

## S U M M A R Y

## **Tackling the achievement gap head-on**

### **What it takes to help all children succeed in school**

A wide gulf divides public school classrooms in the Twin Cities region. It closely follows the lines of family income and of race and ethnicity. The gap persists throughout the school years, from grade-school test scores through high school graduation and higher education.

It divides American Indian, Asian, Black, Latino, and White students, and it divides the economically advantaged from the disadvantaged regardless of their race/ethnicity.

#### **The majority of students attending Saint Paul public schools are at risk for underachievement or school failure.**

This is based on the 71 percent of Saint Paul students who are of race/ethnicity other than White and the 66 percent in low-income families. Many students fall into both categories. While English language proficiency is part of the explanation for Asian, Latino, and Black students from immigrant families, it does not explain the wide gap for students of color who are native speakers of English.

Of course, students of all racial and ethnic backgrounds and of all incomes can and do succeed in our public schools and go on to succeed in college. Poverty and minority status do not doom a student to fail, any more than a wealthy White student is guaranteed to do well. However, their chances of success are dramatically and persistently different, both locally and across the country.

Ultimately, we want every child to have the same chance to excel – regardless of their skin color, their cultural background, or their family’s income. At a minimum, it is essential that every student gain basic proficiency in core academic skills like reading, writing, math, and science, so that they have the skills that enable them to graduate from high school, successfully pursue post-secondary education, and make a living.

#### **It starts before kindergarten**

The achievement gap begins early, before students are old enough to enter school. Recent studies show:

- Black children and children from low-income families (less than \$25,000 a year) throughout the United States were more likely to lag behind other kindergartners in health, cognitive achievement, and social and emotional development.
- Three-year-olds at higher socio-economic levels had more than twice as many words in their vocabulary than those at low economic levels (about 1,100 words compared to 500).
- In 2003, Minnesota children with lower family income and those whose parents had less education tended to have lower school readiness ratings in an assessment that included personal and social development, language and literacy, mathematical thinking, the arts, and physical development.

Preschool screening can be critical for early identification of health and developmental needs that may interfere with learning. The earlier children receive this screening, the more time is left for them to receive help before entering school. Unfortunately, in Saint Paul only about half (52%) of the children are screened by age 4, and 14 percent are not screened until they enter kindergarten when it is mandatory.

### Gauging the gap in Saint Paul

All of the following statistics show improvement over the past five years for Saint Paul's student population as a whole, but the gaps persist between students of different race, ethnicity, and income.

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#### Third-grade reading

- Only 40% of low-income students were proficient in reading, compared to 77 percent of higher-income students.
- Less than half (39-45%) of American Indian, Asian, Black, and Hispanic students were proficient in reading, compared to 78 percent of White students. (2003 test results)

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#### Eighth-grade reading and math

- Only 32% of low-income eighth-graders passed the math test and 47% passed the reading test, compared to 68% and 81% of higher-income students, respectively. (Students must repeat this test each year until they pass, in order to graduate from high school in Minnesota.)
- Passing rates for the math test: 67% of White eighth-graders, 45% of Asians, 33% of American Indians, 29% of Hispanics, and 23% of Blacks.
- Passing rates for the reading test: 81% of White eighth-graders, 60% of American Indians, 54% of Asians, 47% of Hispanics, and 42% of Blacks. (2004 results)

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#### On-time high school graduation

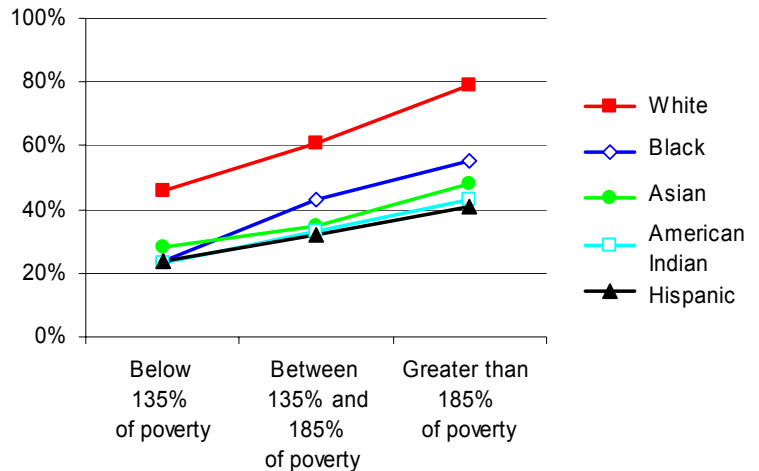
- 73% of White students graduated on time in 2001, compared to 66% of Asian students, 49% of Hispanic students, 45% of Black students, and 43% of American Indian students. (2001 rates)

#### Both income and race play a role

Race and income each have a strong, independent link to school success. Within each racial/ethnic group, students from higher-income families have better results. Within each income group, White students have better results.

