

SEIZING THE MIDDLE GROUND

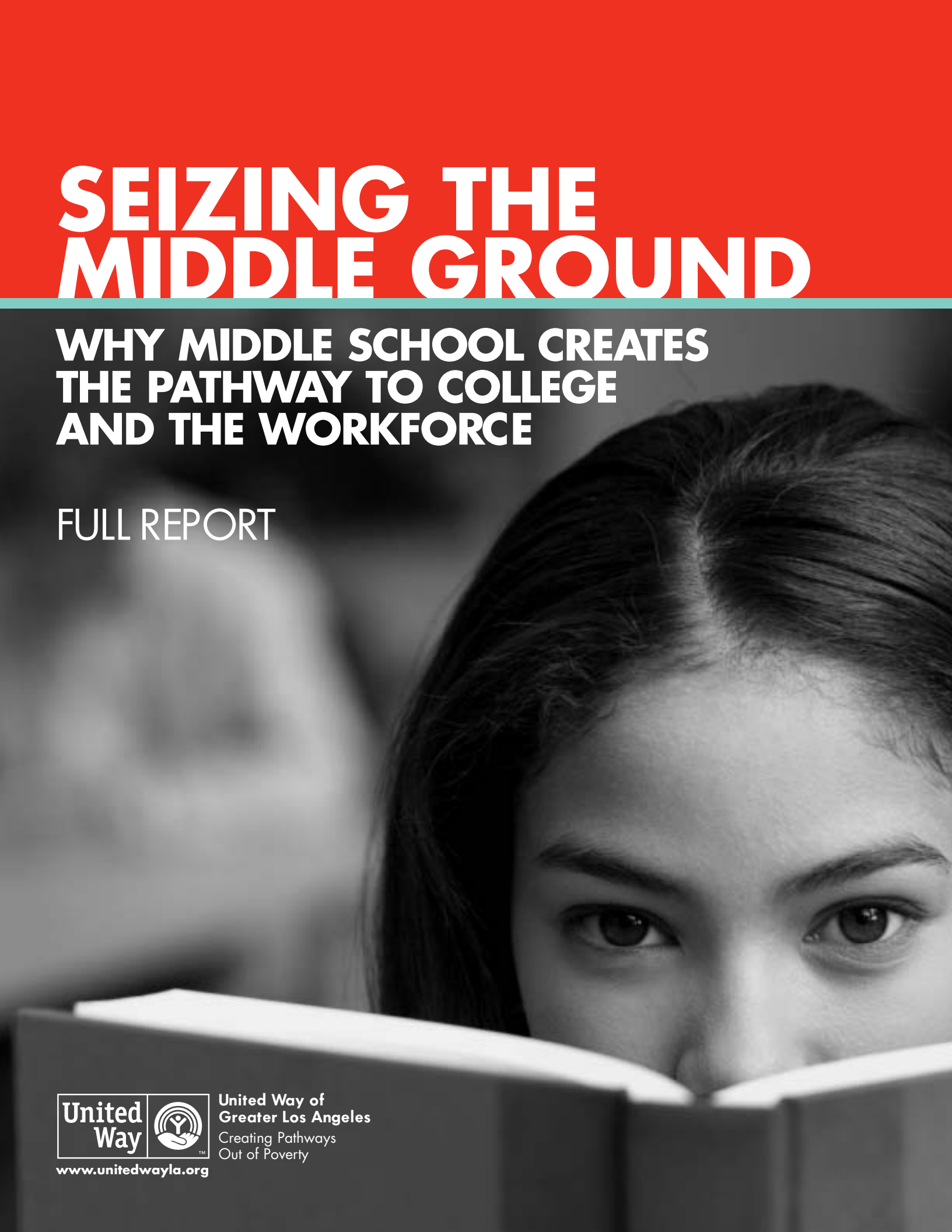
WHY MIDDLE SCHOOL CREATES THE PATHWAY TO COLLEGE AND THE WORKFORCE

FULL REPORT



United Way of
Greater Los Angeles
Creating Pathways
Out of Poverty

www.unitedwayla.org



INTRODUCTION

Middle schools are critical to the future success of our students yet they have been largely ignored in the debate on education reform.

Research continues to show that academic planning and counseling needs to start as early as the 6th grade so students are prepared for the rigorous curriculum of high school and the future challenges of college and the workforce. Yet more than half of our middle schools in Los Angeles County are failing to meet national education standards.

Lack of funding, overcrowded classrooms and a shortage of credentialed teachers are severely impacting our students' performance, and the situation is even more critical in low-income schools with a majority of African American and Latino students, who face inadequate and unequal learning conditions and opportunities.

We are facing a serious crisis in our middle schools. Youth are expected to learn and succeed in nearly impossible environments where 11-12 year-olds transition from a school of 500 students with few classroom changes and consistent teacher and staff relationships to a school of over 2,000 students with multiple classroom changes, and fewer caring adult relationships.

For our community to succeed, we need to be effectively preparing our middle school youth with the academic foundation for college and careers of the 21st century. United Way of Greater Los Angeles is committed to leading this effort as part of our ten-year action plan to fight poverty and improve the quality of life for all in Los Angeles County.

As you read this report, I urge you to join us as we work with schools, educators, leaders from the public, private and nonprofit sectors, parents, and youth to create and implement the solutions that will improve the middle school experience for all students in Los Angeles County, and help them make successful transitions to high school and beyond.

Sincerely,



Elise Buik
President & CEO
United Way of Greater Los Angeles

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EXECUTIVE SUMMARY

WHY MIDDLE SCHOOL MATTERS

Education reform efforts over recent years have focused on early education and high school, and have missed out on the critical role of middle school.

The conditions students face and how they perform in middle school play a vital role in whether or not they will graduate from high school prepared for college and the 21st century workforce.

There are several key factors in middle grades that influence how well students will progress.

Adolescent Development

As we all know, puberty is a very difficult time for kids and can result in greater emotional reactivity to stress.¹ Peers also become a primary influence so it is critical that young people have at least one relationship with a caring adult in their lives.

Access to Quality Teachers

Unlike elementary and high school, middle school teachers are rarely requested to undergo specific training to teach that age group. About a quarter of middle school teachers in the U.S. are credentialed to teach in middle school, while the majority of the rest are credentialed for elementary school.²

College Planning

The U.S. Department of Education now recommends that students begin planning for college as early as 6th grade. In a recent national study by the college entrance exam firm ACT, only 60% of middle and high school students described their curriculum as college preparatory; 22% had yet to think about education, training and work post high school; and 30% of students and their families had not considered ways to pay for college.³

Academic Reform and Rigor

Students need to be prepared in middle school for the increasing rigor demanded by high school as curriculum is aligned with the needs of the 21st century economy. While some may argue that this increases failure rates for middle school students, research has shown that increased academic rigor, coupled with quality student support, actually increases high school completion and success.⁴

The majority of kids drop out in 9th and 10th grades, making middle school a make or break moment in their lives.

“No one in my family has ever gone to college and I want to be the first one.”

Gabriel Hernandez

14 year-old Boyle Heights resident on his transition from elementary to middle school and beyond.

Transition to Middle School:

“It was stressful. It’s hard to keep track of all the classes, especially when you go from one teacher to four or five. I struggled.”

The Classes:

“They put me on daily check. The teachers had to sign off if I did my homework, brought in my supplies. It was a hassle. But I think it was a good thing now.”

Being Safe:

“The world opens up to you slowly. You start to learn about why this bunch of guys hang around together, why this guy is walking past me covered in blood. You start learning about things. It’s something you shouldn’t have to, but you do.”

Dropping Out:

“My friends talk about dropping out. It’s getting too hard, you know. You see other students do it, and it sends you a message. If they’re dropping out, why can’t I?”

Why He Won’t:

“Mostly the influence here [InnerCity Struggle] and my family. No one in my family has ever gone to college and I want to be the first one.”

His Mother:

“My mother wants me to go to college. She always tells me, ‘Get your grades up, you’re there to learn.’ She always checks my homework, meets with the teachers. That helps me a lot now.”

The Future:

“I want to go to college. To Berkeley. And do medicine.”



InnerCity Struggle is a United Way partner in East Los Angeles that engages middle and high school students and their families in improving the quality of their education.

KEY FINDINGS

- 1** **The likelihood of students moving on from middle to high school and graduating are appallingly low.**
 - For every 100 ninth grade students in 2002, 57 had graduated 4 years later, and only 12 enrolled in a California public university.

- 2** **Over half of middle schools are failing federal education standards and the situation is much worse for schools serving low-income African American and Latino populations.**
 - 70% of middle schools that serve high levels of low-income students are failing, compared to 44% of high schools and 32% of elementary schools.

- 3** **Students who fail even one middle school class are much more likely to drop out of high school.**
 - Less than 50% of students who failed at least one class in grades 6-8 graduated from high school within four years compared to over 66% of students who never failed a class.

- 4** **Half of middle schools in Los Angeles County meet the state's definition of an overcrowded school.**
 - The average sized middle school in Los Angeles County has 2,100 students compared to 500 students in elementary school – children are entering into classes that are double the size of what they are used to.
 - Overcrowding is even more intense in LAUSD, where 75% of middle schools meet the state's definition of an overcrowded school.

- 5** **About half of Los Angeles County 7th graders don't feel safe in school.**
 - 48% of 7th grade students have been bullied at least once in the last year.
 - 6% of 7th graders have carried a gun – and 13% another weapon – onto school property at least once.

- 6** **The support of a caring adult is critical to the success of middle school students, but very few have it.**
 - 71% of 7th graders do not have a high level of caring relationships with a teacher or other adults at school.
 - 41% of 7th graders do not have a high level of caring relationships with adults in the community.

IMPLICATIONS

- ▶ Unless we prioritize middle school education to prepare all students for college and the 21st century workforce, we will not have the necessary infrastructure for a thriving community and sustainable economy.

- ▶ When middle schools fail, students fail. The high failure rate of middle schools with a majority low-income African American and Latino population also leads to a growing racial opportunity gap and often seals the students' fate to low-wage jobs and a cycle of poverty.

- ▶ Without early intervention, struggling middle school students will continue to drop out, adding to the current crisis. We need to drive the necessary supports and opportunities for the future success of our children.

- ▶ Overcrowded schools lead to unstable learning environments where students are more likely to receive a low-quality education and fall through the cracks.

- ▶ Feeling unsafe in middle school perpetuates further violence and victimization as youth join gangs, bring weapons onto school property or become the aggressors, preventing them from focusing on their own personal growth and education.

- ▶ Without the steadying influence of an engaged adult – teacher, parent, clergy or youth leader – middle school students who are already struggling with the challenges of puberty are much more likely to tune out and drop out.

THE STATE OF MIDDLE SCHOOL STUDENTS



SCOPE AND DEMOGRAPHICS

There are about 400,000 youth in grades 6, 7, and 8 (normally ages 11-14) in public schools in Los Angeles County, representing a large, diverse group of young people who will enter adulthood within the next four to seven years. These students tend to be from minority groups under-represented in higher education (i.e. Latino, African American or American Indian), and many face challenges such as poverty and learning English.

School Types and Enrollment

- The number of public middle schools in Los Angeles County has grown steadily over the past decade, from 233 in 1997 to 266 today.
- The average size of an elementary school in Los Angeles County is about 500 students, whereas the average middle school has 2,100 students.

Income

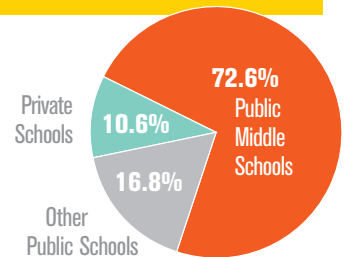
- Race and class converge in middle schools: over 75% of schools with a majority of Latino, African American, and American Indian students have a majority of low-income students compared to 9% of schools with a majority of White and Asian students.

- About two-thirds of middle school students – and about 80% in LAUSD – are in the Free and Reduced Price Meal Program for low-income families.

Race/Ethnicity

- 73% of middle school students are from under-represented minority groups (i.e., Latino, African American or American Indian) compared to 67% in high schools.
- Latinos make up about half of the Los Angeles County population, but almost two out of three middle school students are Latino.

Majority of 6th-8th Graders in Los Angeles County are in Public Middle Schools



Source: California Department of Education, 2006-7

Language

- More than a quarter of middle school students in the county are classified as “English Learners” (compared to about a fifth of high school students).

“Conditions are bad for all students, no matter their race or ethnicity, and on top of that, they are worse for African American and Latino students. Yet these problems are readily identified and fixable.”

John Rogers and Jeannie Oakes, UCLA Department of Education.

SOCIAL DEVELOPMENT

Middle school is a time of heightened vulnerability for many young people. The three years between sixth and eighth grade are known for an increase in disciplinary problems, motivational decline (lack of interest, increased alienation), and initiation in risky behavior, and these developmental changes can directly affect how students perform academically.

While there is a general lack of data on the social-emotional adjustment of young people, the California

Healthy Kids Survey does provide several indicators that are helpful in assessing how middle

grades students are doing developmentally.⁵

Relationships with Caring Adults

- Less than 30% of 7th graders report having a high level of caring relationships with a teacher or other adults at school, and less than 20% have a high level of opportunities



for meaningful interactions with teachers or other adults in school.

- 41% of 7th graders said they do not have a high level of caring relationships with adults in the community.
- According to the 2005 California Health Interview Survey, over a quarter of middle school-aged youth feel that their parents know little or nothing about their free time, while 58% said that an adult is always around after school hours and 28% said that an adult is around most of the time after school.

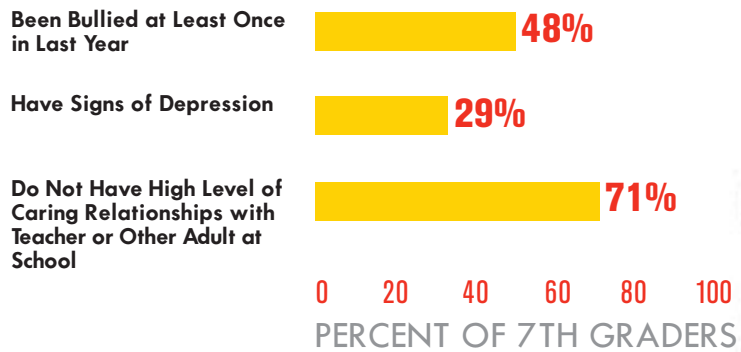
Detachment

- One in five students report having skipped school or classes a minimum of one to two times.
- About 30% of 7th graders report feelings of depression to an extent that such feelings interfere with their engagement in activities.

Youth Violence

- Only about half of Los Angeles County 7th graders report feeling safe in school. 6% of 7th graders have carried a gun – and 13% another weapon – onto school property at least once.
- About 9% of 7th graders in Los Angeles County said that they are involved with a gang.

MIDDLE SCHOOL YOUTH FACE SOCIAL DEVELOPMENT CHALLENGES



Source: California Healthy Kids Survey, 2004-2006



“It was difficult. The classes were bigger compared to the ones in elementary. Thirty to forty students compared with twenty in elementary.”

Ivan Hernandez, LAUSD student

SCHOOL RESOURCES

Throughout the county, middle school students experience shortages of basic resources such as overcrowded facilities, counselors with large student loads, shortages of fully qualified teachers and lack of college preparatory courses/teaching resources. The situation is even more critical in racially disparate schools where students face inadequate and unequal learning conditions and opportunities.

Per-Pupil Spending

- 100% of Los Angeles County middle schools – and 98% of high schools – spend less on each student than the national average (\$8,041). This reflects California's low

level of spending statewide (\$6,765) in comparison to the rest of the nation.

Overcrowding

- Half of the county's middle and high schools

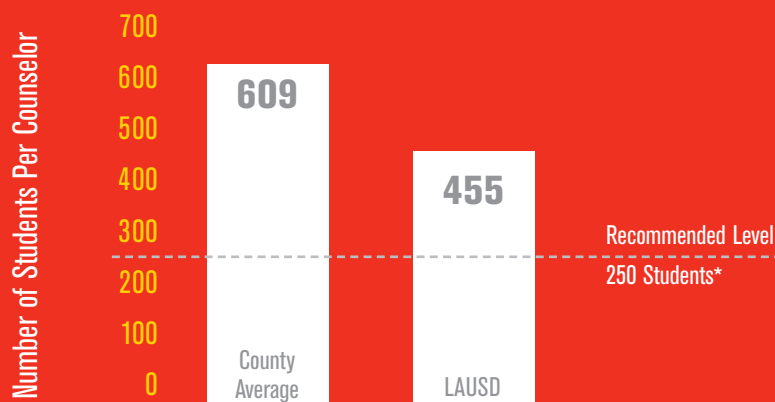
meet the state's definition of an overcrowded school.⁶ Overcrowding is even more intense in LAUSD, where 75% of middle schools meet the state's definition of an overcrowded school (twice the proportion of non-LAUSD middle schools).

Qualified Teachers

- Approximately one in four middle schools have serious shortages of qualified teachers (at least 20% of teachers lack full credentials).
- Schools that primarily serve communities of color are four times more likely to have serious shortages of qualified teachers than schools with smaller percentages of under-represented minority students.
- Just half of the instructors teaching the critical subject of math at middle schools hold preliminary or full teaching credentials in mathematics.
- Disparities in access to A-G college prep courses are correlated with the race/ethnic makeup of schools: those with White and Asian majorities are far more likely to have A-G classes in all subjects, and A-G math classes taught by fully qualified teachers.

Half of the county's middle and high schools meet the state's definition of an overcrowded school.

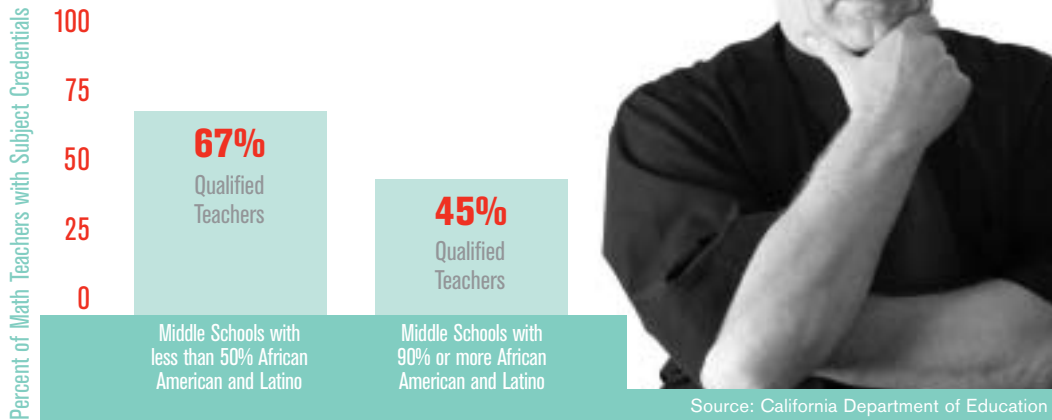
MIDDLE SCHOOLS PROVIDE 1 COUNSELOR FOR EVERY 609 STUDENTS



Source: California Department of Education

*American School Counselor Association

SHORTAGES OF QUALIFIED TEACHERS FOR MATH MORE SEVERE IN MIDDLE SCHOOLS THAT PRIMARILY SERVE COMMUNITIES OF COLOR



ACCESS TO COLLEGE PREP COURSES

The A-G Curriculum is a sequence of courses required for admission to the University of California or California State University systems. Most A-G courses are taken in high school, however, some rigorous courses taught at the middle school level may be A-G eligible, like Algebra I.

- A** History/Social Science Two years (one year of world history, one year of U.S. history or a half year of U.S. history and a half year of Civics)
- B** English Four years
- C** Math Three years required, four years recommended (Algebra, Geometry, Algebra II required)
- D** Science Two years required, three years recommended (two of the courses must be Biology, Chemistry or Physics)
- E** Foreign Language Two years (same language), three years recommended
- F** Visual/Performing Arts One year
- G** College Prep Elective One year

Source: University of California

ACADEMIC ACHIEVEMENT

Middle schools are under mounting pressure to increase academic achievement and adequately prepare young people for high school. Unfortunately, overall they are failing miserably in Los Angeles County, as many are failing to meet target performance measures under No Child Left Behind (NCLB). Schools with significant populations of disadvantaged students that do not make adequate progress in improving academic outcomes for two consecutive years are known as “Program Improvement” schools.

Program Improvement

- In the current school year, 70% of middle schools that serve high levels of low-income students are in Program

Improvement – over half have been there for four or five years.

- More than half of middle schools have failed to meet NCLB targets. At current

Over 50% of our middle schools are failing national education standards, and they’ve been failing for years.

rates of progress, all county middle schools will have failed to meet targets by 2014. The situation is even more dire in middle schools that primarily serve communities of color: 6% of schools with a majority White and Asian population are failing today compared to 90% with a majority African American and Latino population.

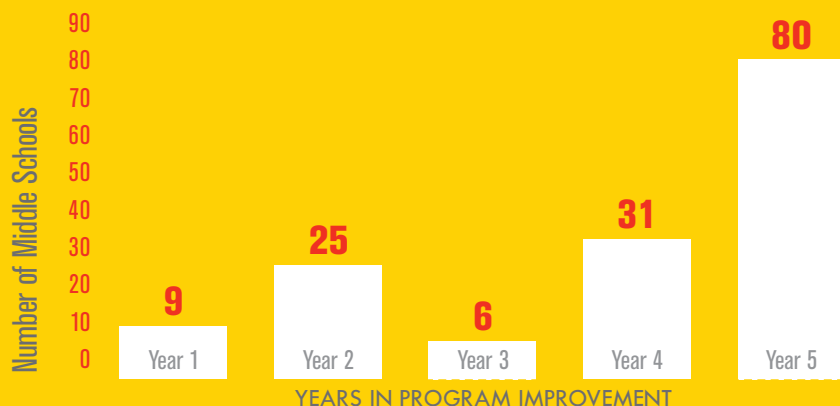
Algebra

- A rigorous curriculum, such as taking Algebra in 8th grade, is critical to improving educational outcomes. On average, slightly more than half of 8th graders are taking Algebra. LAUSD middle schools enroll a slightly higher proportion of their 8th graders in Algebra than other districts in the county.
- Contrary to other findings, middle schools with larger enrollments of under-represented minority students, both inside and outside of LAUSD, have larger percentages of 8th graders taking Algebra.

Pathways to High School Graduation and College

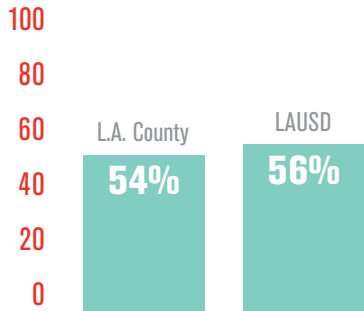
- The likelihood that students moving on from middle to high school will successfully graduate and go to college is appallingly low. For every 100 ninth grade students in 2002, 57 graduated four years later,

MAJORITY OF MIDDLE SCHOOLS THAT SERVE LOW-INCOME STUDENTS IN PROGRAM IMPROVEMENT FOR AT LEAST 5 YEARS



Source: California Department of Education, 2007-8

JUST HALF OF 8TH GRADERS IN LOS ANGELES COUNTY TAKE ALGEBRA



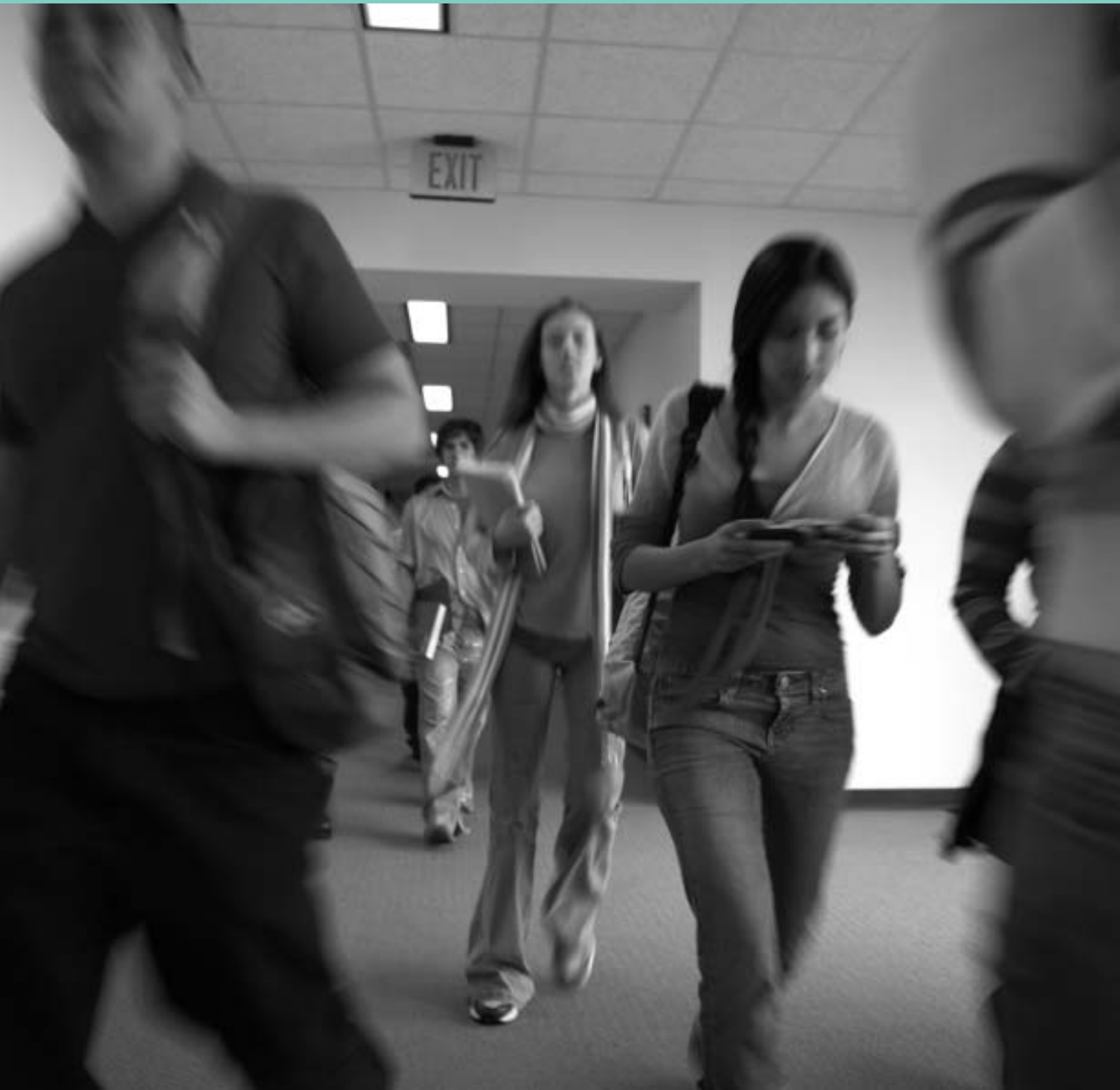
Source: California Department of Education

23 had taken the necessary A-G coursework, and only 12 enrolled in a California public four-year university. The rates of high school graduation and college enrollment are even lower for students in LAUSD or from under-represented minority groups.

- A significant proportion of students who do not graduate college-ready are close to achieving college readiness. Recent detailed analysis shows that from 20 LAUSD schools studied, one-third of students were found to be no more than two courses away from the A-G benchmarks in their grades. Failing grades in math and English in 9th grade were the two major barriers.⁸

For every 100 ninth grade students, only 12 will actually make it to California's public universities four years later.

INFLUENCE ON HIGH SCHOOL GRADUATION AND COLLEGE READINESS



NEW ANALYSIS ON MIDDLE GRADES

Middle grades students in Los Angeles County face serious challenges in being academically and socially prepared for high school.

In order to better understand how these various factors influence whether middle school students are successful in high school, we report here on detailed new analysis of the middle school experiences of students in Los Angeles Unified School District (LAUSD) who were expected to graduate from high school in 2005.⁹

Graduation

- Just over half (51%) of the students in LAUSD earned a high school diploma within four years. This graduation rate is much lower than the official figure provided by the district to the state, but confirms the findings of other outside researchers.¹⁰

Academic Performance

- Failing even one middle school course is a significant risk factor that jeopardizes high school graduation and college readiness. More than two-thirds of the students who never failed a class in grades six to eight graduated from high school within four years, compared with less than 50% of students who failed at least one class.
- Those who fail classes during all three middle

grades years are at greatest risk – only 18% graduated from high school.

Language

- A surprising finding is that students who spoke English

at home and students who spoke Spanish at home both graduated at the same rate (50%), despite the fact that students who speak Spanish at home tend to have lower academic outcomes in standardized testing. English speakers were, however, slightly more likely to graduate college-ready than Spanish speakers (29% to 24%).¹¹

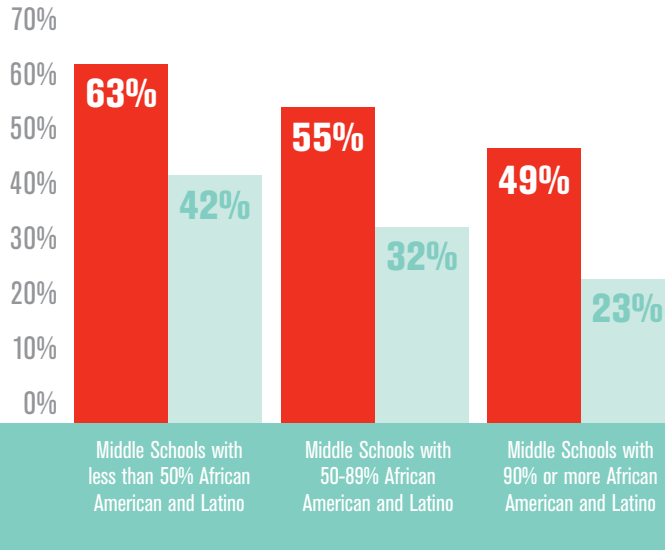
Of those students who started 9th grade in 2002, just 28% graduated from high school with the A-G college eligibility requirements to apply to a CSU or UC campus.

PROBABILITY OF GRADUATING DECLINES WITH MORE MIDDLE SCHOOL CLASSES FAILED



Source: Zarate et al. analysis of LAUSD data

Students at Middle Schools That Primarily Serve Communities of Color Less Likely to be Successful in High School



Source: Zarate et al. analysis of LAUSD data

- Students who spoke a language other than English or Spanish were much more likely to graduate from high school (67%) and complete the A-G curriculum (52%). These disparities are likely explained by the fact that students in the “Other” category are from Asian and other immigrant groups, who tend to have better outcomes overall.¹²

Race/Ethnicity

- Latinos and African Americans (who together make up about 80% of the students in the study) are much less likely than Asians and Whites to be successful in high school.

- Less than half of Latino (49%) and African American (46%) students graduated from high school, compared to 59% of Whites and 68% of Asians. A-G completion rates for Latinos and African Americans were just under 25%, compared to 43% of Whites and 56% of Asians.

Income

- 50% of students who attended high-poverty middle schools completed high school, compared to 56% of students who attended other schools. A quarter of students at high poverty middle schools completed A-G, compared

to 34% of the students at more economically diverse schools.

Gender

- While girls had a 58% chance of graduating, just 45% of boys ended up graduating from high school. This may reflect differences in the personal experiences of boys and girls in middle grades.

- Boys were far more likely to fail middle grades classes than girls: 58% of boys compared to 41% of girls failed at least one class. Moreover, boys failed nearly twice as many middle grades classes as girls (2.9 to 1.5).

- Boys and girls also complete the A-G course requirements at very different rates (34% for girls compared to 22% for boys).

School Transitions

- Over half (54%) of students who stayed at the same middle school ended up graduating from high school, while only 35% of students who changed

Students who spoke English at home and students who spoke Spanish at home both graduated at the same rate.

“My neighborhood middle school is underperforming. I’m terrified to send my kids there, but I don’t have the resources to send them to private school. What other choices are there?”

LAUSD Parent

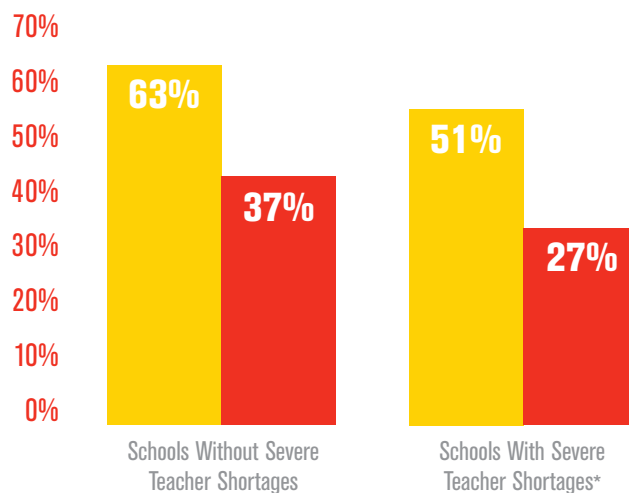
schools between 7th and 8th grade went on to graduate.

- Only 17% of students who changed schools between 7th and 8th grade completed CSU/UC eligibility, compared to 30% of students who did not change middle schools.

Access to Qualified Teachers

- When less than one-fifth of teachers at a middle school had a teaching credential, 27% of students graduated with A-G eligibility requirements. This rose to 37% for students at schools where more than one-fifth of teachers were credentialed.

MIDDLE SCHOOL STUDENTS WITH MORE QUALIFIED TEACHERS ARE MORE LIKELY TO SUCCEED IN HIGH SCHOOL



■ Graduated from High School
 ■ Graduated College Ready

*Schools where more than one-fifth of teachers are not fully certified are described as having severe teacher shortages.

Source: Zarate et al. analysis of LAUSD data

RECOMMENDATIONS



Clearly, we need to do more to prepare middle grades students for a successful transition to high school on a pathway to college and the workforce. To do so, we need to agree on several core principles and values:

- Reform must be based on the best interests of students, families, and communities.
- The growth and vitality of local communities depends on strong and healthy school systems.
- Schools, educators, students, parents, colleges and universities, and local business leaders are all accountable for education excellence in equity, outcomes, and practice.
- School reform depends on high standards, equal access, and integrating multiple educational pathways for youth to succeed.
- School districts need to align and coordinate elementary, middle and high school levels.
- Decisions must be based on the best available data and research.

The following pages describe three key recommendations for improving the middle grade experience of students in Los Angeles County.

