NC SCHOOLS

FIRST IN AMERICA

2010

First in America Special Report: Eliminating the Black-White Achievement Gap

The gap between the academic achievement of students from minority groups and that of the white majority is once more at the forefront of educators' and policymakers' agenda, in North Carolina as elsewhere around the country. Through its *First in America* initiative, the North Carolina Education Cabinet — leaders of the K-12, community college, college, and university levels of the state's education systems — set the target of eliminating the minority achievement gap by the year 2010:

TARGET	INDICATOR
• NC will eliminate the minority achievement gap.	Percentage point gap in performance between white and minority students on NAEP and NC EOG and EOC examinations

	BLACK	HISPANIC	AMERICAN INDIAN
NAEP	28	24	21
EOG & EOC	27	18	14

Whether measured by the National Assessment of Educational Progress or the North Carolina End-of-Grade and End-of-Course examinations, the gaps between the performance of white and minority students are substantial. The gaps have narrowed to some degree in recent years, but if they are to be eliminated altogether by 2010, the rate of improvement will have to increase sharply. This report focuses primarily on the gap between African-American students and their European-American counterparts, and on the ways schools may either recreate and preserve the gap or eliminate it. Future reports will deal with the gaps experienced by other minority groups.

Research does not point to any dramatic "breakthrough" interventions, but to a series of apparently straightforward changes that schools could make in order to close the gap. While the steps outlined here seem straightforward, important complexities and potential pitfalls are associated with most of them. None is easy to carry out. Some are costly — either in dollars or in political terms. Still others involve changes in knowledge, skills, and ways of thinking that are hard to bring about. Effective steps that are both cheap and easy have either been made already or will be discovered only through further research.

by Charles L. Thompson and Sam D. O'Quinn, III

NC Education Research Council

June, 2001

EXTEND HIGH QUALITY, ACADEMICALLY-FOCUSED EARLY CHILDHOOD EDUCATION TO ALL CHILDREN AT RISK OF SCHOOL FAILURE.

By the time students enter kindergarten, the black-white gap is already about half its ultimate size. Yet high quality early childhood programs that focus on academic preparation for school can reduce the gap sharply, and the effects last well into the schooling process. While early childhood care and education (ECCE) programs produce only short-term gains in IQ scores, they can have long-term benefits in school achievement, grade retention, special education placement, and socialization (Barnett, 1995). The gains are significant and lasting only in ECCE programs of high quality — those with low child-staff ratios, well-educated staff, and careful supervision.

In addition to quality, the focus of ECCE programs is also crucial. Programs that make a deliberate effort to familiarize children with letters, sound-letter correspondence, numbers, and other content important to success in the early grades give at-risk children an advantage when they start school. Early childhood educators will need to find approaches that give disadvantaged children opportunities to get ready for school, but without the pressure or rigidity that can engender anxiety and dislike for learning. As a recent study of Georgia's Pre-K program shows, teachers who use and build on children's natural interests rather than using more rigid approaches produce better learners in kindergarten and the early grades (Henry, 2001).

North Carolina already has an award-winning early childhood program in Smart Start, but many child care providers do not give sufficient emphasis to academic preparation, and as many as 10,000 needy four year olds are receiving no services at all (More at Four Pre-K Task Force, 2001). Governor Easley's proposed More at Four program is designed to address these problems. Results from Pre-K programs in other states are encouraging, despite some significant implementation pitfalls (addressed in a separate *First in America Special Report* due out later this summer).

ENSURE THAT AFRICAN-AMERICAN CHILDREN ARE TAUGHT BY ABLE, WELL-PREPARED, EXPERIENCED TEACHERS.