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#### Third-graders proficient in both reading and math, by family income and race/ethnicity (Saint Paul Public Schools, 2002-03)



#### What the gap means - for the students and for the community

Now that we've seen the extent of the achievement gap in Saint Paul, what does it mean for these students and for the community? About 7 in 10 students in Saint Paul public schools are of race/ethnicity other than White, and two-thirds of students are from low-income families (at or below 185% of the federal poverty line). About 80 percent of racial/ethnic minority students are from low-income families.

#### Personal economic stability and self-sufficiency.

The American dream of financial security and home ownership will be elusive for workers without at least some education beyond high school. In the increasingly knowledge-based economy, the difference in wages between those with higher education and those without it appears to be widening. With a high school diploma or less, it takes multiple wage-earners, or a single wage-earner working multiple jobs, or both, to provide even the basic necessities for a household.

**Community economic stability and vitality.** Saint Paul needs an educated workforce in order to compete and thrive economically. It must be able to offer a new generation of well-educated employees to attract

knowledge-based companies. This will become especially crucial as the relatively well-educated Baby Boom generation begins to retire. The new generation of employees will be increasingly made up of racial/ethnic minorities, who are currently much less likely to have the benefit of higher education.

### **Current context: The “No Child Left Behind” Act**

The achievement gap is not a new issue in American education. Inequality by race and income are longstanding problems. Significant federal efforts over the years to address the issue include the school integration efforts following the Brown v. the Board of Education ruling, Head Start, Title I programs, and other national policies.

The No Child Left Behind Act (2002) reflects the recent political emphasis on accountability in public education. This law requires testing, ambitious academic goals for all children, and imposes serious sanctions in an attempt to close the achievement gap in individual schools, school districts, and entire states.

No Child Left Behind requires continuous and substantial improvement on state tests by all students (including the economically disadvantaged, racial/ethnic minorities, disabled students, and those with limited English proficiency) until all are proficient in reading, math, and science. The target date is 2014.

This new law appears to be fostering a strong focus on improving state test results. Educators are feeling pressure to raise test scores at a time when school budgets are being trimmed due to state budget problems. This focus may reduce or force out school programming that is not seen as having a direct impact on increasing test scores.

Some of these effects could be good, and others could be bad. The ultimate aim of the legislation is certainly good: No child can afford to be left behind in school in this day and age, and neither can a community afford to leave them behind.

### **Factors that contribute to the achievement gap**

The achievement gap persists for many reasons, including broad social conditions. A recent review of published research identified 14 factors related to the school, home and community. Unless otherwise noted, research evidence indicates that students from lower-income families and racial/ethnic minorities (Black and Hispanic students in particular) tend to have fewer of the following advantages while their higher-income and White peers have more.

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#### **School factors**

- Rigorous curriculum (taking the more challenging high school courses, taking Advanced Placement exams)\*
- Teacher preparation (teachers with certification to teach their subjects, or with at least a college minor in the subjects they teach)
- Teacher experience, attendance and stability (teachers with 3 to 5 years’ experience, low teacher absenteeism, low teacher turnover)
- Small class size (fewer than 25 students per class)\*
- Technology-assisted instruction (access to and use of computers and the Internet in the classroom)
- Safe schools (little or no fear of being attacked, no gang presence)

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#### **Other factors**

- Parent participation (attendance at school events, volunteering at school, teachers’ high ratings of parent involvement)
- Student stability (rarely changing schools)
- Normal birth weight (avoiding low birth weight)\* \*\*
- Absence of lead poisoning (low lead levels in the blood)
- Adequate nutrition, not going hungry
- Reading to young children (daily for those age 3 to 5)
- Limited television watching (less than six hours per day)
- Parent availability (living with two parents)

\* *Difference not established by income level.*

\*\* *Difference not established between Hispanic and White students.*

Factors not included in that study, but identified in other research as likely contributors to the achievement gap include:

- Teacher expectations (low expectations for student performance and success)
- High concentrations of children from low-income families in the school
- A school climate less conducive to learning
- Overuse of special education for racial/ethnic minority students
- Student absenteeism, low school attendance
- School funding disparities
- Negative peer pressure
- Disparities in access to high-quality preschool programs
- The legacy of race discrimination

Clearly, to make headway on closing the achievement gap will require major and sustained efforts on many fronts, both within and beyond the school, starting in early childhood.