Prepare middle grades youth for college and the high-paying jobs and careers of the 21st century by giving students the academic foundation for future success

WHY?

The demand for workers with postsecondary education in California is projected to grow in the 21st century economy. College and career planning need to begin in the middle grades so that students are prepared for the rigorous curriculum of high school.

HOW?

- Prepare students to complete the A-G college preparatory courses required for California's public universities. Educate parents on the importance of A-G for their child's future.
- Set a school goal that at least 65% of 8th grade students are enrolled in Algebra I.
- Schedule convenient times for parents and families to participate in school meetings and opportunities that support their children's academic preparation and educational success.
- Require superintendents and local school boards to fully align classroom curriculum so that students can successfully transfer from elementary to middle and then to high school.¹³

WHERE IS IT WORKING?

In 2005, the Los Angeles Unified School District adopted A-G as the default curriculum for all high school students, thanks to advocacy efforts by a coalition of organizations, parents, and students.¹⁴ This has set the stage for promoting systemic reform across K-12, including investments in teacher development, career technical programs, and an increased commitment to partnering with parents. In 2007, the Long Beach Unified School District (LBUSD) unanimously approved policy recommendations from a

similar coalition to boost successful completion of A-G courses by aligning classes, counseling and supports beginning in 6th grade. LBUSD also signed the Long Beach College Promise with California State University Long Beach and Long Beach City College to align academic standards, teaching methods and student assessment to make higher education and high-paying careers attainable for every Long Beach student, beginning with the incoming 6th grade class of fall 2008.

"It's a challenge to engage parents. Many parents have to work two jobs and are very busy. We need to join forces in order to help the students excel academically. Because when you have parents that are involved in schools, you get better results. Students achieve academically." Arturo Ibarra, teacher

Provide quality student support services and early academic interventions to bolster student preparation and performance

WHY?

Students who fail classes early in middle grades but receive help to get back on track are much more likely to be successful in high school. Students not adequately prepared in middle grades for core high school subjects such as mathematics and English Language Arts in 9th grade have difficulty catching up on college-readiness requirements.

HOW?

- Evaluate and monitor the progress of students on an ongoing basis, particularly in critical subjects such as Algebra and English Language Arts in the 6th to 8th grades.
- Make sure schools offer timely feedback and intervention strategies in communication with students and their parents, to improve student performance.
- Improve student achievement and social development by providing high-quality before and after-school programs such as Saturday academies and Summer Bridge programs.
- Engage parents, community partners, and stakeholders to work with individual schools and school districts to support student achievement and school success.

WHERE IS IT WORKING?

In 2007, Project GRAD Los Angeles hosted a Middle School Algebra and Robotics Summer Institute to prepare more students to take and succeed in Algebra. In all, 165 students from four LAUSD middle schools in the Northeast San Fernando Valley, who were at risk of not enrolling in Algebra, participated in the four-week program. After the Summer

Institute, all 165 students were placed into Algebra I classes with the teachers who had taught them during the summer. After the first semester, over 99% of students passed Algebra I, with over 56% of students earning A or B grades. L.A. Mission College and California State University, Northridge, were partners in the project.

“Part of our role is to build school capacity to engage communities. You can have a well intentioned principal who simply, time-wise and staff-wise, can’t afford to take on a new project even if they know the outcome would be good.”

Lester Garcia, Executive Director, Boyle Heights Learning Collaborative

Provide youth with small, personalized learning environments where teaching and learning support student success

WHY?

Los Angeles County has some of the largest middle schools in the nation, with grade sizes at least seven times larger in middle school than in elementary school. These large environments can be intimidating for both students and parents and can impede learning.

HOW?

- Teach youth in smaller learning groups where each student can feel known and valued by staff and peers.
- Recommend a ratio of 1 teacher for 25 middle grades students in core courses, and 1 teacher for 20 students in intervention courses.
- Support the practice of having teachers continue with the same students from one year to the next so they can develop ongoing positive, caring relationships to better support student success both academically and socially.
- Support Professional Learning Communities where teams of teachers and staff collaborate in an intentional and consistent manner to support student learning. The benefits include academic gains for students and better informed and more committed teachers.¹⁹

WHERE IS IT WORKING?

Torch Middle School in the City of Industry (Basset Unified School District) was one of three schools in the state to be designated a 2008 California “Schools to Watch” Model Middle School. With a student population that is 94% Latino, 86% eligible for the free and reduced meal program, 29% classified as English learners and 25% who are homeless, Torch exemplifies a high-performing Professional Learning Community, where teachers work in highly effective teams, sharing common planning time, working collaboratively and productively, and applying

tools such as systematic data analysis, reflection of practice, and feedback to improve student performance and instruction. Torch works in collaboration with THINK Together, which provides after-school academic support and enrichment activities for Torch students, and the California League of Middle Schools, which partners with Torch to provide mentorship opportunities for the Principals to Watch Academy. Torch's overall Academic Performance Index (API) score has risen 290 points in the last eight years and is now at 735.

“We have an imperative to change our graduation results. We have an imperative to be the district of choice for teachers and principals and parents. We’re under a lot of pressure to find results that work and smaller sized classes have resulted in a boost to student achievement.”

Monica Garcia, President of Los Angeles Board of Education

ACKNOWLEDGMENTS AND NOTES

Acknowledgments

Much of the content in this Summary Report came from work by an expert research team. These work products are available as separate chapters in the Full Report, which can be found online at www.unitedwayla.org:

- State of Middle and High School Education in Los Angeles County – Jeannie Oakes, John Rogers, and Siomara Valladares (UCLA Institute for Democracy, Education and Access)
- The Role of Middle Schools in High School Graduation and College Enrollment - Maria Estela Zarate (University of California-Irvine Department of Education)
- Challenges for Middle School Reform: How to Foster Continuity, Connections, and Caring Peer Culture - Jaana Juvonen (UCLA Department of Psychology)
- Middle School Influences on High School Graduation and College Readiness in Los Angeles Unified School District – Maria Estela Zarate, Eric Ruzek (University of California-Irvine Department of Education) and David Silver (UCLA Institute for Democracy, Education and Access)

Notes

¹ Buchanan, C., Eccles, J., & Becker, J. (1992). Are adolescents the victims of raging hormones? Evidence for activational effects of hormones on moods and behavior at adolescence. *Psychological Bulletin*, 111, 62-107.

² Juvonen, J. Le, V-N., Kaganoff, T., Augustine, C., & Constant, L. (2004). Focus on the wonder years: Challenges facing the American middle school. Santa Monica, CA: Rand. <http://www.rand.org/pubs/monographs/MG139/>

³ Wimberly, G.L. & Noeth, R.J. (2005). College Readiness Begins in Middle School. ACT Policy Report. <http://www.act.org/research/policymakers/pdf/CollegeReadiness.pdf>. The study consists of a survey and focus groups with middle and high school students from 15 schools in six school districts (including LAUSD) across the country.

⁴ Cooney, S. & Bottoms, G. (2003) Middle Grades to High School: Mending a Weak Link. Southern Regional Education Board. <http://www.sreb.org/programs/hstw/publications/briefs/MiddleGradestoHS.asp>; Cooney, S. & Bottoms, G. (2003). Making Middle Schools Work: School and Classroom Practices That Improve Student Achievement. Southern Regional Education Board. http://www.sreb.org/programs/hstw/publications/briefs/03V65_ResearchBrief%20MMGW.pdf

⁵ WestEd (2007). California Healthy Kids Survey. Technical report, Fall 2004-Spring 2006, Los Angeles County. Data reported here are for Los Angeles County and are from the latest summary of the data from the fall of 2004 to the spring of 2006 (a total sample of 69,947 seventh graders surveyed: 61% Latino, 15% Caucasian, 12% Asian, 9% African American).

⁶ A school is counted as overcrowded if its population density is equal to or greater than 175% of the California Department of Education recommended pupil population density. Elementary schools with 100 students or more per acre and middle schools and high schools with 75 or more students per acre are defined as overcrowded.

⁷ See: http://www.ucop.edu/a-gGuide/ag/a-g/a-g_reqs.html

⁸ “College Just Out of Reach for Many LAUSD Students” by Communities for Educational Equity (2008). Available at:
http://www.unitedwayla.org/getinformed/rr/research/education/Documents/CEE_TESPolicyBriefRecent.pdf

⁹ The data used for this analysis is based on the first time freshman enrollment in 2001-2002 at LAUSD high schools and captures the enrollment in LAUSD schools for 6th-8th grades between 1998 and 2001. The trajectories of over 39,000 cases are represented in these results. The racial distribution of the cohort was 69% Latino, 12% African American, 11% White, and 7% Asian American. 74% of the students qualified for the Free and Reduced Price Meal program and 70% spoke a language other than English at home. For more detail on the sample and analysis, see the chapter on Middle School Influences by Zarate, Ruzek and Silver in the Full Report.

¹⁰ The Civil Rights Project. (2005) Confronting the Graduation Rate Crisis in California.
<http://www.civilrightsproject.ucla.edu/research/dropouts/dropouts05.pdf>.

¹¹ These similarities exist even though English speakers are less likely to be low-income than Spanish speakers (58% of English speakers qualify for Free and Reduced Meal Program compared to 82% of Spanish speakers). Neither does the race/ethnic makeup of the English speakers account for the finding: about 40% of the English speakers are African American, 29% Latino, 23% White, 7% Asian, and 1% Native American.

¹² The top languages in the “Other” category include Armenian (18% of “Other”), Korean (16%), Pilipino (14%) Farsi (7%), Cantonese (7%), Russian (7%), and Vietnamese (6%).

¹³ National Middle School Association (2006). Success in the Middle: A Policymaker’s Guide to Achieving Quality Middle Level Education.
http://www.nmsa.org/portals/0/pdf/advocacy/policy_guide/Federal_Policy_Brief.pdf.

¹⁴ For more information on the A-G campaign in LAUSD, see The A-G Story: Lessons from a Grassroots Movement for Educational Equity in Los Angeles, available at
<http://www.unitedwayla.org/getinformed/rr/socialreports/Pages/TheA-GStory.aspx>.

¹⁵ For more information on PLCs, see DuFour, R., DuFour, R, Eaker, R., & Many, T. (2006). Learning by doing: A handbook for professional learning communities at work. Bloomington, IN: Solution Tree; Annenberg Institute for School Reform (2004) Professional Learning Communities Providence, RI: Brown University, <http://www.annenberginstitute.org/pdf/ProfLearning.pdf>

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STATE OF MIDDLE AND HIGH SCHOOL EDUCATION IN LOS ANGELES COUNTY

JEANNIE OAKES, JOHN ROGERS AND SIOMARA VALLADARES
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This report uses publicly available data from the 2005-2006 school year to describe four dimensions of middle and high school education in Los Angeles County: Scope, Demography, Basic Resources, and Results.
Please Note: Data Charts are in the Appendix

- **Scope** identifies how many middle and high school students are enrolled in Los Angeles County (LA County), the range of grades in which they are enrolled, and the numbers who attend LAUSD schools or other LA County school districts.
- **Demographics** address students' race/ethnicity, income, English language proficiency, and the demographic composition of schools.
- **School Resources** provides data on resources and their distribution across LA County schools. Topics include spending, facilities, access to counselors, access to qualified teachers (with separate reporting for math teachers), and access to college preparatory courses (and those courses taught by qualified teachers.)
- **Results** looks at several metrics, including whether schools meet NCLB targets, CAHSEE pass rates, rigorous course taking (in

particular, enrollment of 8th graders in algebra,) and students' rates of graduation and preparation for four-year colleges.

- These findings are illustrated with a set of charts. Definitions of the variables and data sources are provided in a separate document.

Scope of Middle and High School Education—At a Glance

- Los Angeles County educates nearly 1 million students in grades 6-12. These students are distributed among a variety of types of schools in LAUSD and across the county.
- LA County educates approximately 400,000 in grades 6, 7, and 8, 41% of these students attend LAUSD schools.
- 79% of Los Angeles County 6th, 7th, and 8th Graders attend schools designed specifically for

middle school students (i.e., schools serving grades 6-8 or 7-8).

- LAUSD enrolls a greater percentage of its 6th, 7th, & 8th graders in middle schools than do other districts, where 20% of students in these grades enroll in K-6 or K-8 schools
- LA County educates more than 500,000 students in grades 9-12, and 38% of these students attend LAUSD high schools.
- Nearly all Los Angeles County 9th-12th graders attend high schools that enroll only grades 9-12 (4% attend schools that span grades 7-12.)

Demographics of Middle and High Schools—At a Glance

- The county's middle and high schools are extraordinarily diverse racially, and they enrolled large proportions of low-income students and students still learning

English. LAUSD schools, however, are far more likely to have large concentrations of students from underrepresented minority groups, students from low-income families, and English learners than are schools elsewhere in Los Angeles County.

Students' Race/Ethnicity

- 63% of LA County middle school students are Latino. Approximately 1 of 6 is White, 1 of 8 is Asian/Filipino or PI, and 1 of 10 is African American.
- 56% of LA County high school students are Latino; 1 of 5 LA County high school students is White, 1 of 7 is Asian/Filipino or PI, and 1 in 9 is African American.
- Comparing LAUSD with other LA County middle and high schools, significantly smaller proportions of Whites and Asians and larger proportions of Latinos attend the LAUSD schools.

Students' Income Levels

- Nearly 2/3 of LA County middle and more than 1/2 of high school students come from low-income families.
- LAUSD has a significantly larger proportion of middle and high school students from low-income families than do schools in the other LA County districts

Students Still Learning English

- Nearly a quarter of all Los

Angeles County middle and high school students are still learning English (about 1/4 of middle school and 1/5 of high school students)

- LAUSD middle and high schools have almost twice the percentage of students still learning English as non-LAUSD middle and high schools.

Racial Composition of Schools

- 73% of all LA County middle schools enroll a majority of underrepresented minority students (African American, Latino, & American Indians);
- 27% of LA County middle schools (attended by 124,524 students) are "intensely segregated"; these are schools where less than 10% of the students are White and Asian.
- 73% of LA County high schools enroll a majority of underrepresented minority students (African American, Latino, & American Indians)
- 28% of LA County high schools (attended by 140,198 students) are intensely segregated.
- LAUSD middle and high schools are twice as likely to be intensely segregated as non-LAUSD middle and high schools in the County.
- Non-LAUSD middle and high schools in the county are 4 times more likely to be majority White and Asian schools as LAUSD middle and high schools.

Concentration of Poverty

- More than half of middle and high schools have a concentration of student from low-income families.
- LAUSD middle and high schools are almost twice as likely to have a concentration of low-income students as middle and high schools in other districts in the county.

Concentration of English Learners

- Almost 1 of 3 LA County middle schools and 1 of 6 high schools have at least 1/3 of their student body still learning English.
- LAUSD middle schools are three times as likely and LAUSD high schools are four times as likely as other county middle and high schools to have at least 1/3 of their student body still learning English.

Racial Segregation and the Concentration of Poverty and English Learners

- Less than 10% of majority white and Asian county middle and high schools have a high concentration of poverty.
- More than 90% of intensely segregated county middle and high schools have a high concentration of poverty.
- LAUSD middle and high schools with a majority of underrepresented students are far more likely to have large concentrations of English learners than other county middle and high

schools with a majority of underrepresented students.

Schools Where Concentrations of Poverty and English Learners Converge

- Almost 1 of 3 county middle schools and 1 of 6 county high schools have large concentrations of both low-income students and English learners.
- LAUSD middle schools are 3 times more likely and LAUSD high schools 4 times more likely to have large concentrations of both low-income students and English learners than other county middle schools.

Resources at Middle and High Schools—At a Glance

Throughout the county, middle and high schools experience shortages of basic schooling resources—low levels of spending, overcrowded facilities, counselors and teachers with large student loads, shortages of fully qualified teachers and of college preparatory course and teaching resources. However, the burden of these resource problems is not borne equally by students across the county. In schools where 50% or more of the students are from underrepresented minority groups, and especially in intensely segregated minority schools, students are far more likely to experience overcrowding,

shortages of qualified teachers, too few college preparation courses, and a larger proportion of college preparation courses taught by qualified teachers.

Spending

Nearly every Los Angeles County middle and high school spends less on each student than the national average.

Facilities

- Half of the county's middle and high schools meet the state's definition of an overcrowded school.
- 75% of LAUSD middle schools meet the state's definition of an overcrowded school (twice the percentage of non-LAUSD middle schools.)
- More than 90% of LAUSD high schools meet the state's definition of an overcrowded school (almost 3 times the percentage of non-LAUSD high schools)
- Across the county, high schools with 90-100% underrepresented minority students are 1 1/2 times more likely to meet the state's definition of an overcrowded school than are less segregated high schools in the county.

Access to Counselors

- Across the county, middle schools provide only one half and high schools provide only one third the national average of 1 counselor for every 229 high school students.

- LAUSD middle schools provide almost twice as many counselors as other county middle schools, but only about half the national average.
- LAUSD high schools provide more counselors than other high schools in the county, but still far fewer than national average.
- LAUSD schools provides counselors more equitably to schools enrolling a majority of underrepresented students than non-LAUSD schools.

Access to Qualified Teachers

- LA county middle and high schools provide an average of 1 teacher for every 24 middle and high school students; the national average is 1 teacher for every 15 students.
- Approximately 1 of 4 middle schools and 1 of 5 high schools have serious teacher shortages—that is, at least 20% of teachers lack full credentials
- LAUSD middle schools, on average, have fewer fully qualified teachers than non-LAUSD middle schools. LAUSD and non-LAUSD high schools, on average, have comparable proportions of fully qualified teachers.
- Countywide, intensely segregated middle and high schools have, on average, lower percentages of qualified teachers than schools with fewer minority students.

- Countywide, intensely segregated schools are approximately 4 times more likely to have serious teacher shortages than schools with smaller percentages of underrepresented minority students.
- LAUSD distributes qualified high school teachers more equitably across schools than non-LAUSD schools; intensely segregated non-LAUSD high schools students are 2 times as likely have serious teacher shortages as comparable LAUSD high schools.

Access to Qualified Middle School Math Teachers

- At LA County middle schools, on average, about half of the teachers teaching math hold preliminary or full teaching credentials in mathematics.
- Teachers teaching math in non-LAUSD middle schools are slightly more likely than in those in LAUSD middle schools to have these credentials.
- Across the county, teachers teaching math at schools with a majority of White and Asian students are more likely to hold preliminary or full teaching credentials in mathematics.
- Non-LAUSD middle schools with majority White and Asian enrollments have a much larger proportion of qualified math teachers (70%) than schools with majority African American and Latino students (less than 50%).
- LAUSD distributes middle school math teachers more equitably across schools than non-LAUSD middle schools in Los Angeles County.
- Access to High School College Preparatory Courses and to College Preparatory Courses Taught by Qualified Teachers.
- 2/3 of the courses offered at LA County high schools, on average, satisfy the A-G course requirements for freshman admission to CSU and UC.
- 5 of 6 college preparatory courses across all subjects and 4 of 5 college preparatory math courses offered at LA County high schools, on average, are taught by teachers with appropriate training.
- However, these averages also mask disparities with some schools offering higher percentages and significant numbers having lower percentages. Across the county 45% of schools provide too few college preparatory courses to accommodate all students, and 30% allow more than 1/5 of college preparatory courses to be taught by teachers without appropriate credentials.
- LAUSD high schools are less likely than non-LAUSD high schools to have shortages of qualified college prep teachers across subjects, but more likely in math.

- Countywide, high schools with a majority of underrepresented students are far more likely to experience shortages of college preparatory resources than schools with majority white and Asian students.
- Students in high minority LAUSD high schools are less disadvantaged by these college preparatory resource shortages that students attending comparable schools outside the district.

Schooling Results—At a Glance

Throughout the county, middle and high schools with 50% or more of the students from underrepresented minority groups are less likely to meet NCLB targets, have lower CAHSEE pass rates, lower graduation rates, lower college preparation rates, and lower 4-year college going rates. These racial composition differences account for most, but not all, of the lower success rates of schools in LAUSD. However, on some measures LAUSD high schools do as well as other county high schools.

Meeting NCLB Proficiency Targets

- More than one half of county middle schools and almost one-third of high schools have failed to meet NCLB targets. At current rates of progress, by 2014 all county schools will have

failed to do so.

- Twice as many LAUSD middle schools as other county middle schools have already failed to meet NCLB targets, and the remainder of LAUSD middle schools will likely fail earlier than other county schools.
- More than 3 times as many LAUSD high schools as other county high schools have failed to meet NCLB targets, and the remainder of LAUSD high schools will likely fail earlier.
- Countywide, middle schools with at least 50% underrepresented students are failing NCLB targets more quickly than others, and nearly all intensively segregated middle schools have failed.
- Countywide, high schools with at least 50% underrepresented minority students are failing NCLB targets more quickly than others, and 2/3rds of intensively segregated schools have failed.
- LAUSD middle schools are failing to meet NCLB targets far more quickly than other schools with similar racial composition, but few differences exist between the rates at which LAUSD and other high schools are failing to meet NCLB, once the racial composition of the schools is taken into account.

Rates at Which Middle School Students Take Rigorous Courses—Enrollment of 8th Graders in Algebra:

- On average, slightly more than half of 8th graders in county middle schools are taking algebra. However, LAUSD middle schools enroll slightly more of their 8th graders in algebra than other county middle schools.
- Perhaps surprisingly, both in and outside of LAUSD, schools with larger enrollments of underrepresented minority students have larger percentages 8th graders taking algebra.

Rates at Which High School Students Pass the CAHSEE

- Approximately 3/4 of the Class of 2006 in LA County high schools passed the English language arts and mathematics tests required for graduation.
- Countywide, students in schools with larger enrollments of underrepresented minorities pass the CAHSEE at lower rates than those at majority White and Asian schools.
- On average, students in LAUSD high schools pass the CAHSEE at slightly lower rates than students in non-LAUSD high schools with similar racial composition.

Pathways to High School Graduation and College

- Countywide, for every 100 9th graders in 2002, 57 graduated four years later, and 12 enrolled in a California public 4-year university.
- 9th graders at LAUSD high schools graduated and enrolled in California public 4-year universities at significantly lower rates than at other county high schools.
- Countywide, Asians and Whites progressed through high school and into college at much higher rates than African American and Latino students.
- Overall, students in majority and segregated minority schools graduated and enrolled in 4-year universities at far lower rates than in majority White and Asian schools. Countywide African Americans in majority and segregated minority schools countywide graduated and enrolled in 4-year universities at far lower rates than African Americans in majority White and Asian schools.
- African Americans in LAUSD were less likely to graduate, but they were more likely to complete A-G, and as likely to attend 4-year universities as those in other county high schools.
- Countywide, Asians in majority and segregated minority schools graduated and enrolled in 4-year universities at far lower rates than in majority White and

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Asian schools.

- Asians at LAUSD high schools graduated and attended 4-year universities at much lower rates than Asians in other high schools.
- Countywide, Latinos in majority and segregated minority schools graduated and enrolled in 4-year universities at far lower rates than Latinos in majority White and Asian schools. Latinos graduated at much lower rates from LAUSD high schools but attended 4-year universities at only slightly lower rates than Latinos in other high schools. Countywide, Whites in majority and segregated minority schools graduated and enrolled in 4-year universities at far lower rates than Whites in majority White and Asian schools
- White students graduated at much lower rates from LAUSD high schools, but they attended 4-year universities at the same rates as Whites in other high schools.

THE ROLE OF MIDDLE SCHOOLS IN HIGH SCHOOL COMPLETION AND COLLEGE ENROLMENT

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In 1981, Paul George referred to the 20th century as “the century of the middle school” (George, 1981). Middle schools are a fairly recent phenomena and according to George, rose out of an emergent awareness of the differences between early adolescents and elementary-age children. Currently, there are 266¹ middle schools in Los Angeles County and discussions about middle school are gaining ground as educators continue to define the purpose and objectives of effective middle schools. It appears that although middle schools continue to gain ground in their popularity, questions still remain about how best to meet the learning and social needs of young adolescents (Juvonen et al., 2004).

The role that middle schools play in high school completion and college enrollment is a compelling reason for why middle schools, middle school teachers, and middle school students have gained researchers’ interests. Contrary to traditionally held views, finishing high school is not a process that takes place in high school only. For example, the Civil Rights Project reports that most students in California leave high school between 9th and 10th grade, implying that pre-high school experiences influence dropping-out decisions. Relying on national datasets, The Graduation Project (2006) determined that the greatest source of loss occurs in 9th grade, with over one-third of high school dropouts leaving during the

transition between 9th and 10th grade. Additional studies have further demonstrated that college planning and academic achievement in 8th grade middle school impacts college enrollment post-high school (Cabrera & La Nasa, 2000; Hurtado, et al., 1997; Horn & Nunez, 2000; Swail, et al., 2005).

Given the significance of middle school education to later educational outcomes, it is important to understand how middle school factors and events contribute to successful high school completion and college enrollment. Some of the middle school factors that are known to impact high school completion and college enrollment are: parental involvement; academic performance; qualified teachers; ability

grouping (tracking); English-language learning placement; and changes in classroom and school structure between elementary school and middle school. These factors impact later educational outcomes in different ways, such as completing high school, going to college, transitions between grade levels, and access to qualified teachers.

In this review of existing research on middle schools, middle school age youth, and middle school teachers I explore how various middle school experiences and factors impact later educational outcomes. Although middle school experiences may be at least four years from potential college enrollment, a students’ academic achievement and schooling

experiences can influence who enrolls in college. The long-term consequences of middle schools have only recently been explored but the implications are urgent. The implications of the middle school years are also discussed here.

Academic Predictors of Post-High School Success

In surveys and research of the middle school experiences of high school dropouts, specific academic indicators of dropping out in high school have emerged. In a report of the “dropout crisis” in Boston Public Schools, the authors report that most students that drop out of high school were held back a grade in middle school and endured persistent academic problems throughout their schooling experience (Youth Transition Task Force, 2006). In a study of 18-24 year olds in Baltimore and Philadelphia who had not completed high school, 45% of the students reported that they were academically unprepared when they started high school (Bridgeland et al., 2006). These same respondents frequently repeated a grade before dropping out and had fallen behind in elementary and middle school. In a study of middle school students in Philadelphia, Balfanz and Herzog (2006) found that having failed math or English

in 6th grade significantly diminishes the probability of completing high school. Using a national sample, Ingels et al. (2002) found that in addition to individual socio-economic characteristics, high performance on 8th grade mathematics standardized tests increased the likelihood of finishing high school.

Large-scale examination of middle school influences on college destinations has made use of the National Education Longitudinal Study (NELS), a data set containing longitudinal data of a national sample of 8th graders. Utilizing the NELS database, various studies have shown that 8th grade reading performance and the academic tracking of 8th grade students play a significant role in determining post-high school educational outcomes (Cabrera and La Nasa, 2000; Hurtado, Inkelas, Briggs, and Rhee, 1997; Horn and Nunez, 2000; Swail, et al., 2005). Mathematics achievement and completion of Algebra in 8th grade has been also cited as a strong indicator of pursuing a post-secondary education (Horn and Nunez, 2000; Ingels et al., 2002). Like Bridgeland et al. (2006), Rumberger (1995), found that students who were retained a grade were eleven times more likely to drop out in middle school and a decrease in

grade-point average in 8th grade significantly impacted the odds of dropping out of high school. Indeed, these studies suggest that pre-high school academic performance and academic tracking predict post-high school college enrollment and high school completion.

It is also widely known that shuttling students into vocational or college preparatory courses is a common practice in schools and a major determinant of future college enrollment. This practice can begin as early as elementary and middle school and can determine the high school track to which students are assigned (Gonzales, Stoner, Jovel, 2003; Oakes, 1995). Gonzales and colleagues (2003) found that, in certain conditions, a designation as an English-language learner as early as elementary school can limit students' access to college preparatory classes in middle and high school, and thus also limit these students' college options to community colleges. Performance in standardized test scores throughout a students' schooling experience can also determine high school academic placement and subsequent college enrollment. One such study that examined standardized test scores found that students' post-secondary educational status could be determined by their

academic performance beginning as early as elementary school (Zarate & Gallimore, 2006).

Rumberger (1995) presents an even more direct examination of middle school influence on dropping out by examining students that drop out between 8th and 10th grade. In this analysis, socio-economic status was the most consistent individual-level predictor of dropping out and repeating a grade. School-related predictors included changing schools and being absent, misbehavior and poor academic performance. More importantly, Rumberger (1995) made the important observation that these factors predict dropout rates for some ethnic groups and not others. For example, changing schools, misbehavior, and low grades were associated with dropping out for Blacks and Whites, but not Hispanics. These findings underscore the different role that middle school experiences play for different social groups and the difficulty in generalizing interventions in middle school.

We have delineated which academic factors seem to influence high school completion and college enrollment. However, how these middle school factors are related to educational outcomes are more complex to capture. For example, that academic achievement in

middle school is related to post-high school educational outcomes may be intuitive, but understanding the process through which a cycle of low achievement is perpetuated in the early years allows for actual policy intervention.

Tracking

One of the ways in which a students' academic achievement status is perpetuated is by early placement into certain academic tracks that can either limit or increase their access to college preparatory academic courses. When Zarate and Gallimore (2006), Gonzales, et al. (2003), and Horn and Nunez (2000) found that certain academic measurements in middle school predicted high school outcomes, it is likely the result of a process where early low achievement leads to placement in lower academic level classes or a non-college bound curriculum.

Although middle schools are intended to address the unique social and learning needs of early adolescents, critics have observed that middle schools are instead often structured like "mini-high schools" (Russell, 1994). One such way that this practice is reflected is by ability grouping or tracking. Academic ability grouping or tracking is common in high school and its effects have been

documented (Valenzuela, 1996). However, the implications of tracking in middle school may be more injurious. In fact, we can soundly suggest that the relationship between ability grouping and race and socioeconomic status that Oakes (1985) finds in high schools may be a progression of middle school practices. The criteria used to sort students and the evidence that poor students and students of color are frequently placed in lower-ability groupings has presented questions about the efficacy of such practices.

Using a longitudinal sample of middle school students to measure effects of ability-grouping, Hoffer (1992) found that ability grouping is frequently used in mathematics placement and to a lesser extend in other subjects in middle school. He also found that ability grouping has positive effects for higher-academic placement students only, and to the detriment of lower-placed students. Russell (1994) and Eccles et al. (1993) similarly found that school program components that support ability grouping in middle school can negatively impact 8th grade mathematics standardized test results. Eccles et al. (1993) confirmed the negative long-term impact of ability grouping on mathematics performance and behavior

by extending their analysis to 10th grade. The limited research focusing on middle school tracking practices makes it difficult to definitively make conclusions about the impact of ability grouping in middle school, but this initial research shows ability grouping practices in middle school is problematic.

Qualified Teachers

A prominent area of research that has implications for middle school academic experiences has been about issues of teacher training and preparation among middle school teachers. Unlike elementary and high school teachers for whom states typically require specific training to teach in those particular age groups, middle school teachers rarely face similar middle school-specific certification requirements. Currently, few teachers in the U.S. have received formal training to work with young adolescents (Flowers et al., 2002; Juvonen et al., 2004). Even middle school educators trained in formal teacher education programs have rarely been exposed to middle school-specific teaching methods (George, 2004). Ingersoll (1999) found that a third of all secondary mathematics teachers in the nation do not have a major or minor in mathematics and are more frequently concentrated in

small schools, schools serving poor communities, and middle schools. In California, underqualified teachers are more likely to be concentrated at schools serving minority, poor, and English-limited students (Shields, et al., 1999).

In order to address the lack of appropriate training for middle school level teaching, it is important to consider the question: what is a qualified middle school teacher? This question must be deliberated within the context of current national discourse on qualified teacher requirements as mandated by No Child Left Behind policies. Current federal policy supports both formal teacher education certification programs and alternative certification programs that do not require formal teaching training or experiences in the middle school context (The Teaching Commission, 2004). However, in George's (2004) review of existing research he finds that middle school certification is linked to higher academic achievement and argues that formal teacher education programs are the most effective means for assuring that middle school teachers are adequately trained. Unfortunately, current discussions of what constitutes "highly qualified teachers" rarely makes mention of specialized middle school level teacher

certification.

Most discussions of adequate teacher training involve the increasing use of high-stakes testing to measure teacher efficacy in middle school academic achievement. An existing argument suggests that teacher performance can be measured according to changes in individual standardized test performance – a so-called "added value approach" (Doran & Izumi, 2004). However, Lockwood et al. (2007) found that effects on middle school mathematics achievement is more likely varied according to the specific measurement used to assess mathematics achievement than by teacher or student background variables. Thus, policies seeking to evaluate teacher performance in middle schools and apply rewards based on standardized test results should be carefully weighed.

In an effort to inform this discussion, Smith et al. (2005) examined different indicators of teacher quality for effects on 8th grade mathematics achievement. They found that being completely certified on its own does not predict mathematics achievement among 8th graders. However, having majored or minored in math allowed teachers to be better prepared to use conceptual teaching strategies in the classroom, which leads to

increased and more in-depth understanding of mathematics concepts. Professional development in subject content was also positively associated with emphasizing conceptual-learning in the classroom.

It is important to keep in mind that not all teaching strategies benefit racial groups similarly. In examining achievement gaps between students of color and whites in national standardized mathematics tests, Wenglinsky (2004) found that time spent on homework and real-world problem solving is associated with higher performance at the school level; whereas increased emphasis on testing in schools decreases mathematics test performance. In comparing racial groups, Wenglinsky's (2004) time-on-task reduced the gap between African Americans and whites and working on projects reduced the achievement gap for Latinos. In contrast to Smith et al. (2005), Wenglinsky found that having teachers with masters degrees in math actually widened the academic achievement gap. This apparently contrasting finding indicates that further research is needed to understand how teacher professional development is best measured and translated to teaching practices in middle school.

Teaching and pedagogical

strategies should be targeted to middle school students. For example, developmentally appropriate teaching strategies and inter-disciplinary team-teaching has been found to be a positive influence on middle school achievement (Russell, 1994). Ongoing professional development has the potential to address gaps in middle school level teacher training (Juvonen, 2004). Ingersoll (1999) also suggests that it is the management of the schools and the staffing decision that principals make that contribute to the current situation, and policy recommendations seeking to streamline certification by lowering major and minor requirements may be detrimental. However, Flowers et al. (2002) found that middle school teachers and administrators differ on their perceptions of professional development needs and opportunities. Middle school teacher training merits closer inspection by policymakers and researchers to target training to serve adolescents in the middle school grades.