Research has shown differences in the effectiveness of teachers to be the single most important factor accounting for differences in students' academic growth from year to year (Wright, Horn, and Sanders, 1997). Students who get three effective teachers in a row in grades three through five score fifty percentile points above students who get three ineffective teachers in a row (Sanders and Rivers, 1996; Jordan, Mendro, and Weersinghe, 1997). The effects of even a single ineffective teacher are enduring enough to be measurable at least four years later (Sanders and Rivers, 1996). Research is also clear about several key characteristics of good teachers:

- Teachers with higher verbal ability test scores seem more effective in promoting student learning, presumably because the ability to give clear presentations and to sort out students' confusions is central to teaching (Bowles and Levin, 1968; Coleman et al., 1966; Hanushek, 1971; Murnane, 1985).
- While holding just any advanced degree may not improve performance, advanced education in the subject that the teacher actually teaches does increase teachers' effectiveness (Hawk, Coble, and Swanson, 1985).
- Coursework in teaching and learning also helps (Ferguson and Womack, 1993), especially in combination with solid subject matter knowledge (Druva and Anderson, 1983). Formal teacher preparation and licensure requirements seem to help assure that teachers have both.
- Beyond a point, more experience is not necessarily better, but inexperienced teachers are generally less effective than teachers with at least five years of experience (Murnane and Phillips, 1981; Klitgaard and Hall, 1974; Rosenholtz, 1986).
- Not surprisingly, the evidence seems strongest for teachers with a combination of strong subject matter knowledge, knowledge of teaching and learning, and several years of experience (Ferguson, 1991; Ferguson and Ladd, 1996).
- Finally, a teacher who is intellectually able, well-prepared, and experienced in teaching in a particular subject or at a particular grade level is not necessarily effective in teaching other subjects or other grade levels (Druva and Anderson, 1983; Hawk, Coble, and Swanson, 1985; Shulman, 1987; Darling-Hammond, 1992; Monk, 1994; Monk and King, 1994; Goldhaber and Brewer, 1997; Goldhaber and Brewer, 2000). Teachers should be assigned to teach only in the fields and grade levels for which they are prepared.

In sum, then, teacher quality exerts a powerful influence on student learning, and the characteristics of effective teachers can be identified with some confidence. Yet in many states — including North Carolina — minority children are regularly assigned less qualified, less experienced teachers than are white children. In districts all across North Carolina, predominantly African-American schools are assigned unusually large percentages of inexperienced and uncertified teachers (Simmons and Ebbs, 2001; Mickelson, forthcoming). More equitable teacher assignment could sharply reduce the black-white achievement gap.

REDUCE CLASS SIZE IN THE EARLY GRADES.

Smaller classes in the early grades (K-3) can produce large and lasting gains in student learning:

- Only when classes drop below a certain threshold (no more than 20 and probably as few as 17) do large benefits appear and last into subsequent grades (Word et al., 1990; Finn, 1990; Finn et al., 2000).
- Small classes improve achievement by all students, but help minority and low-income students the most (Word et al., 1990; Finn and Achilles, 1990; Molnar et al., 1999).
- Small classes afford more individual attention through one-on-one tutoring and brief on-the-fly help from teachers (Molnar et al., 1999; Molnar, Smith, and Zahorik, 1999).
- Teachers of small classes report fewer discipline problems than in larger classes (Achilles, 1994; Molnar et al., 2000).
- Student achievement is not significantly improved in regular sized classes with a full-time teacher aide (Finn, 1998). Yet if aides are carefully selected for their verbal skills, trained, and assigned to tutor students one-on-one, they can contribute to improved learning (Farkas, 1998a; Farkas, 1998b).
- The longer students are in small classes, the more they benefit. For students to make enduring gains, they need to be in smaller classes for at least two years (Finn et al., 2000). With at least two years of smaller classes in grades K-3, students continue to learn more even after they move into larger classes at grades four and above (Finn et al., 2000).

Despite the clear advantages of smaller classes, there are significant obstacles to successful class size reduction initiatives. First, qualified teachers are in short supply. Since reducing all of its kindergarten through third grade classes to 20 students to one teacher, California has seen a dramatic rise in teachers who are teaching without a license (Bohrnstedt and Stecher, 2001; CSR Research Consortium, 2000). Second, smaller classes require additional classroom space and

resources. As the *First in America 2000 Progress Report* has shown, inadequate facilities and materials are already a major problem for North Carolina's schools. And third, class size reduction may mean cuts in other programs. Taken together, these considerations strongly suggest phasing in class size reduction, focusing first on schools with large numbers of poor and minority children.

ADOPT SOUND AND EQUITABLE GROUPING PRACTICES IN ELEMENTARY SCHOOLS.