### **Effective strategies for schools**

Research evidence, although limited, tells us that when children have greater exposure to some of the advantages and positive factors on the list above, children from racial/ethnic minorities and from low-income families can make greater academic strides. The strongest evidence is for the school-related factors rather than for factors beyond the school. (This may be partly because more research has been done on those factors.)

**Smaller classes.** Children benefit from small class size (17-20 students), especially in kindergarten through third grade. To benefit, children need to be in smaller classes at least two years during the early elementary grades. Minority students and students from low-income families gain the most from smaller classes.

**Well-qualified teachers.** Ensuring that students in high poverty/high minority schools have excellent, well-prepared, and experienced teachers can make a big difference.

**Comprehensive school reform.** Comprehensive reform integrates instruction, testing, classroom management, teachers' professional development, parent involvement, and school management to achieve school-wide academic improvement. The best of these models have boosted student academic achievement and reduced achievement gaps.

**High-quality preschool.** Research indicates that good early childhood education can have a long-lasting impact on school success for economically disadvantaged and minority children. High-quality programs have low child-staff ratios, well educated staff, and strong supervision. They include an emphasis on developing cognitive skills, which tends not to be an emphasis of Head Start programs.

**Challenging, rigorous curriculum.** All students need challenging (but realistic) courses. At present, large racial disparities mark the participation rates in more rigorous or advanced courses, or advanced placement coursework in high school. To even out this disparity, students need to be prepared with challenging curriculum and instruction in elementary school. Teachers' expectations also strongly influence students' effort and performance.

**Smaller schools.** Students who attend small schools (150-250 in elementary school, 300-400 in middle school, 450-600 in high school) tend to have higher academic achievement. The benefits appear greater for economically disadvantaged and minority students, who are more likely to attend large schools. A current approach called "schools within a school," being used in some Saint Paul schools, aims for similar benefits.

**Individual tutoring for students in need.** One-on-one tutoring that supplements the regular curriculum can be an effective approach to improving student achievement. It is most effective when it is provided early to students in danger of falling behind. Certified teachers are the most effective tutors.

### **Other less-documented strategies**

Other approaches may also hold promise for reducing the achievement gap, such as standards-based education, high-stakes testing, and accountability (as embodied in the No Child Left Behind Act). In addition, a variety of strategies outside the classroom may help, such as student and family support services to reduce or eliminate barriers to learning (such as behavioral and health problems, family stresses and instability, and problems in meeting the child's basic needs). These strategies also address some of the "other factors" listed above, which have been found to contribute to the achievement gap (such as student stability, adequate nutrition, and parent participation in education). To have a measurable impact on the achievement gap, these efforts would need to be long-term and widespread. These efforts take an indirect approach to academic success, in the sense that they do not seek to directly increase learning but seek to create conditions where more learning can occur.

A body of research describes the characteristics of schools that "beat the odds," producing higher-than-expected achievement given their student demographics. These schools typically have strong administrative leadership, strong commitment from the staff, and persistence.

Finally, in recent years much attention has been devoted to creating more school choice or options in public education (such as charter schools, vouchers for private education, magnet schools, and open enrollment). Proponents believe that by introducing market forces and decentralization into public school systems, the quality of education available to all children, including children from disadvantaged backgrounds, will improve. At this point, there is no consistent evidence that such benefits will result.

### **How some community organizations have worked with public schools to close the gaps**

**Intermediary organizations.** These work to improve and reform various aspects of service delivery systems for children, youth, and families, and the concept can also be applied to school achievement. Intermediary organizations might:

- Convene diverse constituencies to increase public awareness and involvement.
- Promote quality standards, continuous improvement and the measurement of results.
- Combine public and private funds that single organizations may not be able to attract on their own.
- Promote effective policies through education of policymakers and funders.

**Local education funds.** These organizations seek to bridge the gap between a community and its schools. They convene forums in their communities and bring disparate groups together to discuss and take action on education issues. They raise funds, promote local partnerships, award grants, implement programs, and evaluate results. These independent nonprofits often see themselves as agents of change or catalysts for school reform.

Overall, the impact of local education funds has been quite modest. Impediments include:

- Rapid turnover of school leadership and management
- Entrenched school cultures and school district bureaucratic practices
- School staff's resistance to change or lack of capacity to implement change
- Politics of urban school districts
- Lack of leadership from school administrators, such as principals

A Rand Research Brief (2002) on school reform concluded that "schools are not, by and large, fertile ground for 'break the mold' ideas..."