Behavioral Factors

Chronic absenteeism and behavioral problems in middle school are clear warning signals of dropping out in high school (Youth Transition Task Force, 2006; Bridgeland, et al., 2006). Students that eventually drop out are absent

considerably more days in the school year than those students who don't drop out. Bridgeland, et al., (2006) considers this the "most common indicator of overall student engagement". Balfanz and Herzog (2006) found that sixth graders who either attended school less than 80% of the time or received a poor final behavior grade had a 29% chance of completing high school. Rumberger (1995) also explores individual factors related to high school completion and finds that students that were absent more than 25% of the time, changed schools, misbehaved, or did not participate in extracurricular activities in middle school were more likely to drop out before 10th grade. The significant associations between absenteeism, changing schools, and behavioral problems in middle school to high school completion have lead researchers to conclude that these factors are indicators of disengagement from and disinterest in school that can eventually lead to dropping out of high school.

Although, these type of factors can be examined with various frameworks such as social development, school culture, and psychological frameworks, its impact on learning and academic progress is undeniably uniform. That is, students that are absent or

behave poorly in middle school are not likely to academically progress in high school. In the following section of this report, research on motivation and social development of adolescents is reviewed to understand why some students disengage from school. Here, the research on transitions between elementary and middle school is helpful in understanding how learning conditions in middle school may contribute to students' disengagement from school and in turn, lead to increased behavioral problems.

Transitioning from Elementary School to Middle School:

Researchers have been concerned with achievement and developmental implications of transition between elementary and middle school. One way that this question has been approached is to compare students that transitioned to different middle schools after elementary school and again in high school with students that attended K-8th grade schools and transitioned to a different high school. Alspaugh (1998) found that students that changed schools between 5th and 6th grade incurred greater achievement loss than students who remained with the same peers in the same K-8th school. Moreover, those same students that

joined different middle schools from elementary school incurred greater achievement loss in the transition to high school compared to the students that attended K-8th schools. This loss in academic achievement was further correlated to dropping out of high school for the students who transitioned school twice. Alspaugh's (1998) findings can be interpreted as a consequence of peer and school instability and other changes faced by students surrounding each transition.

Other research also collaborates Alspaugh's interpretation and points to specific changes that occur in middle school transitions (Feldlaufer, et al., 1988; Eccles, et al., 1993). In a study of transitions between 6th and 7th grade, observed changes in the classroom environment, such as less individualized task organization, less autonomy and input in class material, and less opportunity for collaboration and interaction between students, were associated with transitions between elementary school and middle school (Feldlaufer, et al., 1988). Interestingly, in this study students and teachers did not report changes in competition between students. However, increased social comparison of grades and report cards did seem to increase in the transition to middle school.

Many of these changes can be described as increased expectations of self-reliance in completing tasks yet less self-direction in the learning processes – developmental expectations that may not be in agreement with students' actual emotional and social development in early adolescence (Feldlaufer, et al., 1988).

Academic achievement is closely linked to students' engagement and interest in school. Student engagement in school, in turn, is closely linked to positive relationships between teachers and students (Thorpe, 2003). In this link, Feldlaufer, et al., (1999) also found that students perceived middle school teachers as less caring, warm, friendly, and supportive than their elementary school teachers. Parallel to this observation, Eccles et al., (1988) found that 7th grade teachers, in contrast to 6th grade teachers, believed that students were less trustworthy and needed to be disciplined and controlled. This negative perception of students in 7th grade may be, in part, a reflection of 7th grade teachers' lower sense of efficacy found in the study. And this finding also confirms the lack of professional development of middle school teacher discussed earlier. It is apparent that teacher-student relations take a

negative turn in middle school, which could contribute to students' disengagement from school and decreased academic motivation. And Eccles et al., (1993) confirm that middle school classroom environmental changes can indeed be linked to decreased academic motivation among adolescents.

Eccles et al. (1993) seemed to be concerned with environmental factors that stimulate trust, confidence, and positive relationships with teachers in the transition to middle school. However, Phillips (1997) argues that the academic climate of a classroom is much more crucial to mathematics achievement than a communal school arrangement where "embeddedness" in social relationships in schools is a condition for academic engagement. Phillips (1997) presents evidence that schools that emphasize high teacher expectations and a demanding curricula, independent of having caring teachers or shared values, yield better academic results for students. This argument merits closer inspection, especially as it applies to lower economic status students and in situations where schools accomplish both communitarian and academic focused environments.

A possible explanation for

misbehavior in school and increased absenteeism in middle school is a student's disengagement and disinterest in school and lowered academic motivation. The research discussed here presents an argument where premature changes in the middle school learning environment and student-teacher relationships may initiate disengagement in school. This further points to the need to investigate exactly how middle schools are appropriately aligned to address adolescent's social and learning developmental needs and not simply replicate high school learning environments.

Family Factors in Decisions to Attend College and Dropping Out of High School

There are various family factors that are correlated to high school completion and college enrollment, and some factors are exclusive to middle school experiences. To begin, most research confirms that the relationship between socio-economic status and educational attainment is very strong (Cabrera & La Nasa, 2001; Choy, 2002). In Rumberger's (1995) analysis of a longitudinal sample, socio-economic status was the most consistent individual-level predictor of dropping out. However, Rumberger (1995) made the important

observation that the factors predicting dropout rates varied by ethnic groups. For example, socio-economic status predicted dropout rates for Hispanics and Whites but not for Blacks. Rumberger's (1995) findings underscore the different role that socio-economic status plays for different social groups and the difficulty in generalizing family influence in educational outcomes.

Several studies have also demonstrated the direct and indirect influence of parental factors on the development of college plans and aspirations (Cabrera & La Nasa, 2001; Hamrick & Stage, 2004)). In Hossler's and Gallagher's (Hossler, Schmit, and Vesper, 1999) college-going model, middle school is identified as a crucial time when students develop college-going "predispositions" with the help of their parents or counselors. Additional studies that have relied on national longitudinal samples have confirmed that students and parents with college aspirations and expectations in 8th grade were more likely to complete high school and go to college (Swail, et al. 2005; Cabrera & La Nasa, 2001). However, Perna (2000) has questioned the universality of this assumption when she finds that parental involvement, aspirations and expectations predict college enrollment

differently for some racial and ethnic groups than others.

In real life circumstances, few students actually report initiating college planning before high school.

Wimberley and Noeth (2005) found that although most students reported a desire to attend college in the early years, few reported being enrolled in a college preparatory curriculum in high school and almost a fourth of high school students had yet to explore their post-high school options. Unfortunately, a wide gap exists between aspirations and expectations and actual college planning activities among working class families or families where parents do not have a college education (Cunningham, et al., 2007; Hurtado, et al. 1997; Horn & Nunez, 2000; Tornatsky, et al., 2002). The recommendations offered in these studies suggest that it is necessary that college planning begin in middle school so that when students arrive at high school they are able to plan their coursework accordingly.

In discussing the relationship between educational attainment and family factors, there is a broad range of factors to consider: parental aspirations, parental expectations, and parental socio economic status. The exact causal relationship between parental encouragement,

aspirations and expectations and college enrollment has not been established, but it is generally accepted in college-going decision models that parents play an important role in the development of college aspirations and expectations, and college plans (Cabrera & La Nasa, 2001; Hossler et al., 1999). Along with this assumption is the clear evidence that a students' socio-economic status is positively correlated to college enrollment and high school completion.

Parental Involvement in Middle School:

In linking parental aspirations, expectations, and encouragement, it has become acceptable to look to parental involvement in education and in school as a possible area of intervention to increase educational attainment. Existing research does present some evidence for this assumption: high school dropouts report low levels of parental involvement and it is mostly related to discipline issues (Bridgeland, et al., 2006). Moreover, students that go to college report higher levels of parental involvement (Cabrera and La Nasa, 2001; Perna, 2000). Eccles and Harold (1993) specifically links parental involvement to academic achievement. Kreider et al. (2007) conclude that home-school connections

are important in the transition from middle school to high school and have implication for high school completion and college planning. Generally, the argument is that increased parental involvement in the form of parental support or encouragement can lead to higher aspirations and expectations and serves as some sort of signaling of educational importance in the family. Other forms of parental involvement, such as academic advocacy may have more direct impact on academic performance. Unfortunately, parental involvement in middle school decreases (Juvonen et al., 2004; Kreider et al., 2007; Eccles & Harold, 1993).

Kreider et al. (2005) argues that parental involvement is particularly important for Latino, African American, and educated parents with little or no formal education and whose children may need more advocacy in the schools. In a study of working-class Latino parents, Zarate (2007) found that middle school parents were concerned with their children's lives and engaged in activities and practices that allowed them to stay abreast of children's activities and peers. And although parents supported students academically, some parents felt that the schools best addressed the realm of academic development activities. This perception

stood in contrast to teachers' expectation of parental involvement in more traditional forms, such as volunteering at school and participating in the PTA. Parental involvement in different spheres of students' lives and its impact on academic achievement remains to be explored as it relates to diverse families' experiences.

It can be argued that parental influence is particularly relevant in the transition of students between elementary school and middle school and between middle school and high school when students are experiencing social changes. Like Zarate (2007), Smith et al. (2006) found that in transitions to high school, parents were also most concerned about students' social transition, such as confronting peer pressure. It may be that a common parental concern and motivation for involvement in middle school is the social dimension of students' adolescent development. Family interactions may provide some source of resiliency for students in the transition between high school and middle school: Crosnoe and Trinitapoli (undated) found that the way parents spent leisure time had implications for academic performance and parent-child relation between transitions from elementary school and middle school. In this study,

educational activities were the shared activities that most frequently persisted in the transition to middle school and seemed to also impact mathematics achievement positively. From these studies, we can consider that parental involvement definitions can shift from academic and school involvement in elementary school to social awareness in middle school.

There are a myriad of ways in which parents can be involved in with their child's education in middle school and no consensus of what is the most effective form of parental involvement, from helping with middle schools tasks to traditional school volunteering (Eccles & Harold, 1993; Juvonen et al., 2004). However, Zarate (2007) found that parents often lacked the time and school system knowledge to volunteer at school or help with academic tasks – especially parents who did not attend college themselves. Another accessible area of remedy is to involve parents in the development of post-high school plans – which seems to be an important predictor of college enrollment. Zarate & Pachon (2006), Cunningham et al. (2007), and Tornatsky et al., (2002) have all documented the extent to which parents are often uninformed about college options and admissions processes. If parents indeed play an

important role in the development of aspirations and expectations, college information dissemination might the most direct way to involve parents in determining the educational outcomes of their students.

Interventions in Middle School

Various programs have emerged that have been aimed at curbing dropout trends and have targeted different age groups, schools, and communities. Of particular interest are middle school intervention programs and the characteristics associated with successful dropout programs. In their review of intervention programs, which included 2 middle school intervention programs, Fashola and Slavin (1997;1998) found that programs that were personalized, provided academic support, and linked students to college campuses were effective in stemming dropout rates and college enrollment. Mahoney and Cairns (1997) found that students with greater involvement in extracurricular activities in the middle school are less likely to drop out in high school. Extracurricular activities strengthen school connections and positive school engagement for students academically at-risk, especially during the crucial middle school to high school transitions.

In a broader evaluation of federally funded dropout prevention programs, Dynarski and Gleason (2002) found that programs that did not seek to supplant or alter the organization of the school were implemented much more smoothly than those that addressed the school structure. On the other hand, very few schools addressed teaching practices or organizational structures that permit dropping out and most fund-recipients only added a dropout prevention program in an extra-curricular capacity. In their evaluation, they found that alternative middle schools offered the most intensive and effective intervention. Such programs gave at-risk middle school students staff and teaching services that addressed their needs specifically. Resounding similar conclusions, Gandara's and Bial's (2001) assessment of several intervention and outreach programs across the nation, found that long-term and all-encompassing intervention programs that begin before high school are the most effective. Unfortunately, they found that most programs "augment and supplement" school days but do not substantially change the way students engage with the school.

Conclusion

For many years, middle

schools have been neglected as an ill-defined middle gap between elementary and high school. The implications and consequences of school climate, learning, academic achievement, and social development in early adolescence have only recently begun to be explored by researchers and garnered the attention of policymakers. Increased attention to what happens in middle school is largely due to emerging evidence that middle school academic achievement, behavioral patterns, and parental influence impacts high school completion and college enrollment. The sense of urgency associated with addressing soaring high school dropout rates and the increasing importance of completing college has pushed the examination of middle school experiences further. Indeed, in order to address high school completion and college enrollment, it becomes imperative to examine the entire schooling trajectory to identify different intervention opportunities.

In this review, middle school academic outcomes are featured as strong predictors of who is likely to drop out of high school or not enroll in college. Failing classes and being placed in low ability groups are fairly visible indicators that can point to which students may be at-risk of dropping out. In

addition to individual student factors, it is important to consider structural limitations that can impact academic outcomes in middle school and thus point to policy intervention. Teacher preparation and training materialized as a factor to consider when evaluating academic achievement in middle school. Existing regulations are not addressing the unique professional development needs of middle school teachers. Unfortunately, the implications of having inadequately trained teachers are evident in the lower academic standing of students with unqualified teachers.

From a social development standpoint, it also becomes apparent that students in middle school may be more prone to experience disengagement from school and school personnel. Alienation from school can contribute to behavior challenges and absenteeism, a pronounced indicator of dropping out of high school. The precipitous transition between elementary school and middle school and all of the changes involved in this transition should be reconsidered as a possible source of alienation for students and inevitable detachment from school personnel.

Most recently, outreach efforts and intervention movements have pointed to parental involvement as a

treatment for the many ailments that lead to dropping out or not going to college. The numerous and inconsistent definitions of parental involvement and parental support have complicated any conclusions one can make about the impact of parental involvement in middle school on academic achievement, given other more reliable middle school indicators of educational outcomes. Nonetheless, existing research has confirmed there is a relationship between parental expectations, aspirations, and parent participation in college planning to high school completion and college enrollment. Although, the causal map of the relationship between parental involvement and education is not completely understood.

A student's socio-economic status is intrinsically shaping all of the factors under consideration in this review. And most research confirms that socio-economic status plays an indirect role in determining middle school and high school trajectories. The impact can rest on the access to qualified teachers, schools with adequate learning conditions, and in parental navigation of schools and college planning. Socio-economic factors must be considered in relation to the structural opportunities available to

students. Policy interventions and outreach programs targeting middle school students should aim to address indicators of high school completion and college enrollment within the context of persistent socio-economic inequalities.

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Notes

¹ Source: California Department of Education, Educational Demographics Office (CBEDS, assign06 7/3/07, pubschls 9/1/07, sfib0607 5/14/07)

CHALLENGES FOR MIDDLE SCHOOL REFORM: HOW TO FOSTER CONTINUITY, CONNECTIONS, AND A SENSE OF EMOTIONAL SAFETY

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Middle school years are a time of heightened vulnerability. The three years between sixth and eighth grade are known for an increase in disciplinary problems (rebelliousness), motivational decline (lack of interest, increased alienation) and initiation in risky behaviors (Dryfoos, 1990; Eccles et al, 1991; Lightfoot 1997). The question is whether these are inevitable (e.g., biologically based) problems displayed by young teens or whether schools are contributing to the social-emotional vulnerabilities of young adolescents. To analyze this question, we need to understand not only how young teens change, but also how their school environments change as they move from elementary schools to middle schools.

Middle school years are a time of heightened vulnerability. The three years between sixth and eighth grade are known for an increase in disciplinary problems (rebelliousness), motivational decline (lack of interest, increased alienation) and initiation in risky behaviors (Dryfoos, 1990; Eccles et al, 1991; Lightfoot 1997). The question is whether these are inevitable (e.g., biologically based) problems displayed by young teens or whether schools are contributing to the social-emotional vulnerabilities of young adolescents. To analyze this question, we need to understand not only how young teens change, but also how their school environments change as they move from elementary schools to middle schools.

Although many school reform ideas since the late 1970's have been framed in terms of developmental responsiveness (Juvonen et al., 2004), the practices promoted often reflect a rather simplistic understanding of development. Perhaps one of the most problematic assumptions is that students who are starting to look older are not only capable of handling a school that resembles high school more than their elementary school, but that they also benefit from a comprehensive change. The premise that developmental changes require changes in the school environment has been challenged by adolescent experts. Specifically, the timing of the transition to a new school (Simmons & Blyth, 1987)

and the nature of the changes with regard to young teens' developmental needs have been questioned (e.g., Eccles & Midgley, 1989, Eccles et al., 1991). Simmons and colleagues maintain that transitioning young adolescents into a new school environment at the time when they are going through many other changes related to their physical development raises their level of distress, which interferes with their psycho-social adjustment and school performance. Eccles and colleagues, in turn, contend that a poor match between the developmental changes of youth and the educational practices of middle schools contributes to the increasing motivational and behavior problems associated with social-emotional difficulties

of young teens.

Guided by the work of developmental psychologists focusing on social-emotional needs of young teens, I will first summarize some of the key developmental changes that 12-14 year old youth go through. To analyze the fit between student needs and the changes in their school environments, I then summarize how the learning context typically changes as youth transition from elementary schools to either 6-8 grade middle schools or 7-9 grade junior high schools. Extending the prior conceptualizations of the poor timing of the transition and lack of developmental responsiveness of the changes in the educational environment, I contend that the transition to middle school (1) poses a series of developmental discontinuities that compromise the social-emotional adjustment of young teens, and (2) that discontinuities in relationships with teachers, peers, and parent-home connections, along with larger size and organizational features of middle schools, contribute to students' sense of vulnerability. Fears of personal safety and lack of supportive relationships are causes of concern, inasmuch as they highlight how and why urban middle schools have failed students who continue to perform poorly academically

To better serve young

teens and optimize their learning environments, I propose that schools need to foster continuity, personal connections, and sense of emotional safety. To accomplish these goals, a range of strategies is described that districts and schools can implement. Although much of this review is based on national trends and generic research findings, the recommendations are designed specifically for Los Angeles County. In keeping with the focus on the local schools, I first start with a brief summary on social-emotional indicators of middle school students in the Los Angeles County.

Social-emotional Adjustment of Middle School Students in L.A. County

One of the most important findings of our search for adjustment indicators of middle schools students in Los Angeles County is that little data are available. This is telling of the priorities, and the finding is not unique to Los Angeles County. Most states, counties, and school districts keep careful account on standardized achievement test scores by schools and students demographics (i.e., race or ethnicity and socioeconomic indicators), but few if any indicators of social-emotional adjustment are systematically assessed. In California, one of the best

“standard” indicators other than achievement is offered by a student survey called “California Healthy Kids.”

Although historically this survey focused on physical health and risky behaviors (mainly drug use) starting at seventh grade, it currently includes one item on depression, one on truancy, a few items on perceptions of school safety and various forms of victimization as well as a new section on protective factors (e.g., opportunities to interact with teachers and other adults at school). Based on the latest summary of the data from the fall of 2004 to the spring of 2006, of the 69,947 seventh graders surveyed during the past year (61% Latino, 15% Caucasian, 12% Asian, 9% African-American):

- About 30% report feelings of depression to an extent that such feelings interfere with their engagement in activities
- One in five students report having skipped school or classes a minimum of 1-2 times
- Almost half (45-49%) of seventh grade students report being harassed and pushed, shoved, or hit by peers at school
- Less than 20% report having high level of opportunities for meaningful interactions with teachers or other adults in school, (WestEd, 2007).

These data suggest that among seventh grade

students, a substantial number are experiencing social-emotional problems likely to impede academic achievement. Particularly troubling is the high proportion of students feeling unsafe in school. These estimates are comparable to national data on middle school students; 43% of whom report being bullied (U.S. Department of Education, 2006) and hence should be a cause of concern. In light of these findings, it is clear that we need to better understand why so many students in middle school experience difficulties.

Developmental Changes During Middle School Grades

Early adolescence (ages 12-14) is associated with numerous changes in physical appearance, reasoning capabilities, and relationships with parents and peers. To understand what educational implications these developmental changes have, I briefly describe complex reasons underlying behavior changes in early adolescence and highlight popular misconceptions about the pubertal effects.

Puberty and hormones: "Raging hormones" is one of the most popular explanations for negative behavior changes during adolescence (Buchanan et al., 1992). Yet the most

fundamental hormonal effects on behavior do not take place during adolescence, but before and right after birth (Connolly et al., 1996). Moreover, variations in hormonal levels across individuals during adolescence explain rather trivial amounts of variation in their behavior. For example, variations in testosterone levels do not consistently account for individual differences in aggressive or disruptive behavior among adolescent males across studies (Connolly et al., 1996). Chronological age or grade level better predict initiation of new behaviors (e.g., dating) than pubertal development (Berndt & Savin-Williams, 1993). Thus, although hormones regulate maturational processes, their ability to account for any major behavior changes during adolescence is very limited. Yet, hormones and other changes related to puberty are implicated in greater emotional reactivity to stress (Buchanan et al., 1992), which is relevant when trying to understand youngsters' acclimation to a number of changes in social relationships, educational practices and expectations associated with the transition to middle school.

Cognitive gains and decision-making:

If hormonal changes cannot account problems

other than increased reactivity to stressors, what then can explain the negative behaviors of young teens? Particular puzzling is the idea that while young adolescents might be able to reason as logically as their parents on laboratory tests (Fischhoff, 1992), teens appear to make many more immature decisions than their parents. This paradox can be understood when considering the situations in which youth make or act on their decisions. For example, one recent experiment of simulated driving showed that adolescents made more risky (poor) decisions in the presence of their peers, as opposed to alone, and compared to adults who were accompanied by adult peers (Gardner & Steinberg, 2005). These findings are consistent with recent research on neural activation of the adolescent brain suggesting that self-presentational factors have stronger effects on adolescent decision making than on adults or younger children (Dahl, 2004; Galvan et al, 2006). Thus, when peers are present, "saving face" or acting "cool" may be more important determinants of behaviors than safety concerns. This conclusion implies that we need to better understand the potentially powerful meaning and function of peer relationships during adolescence.

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Changes and relationships:

As suggested by the example about decision making, peers are likely to affect teens' decision making. Not only are relationships with friends important, but also the time they spent with peers exceeds the time spent with family during early adolescence (Berndt & Savin-Williams, 1993). Peers come to serve as another source of influence, support, and validation outside of the home environment. A heightened need to belong to a peer group is developmentally (and also evolutionarily) adaptive, in as much as youth need to gradually become less reliant on their parents. Hence, the desire for independence does not necessarily refer to an absolute sense of autonomy, but to a need to find another source of support and identity besides one's family.

Although the belongingness need is met increasingly more so by peers than parents, this does not mean that parents no longer matter (Steinberg & Silverberg, 1986). For example, good relationships with parents are associated with better emotional adjustment and school achievement (Steinberg, 2001). Moreover, research shows that peers are less likely to have negative influence on youth when they continue to have close

relationship with their parents (Steinberg 1993). In other words, parents vs. peers is not a zero sum game, but the effect of one set of relationships determines the behavioral influence of the other.

Whether or how schools take into account the fact that young adolescents continue to need parent support at the same time when peers become increasingly important sources of support and validation is not clear. Equally important are the educational implications of the heightened need to belong or "fit in" with peers. While some educators might argue that a sense of belonging is not educationally an important goal, studies show that social alienation from school-based peer networks during grades 8–9 increase the risk of dropping out over and above achievement indicators (Kaplan, Peck & Kaplan, 1997). Hence, the feelings of vulnerability and low sense of belongingness cannot be ignored when considering how schools can better serve the needs of young adolescents.

Environmental Changes Associated with Transition to Middle School

The transition from elementary school (typically after fifth grade) involves a number of simultaneous changes in the size and

structure of the institution, instructional methods, and relationships with teachers and peers. It is therefore critical to understand how these changes affect young adolescent behavior, especially since these environmental transitions coincide with the many developmental shifts described above. The key questions guiding this analysis are whether environmental changes are supportive of the developmental needs of young teens and whether these changes might also independently contribute to increased disciplinary problems and alienation from school.

School size:

Compared to neighborhood elementary schools, middle schools are typically several times larger even though they consist of fewer (typically two or three) grade levels. For example, in Los Angeles County, the average size of elementary school is about 500 students, whereas the average 6-8 grade middle school is 2100 (Ed-Data, 2006-07). Given that elementary schools typically serve twice as many grade levels than middle schools, the grade cohorts (i.e., the number of students in the same grade) are at least seven times larger in middle school than in elementary school (80-90 vs. 600-700). Although higher rates of

disciplinary problems in larger schools are well established (Cotton, 1996), the effects of the size of the grade cohorts has not been analyzed. Yet, the size of the most salient peer group (i.e., the grade cohort) might be a critical determinant of sense of vulnerability and isolation among middle school students (Juvonen et al., 2004). It has been proposed that increased rates of bullying during middle school (U. S. Department of Education, 2006) reflect the need for students to resort to dominance behaviors (i.e., bullying) to establish social hierarchies as a way to deal with their expanding peer environment (Juvonen & Galvan, 2007). Ethnographic data on middle grades indeed highlight the role of popular peers in setting the mean and exclusionary social norms (Eder, 1995; Merten 1997).

School organization:

Certain structural or organizational features of middle schools are also likely to contribute to perception of anonymity and lack of connections. Students in traditional middle schools are no longer placed in self-contained classrooms with one primary teacher and the same classmates. Instead, teachers and classmates vary from one period to another as the school is structured by academic departments.

When teachers instruct about 150 students per day, it is not reasonable to expect them to know their students well as an elementary school teacher who meets with the same 30 students all year. But students' ability to establish and maintain relationships with their peers is also hindered when classmates vary from one period to the next. Thus, it is not only the number of fellow students but also the lack of consistency that is likely to contribute to low sense of belongingness in middle school. For example, Anderman (2002) showed, that compared with students in K-8 or K-12 schools (i.e., schools with smaller grade cohorts and more continuity), same grade level students in 6-8 grade middle schools felt less connected and safe.

Parent (un)involvement:

The larger size and the departmentalized structure of middle schools also distances parents from the school. Parents are often blamed for not engaging in school when their children reach middle school. However, analyses of the ways in which schools try to engage parents indicate that compared to elementary schools, middle schools organize fewer opportunities for parents to connect with teachers (Juvonen et al., 2004). Not surprisingly, parents are infrequently aware of the expectations of the school (Mulhall, et al,

2001) and do not even know which teacher to contact if they need to talk about their child. Hence, not only are young teens expected to learn to navigate the much larger and anonymous social environment, but the size and organizational structure also hamper the developmentally critical connection between school and home.

Instructional methods:

In spite of gains in reasoning skills, analyses of the instructional methods suggest that compared to the last grade in elementary school, the learning tasks in middle schools frequently require more "drill and kill" (i.e., rote memorization) and fewer creative problem solving skills (Feldlaufer et al, 1988). Thus, the poor match between developmental capabilities and changes associated with their schooling and learning is indeed likely to account for some of the motivational declines documented during middle school grades. Not only are middle school teachers likely to complain about lack of participation in their classrooms, but some disciplinary problems peak in middle school (U.S. Department of Education, 2006). Thus, concerns for classroom management are likely to contribute to teachers' instructional choices. When teachers do not know their students well they are likely to choose

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instructional methods that do not require student-to-student contact. Hence, worksheets and individualized tasks likely become the preferred methods, in as much as they keep students quiet. Thus, today's middle schools do not capitalize on the social motivation of young teens to interact with one another, but disengage them by keeping students from interacting with one another.

In sum, the school environment becomes not only larger but more anonymous, alienating, and less safe and engaging as students transfer from elementary to middle schools. Indeed, it appears that the educational environment of typical middle schools fails to support the developmental needs of young teens. The salient need to belong is not served by schools in which students are likely to feel disconnected from teachers and threatened by peers. Moreover, many changes in the educational context are imposed at the time when youth themselves are going through many critical developmental changes. This brings us to the critical question of the school transition effects.

Transition effects:

Needless to say, the above changes in the educational environment suggest that the transition to middle school represents a

series of disruptions or discontinuities. Comparisons of students with a transition to middle school (or junior high school) and those who remain in K-8 schools show that those who do not have to transition to a new school receive higher grades and have higher self-esteem at eighth grade (Simmons & Blyth, 1987). More recent comparisons across the two types of schools show that the most striking differences pertain to sense of safety: students in traditional middle schools feel more unsafe and victimized by their peers compared to their counterparts in K-8 schools (Anderman & Kimweli, 1997; Anderman, 2002; Weiss & Kipnes, 2006). The school comparisons in Philadelphia specifically show that even by the end of middle school (i.e., 8th grade) those in middle schools have lower self-esteem and feel less safe than those who have remained in the same school since Kindergarten (Weiss & Kipnes, 2006). These findings suggest that continuity protects social-emotional well-being.

Simmons and Blyth (1978) originally proposed that the timing of the junior high (cf. middle school) transition is particularly problematic in as much as youth are simultaneously going through many developmental changes. Although this idea is intuitively appealing, it needs to be further tested. An alternative hypothesis

is that the number of transitions matter. By relying on longitudinal data, Simmons and Blyth (1987) showed that although students from K-8 schools experienced a decline in their grades at ninth grade when they transferred to high school, the grades bounced back by 10th grade to a point where they were higher than those for students who had made two school transitions. Hence, it seems that students do not learn from an earlier transition but each transition is likely to bring about a set-back, while multiple transitions may "cause" rather long-lasting negative effects.

Summary and proposed goals for middle school reform:

In sum, the transition from elementary school to middle school includes a number of discontinuities in the size and organization of the school, and the instructional practices and educational expectations that do not facilitate the development of either vital teacher-student or adaptive student-to-student relationships. As youth transition to middle schools, their friendships are often interrupted, they have several new teachers, at the same time as their parents are distanced from the education of their children. In light of these facts, it is not surprising that many students report feeling

disconnected, unsafe and isolated (Juvonen et al, 2004; see also Anderman, 2002; Weiss & Kipnes, 2006). I propose that to better the conditions for learning for young adolescents, we need to (1) improve the continuity of their educational experiences, (2) facilitate a sense of connection between students and teachers, among students, and between school and home, and (3) enhance the emotional safety of students. These goals also address the needs suggested by the data on the seventh grade students based on California Healthy Kids Survey (WestEd, 2007).

Recommendations for Middle School Reform

I conclude this paper with specific recommendations to reform middle grades in Los Angeles County in light of the three goals to improve continuity, interpersonal connections, and emotional safety. Fostering a sense of connection among students and between teachers and students in addition to promoting a caring peer culture are easier to accomplish when there is a continuity in relationships. Hence, the goals are integrally interrelated. Moreover, some of the recommendations can help reach more than one goal. Nevertheless, I have organized the recommendations by the

primary goal they help promote because linking between the broad goals and the specific strategies is vital. We have learned from middle school reform that many so called “middle school practices” are implemented in a checklist fashion with little attention to their underlying goal (Juvonen et al, 2004). For example, advisory programs originally designed to promote closer teacher-student relationships are frequently implemented in a manner that does not allow the teachers to get to know their students: Advisors do not necessarily teach their advisory students for any subject and therefore do not get to know them outside of the 20 minute period that is typically used to take roll and make announcements. Yet, middle schools that have advisory programs can claim that they rely on “developmentally responsive practices.”

Goal 1: Enhance Continuity Eliminate separate middle schools:

As reviewed earlier, the disruptions and discontinuities created by the transition to and from middle school do not facilitate social-emotional well-being, but often intensify distress and problem behaviors. One solution to this problem is to eliminate separate middle schools (Juvonen, et al.,

2004). Given the favorable evaluations on K-8 schools, grades 6-8 could be incorporated (back) into elementary or “elemiddle” schools (Hough, 1995). This would mean that the school can capitalize on the non-departmentalized elementary school structure. The number of specialized teachers could be increased gradually so that by eighth grade students have several different teachers, while one of them still serves as their primary teacher and is also the main teachers with whom parents can also be in contact. Eliminating one school transition would enhance the continuity for students, and also enable conditions that promote closer school-home connections. Schools would be able to keep parents engaged and parents would be more likely to remain connected with the school when the communication is already in place.

Although the findings regarding the benefits of K-8 schools are not new, few such schools remain. For example, in the largest school district in the Los Angeles County, the Los Angeles Unified School District (LAUSD), there are 8 K-8 schools compared to 74 middle schools (Lim, personal communication).

Postpone transition to middle school:

There are other ways to promote continuity and a

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sense of connection besides K-8 grade configuration. For example, postponement of the transition better supports the development of young teens. Ironically, in large urban areas, the trend has been the opposite: Rather than transferring after sixth grade, most students in Los Angeles County transfer from their elementary schools after their fifth grade. Yet, young teens are likely to better cognitively and emotionally manage changes in their educational environment when they are older. In other words, later changes and more gradual changes are easier for young adolescents to accommodate.

Summer transition programs:

Students with academic problems most at risk of “falling through the cracks” and becoming alienated from school need additional help to prepare them for the changes in educational practices and environment. Summer programs that focus on prerequisite skills have been proven to be particularly effective when they take place before sixth grade (Cooper et al., 1996.). Also, summer programs in general are particularly helpful for economically and socially disadvantaged children (i.e., a large proportion in Los Angeles County) for whom summer forgetting contributes to their relatively low

achievement (Chin & Phillips, 2004; Cooper et al., 1996). Summer transition programs prior to middle school can also foster a sense of connection among students in preparation for the new environment. Given the current budget problems affecting schools, funding of such programs requires coordination between school districts and community organizations.

Looping:

An instructional practice that keeps a group of students with a same teacher for consecutive years, called looping enhances the continuity of students’ educational experience and fosters closer connections between teachers and their students in middle schools (Black, 2000). Compared to non-looped classes, students in looped classes display more positive attitudes toward school and score better in achievement tests (Lincoln, 1998). Moreover, longitudinal research suggests that student attendance and retention rates improve, while disciplinary actions decrease when students are looped for grades 1 to 8 (Grant, 2000). These positive findings may partly reflect the fact that teachers come to know their students better over the years, lessening the chances for any one student to fall between the cracks. This strategy might be particularly

effective in large urban middle schools (i.e., those in LAUSD), which are serving economically and socially disadvantaged students. Looping could also be implemented initially for advisory programs or in only some (rather than all) subjects.

Goal 2: Improve Sense of Connection

Low sense of belonging is a hallmark of American middles. Students report feeling isolated and withdraw from rather than engage in school (Juvonen et al, 2004; Juvonen, 2007). As mentioned earlier in this paper, in Los Angeles County only about one in five seventh graders report having a high level of opportunities for meaningful participation with teachers or other adults in school, while another 20% report skipping school and for 30% feelings of depression interfere with their activities (WestEd, 2007). Although the large size and departmentalized structure are likely to contribute to a lack of connection and increased sense of isolation, individually focused instructional methods and lack of extra-curricula activities are also likely to matter.

Cooperative learning:

As mentioned earlier, middle school teachers underutilize teaching and

learning strategies that capitalize on teens' inherent social motivation to interact with peers. Cooperative learning, has been shown to be superior in facilitating social relationships across ethnic and racial groups and improving achievement among students (Johnson & Johnson, 2002; Slavin, 1995). (No data is available about middle school instructional practices in Los Angeles County that would enable us to estimate the prevalence of cooperative learning methods, but the rates are likely to be very low.) The basic idea underlying this method is to boost the efforts of individuals by fostering interdependence as students are placed in heterogeneous small groups. Evaluations of this method show that students in cooperative learning teams outperform those in traditional classes, and students furthest behind show greatest academic gains (e.g., Sharan, 1984; Slavin, 1995).

De-track students:

In contrast to the basic principles of cooperative learning, education in American secondary schools is based on the assumption that students can be taught better when they are in placed in homogenous, as opposed to heterogeneous, groups. This means that academically engaged students are separated from their lower performing peers

by placing them into different academic tracks. Yet these separate social environments mean the most vulnerable students to have little or no contact with academically engaged students. By aggregating students with academic and behavioral difficulties in low track classrooms, environments are created that breed further problem behaviors (Gifford-Smith, et al., 2005). Indeed, placement in low academic tracks has negative effects on subsequent motivation, commitment to school, academic performance, and misconduct (Fulgini, et al., 1995). Hence, separate classrooms and programs for "at risk" students will not protect them, but might instead increase their risk for social alienation and disengagement because of the negative peer exposure and lack of connections with prosocial and academically competent classmates (Gifford-Smith, et al., 2005).

Extracurricular activities:

There are also other ways to help connect students with one another and with teachers. Research on extracurricular activities shows that engagement in such activities is positively associated with achievement and social-emotional adjustment (Darling, 2005; Eccles et al., 2003; Fredericks & Eccles, 2006). Moreover, participation in extracurricular activities

both at middle and high school decreases the risk of dropping out by eleventh grade (Mahoney & Cairns, 1997). Hence, extracurricular options is one way to engage youth (especially those with history of academic problems) in ways that strengthen their identification with and commitment to schooling (Valentine, et al., 2002). Given the limited school budgets to support extracurricular activities, partnerships with community organizations seem to provide an ideal way to offer opportunities for students to connect with one another and adults.

Community Service:

Volunteer service programs (e.g., Teen Outreach Program) have been shown to be effective in decreasing problem behaviors and improving academic outcomes (Allen et al., 1997). Often facilitated by teachers or counselors, the connections to adults in schools help promote adaptive relationships. For the middle school programs, relationships with site facilitators and schoolmates are particularly effective in reducing problem behaviors (Allen et al., 1994). Community service would also help boost the number of students in Los Angeles County who report that they do not have meaningful opportunities to connect with adults at school. Also,

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given the developmental need to become more self-reliant, the experience of being able to help others might be one of the most empowering experiences for young teens.

Goal 3: Foster A Sense of Emotional Safety

One of the most striking findings regarding middle schools is the high percentage of students concerned about their safety: Almost half of Los Angeles County seventh graders reported feeling harassed or bullied by their peers (WestEd, 2007). Some of these findings may reflect in part the large size of an organizational structure that does not foster a sense of connection among students. For example, if classmates change from one period to the next, it is easy to feel vulnerable and it is difficult to benefit from the support of friends. Similarly, competitive (as opposed to collaborative) instructional practices are unlikely to foster comradery or encourage peer support.

Smaller schools:

There are more disciplinary problems in larger schools than in smaller schools (Cotton, 1996). Moreover, students are likely to feel more vulnerable and threatened in schools where many students in the same grade remain unknown. Although no optimal size has yet been identified, it is safe

to say that middle schools with 2000 or more students (i.e., the average size of middle schools in Los Angeles County) are too large for young adolescents.

Students with academic or behavior problems who display any signs of alienation can easily fall through the cracks in these types of institutions. The smaller size lends itself to a more efficient organizational structure improving communication not only within the school but possibly also between school and home (Nathan & Feben, 2001). Hence, smaller schools might better serve students, teachers, and parents.

Adopt anti-bullying programs:

Middle schools may also be ineffective in dealing with peer-directed intimidation and disciplinary problems that compromise feelings of safety. Close to half of seventh grade students in Los Angeles County report experiencing some form of bullying and peer-directed hostility (WestEd, 2007). A few disruptive students who intimidate the rest can negatively affect the social climate of an entire school. School-wide anti-bullying interventions aiming to change social norms of student conduct are relatively rare in the U.S., yet they are the most appropriate programs to address safety and related

school climate concerns (Olweus & Limber, 1999; Salmivalli et al., 2005). The emphasis is on prevention and emotional safety (Juvonen & Graham, 2004). Given the focus on the collective and overall school culture, such programs might ultimately alleviate the feelings of social isolation and improve student views of the peer culture in American middle schools.

Capitalize on ethnic diversity:

One of the often-mentioned "obstacles" to a harmonious and safe school environment in a county such as Los Angeles, is its ethnic and cultural diversity. It is presumed that in ethnically mixed schools, conflict among students is an inevitable fact of life. Yet our research on Los Angeles County middle schools shows that that African-American and Latino students feel safer, less bullied, and more connected in ethnically diverse as opposed to non-diverse schools (Juvonen, et al., 2006). We presume that in schools and classrooms where there are several ethnic groups (as opposed to only two), ethnic minority students are less likely to feel alone and intimidated by other groups. Even in schools where some ethnic groups are in numerical minority, a careful placement of students across classrooms to even out the

proportional discrepancies or imbalance of power might be critical. Although these ideas need to be further assessed, the bottom line is that ethnic diversity is no reason to expect a heightened level of vulnerability or threat. Rather, ethnic diversity can promote feelings of safety especially for some minority groups. Thus, schools should strive to diversify their student body. In the case of middle schools in Los Angeles County, this may mean creating different feeder patterns.

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Final Conclusions

In summary, there are a number of strategies that can be used to promote continuity, closer teacher-student and student-to-student relationships, as well as emotional safety. These range from instructional practices (e.g., looping) to extracurricular options (including volunteer service), school disciplinary approaches and increasing the ethnic diversity of schools and classrooms. The proposed middle school practices are concrete examples of ways to better meet the needs of young teens. But as such, these examples show that there are multiple ways to improve the developmental responsiveness of the educational institutions designed for young adolescents.

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MIDDLE SCHOOL INFLUENCES ON HIGH SCHOOL GRADUATION AND COLLEGE READINESS FOR THE CLASS OF 2005 AT LAUSD

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The road to high school graduation and college begins long before students enter high school, and the middle school years influence whether young people navigate that road successfully. This report takes a close look at the middle school experiences of students in the Los Angeles Unified School District (LAUSD) who were expected to graduate from high school in 2005. Overall, 51% of the sample earned their high school diploma. Of those 51% who graduated, a total of 54% had also completed the college eligibility requirements to apply to a CSU or UC campus. Middle school grades, attendance, and school conditions had powerful impacts on who actually graduated from high school and who was prepared for college. These sobering results make it clear that educators and policy makers should pay attention to these important factors when they design interventions to increase rates of high school graduation and college enrollment.

Middle School Experiences and High School Graduation

This section looks at middle school factors that influence high school graduation, specifically, the impact of students' problematic personal experiences (including failing grades, spotty attendance, and changing schools) and of the problematic conditions in the middle schools they attend (including shortages of qualified teachers, overcrowding, and race and income isolation). Each of these experiences lower students' chances of graduating from high school.

Low-income, African American and Latino students are also more at risk of not completing high school than their White and Asian American peers.

Failing Classes in Middle School Jeopardizes High School Graduation

Half of the students in the cohort of 9th graders who were expected to graduate from high school in 2005 failed at least one core academic class between 6th and 8th grade. This high rate of failure is significant, since failing a middle school course is a significant risk factor that jeopardizes high school completion. Sixty-nine

percent of the students who never failed a class in middle school completed high school, compared with less than 50% of those who failed at least one course. Moreover, those students who did not graduate high school failed three and a half times as many middle school classes as those who did graduate high school. (1).

The risk for not graduating goes up with each failed class. Figure 1 illustrates that the probability of graduating from high school drops quite dramatically as the number of failures increases.

FIGURE 1

PROBABILITY OF GRADUATING DECLINES WITH MORE MIDDLE SCHOOL CLASSES FAILED



Source: Zarate et al. analysis of LAUSD data

The timing of a failed class in middle school also affects the chances of graduating (See Table 1). The earlier a pattern of consistent failure begins, the more often it signals trouble for high school graduation. Those who fail classes during all three middle school years are at greatest risk. Failing a class or classes closer to the tran-

sition to high school places a student in a particularly precarious position. On the other hand, those students who fail classes only during one of their first two middle school years (6th or 7th grade) seem to be a relatively resilient group that recovers in 8th grade.

TABLE 1

High School Completion According to Class Failures in 6th-8th Grade

	Percent Graduating from High School	Percent of Sample (N=39,616)	Avg. # of Classes Failed
Never Failed a Class	69%	51%	
Failed a class(es) in 6 th grade only	54%	4%	2
Failed a class(es) in 7 th grade only	53%	8%	2
Failed a class(es) in 8 th grade only	38%	10%	2
Failed classes in 6 th and 7 th grade	38%	3%	4
Failed classes in 7 th and 8 th grade	25%	10%	5
Failed classes in 6 th – 8 th	18%	14%	8

Poor Attendance in Middle School Jeopardizes High School Graduation

The relationship between attendance and high school graduation starts early, and middle school attendance helps predict who will complete high school. Students in the Class of 2005 who did not complete high school were absent twice as often when they were 7th and 8th graders as those who did complete high school (14-15 days compared to 7 days per year).

Changing Schools Jeopardizes High School Graduation

Changing middle schools can be particularly disruptive to young adolescents. Only 8% of the cohort changed schools between 6th and 7th grade and 6% changed middle schools between 7th and 8th. Fifty-four percent of those who remained at the same middle school graduated from high school; 48% percent of those who changed middle schools between 6th and 7th grade completed high school; and 35% of the students who changed schools

between 7th and 8th grade completed high school. Students who changed schools in middle school were absent, on average, two more days compared to students who did not change schools.

School Problems Jeopardize High School Graduation

Certain conditions in middle schools also seem to have a negative impact on students' chances of graduating from high school. For the class of 2005, attending middle schools with shortages of qualified teachers, operating

TABLE 2
Middle School Conditions and Chances of Graduating from High School and Completing A-G Courses

	Percent Graduated from High School	Percent Completed A-G	N
Teacher Shortages			
Fewer than 1/5 of middle schoolteachers fully certified	51%	27%	33,773
More than 1/5 of middle schoolteachers fully certified	63%	37%	4,463
Year-Round Calendars			
Multi-Track Middle Schools	50%	n/a	13,769
Traditional Calendar Middle Schools	54%	n/a	24,467
Racial Isolation			
> 90% Latino or African American	49%	23%	20,985
50-90% Latino or African American	55%	32%	14,191
<50% Latino or African American	63%	42%	3,060
Income Isolation			
> 80% Low Income	50%	25%	24,913
< 80% Low Income	56%	34%	13,323

MIDDLE SCHOOL INFLUENCES ON HIGH SCHOOL GRADUATION AND COLLEGE READINESS FOR THE CLASS OF 2005 AT LAUSD

on multi-track calendars, and with less diverse student bodies all lowered the likelihood that students would graduate from high school. Table 2 demonstrates how many students are impacted by challenging school conditions.

Shortage of Certified Teachers:

For example, an important distinction between students who completed high school and those who did not is that students who graduated had, generally, better trained teachers in middle school. Students who attended middle schools where more than one-fifth of the teachers were not fully certified (based on 1999-2000 staffing) graduated from high school at lower rates (51%) than students who attended middle schools where fewer than one-fifth of the teachers were not fully certified (63%). Research

has found that schools with 20% or more under qualified teachers are difficult to staff and their function is “impaired”.¹

Year-Round Calendars:

Attending a school operating on a multi-track, year-round calendar also had an effect, although its impact was smaller than that of teacher shortages. Half of the students who attended a multi-track school in middle school completed high school, compared to 54% of the students who attended a school on a traditional calendar.

Racial Isolation:

Students who attended racially isolated middle schools did not seem to fare as well in completing a high school diploma. Students at middle schools where over 90% of the student body was African American and/or Latino completed high school 49% of the time

compared to 57% of the time for students who attended middle schools with larger percentages of White and Asian students. Those least at risk were students who attended schools where less than 50% of the students were African American and/or Latino; these students completed high school 64% of the time.

Income Isolation:

Finally, students who attended middle schools where more than 80% of the students came from households with low-incomes, as measured by eligibility for free or reduced lunch, completed high school at somewhat lower rates than students at more economically diverse schools. Fifty percent of students who attended middle schools where over 80% of students qualified for free or reduced lunch completed high school,

TABLE 3
Percent of Students with Certain Conditions

	Percent of Sample (N=39,616)
Schools with more than 20% of teachers not fully certified	88%
Schools with multi-track calendars	36%
Schools where more than 90% of students are Latino or African American	55%
Schools where more than 80% of students qualified for free/reduced lunch	65%

compared to 56% for students who attended other schools.

Background Characteristics and High School Graduation

Race/Ethnicity: Students' own ethnicity was also associated with probability of completing high school. Latino and African American students had lower probabilities of completing high school (49% and 46% respectively) compared to Whites and Asians (59% and 68% respectively). This is not surprising, given the different schooling conditions experienced by

different ethnic groups.

Gender:

Gender differences are also striking. Forty-five percent of the boys in the Class of 2005 finished high school, compared with 58% of the girls. This may reflect differences in the personal experiences of boy and girls in middle school. Boys were far more likely to fail middle school classes than girls—58% of the boys compared with 41% of girls failed at least one class. Moreover, boys fail nearly twice as many middle school classes as girls (2.9 to 1.5). However, boys and girls

have similar yearly absences (approximately 11 days per year).

Language and Income Status:

There were no differences in high school graduation between those students who were eligible for free and reduced lunch in middle school and those who were not. However, some differences on this student characteristic emerged in preparation for college and are discussed below. Further, there were no differences between students whose home language was English or Spanish.

TABLE 4
Personal Characteristics and Chances of Graduating from High School and Completing A-G Courses

		Percent Graduated from High School	Percent Completed A-G	N
Race/Ethnicity				
	Latino	49%	23%	27,427
	African American	46%	24%	4,927
	Asian	68%	56%	2,943
	White	59%	43%	4,200
Gender				
	Male	45%	22%	20,347
	Female	58%	34%	19,269
Language Spoken at Home				
	English	50%	29%	12,053
	Spanish	50%	24%	24,071
	Other	67%	52%	3,492
Mobility				
	Moved schools between 6 & 7	48%	27%	2,847
	Moved Schools between 7 & 8	35%	17%	2,067

MIDDLE SCHOOL INFLUENCES ON HIGH SCHOOL GRADUATION AND COLLEGE READINESS FOR THE CLASS OF 2005 AT LAUSD

However, students who spoke a language other than English or Spanish at home had a high school completion rate of 67%

Middle School Experiences and College Readiness

We now turn to the impact of middle school experiences on college preparation. Specifically, we explore the relationship of middle school to students' completion of the high school courses required for admission to a California State University (CSU) or University of California (UC) campus. Overall, 28% of the students in the Class of 2005 (those who started high school in 2001-2002) graduated eligible for admission to CSU or UC. CSU's target is 33% of high school students in the state.

Failing Middle School Classes Jeopardizes College Readiness

Students who passed all of

their middle school classes had a 45% chance of graduating from high school having completed the course requirements for entry into CSU/UC—more than twice the probability of those who failed one or more of their middle school classes.

As was the case for high school graduation, the timing of when students fail middle school classes is also important for CSU/UC eligibility. Table 5 shows how the timing of receiving an F semester grade in a core academic class affected a student's probability of graduating CSU/UC eligible. Failing a class in only one year significantly reduced a student's probability of completing CSU/UC eligibility requirements. However, a student's probability of completing CSU/UC eligibility requirements decreased if the F occurred later in middle school and when Fs were received in multiple years.

Poor Attendance in Middle School Jeopardizes College Readiness

Better attendance seems to have a positive effect on students' college preparation. In both the 7th and 8th grades, CSU/UC eligible students missed, on average, half (6 days) as many days as those who failed to complete the CSU/UC courses (12 days).

Changing Schools Jeopardizes College Readiness

Mobility also appears to have a negative impact on college preparation. Seventeen percent of students who changed schools between 7th and 8th grade completed CSU/UC eligibility, compared with 30% of students who did not change middle schools. However, changing middle schools between 6th and 7th grade did not appear to pose such a risk. Students

TABLE 5
UC/CSU Eligibility After Failing One or More Classes

	Percent CSU/UC Eligible	Percent of Sample (N=39,616)
Never Failed a Class	45%	51%
Failed a class(es) in 6 th grade only	19%	4%
Failed a class(es) in 7 th grade only	18%	8%
Failed a class(es) in 8 th grade only	13%	10%
Failed classes in 6 th and 7 th grade	9%	3%
Failed classes in 7 th and 8 th grade	6%	10%
Failed classes in 6 th – 8 th	3%	14%

who changed school between 6th and 7th grade completed UC/CSU eligibility requirements at a 27% rate.

School Problems Jeopardize College Readiness

Shortage of Certified Teachers:

When more than one-fifth of teachers at a middle school did not have a teaching credential, 27% of students met CSU/UC eligibility requirements (after four and a half years of high school). When less than one-fifth of teachers were not credentialed, 37% of students at the schools met CSU/UC eligibility requirements.

Low Performing Schools:

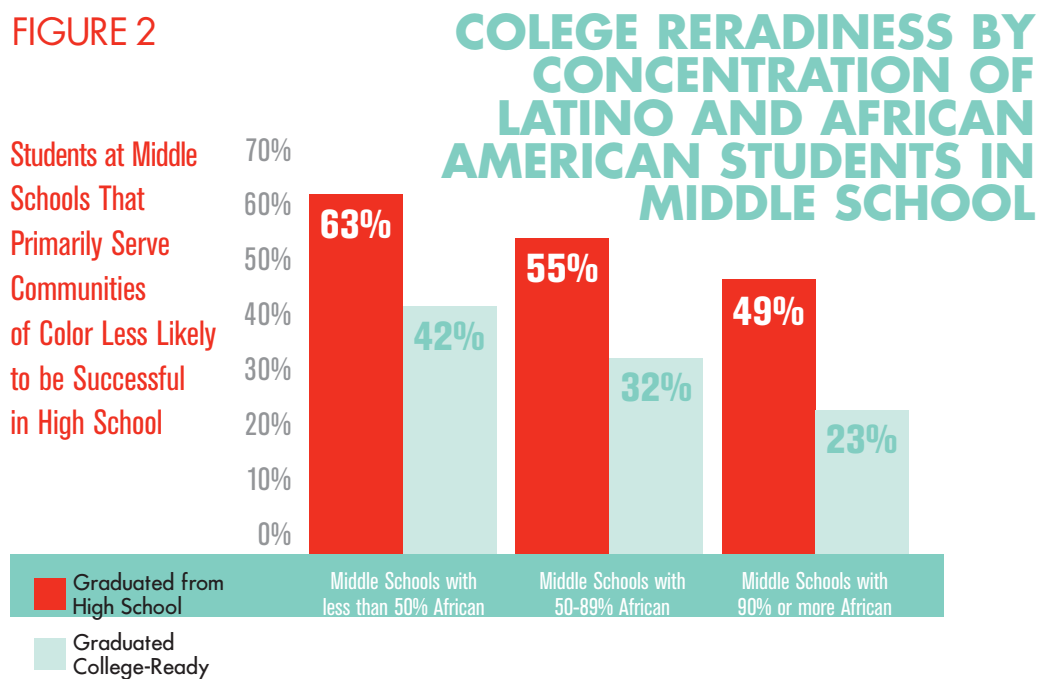
Students attending middle schools with higher levels of math proficiency were more likely than others to graduate from high school prepared for college. At middle schools where school-wide math proficiency² was met, 36% of students went on to become CSU/UC eligible four and a half years after beginning high school. Where school-wide middle school math proficiency was not met, only 25% of students became CSU/UC eligible.

Racial Isolation:

Students at highly segregated schools (schools with concentrations of Latino and African American

students greater than 90%) fared worse than racially diverse schools. More than half of the cohort attended highly segregated schools at which 23% of the students became CSU/UC eligible. By contrast, 37% of middle school students in the sample attended schools that were more racially diverse (schools with 50-89% Latino and African American students), and at these schools, 32% of students were CSU/UC eligible. At schools where less than 49% of the students were Latino and African American, 42% of students were CSU/UC eligible (See Figure 2).

FIGURE 2



Source: Zarate et al. analysis of LAUSD data

MIDDLE SCHOOL INFLUENCES ON HIGH SCHOOL GRADUATION AND COLLEGE READINESS FOR THE CLASS OF 2005 AT LAUSD

Income Isolation:

The concentration of low-income students at middle schools seems to depress students' chances for college preparation. Twenty-five percent of the students who attended a middle school where more than 80% of students were eligible for free and reduced meal plans³ completed CSU/UC eligibility requirements. In contrast, 34% of the students at more economically diverse schools met CSU/UC eligibility requirements.

Background Characteristics and College Preparation Income:

Students' family income status was expected to demonstrate significance on both high school completion and CSU/UC eligibility. In this case, free and reduced meal program eligibility was used as a proxy for family income level. Interestingly, meal program eligibility was not related to high school completion. However, some differences, albeit small, emerged for CSU/UC eligibility. Seventy-one percent of CSU/UC eligible students were meal program eligible whereas 75% of students who were not CSU/UC eligible were eligible to participate in a meal program.

Language:

Differences in CSU/UC

eligibility were found based on the language spoken in a student's home. Twenty-four percent of students who spoke Spanish as their primary language at home met CSU/UC eligibility. In homes where English was the primary language, 29% of students were CSU/UC eligible. For all other languages, CSU/UC eligibility increased to 52%.

Gender:

Just as boys and girls appeared to be on different trajectories toward completing high school, they also complete the CSU/UC course requirements at very different rates. Girls were 50% more likely to be eligible to CSU or UC than boys. It is not entirely clear why there is such a gender difference, but grades appear to be one important factor. Gender differences in the middle school grades were strong, even among those who graduated from high school. Girls who graduated failed classes in middle school at only half the rate of male high school graduates.

Conclusions and Implications

Some of the findings reported here related to students' background characteristics, such as the link between poverty and poor academic outcomes were predictable, given prior research, while others were less so. We did not expect

to find such a strong relationship between gender and high school completion and college eligibility. More research is needed to understand why gender plays such an important role in determining schooling experiences. But most important, we need studies that develop and test interventions that can tease out the relationship between family income, gender, and high school success.

Most of our findings can inform interventions needed in middle school to increase high school completion and college eligibility. Foremost, middle school grades matter for high school completion and college eligibility. Even failing one class in middle school places students on a very precarious trajectory toward dropping out of high school and not being able to apply to college. However, our analyses also show that students who fail early in middle school can recover. Early interventions that target students who fail a class in grades six or seven and help them get back on track by grade eight would address a sizable proportion of those who do not finish high school.

Attendance in middle school also seems to play a major role in determining who graduates from high school and who graduates eligible for college. This may be because increased presence in school results in more exposure to academic

content and/or that increased absences reflect other behavioral or social disengagement from school. Changing middle schools between 7th and 8th grade is also relevant to high school outcomes, perhaps because moving to a new school adds stress to already-difficult school transitions for adolescents. Here, too, early interventions focused on students with spotty attendances and those new to their school in 8th grade would provide support to significant numbers of students whose high school success is in jeopardy.

Finally, the context in which students receive their middle school education also influences their high school outcomes. Having fully certified teachers, appropriate physical space, and school-wide performance in math all seem to matter. Moreover, the positive relationship between diverse student bodies in middle school and positive high school outcomes also hints to the importance of having access to a wide range of resources in middle school. These two findings are related. Schools that are more segregated and exclusively serve low-socio economic students are not presenting students with the full range of important resources offered at more affluent and diverse schools, such as fully certified teachers. Policies

are needed that provide an even playing field for students during the critical middle school years.

Authors' Note

The authors thank the Latino Scorecard Education Action Team (including the Alliance for a Better Community, Families in Schools, the United Way of Greater Los Angeles, UCLA, and USC/The Tomas Rivera Policy Institute) for initiating the study and the Los Angeles Unified School District for providing the data. The analysis and interpretation, however, are those of the authors alone.

SAMPLE AND ANALYSIS

The data used for this analysis is based on the first time freshman enrollment in 2001-2002 at LAUSD high schools. The analysis presented here examines middle school experiences of this cohort and captures their enrollment in LAUSD schools for 6th-8th grades between 1998 and 2001. The trajectories of over 39,000 cases are represented in these results. The final sample represents everyone for whom middle school grades were available and 82% of the 8th grade enrollment population at LAUSD for 2000-2001. The racial distribution of the cohort is 69% Latino, 12% African American, 11% White, and 7% Asian American. Forty-nine percent of the sample is female and 74% of the students qualified for free and reduced lunch. Seventy percent of the students speak a language other than English at home.

The outcomes in this analysis are completion of a high school diploma and completion of California State University (CSU) and University of California (UC) eligibility requirements (A-G requirements)⁴. These outcome measurements were provided by LAUSD as a listing of the class of 2005 members that had completed a high school diploma by December 2005 at LAUSD institutions and fulfilled A-G graduation requirements upon completion of a high school diploma. Completion of a high school diploma includes passing 230 units worth of classes in a number of core and elective areas. Students that completed alternative diploma certification programs in LAUSD, such as the General Education Development (GED) or the California High School Proficiency Examination (CHSPE) were not included in this analysis. Overall, 51%

of the sample completed a high school diploma and 54% of those that finished high school also completed the college eligibility requirements to apply to a CSU or UC campus.

Additionally, this analysis presents an overview of the contrasting characteristics of the types of middle school attended by the sample. School context information is based on 2004-2005 school-level data. We were able to link this data to 97% of the sample based on 8th grade (2000-2001) school enrollment. We expect that demographic changes in schools' enrollment have not dramatically shifted between 2001 and 2004 so as to alter the findings of this analysis. The analysis presented here examines middle school academic, personal, and school context characteristics associated with completion of a high school diploma and college eligibility requirements.

Notes

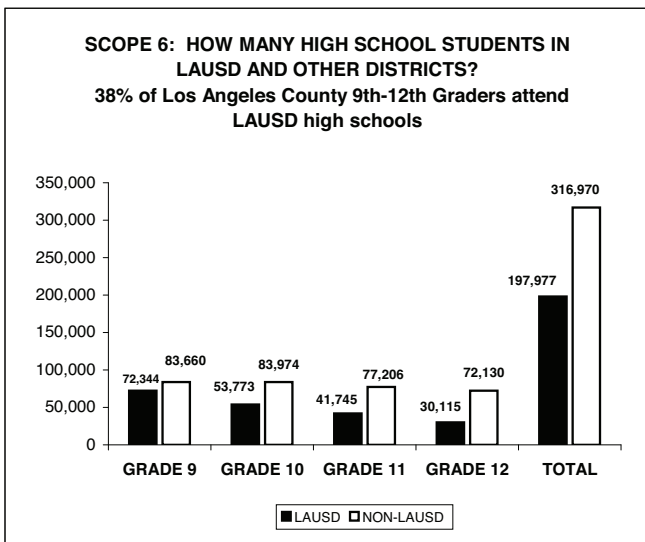
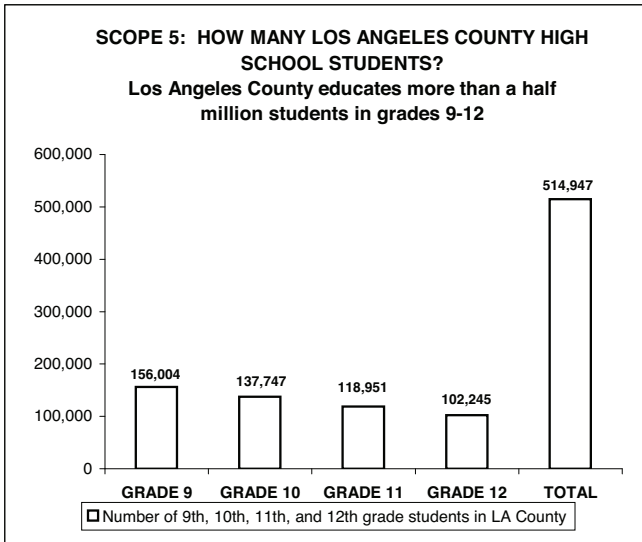
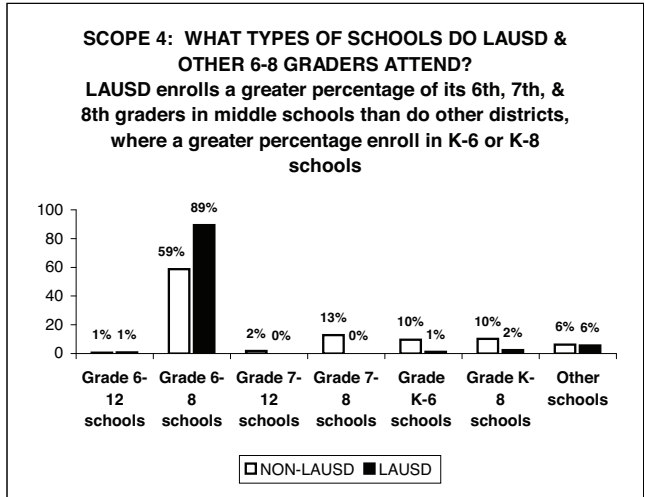
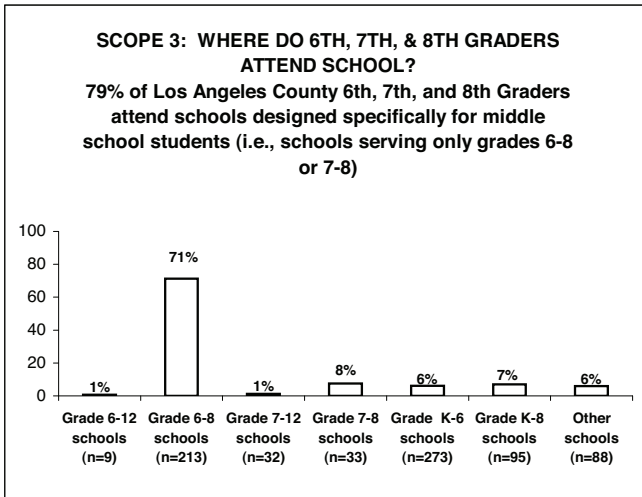
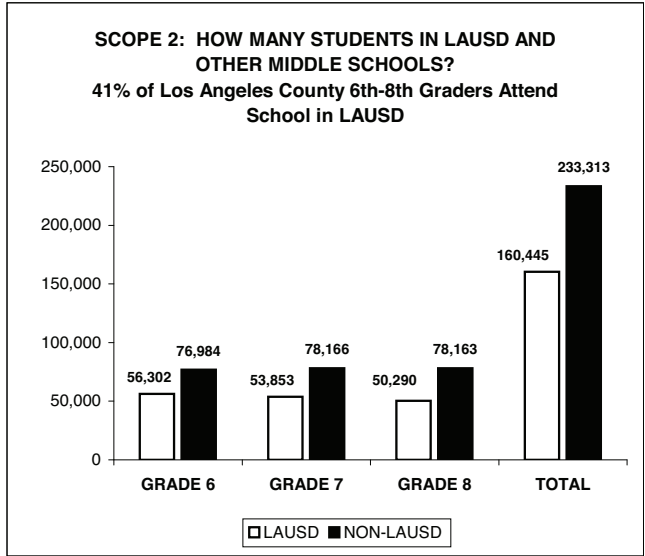
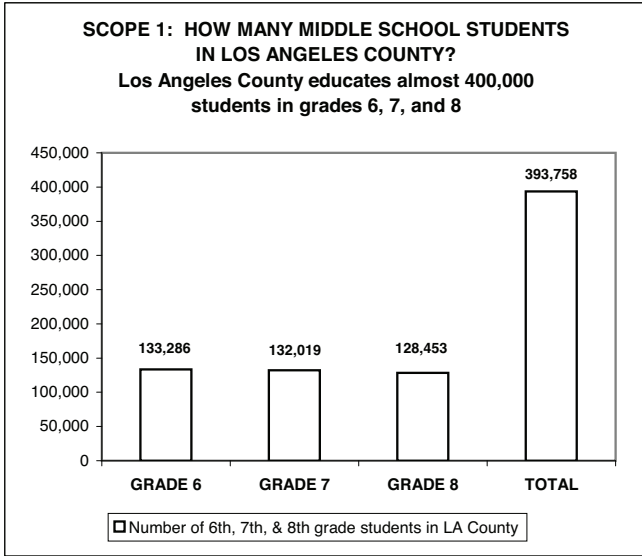
¹ Shields, Patrick M., Esch, Camille E., Humphrey, Daniel C., Young, Viki M., Gaston, Margaret, & Hunt, Harvey. (1999). *The Status of the Teaching Profession: Research Findings and Policy Recommendations*. A Report to the Teaching and California's Future Task Force. Santa Cruz, CA: The Center for the Future of Teaching and Learning.

² Math proficiency is met when schools meet Adequate Yearly Progress according to No Child Left Behind.