The best results of local education funds seem to be in the area of teacher professional development. Giving teachers a sustained opportunity to improve their classroom skills appears, thus far, to yield the best return for the investment.

### **Removing barriers to learning: Some lessons**

Here are some lessons learned by service providers and Wilder Research Center evaluators working on school-linked programs that aim to remove learning barriers and promote achievement.

- Removing barriers to learning, without more direct academic intervention, is likely to have only a small impact on students' achievement.
- Schools can be unpredictable partners in these efforts due to high turnover among leadership and staff, shifting priorities, political pressures, and budget cutbacks.
- Given this reality, it is important when entering into cooperation or collaboration with schools to have a strongly aligned agenda, a strong commitment from both the school and the school district (including some financial commitment), and strong operational leadership within the school district for the project.
- Even solid support for a project from the central administration of the school district can be undermined by the decision-making authority of local site councils of individual schools.
- Staying power can be crucial to the success of an initiative. Often teachers and other school staff are skeptical of new programs and initiatives. They have seen many come and go over the years and sometimes take the stance that "this too shall pass." To give active support, school staff members need to be convinced that the program will be around for a while and that it will help them in their work.
- School staff members tend to have a bias toward direct services and meeting immediate needs. This can make it difficult to implement indirect services (system change, consultation, and training) and can cause some drift in the actual (versus intended) work that project staff do.

### **Directions to consider**

The public schools cannot close the achievement gap on their own. There is much they can do, but they will almost certainly fall short without strong community support. The factors perpetuating the achievement gap go well beyond the school setting. By the same token, working outside the schools to close the achievement gap will not succeed without strong efforts within the schools.

Community organizations, even those not in the business of academic education, can make a difference in closing the achievement gap. What one organization could do on its own in this regard is probably quite modest. However, working in concert a substantial impact is possible.

Here are some thoughts for organizations that are considering such a course.

#### **1. Focus directly on closing the achievement gap.**

This gap is the number-one education issue in our community, and it is well aligned with the mission of many community organizations to improve conditions for the poor and disadvantaged. Some members of the public may see such an effort as potentially holding back the higher-performing students, but this does not have to be a byproduct. In fact, if done well, measures taken to close the achievement gap should be good for all students.

#### **2. Address both the barriers to learning and the academic/learning factors.**

Although the effect on academic achievement is indirect, addressing emotional-behavioral and family problems can reduce significant barriers to learning for many children. However, to close the achievement gap, differences in school readiness and preparation also need attention. Poor and racial/ethnic minority children often enter kindergarten far behind their classmates in academic skills and have a difficult time catching up as they move through school.

Potential areas of focus:

- Increase the number of urban children who receive screening for health and developmental problems by age 4 (currently only about half in Saint Paul), and also the number who receive the follow-up services they need.
- Increase the access of low-income families to high-quality preschool programs that emphasize academic skills.

In addition, every child needs adults who reinforce the importance of school, expect the child to succeed in school, and help the child with schoolwork when needed. Such adults may be parents, teachers, coaches, friends or relatives, child care providers, other mentors, or even older siblings. Community organizations can establish ways for more adults to become meaningfully and consistently involved in the education of high-risk children through mentorship or tutoring, or through efforts to increase parents' availability and involvement in their children's education.

### **3. Marshal community attention and action.**

- Bring disparate groups together to discuss factors that perpetuate the achievement gap and ways to reduce those problems.
- Serve as an informed and informative advocate, speaking out for the educational needs of poor and racial/ethnic minority children – for example, helping the public and policy-makers to better understand the issues.
- Conduct and share research on factors that add to the achievement gap and promising ways to reduce the gap.

### **Conclusion**

Closing the achievement gap depends on highly effective public schools that are able to accomplish many of the things mentioned above as effective ways to close the achievement gap. Without effective schools, the work of community organizations is unlikely to make a large-scale difference in this large-scale problem.

However, schools cannot do it alone. Community groups working together could mobilize support to ensure that public schools have what they need to be effective. For example, a community coalition could help ensure that schools have the resources to hire well-qualified teachers, provide needed professional development, and keep class sizes small, especially in the early grades. Community groups could also work together to prepare disadvantaged children to enter school, remove learning barriers for school-age children, strengthen the support from adults for the academic progress of high-risk children, and build broad community support for the school success of poor and racial/ethnic minority students.

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**For more information**

This summary presents highlights of the briefing paper  
***Tackling the achievement gap head-on.*** Find the full report  
at [www.wilder.org/research](http://www.wilder.org/research), or call 651-647-4600.

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