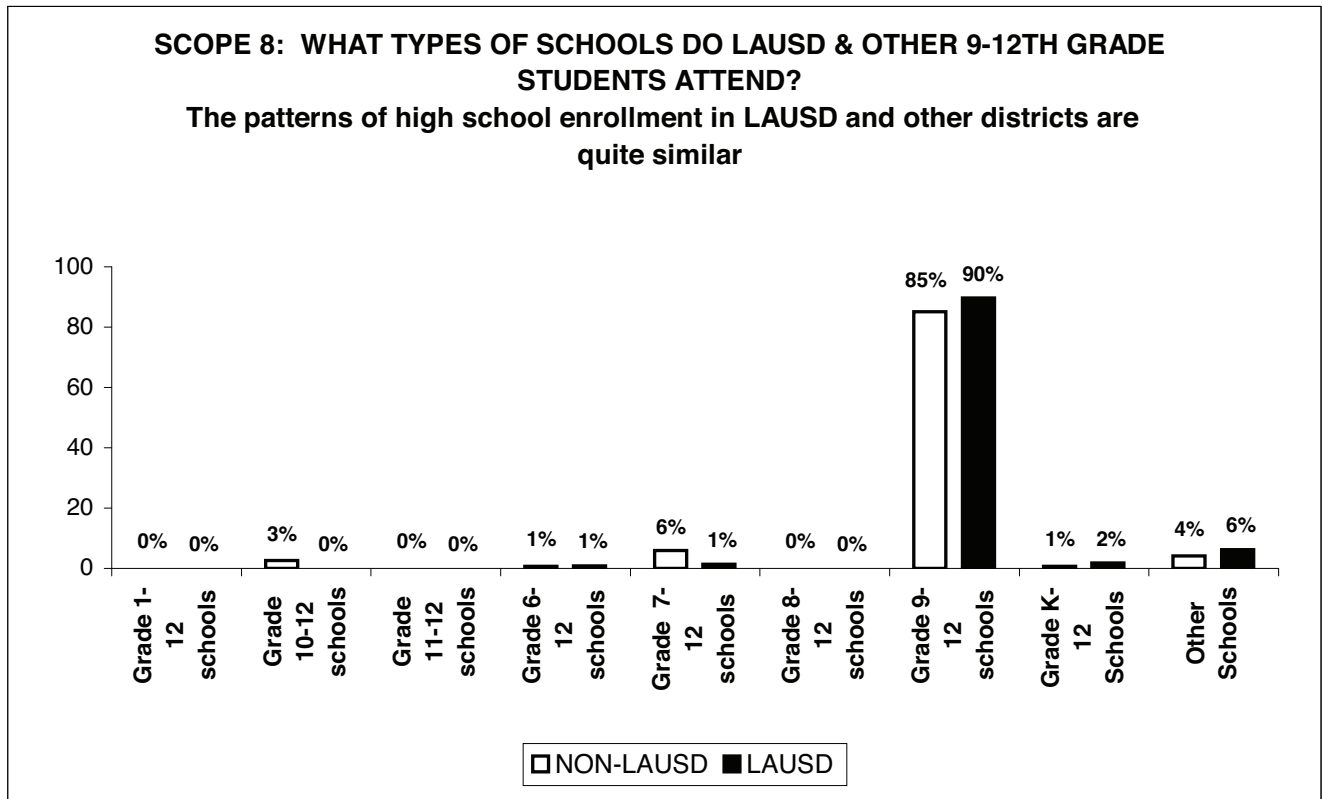
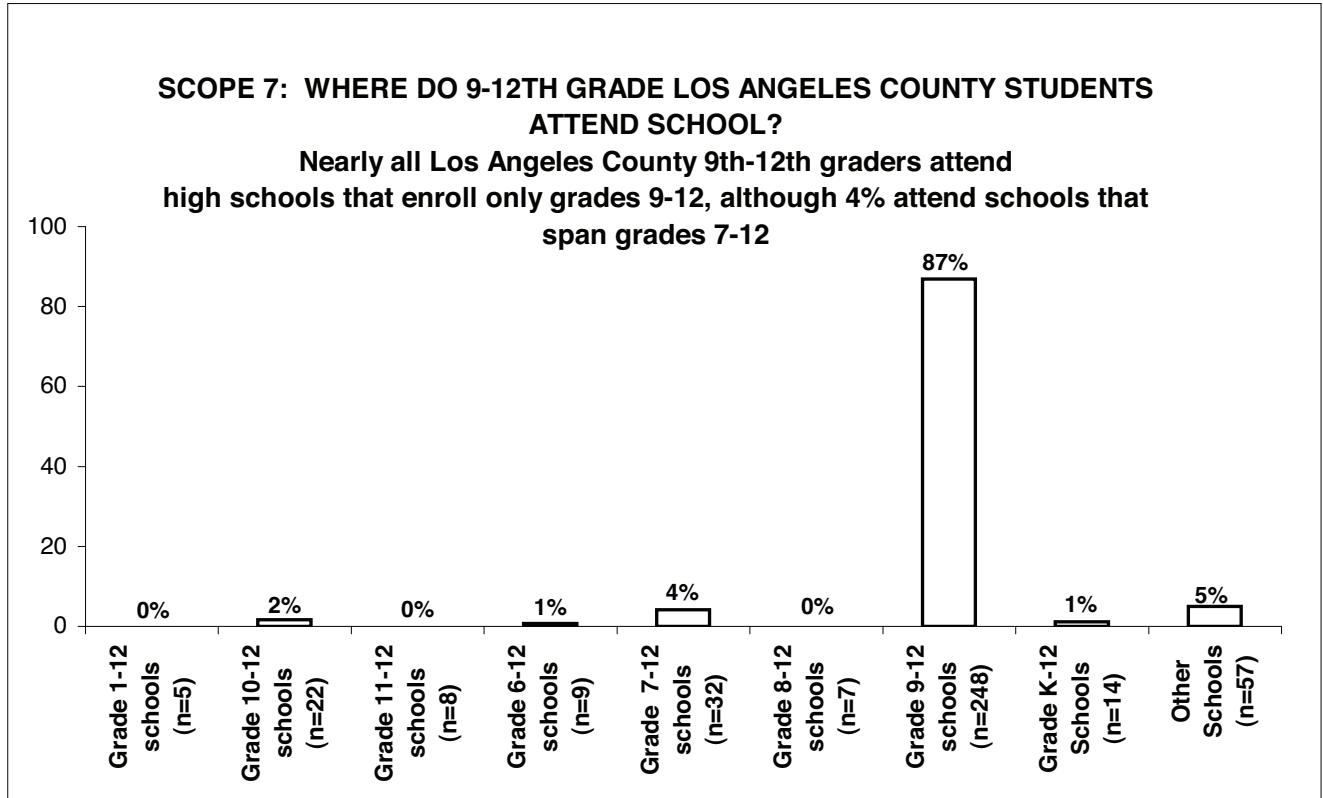
³ In order to qualify for a free meal, a student's family must earn fewer than 130% of the federal government's poverty guidelines for their family's size (<http://www.fns.usda.gov/cnd/governance/notices/iegs/IEGs99-00.htm>).

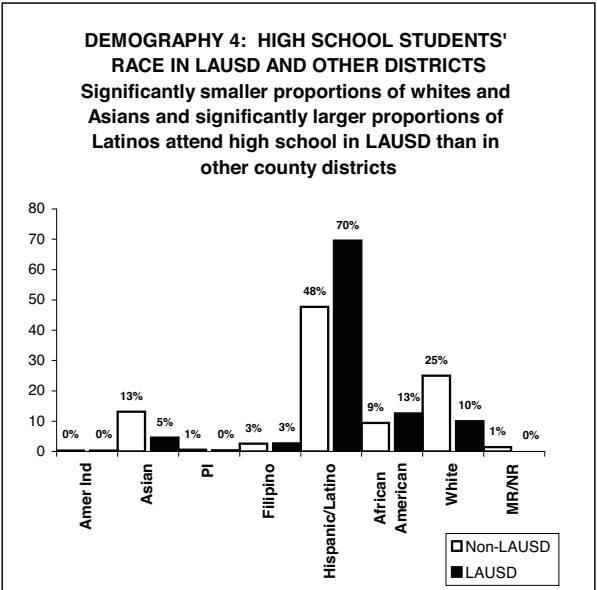
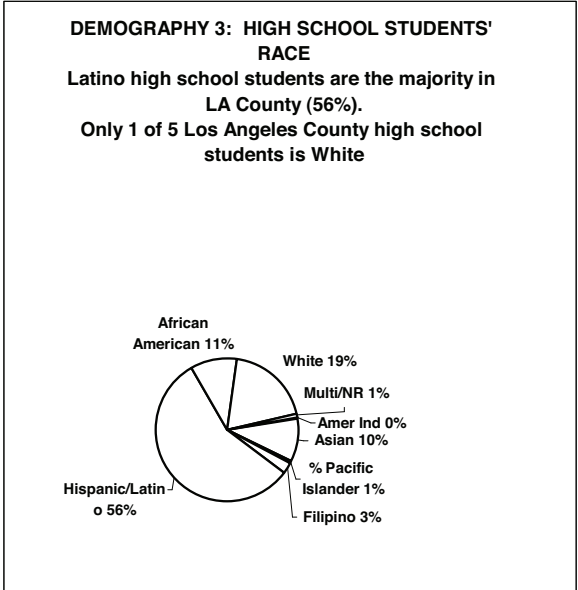
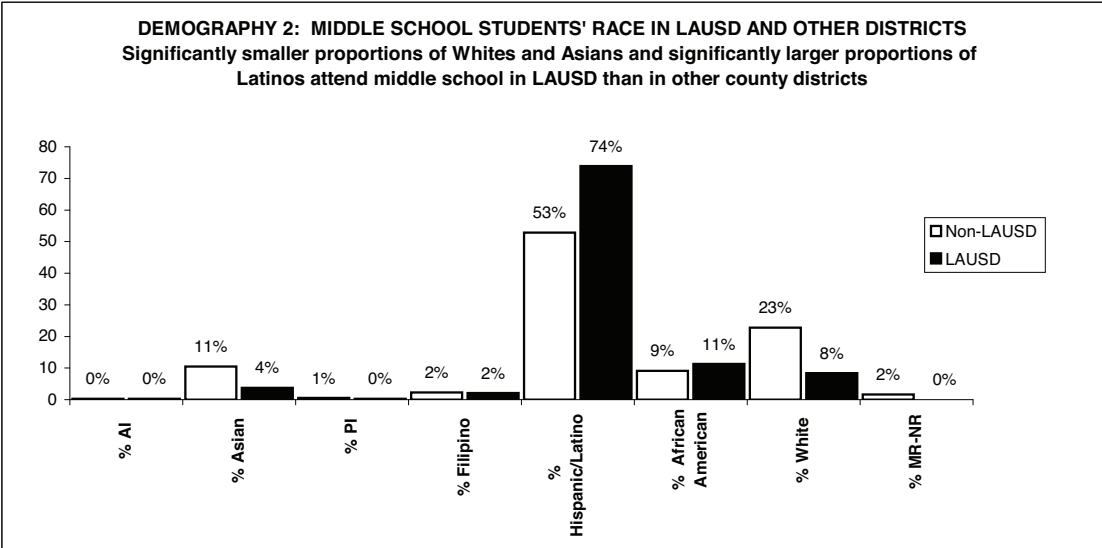
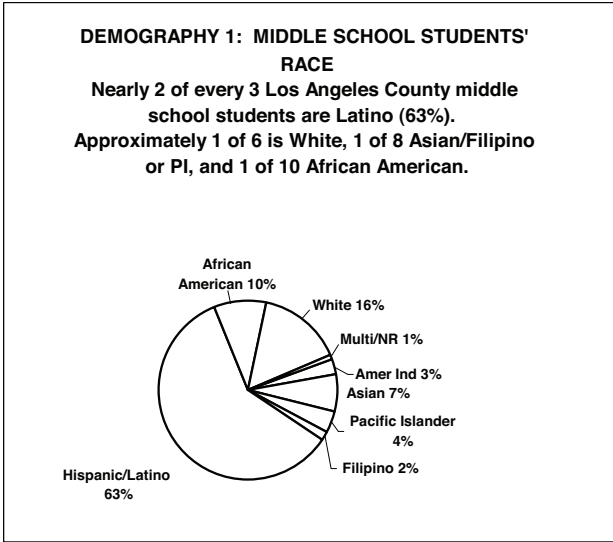
⁴ One requirement for eligibility to the California State University or the University of California is the completion of a college preparatory pattern of coursework, known as the A-G courses: 2 years of History/Social Science, 4 years of English, 3 years of Mathematics (starting at Algebra 1), 2 years of Laboratory Science, 2 years of Language Other than English, 1 year of Visual and Performing Arts, and 1 year of a College Preparatory Electives (Retrieved from: http://www.universityofcalifornia.edu/admissions/undergrad_adm/paths_to_adm/freshman/subject_reqs.html)

APPENDIX

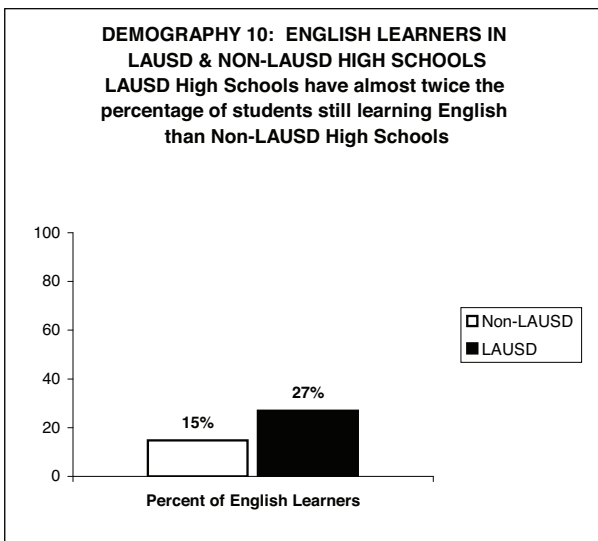
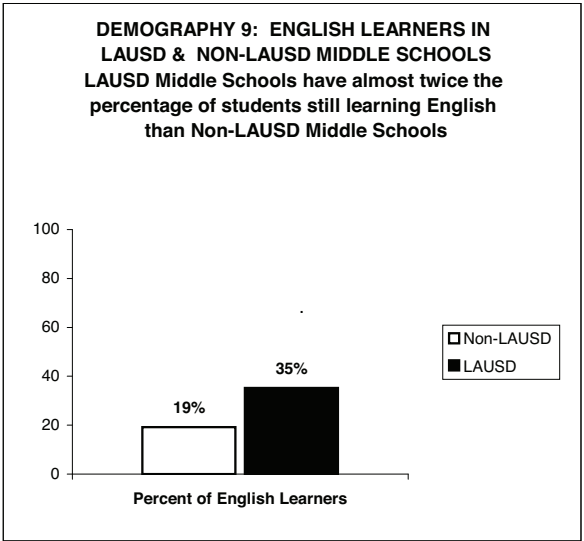
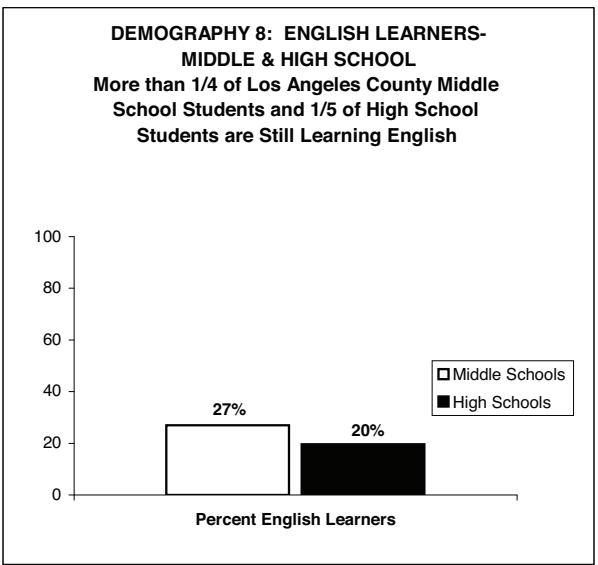
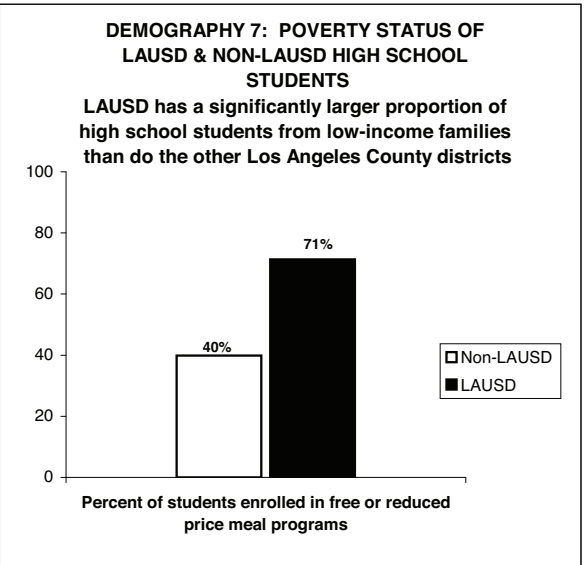
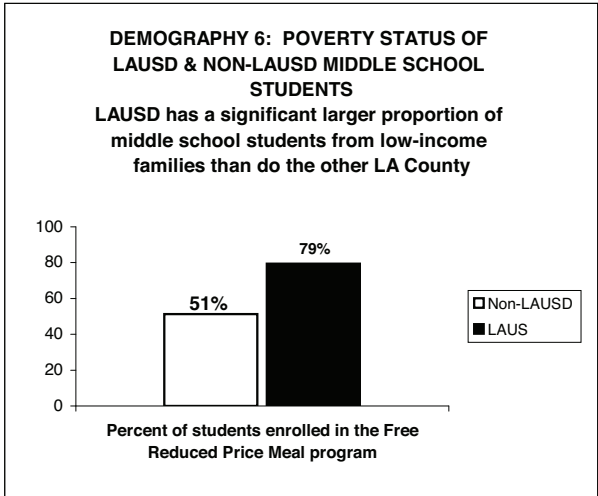
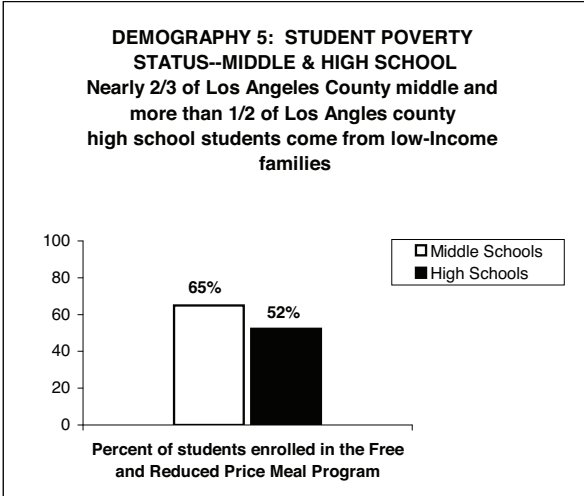


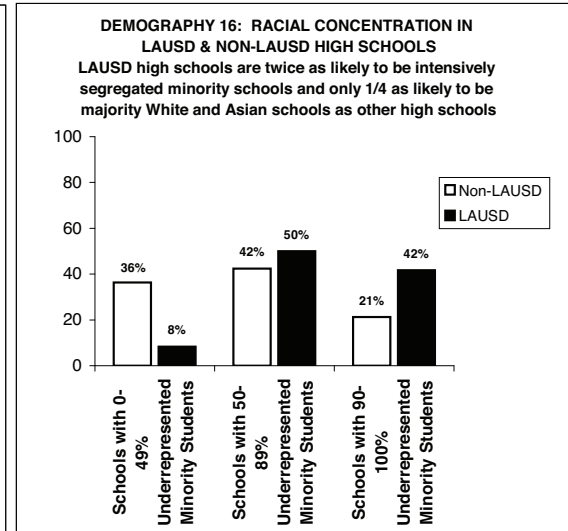
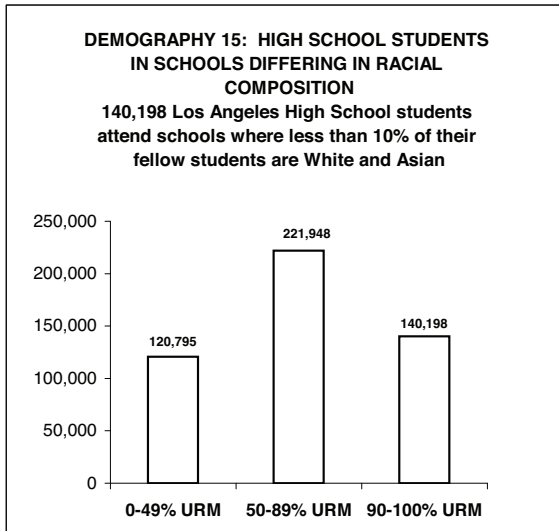
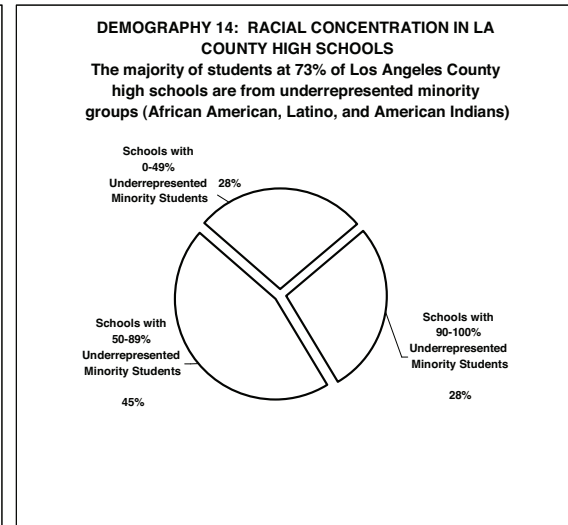
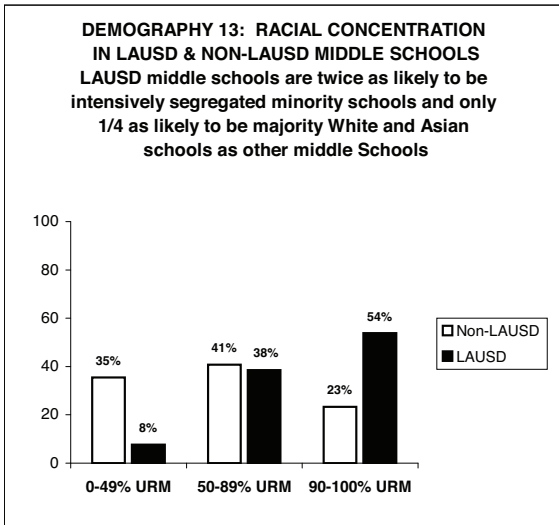
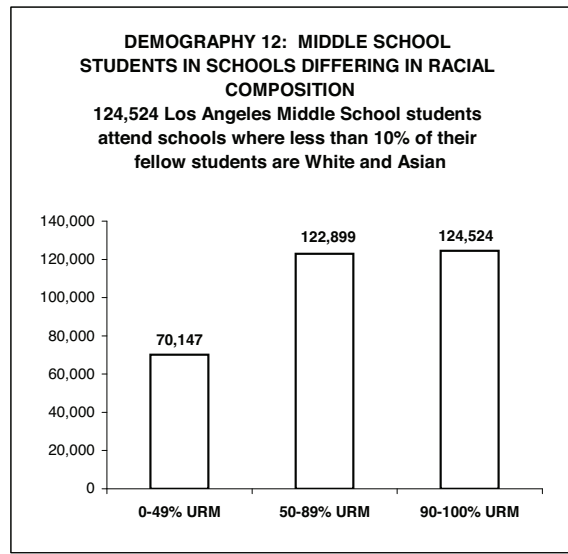
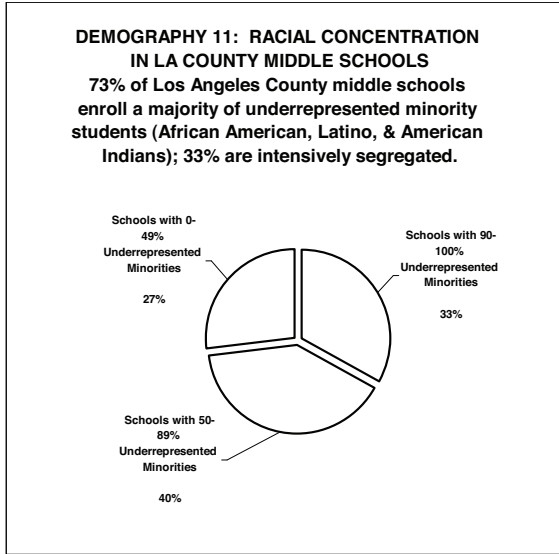
SCOPE: CHARTS 7-8



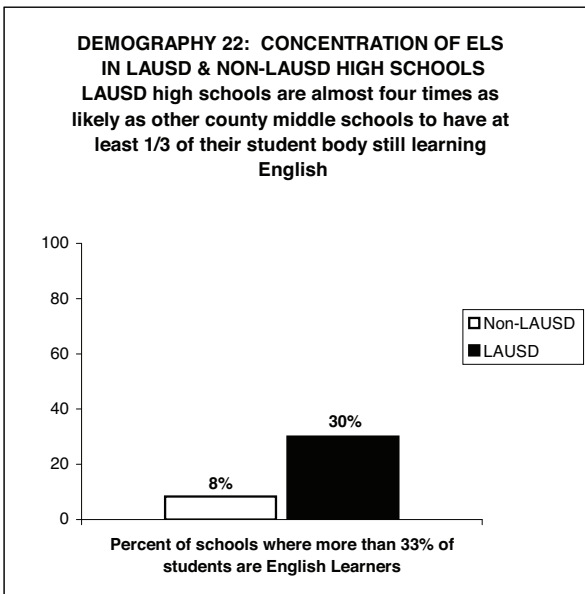
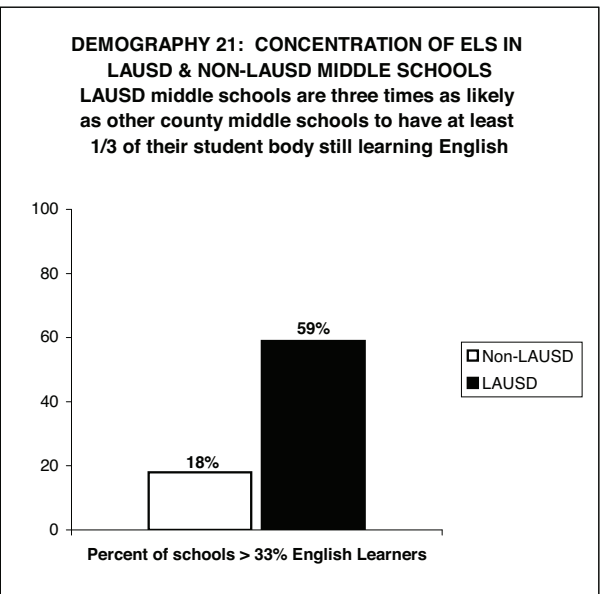
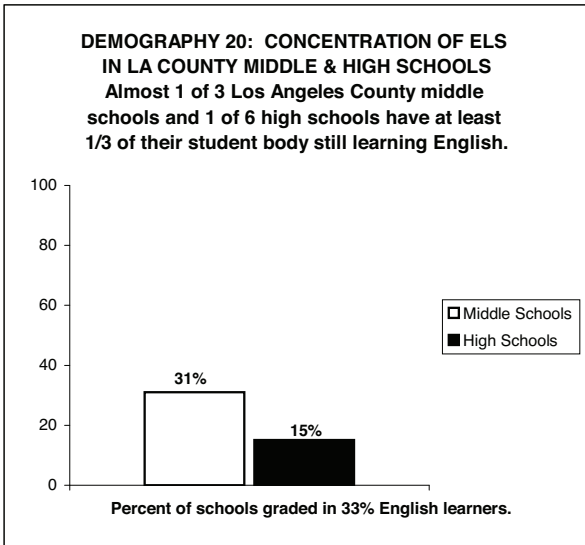
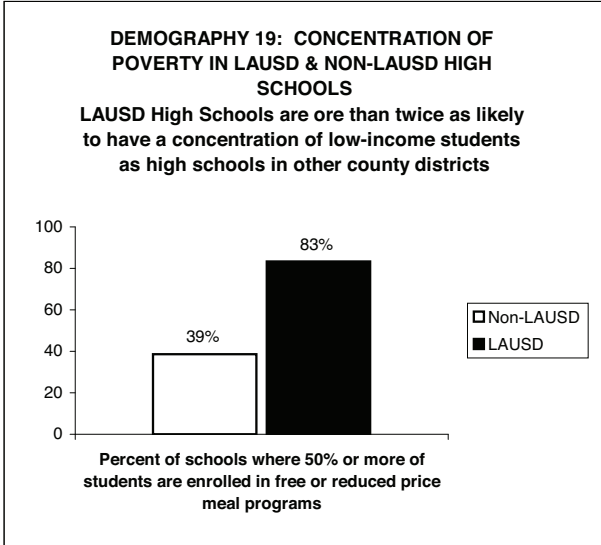
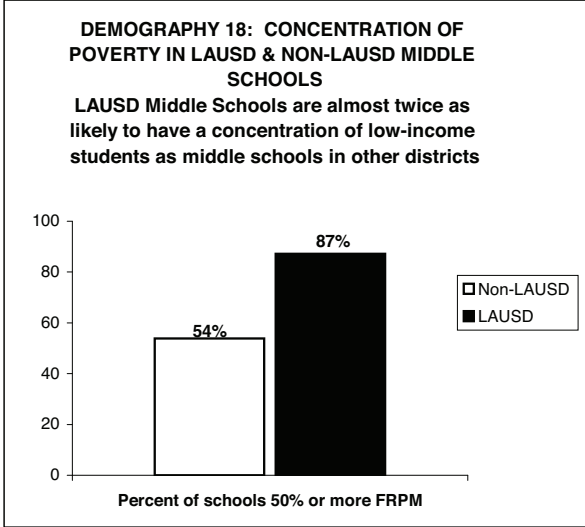
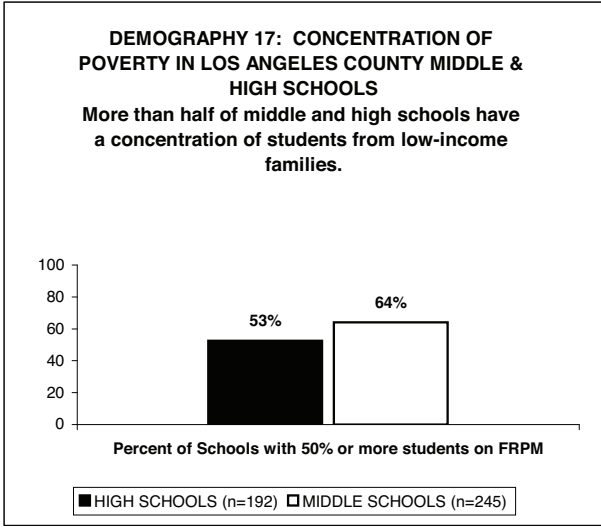


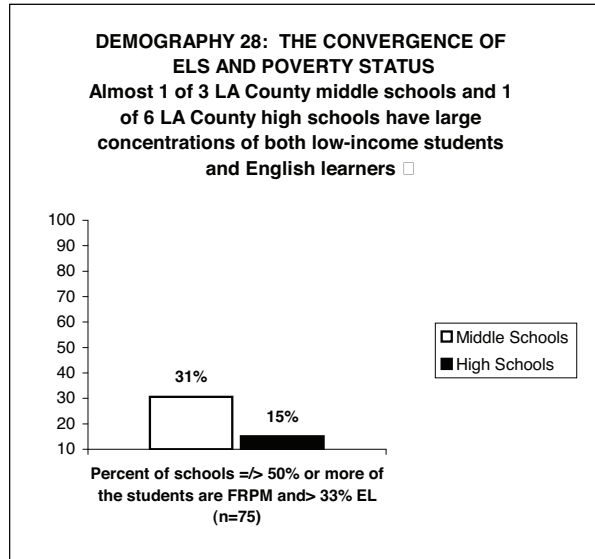
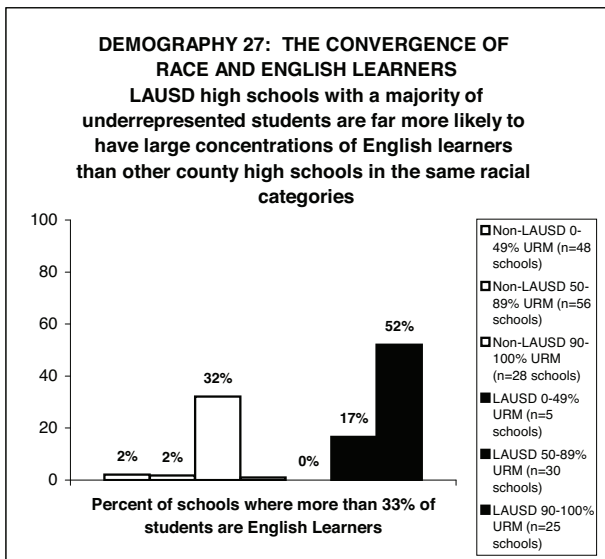
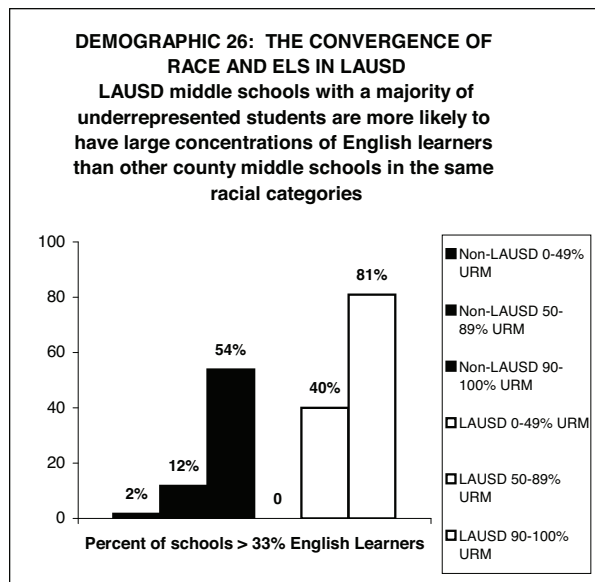
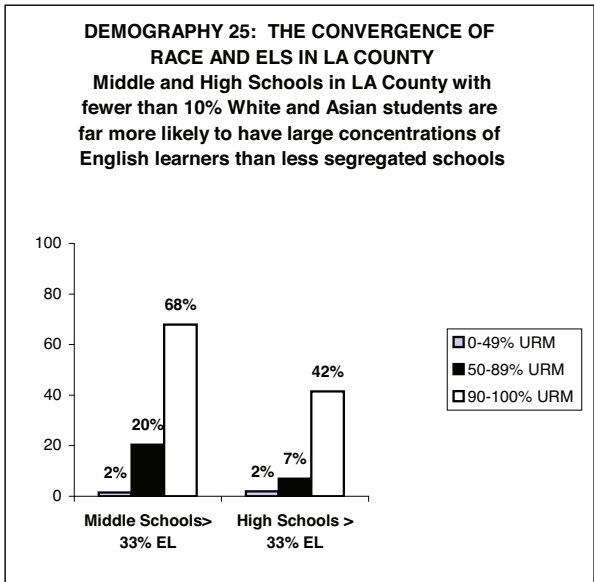
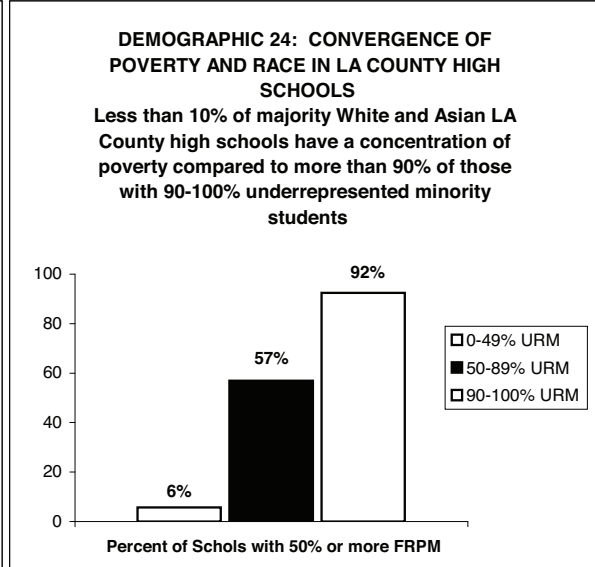
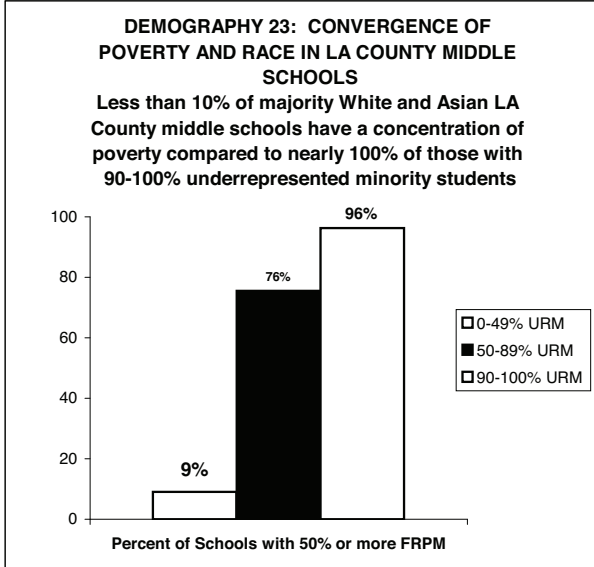
DEMOGRAPHY: CHARTS 5-10



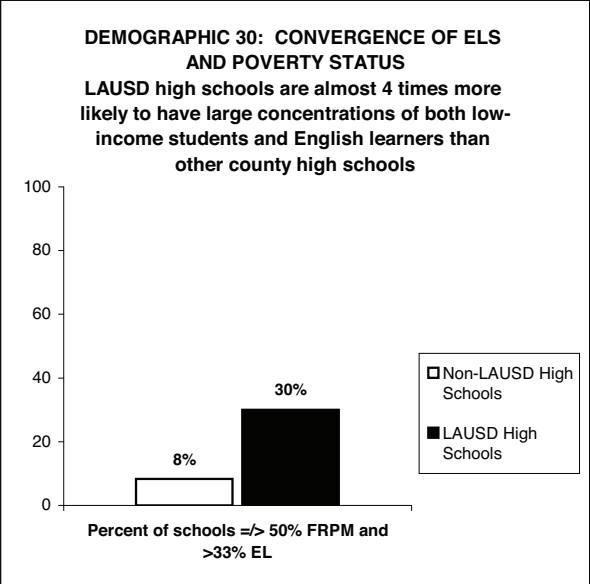
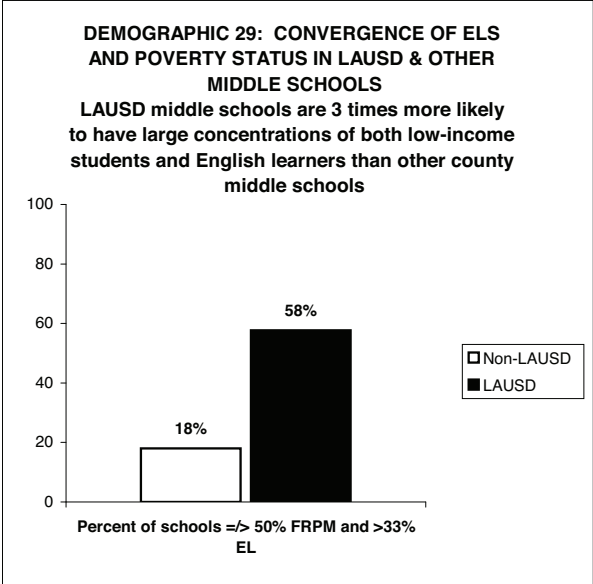


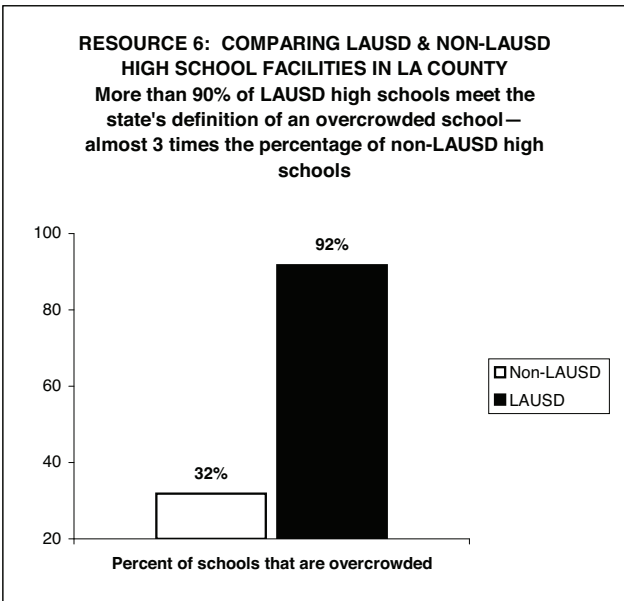
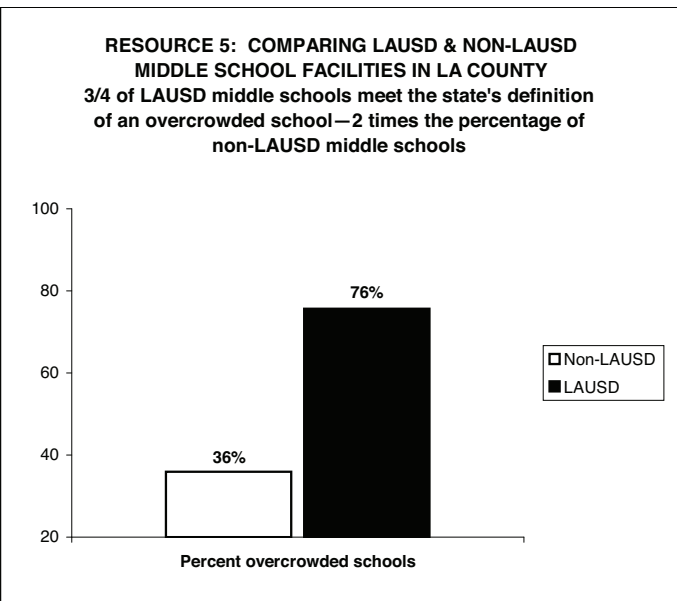
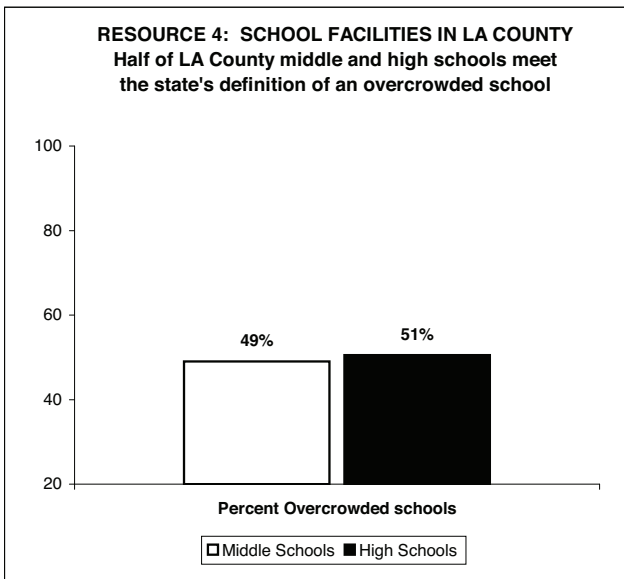
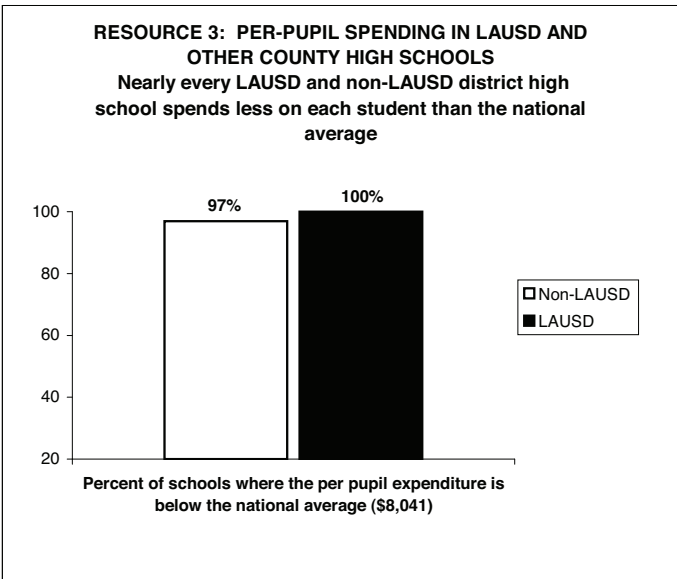
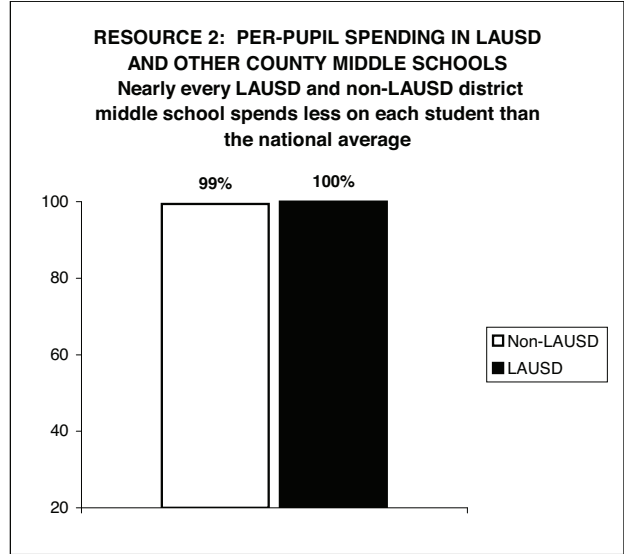
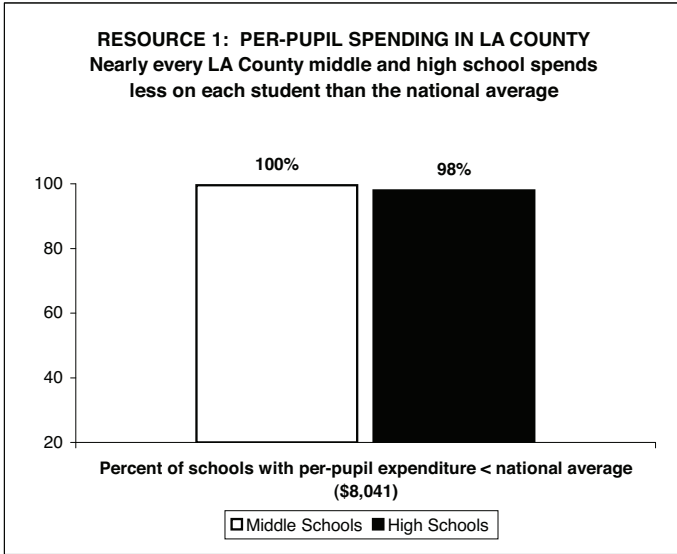
DEMOGRAPHY: CHARTS 17-22



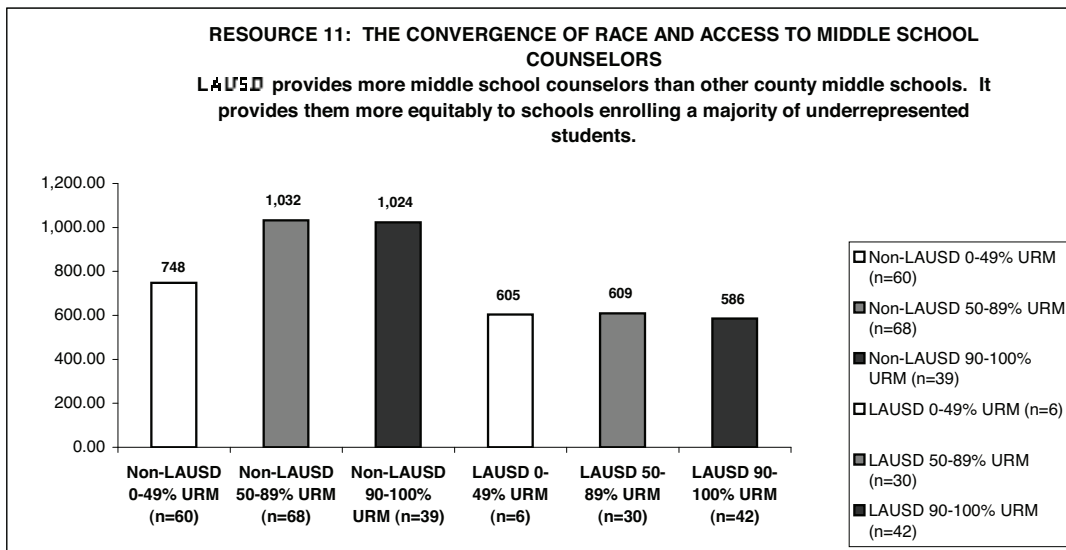
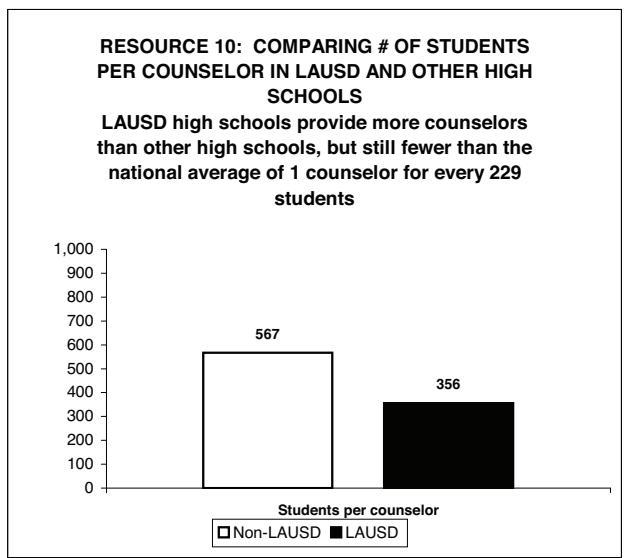
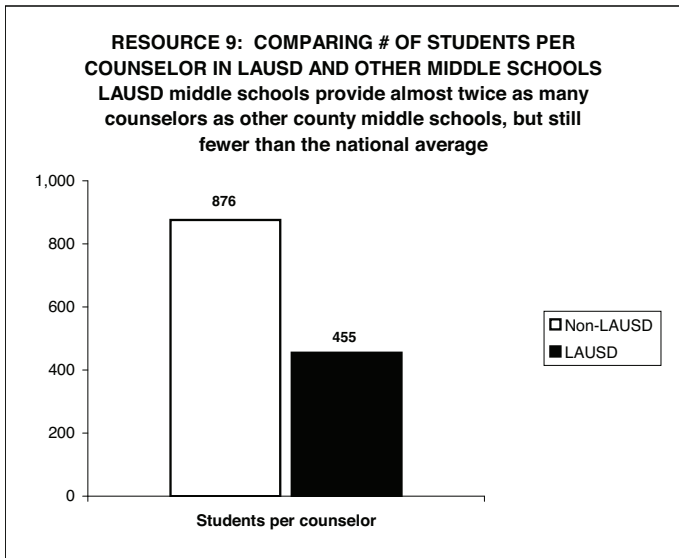
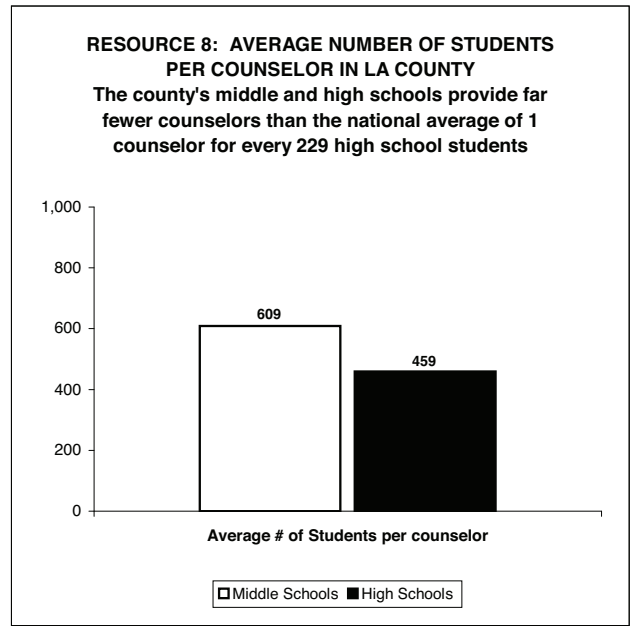
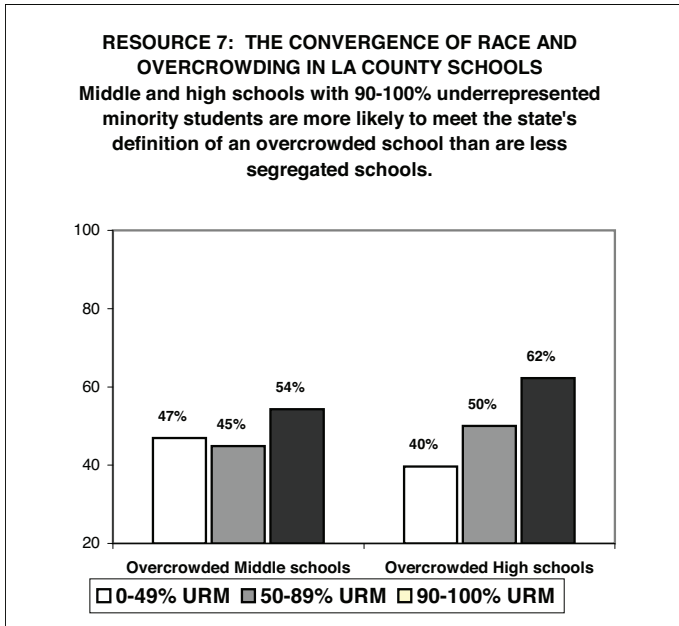


DEMOGRAPHY: CHARTS 29-30



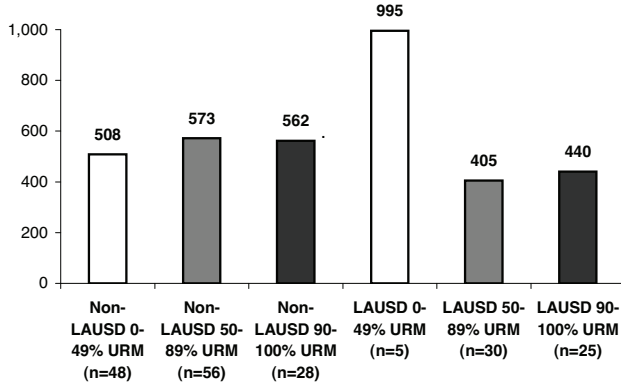


RESOURCES: CHARTS 7-11



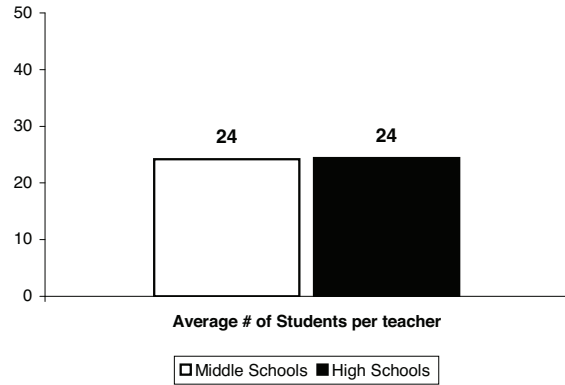
RESOURCE 12: THE CONVERGENCE OF RACE AND ACCESS TO COUNSELOR--HIGH SCHOOL

LAUSD provides more high school counselors than other county high schools, and it concentrates its counselors in high schools enrolling a majority of underrepresented students.



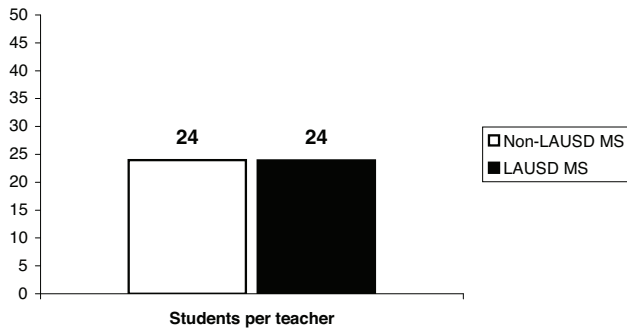
RESOURCE 13: AVERAGE # OF STUDENTS PER TEACHER IN LA COUNTY

The county's middle and high schools provide, on average, 1 teacher for every 24 middle and high school students—far fewer teachers than the national average of 1 teacher for every 15 students



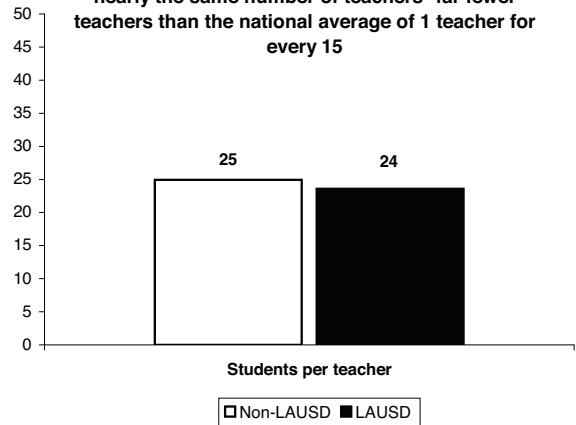
RESOURCE 14: COMPARING # OF STUDENTS PER TEACHERS IN LAUSD & OTHER MIDDLE SCHOOLS

LAUSD and Non-LAUSD middle schools provide an average of 1 teacher for every 24 students--far fewer teachers than the national average of 1 teacher for every 15



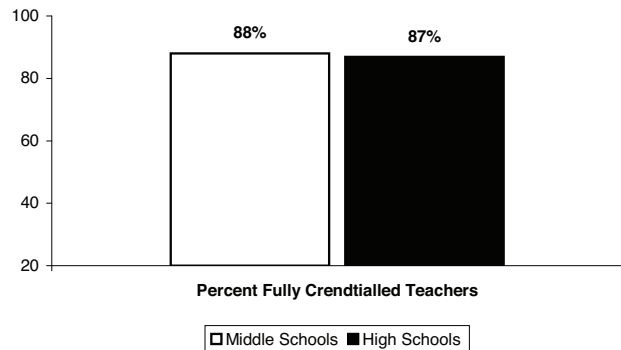
RESOURCE 15: COMPARING # OF STUDENTS PER TEACHER IN LAUSD & OTHER HIGH SCHOOLS

LAUSD and Non-LAUSD high schools provide nearly the same number of teachers--far fewer teachers than the national average of 1 teacher for every 15



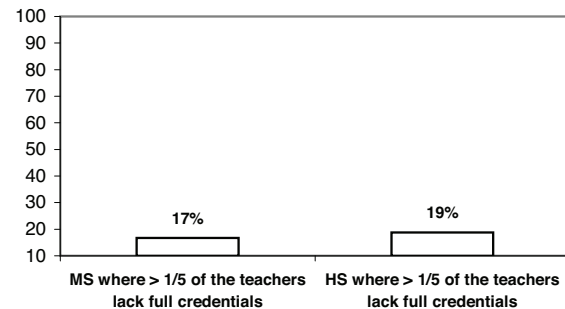
RESOURCE 16: TEACHER QUALIFICATIONS IN LOS ANGELES COUNTY

On average, a large majority of teachers of Los Angeles County middle and high schools hold preliminary or full teaching credentials

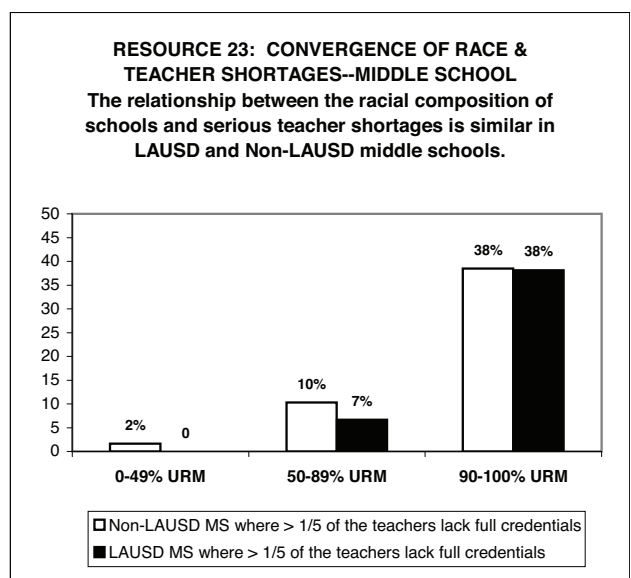
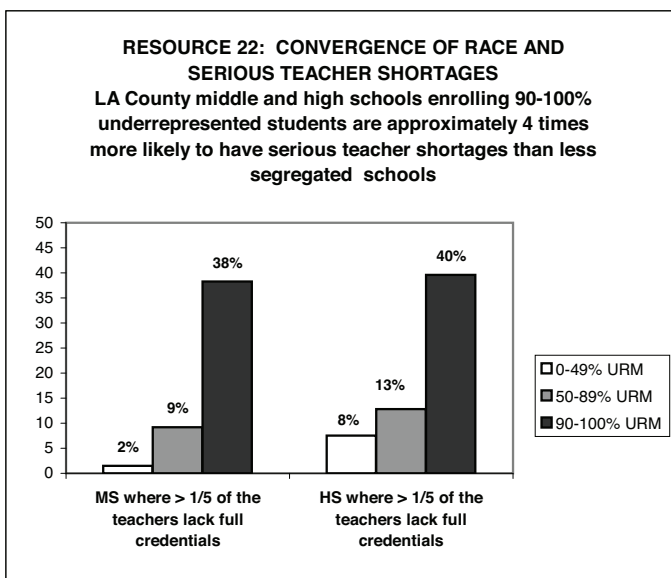
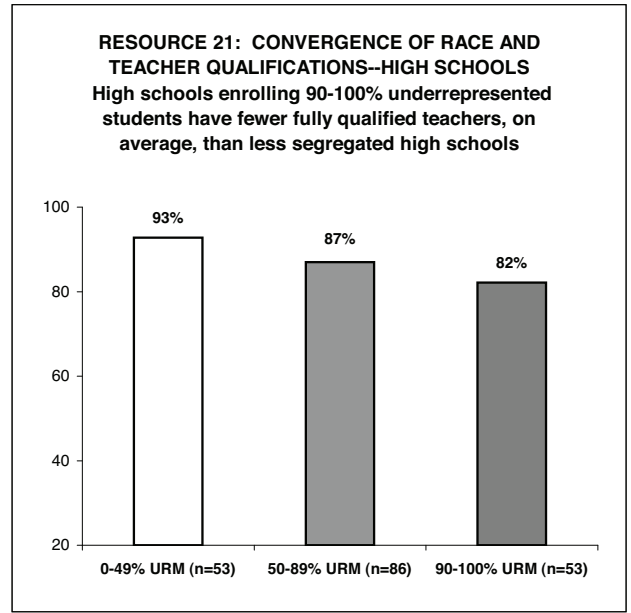
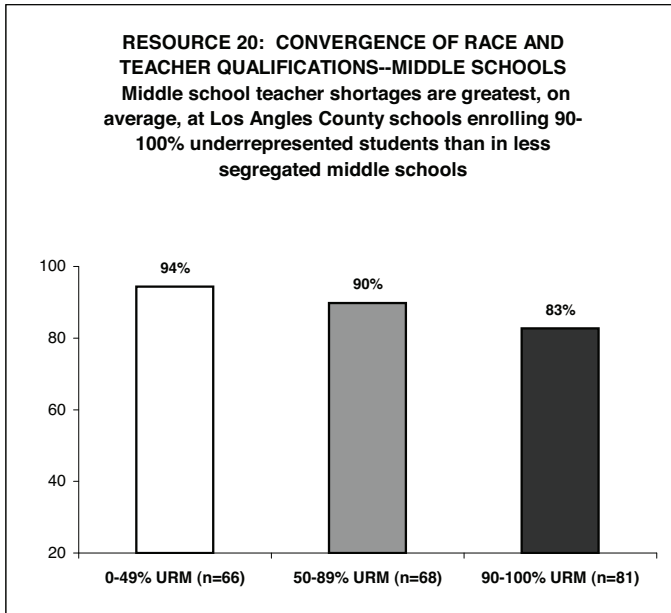
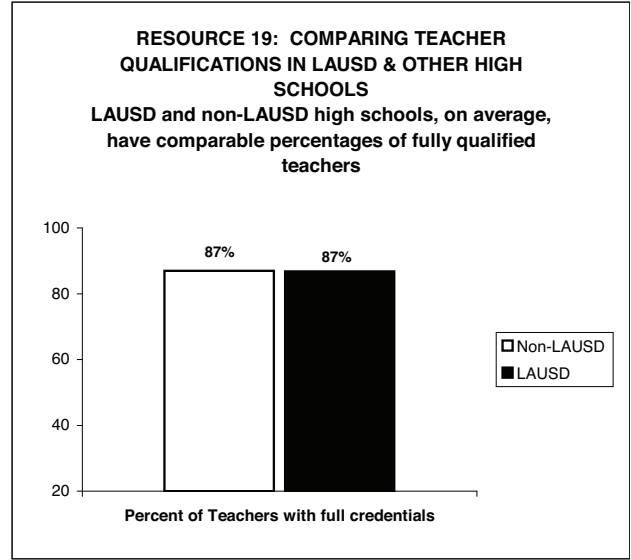
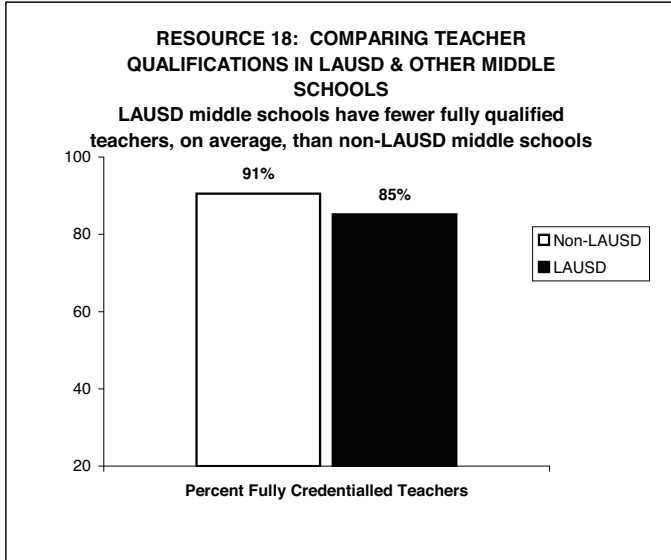


RESOURCE 17: SERIOUS TEACHER SHORTAGES IN LA COUNTY

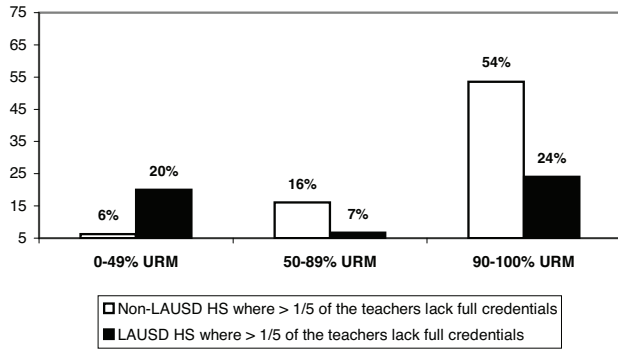
Approximately 1 of 4 LA County middle schools and 1 of 5 high schools have serious teacher shortages--that is, where at least 20% of teachers lack full credentials



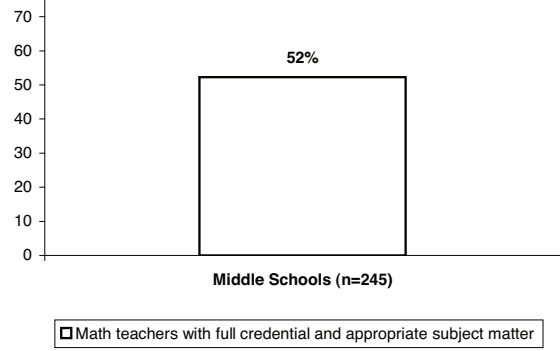
RESOURCES: CHARTS 18-23



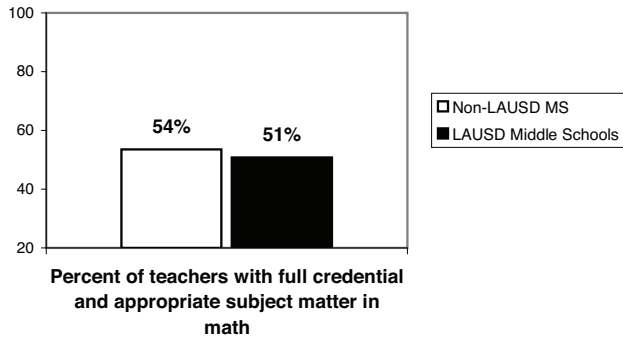
RESOURCE 24: CONVERGENCE OF RACE AND TEACHER SHORTAGES--HIGH SCHOOL
 Non-LAUSD high schools with 90-100% underrepresented students are 2 times as likely have serious teacher shortages as comparable LAUSD high schools



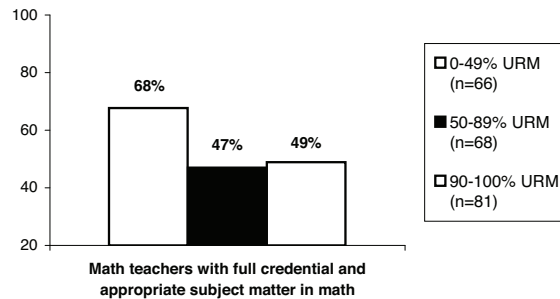
RESOURCE 25: MATH TEACHER QUALIFICATIONS IN LA COUNTY-- MIDDLE SCHOOLS
 On average, only half of teachers teaching math at Los Angeles County middle schools hold preliminary or full teaching credentials in mathematics



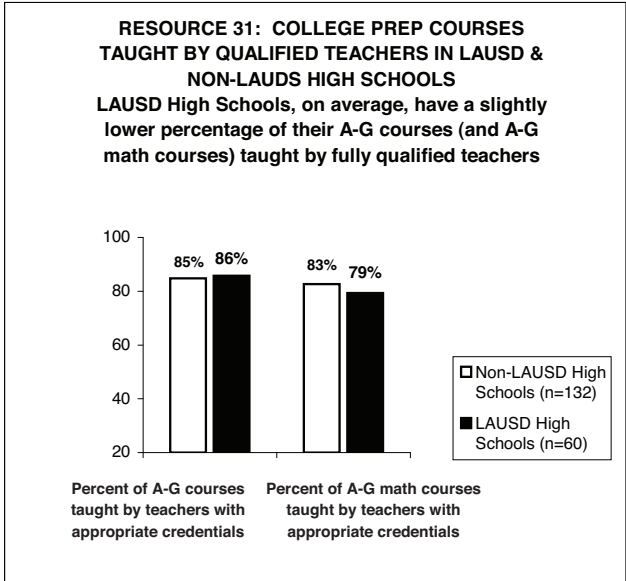
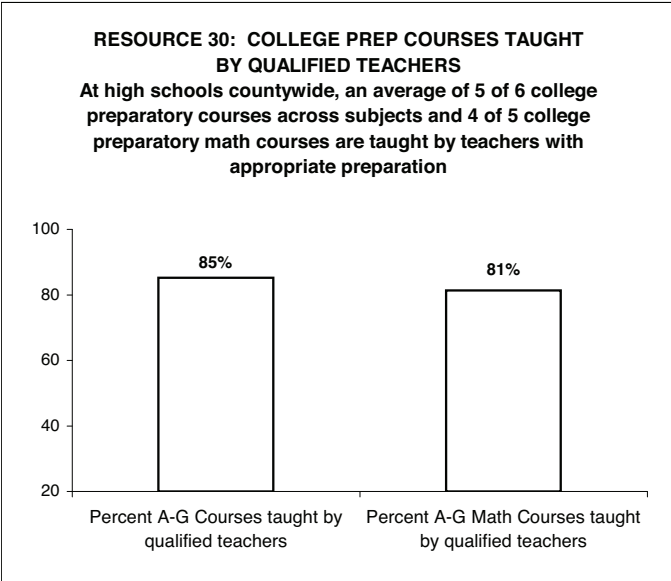
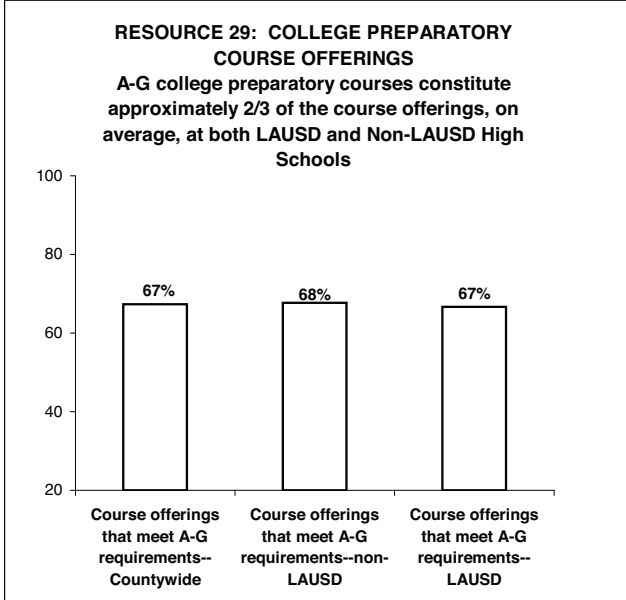
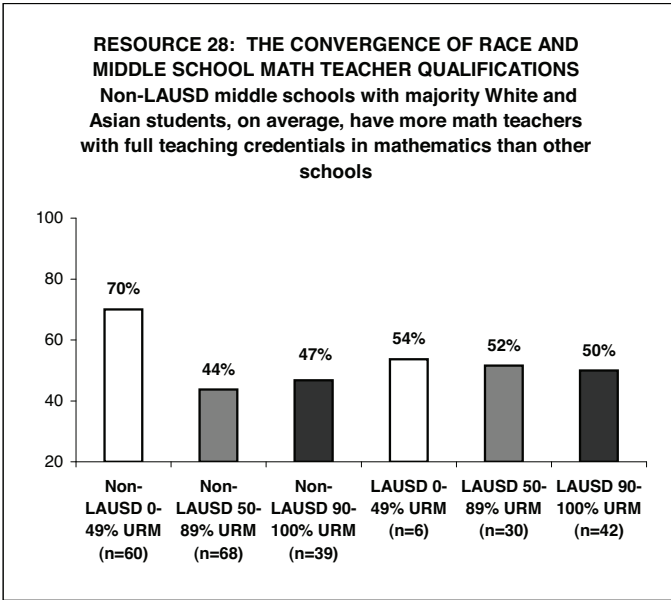
RESOURCE 26: MATH TEACHER QUALIFICATIONS IN LAUSD AND OTHER MIDDLE SCHOOLS
 Teachers teaching math at non-LAUSD middle schools are slightly more likely to hold preliminary or full teaching credentials in mathematics

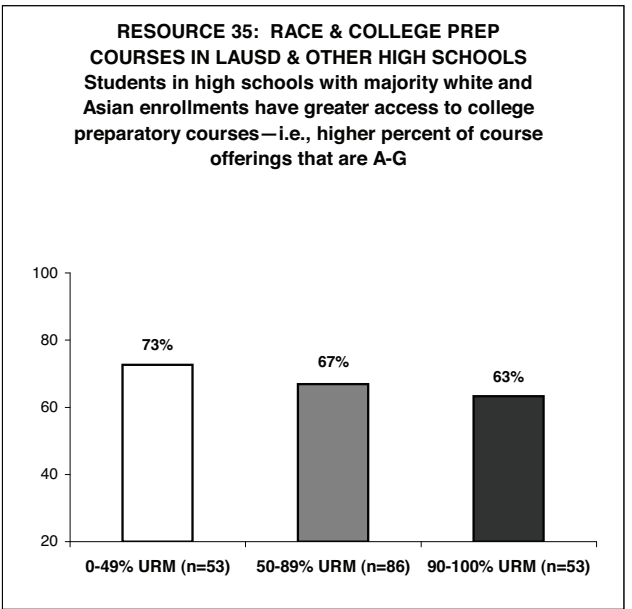
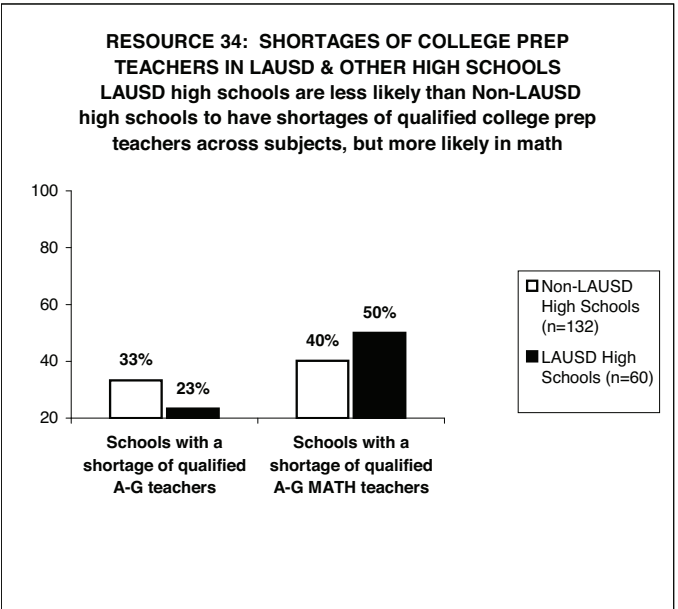
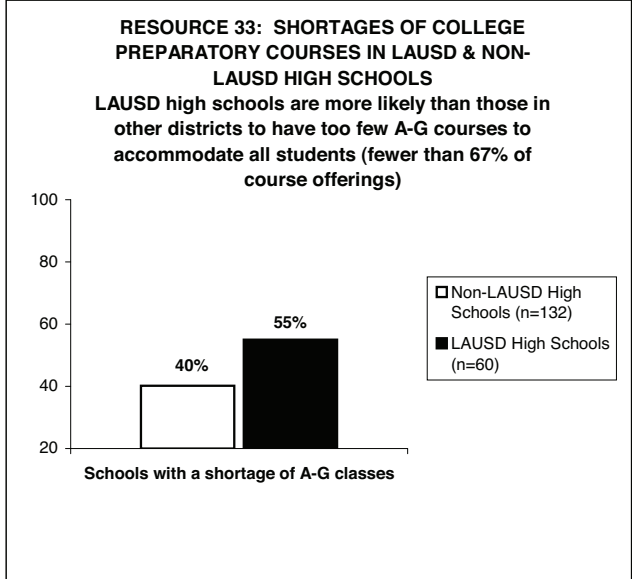
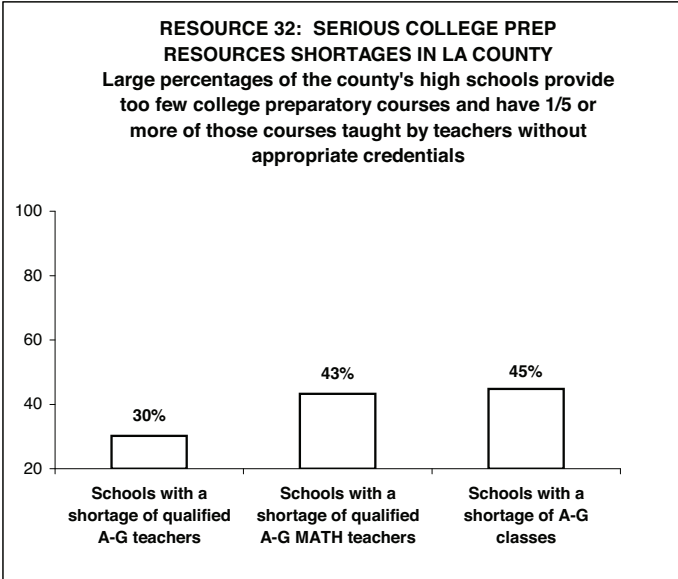


RESOURCE 27: THE CONVERGENCE OF RACE AND MATH TEACHER QUALIFICATIONS IN MIDDLE SCHOOLS
 On average, teachers teaching math at schools with majority White and Asian students are more likely to hold preliminary or full teaching credentials in mathematics



RESOURCES: CHARTS 28-31

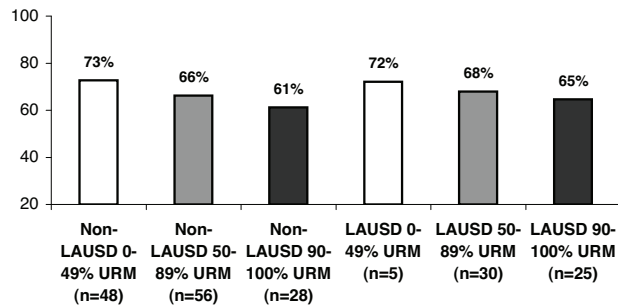




RESOURCES: CHARTS 36-38

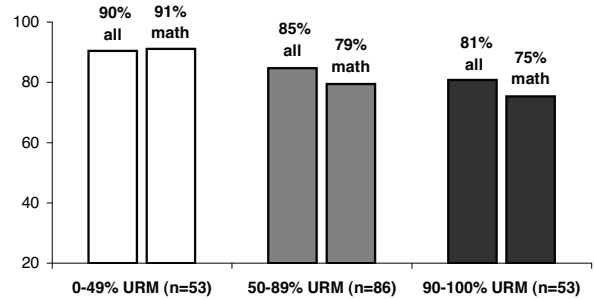
RESOURCE 36: RACE & COLLEGE PREP COURSES IN LAUSD & OTHER HIGH SCHOOLS

Students in LAUSD high schools with underrepresented majorities have greater access to college preparatory courses than those in racially similar non-LAUSD high schools



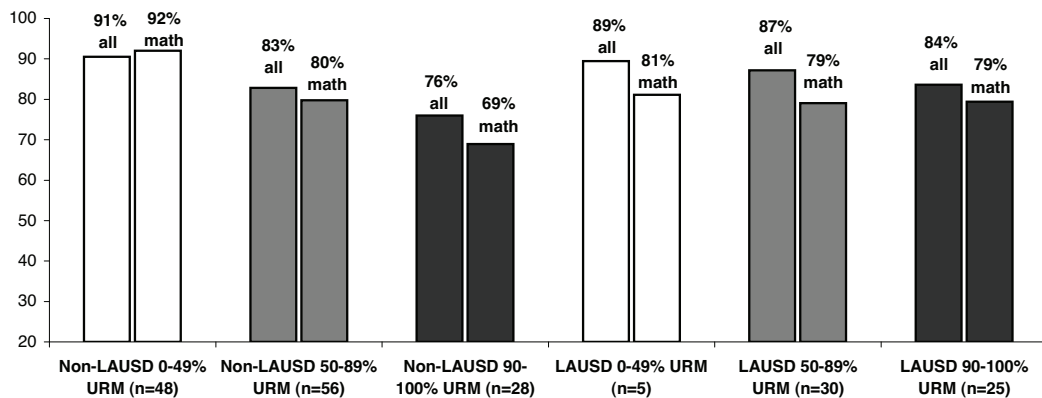
RESOURCE 37: RACE & COLLEGE PREP COURSES TAUGHT BY QUALIFIED TEACHERS IN LA COUNTY

High schools with 90-100% underrepresented students are less likely to have A-G classes in all subjects and A-G math classes taught by fully qualified teachers



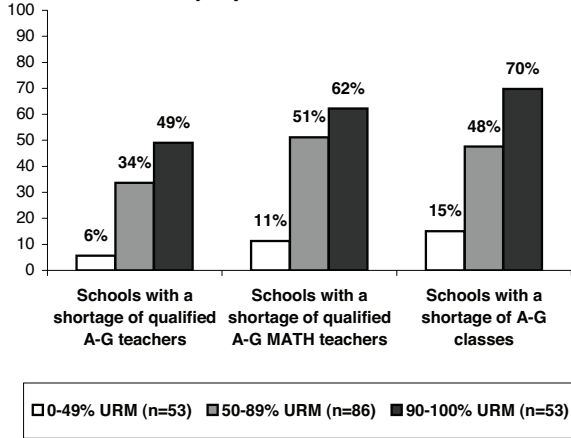
RESOURCE 38: RACE & COLLEGE PREP COURSES TAUGHT BY QUALIFIED TEACHERS IN LAUSD & OTHER

LAUSD provides qualified college preparatory teachers more equitably among high schools of differing racial composition than other county high schools



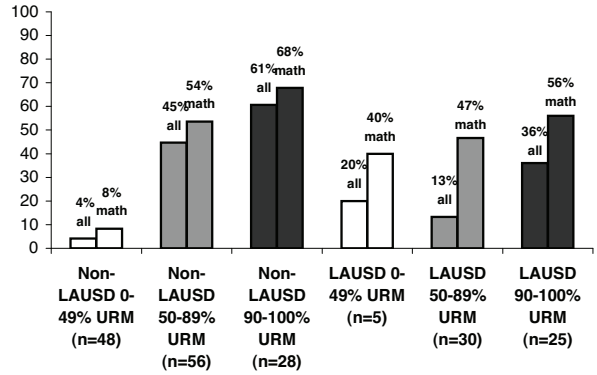
RESOURCE 39: RACE & SERIOUS COLLEGE PREP RESOURCE SHORTAGES

High schools with a majority of underrepresented students are far more likely to have shortages of college preparatory resources than are schools with majority White & Asian students

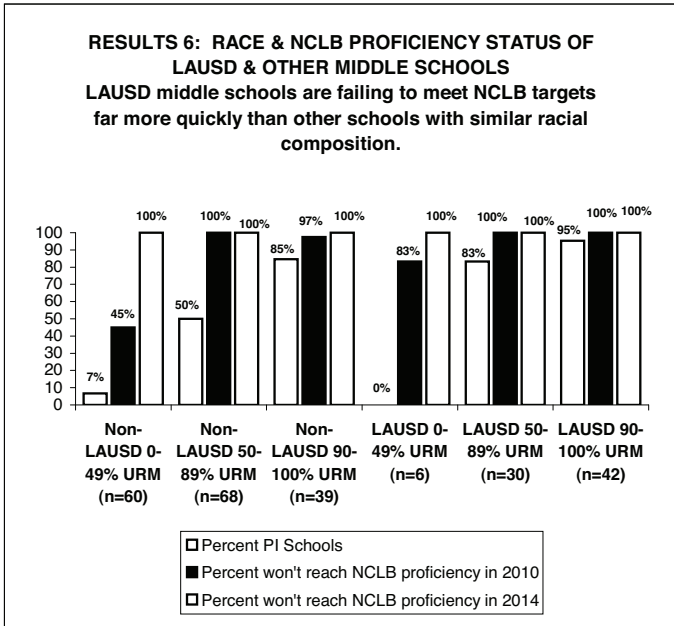
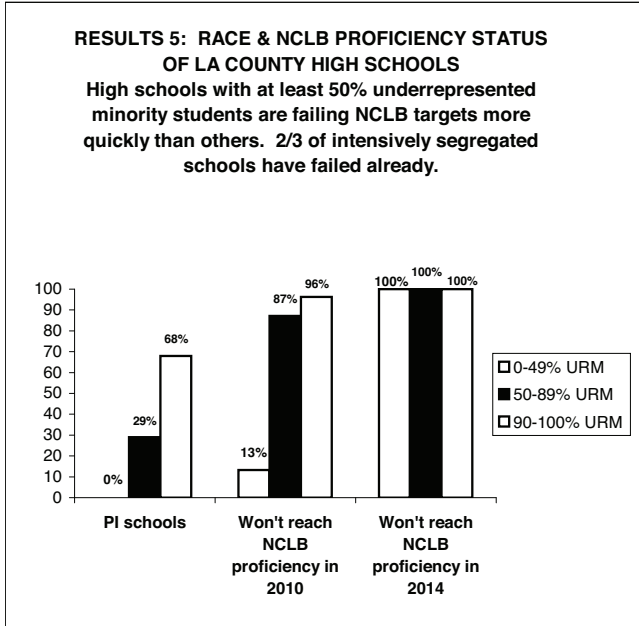
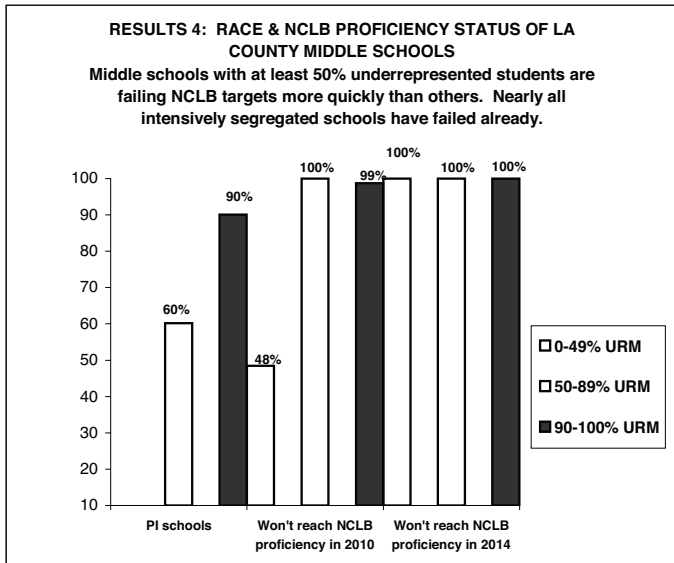
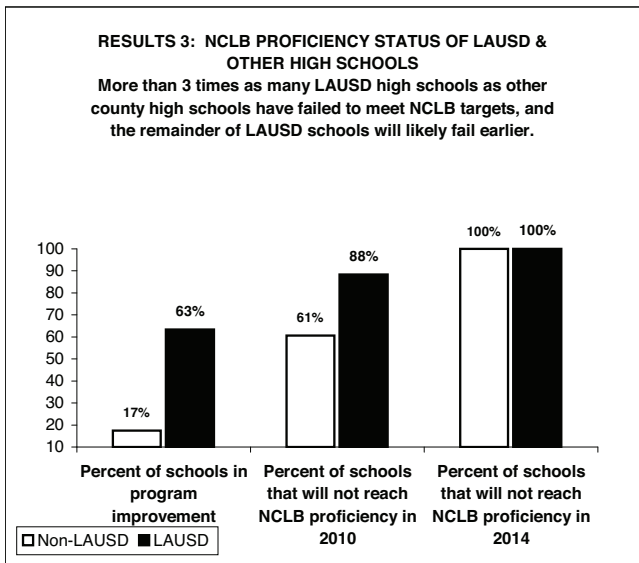
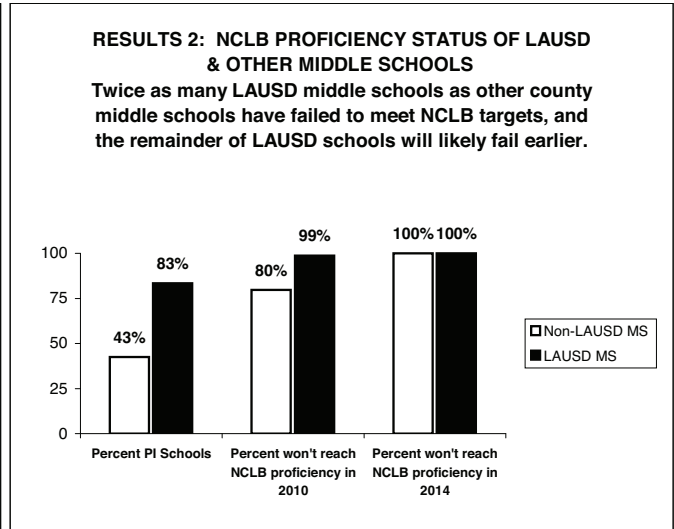
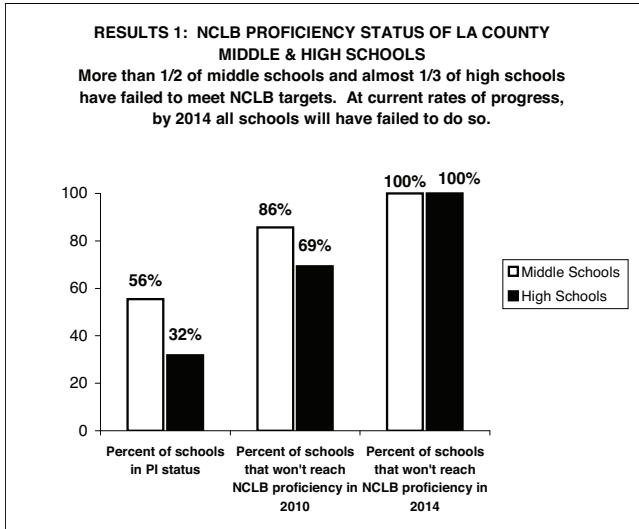


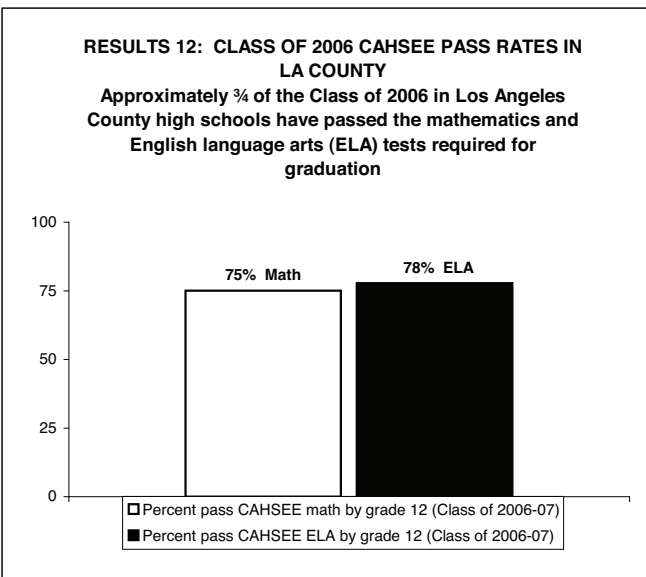
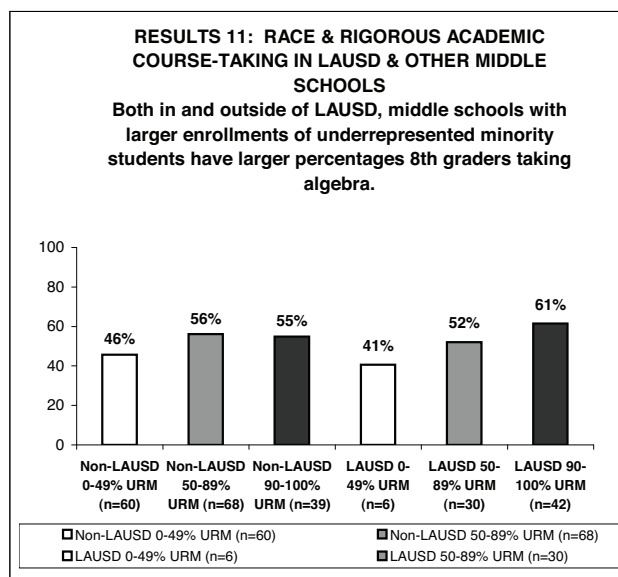
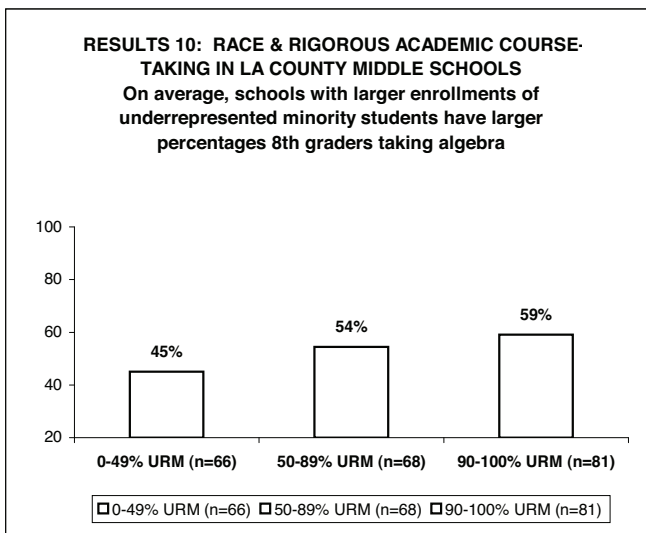
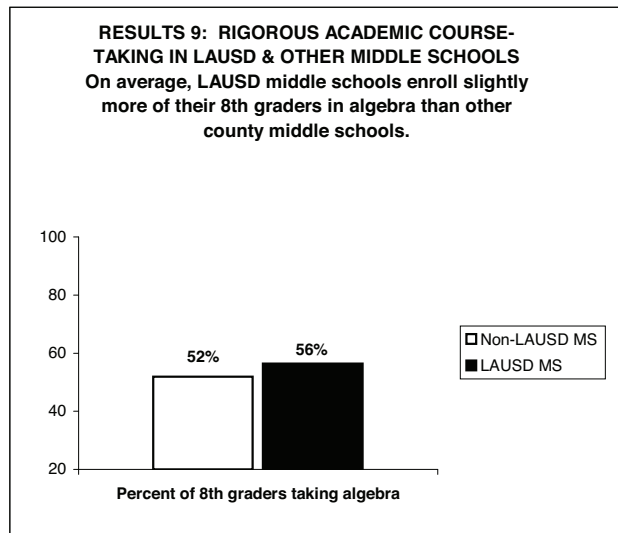
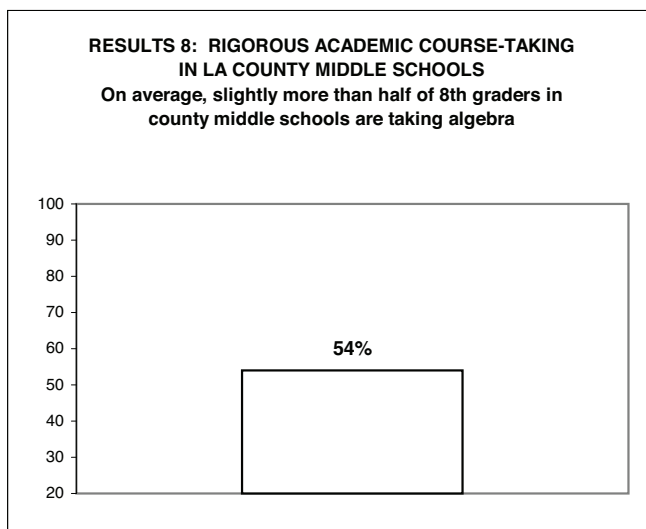
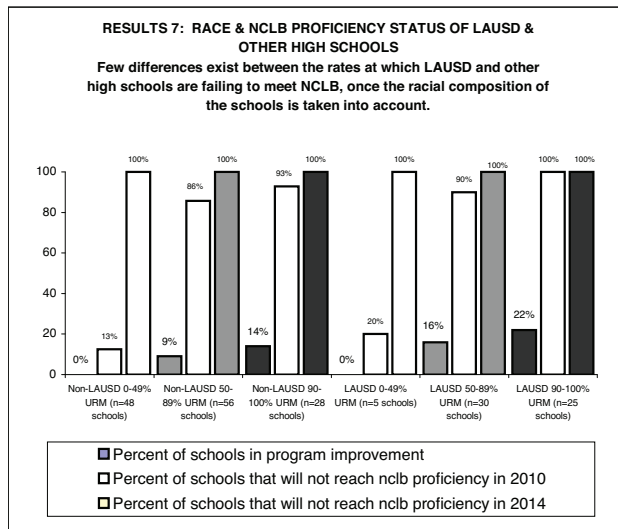
RESOURCE 40: RACE & SERIOUS SHORTAGES OF COLLEGE PREP TEACHERS IN LAUSD & OTHER HIGH SCHOOLS

Students in segregated minority high schools in LAUSD are less disadvantaged than those outside LAUSD by shortages in A-G courses taught by qualified teachers

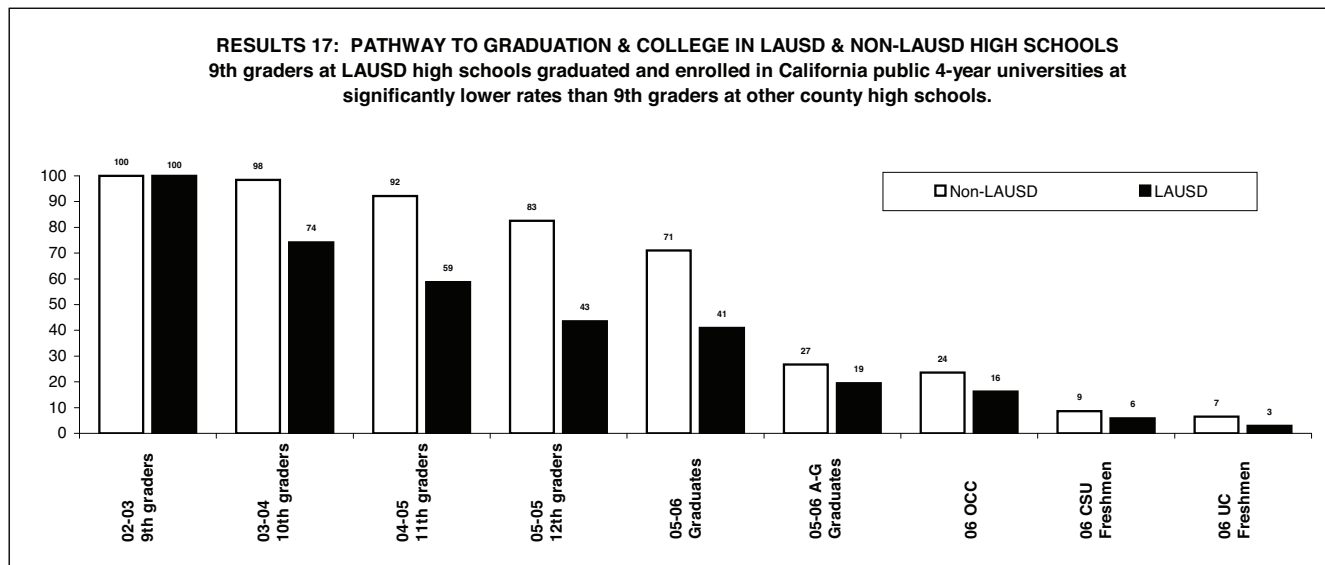
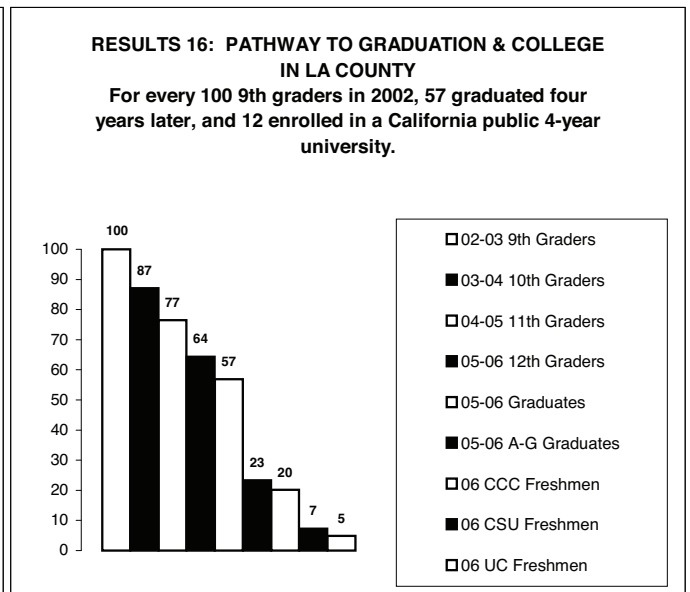
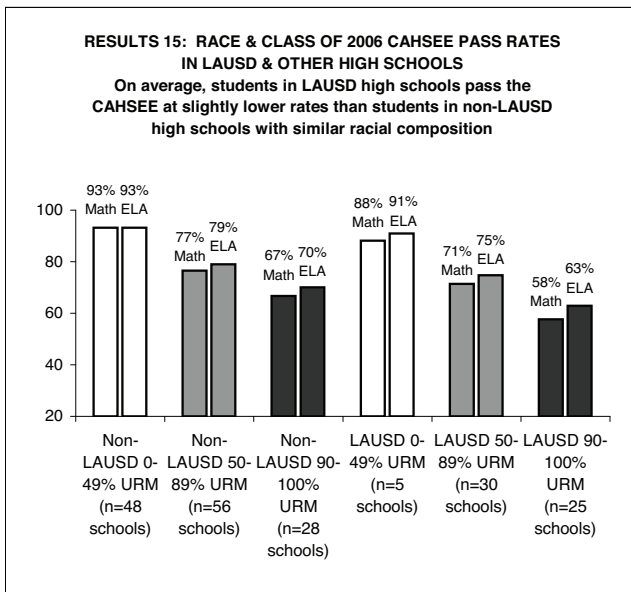
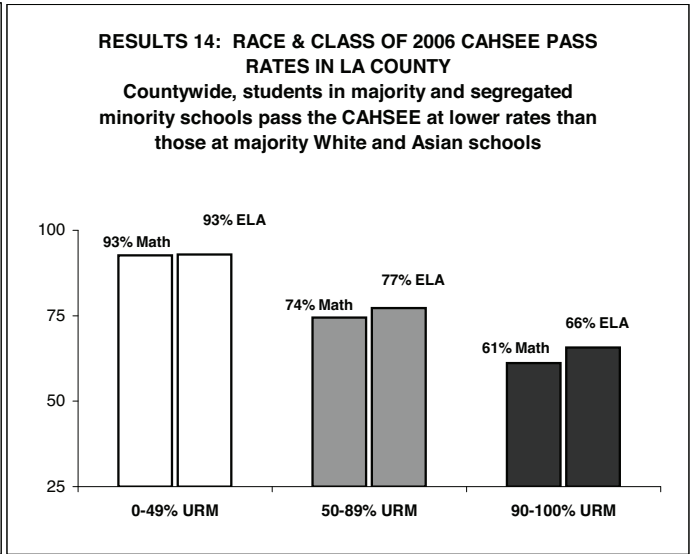
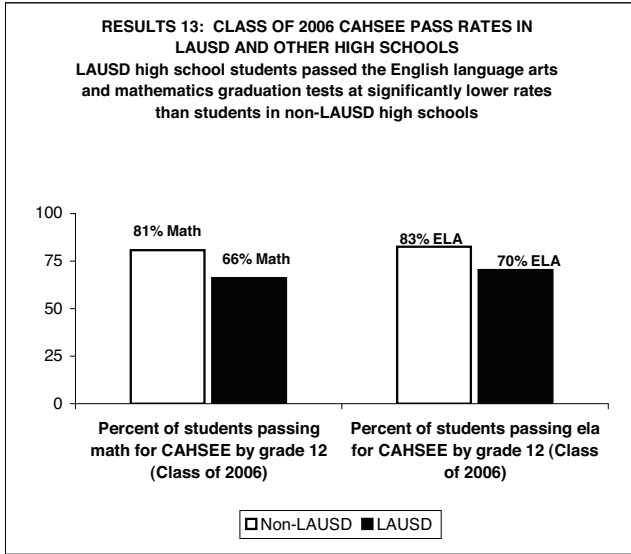


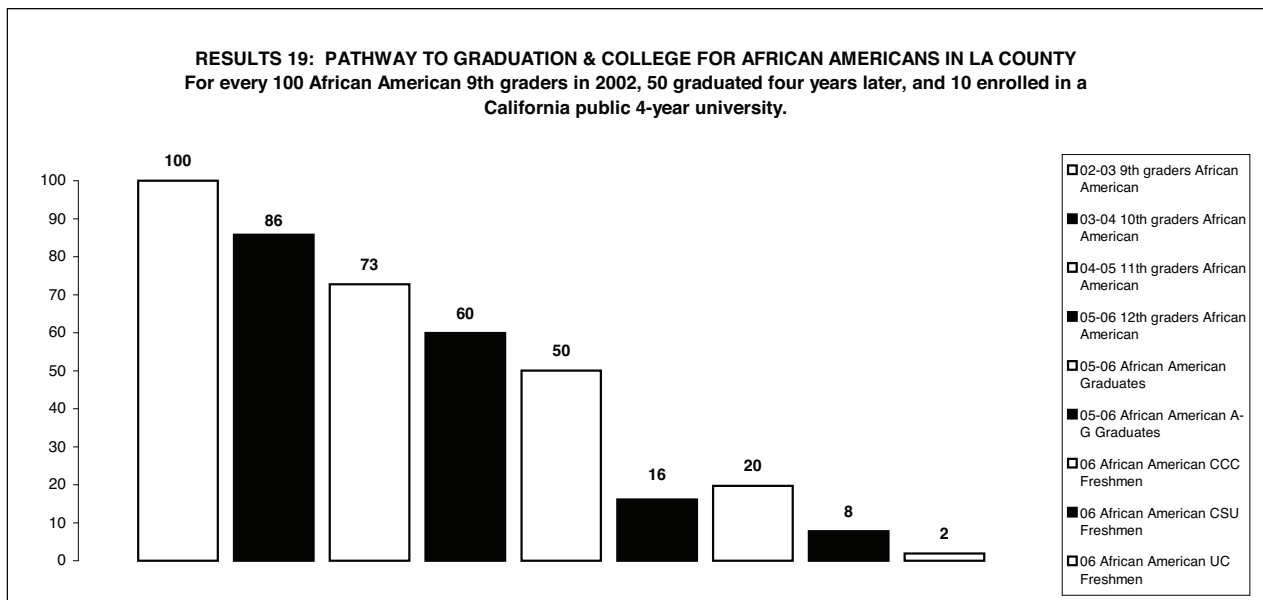
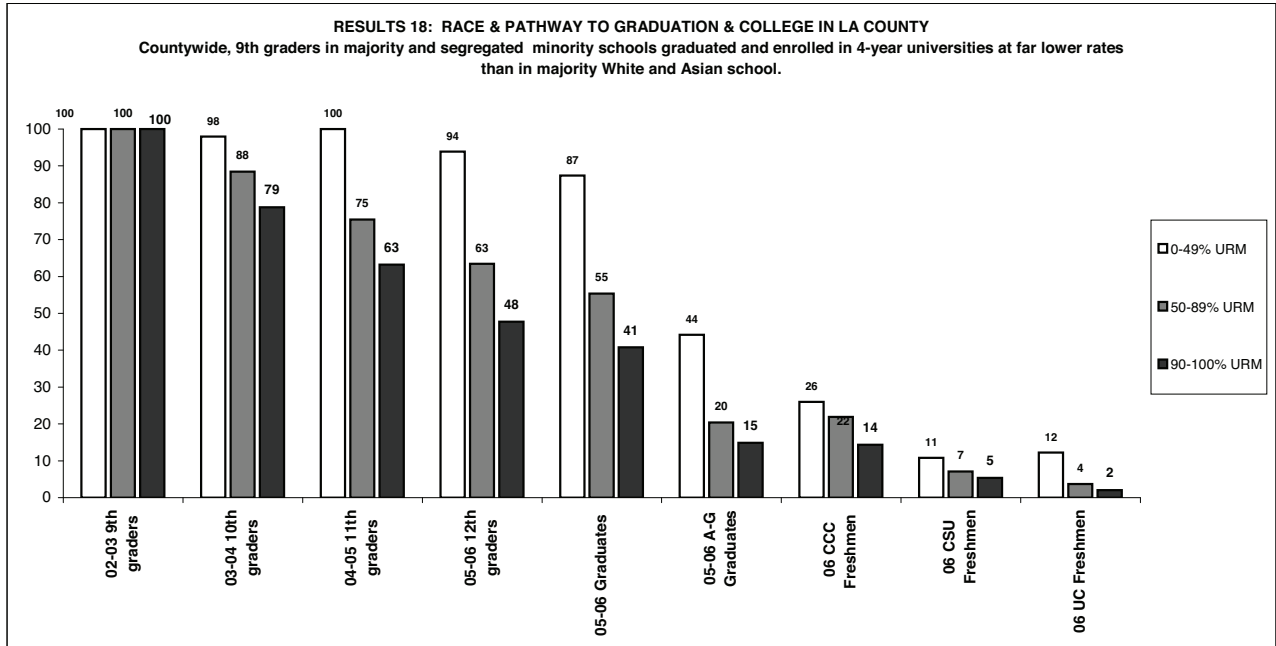
RESULTS: CHARTS 1-6



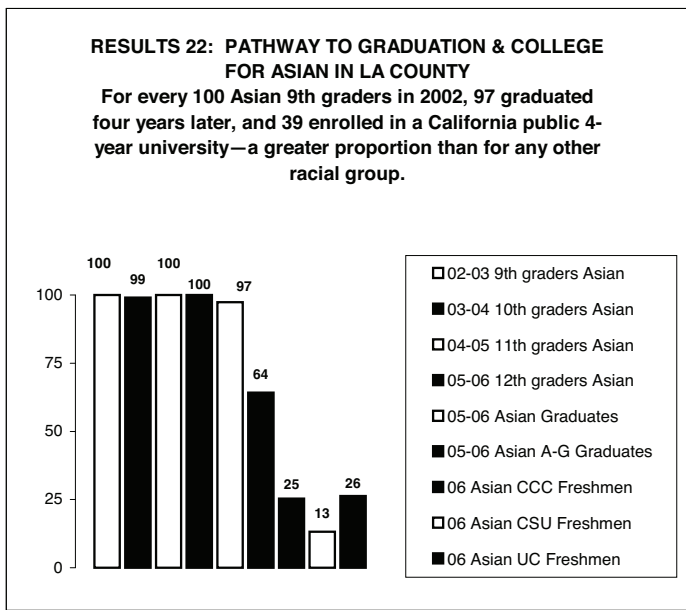
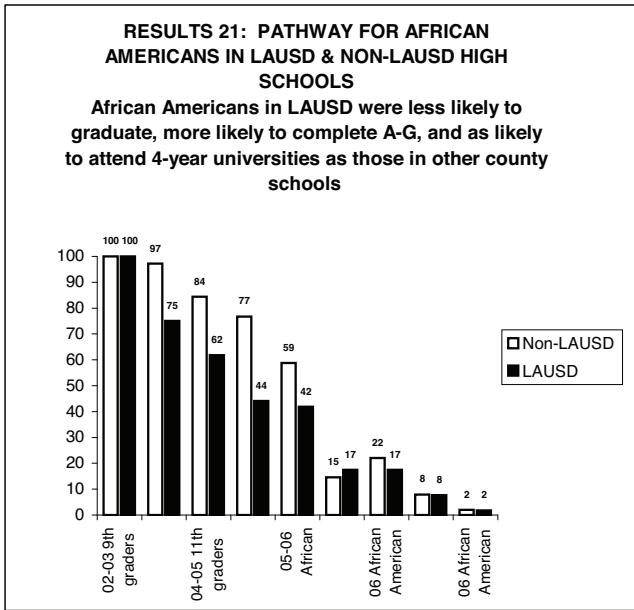
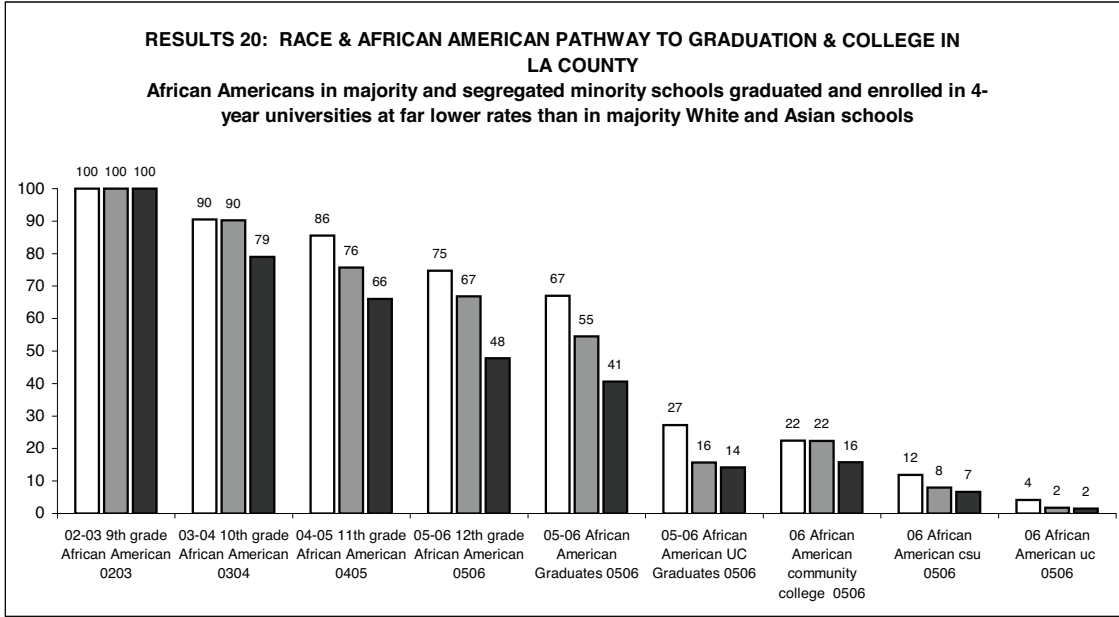


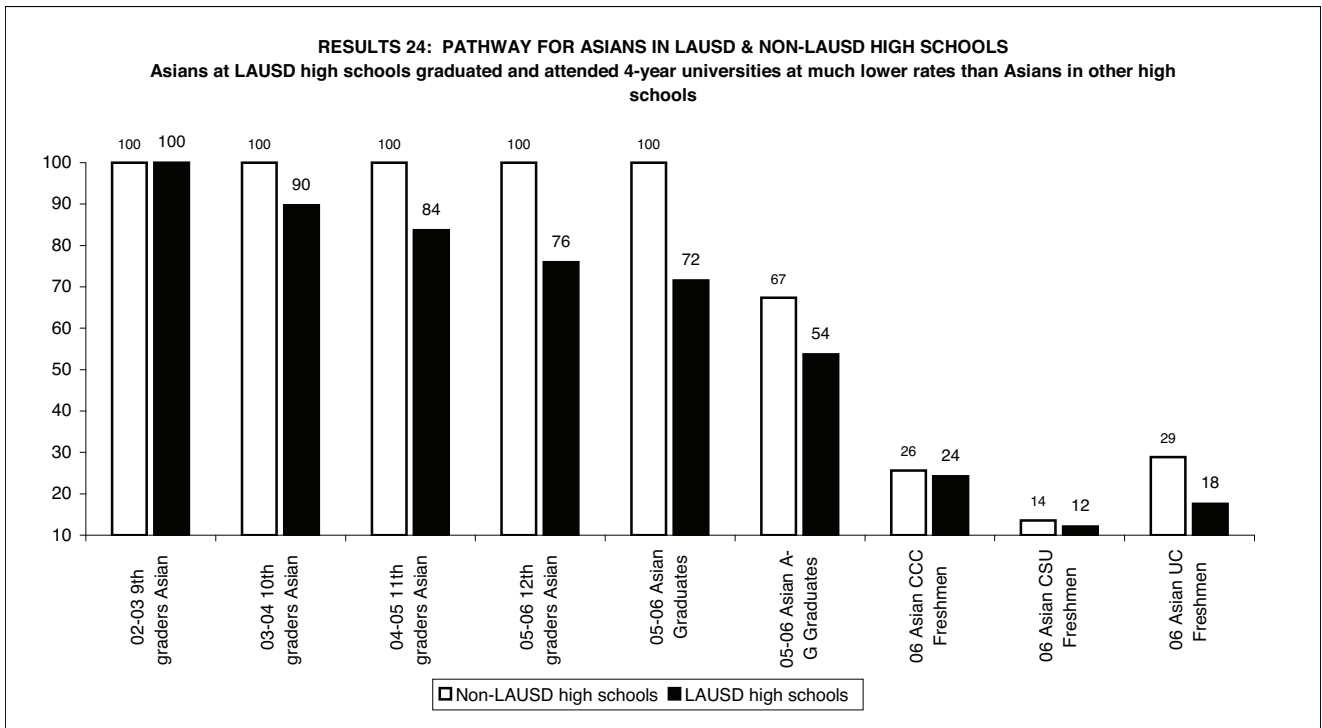
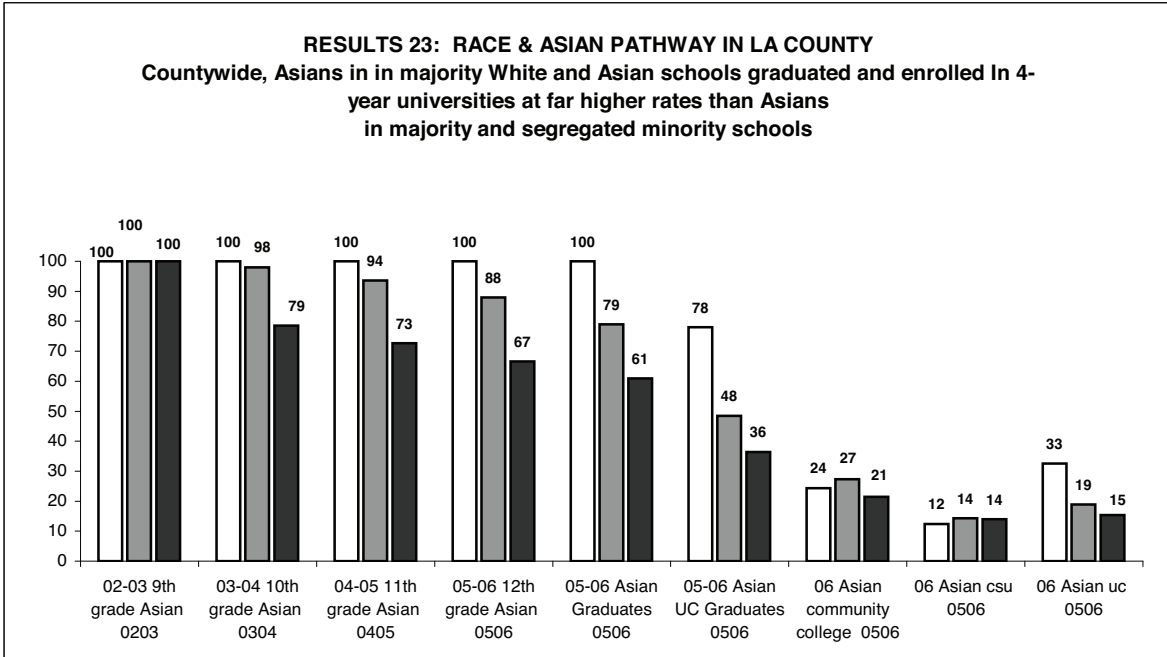
RESULTS: CHARTS 13-17



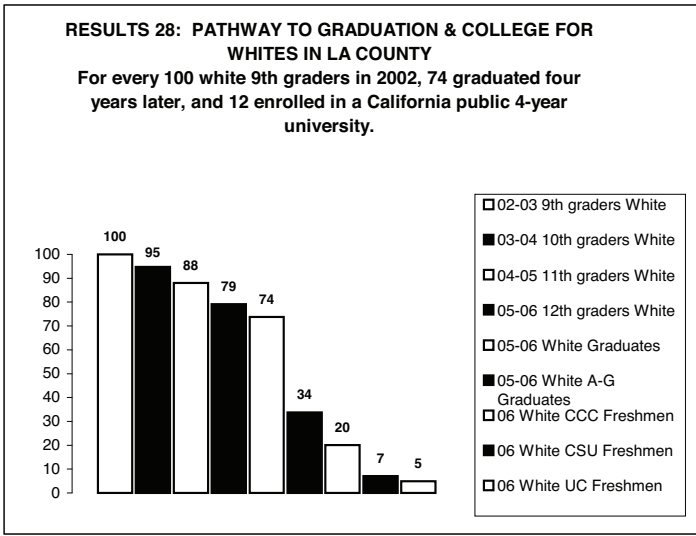
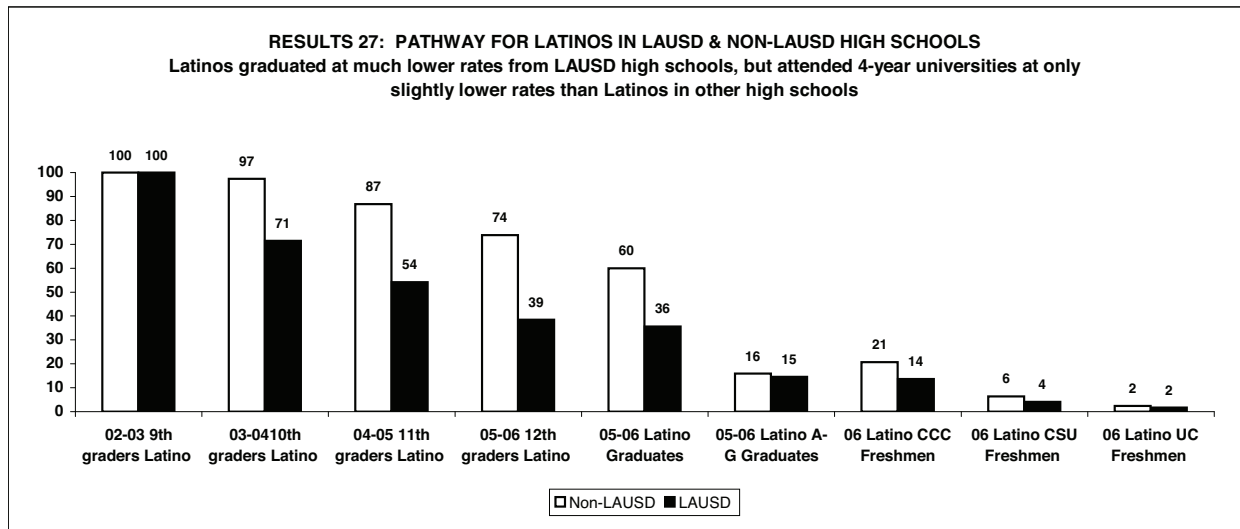
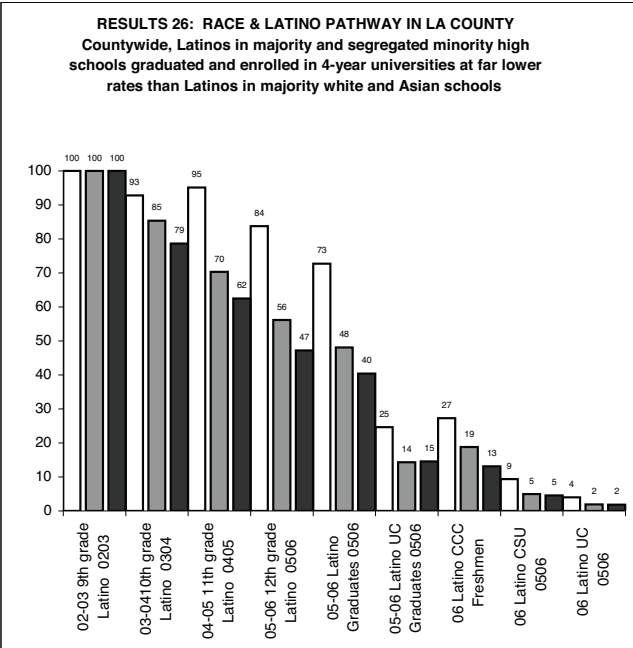
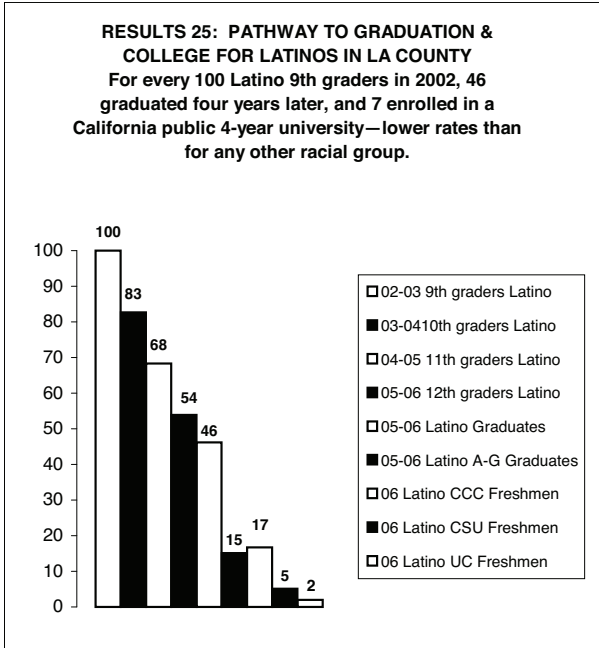


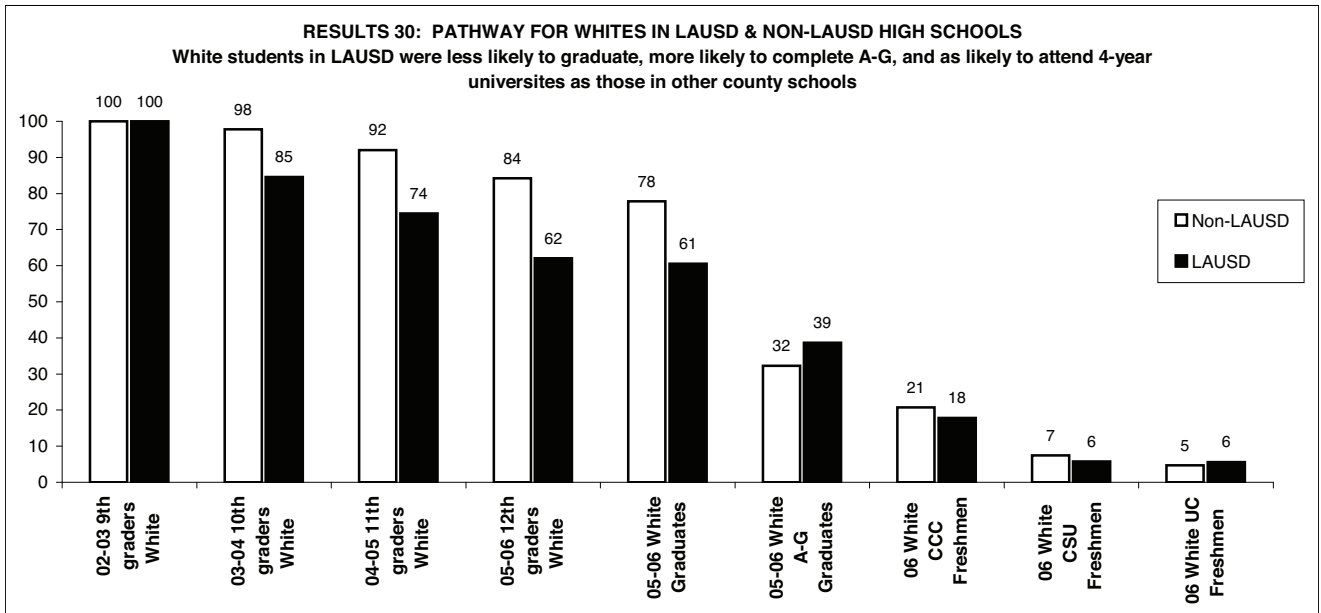
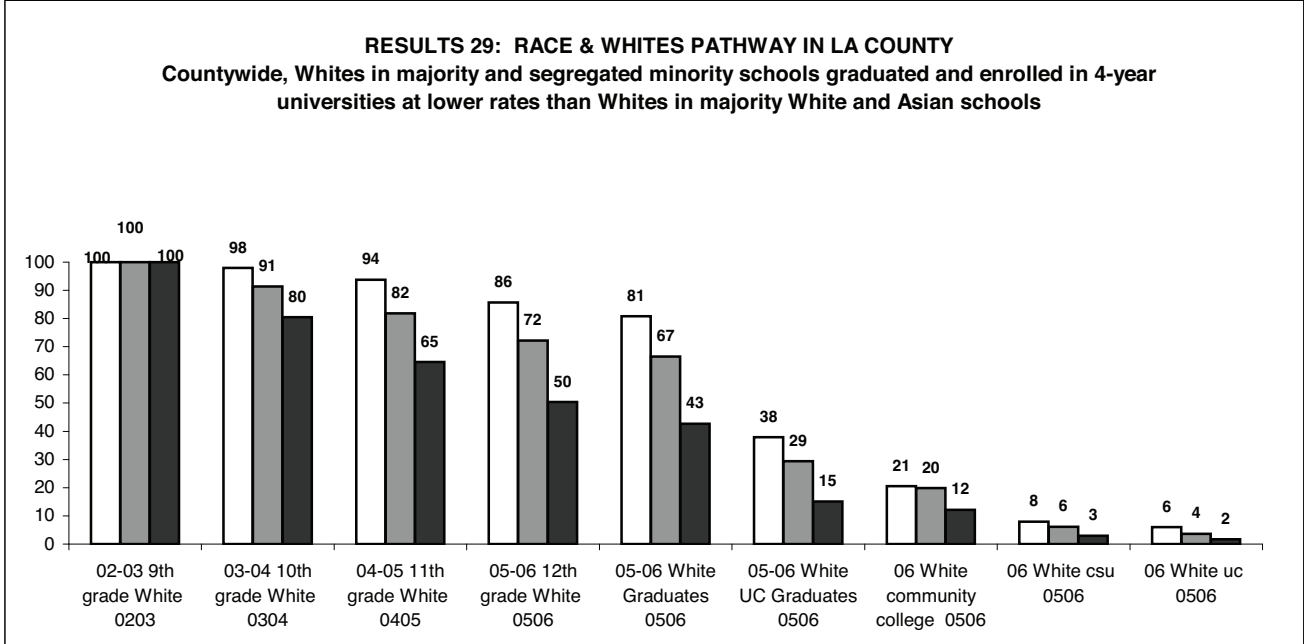
RESULTS: CHARTS 20-22





RESULTS: CHARTS 25-28





CONTRIBUTORS

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JOHN ROGERS is an Assistant Professor in UCLA's Graduate School of Education and Information Studies and the Co-Director of UCLA's Institute for Democracy, Education and Access (IDEA). Rogers studies the distribution of educational opportunities across public schools and public engagement strategies through which youth, parents, and community members can advance equity-focused school reform.

ERIK RUZEK is a graduate student in the Educational Policy and Social Context Ph.D. program at UC Irvine. His research focuses on policy mechanisms designed to increase access to a college education for underrepresented and minority students. He is currently examining university-sponsored outreach programs as an approach to K-12 reform. Prior to entering graduate school, Mr. Ruzek worked for 7 years as an admissions and outreach counselor in both the University of California and California State University systems.

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DAVID SILVER is an educational statistician with 15 years of experience in the field of evaluation and measurement of educational opportunities and academic outcomes. His recent work models the ways in which the racial achievement gap can be traced in large part to severe disparities in learning conditions across California high schools. Dr. Silver has been the lead statistician for a wide variety of academic studies and federal program evaluations.

SIOMARA VALLADARES is a University of California All Campus Consortium on Research for Diversity (ACCORD) postdoctoral fellow at the University of California Los Angeles. Her research in education focuses on race, access and equity. She is particularly interested in faculty of color, their roles and contributions in the academy.

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WHAT YOUR UNITED WAY

IS DOING TO **IMPROVE** THE QUALITY OF LIFE IN LOS ANGELES COUNTY

NEW VISION:

Improve the quality of life for all in Greater Los Angeles by creating pathways out of poverty for those in need.

OUR VALUES:

- 1) All people will have access to the basic needs services they need to succeed in school and life.
- 2) All young people will have a quality education and graduate from high school prepared for college and the workforce.
- 3) All working adults will have access to the employment and economic opportunities they need to provide for their families' future.

OUR GOALS OVER THE NEXT 10 YEARS:

1. **Reduce** the number of homeless people.
2. Ensure children have access to health insurance.
3. Increase capacity of organizations to better integrate services for low-income children and families.
4. **Increase** the high school graduation rate.
5. Help students successfully transition from middle to high school.
6. Promote parent, school and community partnerships that **improve** student performance.
7. Increase access to and successful completion of college prep courses.
8. **Link** job training to jobs in stable industries with career ladders.
9. Improve **literacy** and basic skills levels in current and future workforce.
10. Facilitate greater **access** to existing income supports, financial literacy and asset-building strategies.

More information on United Way's new action plan is available at www.unitedwayla.org

THANK YOU FOR HELPING TO CREATE PATHWAYS OUT OF POVERTY

*Thanks to the generous support
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This Summary Report and the Full Report are
available to download free of charge at:
<http://www.unitedwayla.org>