The net effect of ability grouping appears to be a trade-off between two sets of effects: (1) the potentially positive effect of narrowing the range of skills that a teacher must accommodate in instruction, and (2) the potentially negative effects of undermining the confidence of low-group students, expecting less of them, and limiting their opportunities to learn. On average, grouping helps students only if it is done in a way that maximizes the positive effects and minimizes the negative effects.

By grouping students for only one or two subjects, grouping them differently for different subjects, and regrouping them on the basis of frequent reassessment, teachers can reduce the range of skills in each group without communicating that little is expected or demanded of students in low groups. In contrast, keeping students in the same groups or classes for all subjects — so-called "comprehensive grouping" — tends to stigmatize students in low groups. It seems to tell them that not much is expected or will be demanded of them. And it deprives them of the opportunity to learn the more advanced material available to students in higher groups (Slavin, 1987a; Slavin 1987b). By contrast, special accelerated programs for gifted students result in significantly more learning for these students (Kulik and Kulik, 1987).

What, then, are the implications for efforts to reduce the achievement gap? On balance, it seems wise to avoid "comprehensive" grouping, and at most, to group students only for one or two subjects. Further, it is essential to ensure that black students are proportionally represented in accelerated programs for gifted students. Without equitable representation, programs for the gifted will widen the black-white achievement gap. A recent NCDPI-commissioned study showed that across North Carolina, African-American students are sharply underrepresented in programs for academically and intellectually gifted (AIG) students. During the 1999-2000 school year, black students represented about 30 percent of the overall student population, but only about 10 percent of the enrollment in AIG programs (Darity, Castellino, and Tyson, 2001).

Especially in light of the dangers associated with grouping students of similar ability, a strong case can also be made for "cooperative learning," in which students of different abilities are deliberately assigned to work together in small groups to complete a learning task. If all students in a group are rewarded on the basis of what every student in the group learns, cooperative learning can be productive for high-performing as well lower-performing students (Slavin, 1987a; Slavin 1987b).

ASSURE THAT AFRICAN-AMERICAN STUDENTS ARE EQUITABLY REPRESENTED ACROSS CURRICULUM TRACKS IN HIGH SCHOOLS.

Curriculum tracking goes beyond simply grouping students of similar ability to offering students in different tracks significantly different sets of courses. Tracked instruction provides an advantage to high achievers by exposing them to material that is unavailable to students in lower tracks. Students' opportunities to learn place a ceiling on what they can learn. And upper tracks have substantially higher ceilings than lower tracks do.

Because African-American students are underrepresented in higher tracks and overrepresented in lower tracks, current tracking practices often widen the learning gap. The NCDPI-commissioned study mentioned earlier reveals a pattern of underrepresentation in high tracks and overrepresentation in low tracks all across North Carolina. For example, although African-Americans represent about 30 percent of North Carolina's student population, only about 13 percent of the students enrolled in the four AP courses taught most frequently in North Carolina schools are black, and only 7 percent of students who took at least one Advanced Placement examination were black (Darity, Castellino, and Tyson, 2001).

Whatever the merits or demerits of tracking, the practice seems unlikely to disappear from North Carolina high schools. Too many parents believe that tracking enables their children to get a better education than would an untracked curriculum. If tracking is maintained, it is essential for schools assure that black and white students are distributed across tracks in roughly the same proportions as they are found in the schools' total population. There is evidence that requiring students to take more challenging, college-oriented courses does raise their test scores, and does so without increasing dropout rates or harming minority or low-income students (Porter, 1998). In fact, minority and low-income students may benefit more than others from stronger course requirements. The courses a student takes are more powerful than socioeconomic background in determining his or her success in college (Adelman, 1999).

The UNC Board of Governors recently increased the minimum course requirements in mathematics and foreign language. If African-American students are included equitably in college-bound tracks, the new policy should improve their test scores and their chances of success in college. But if they continue to be underrepresented in the higher tracks, the tougher course requirements could actually widen the gap between black and white students. The ultimate impact depends on the action of local schools and districts.

BRIDGE HOME AND SCHOOL CULTURES BY ADAPTING TEACHING AND DISCIPLINE PRACTICES TO SUIT STUDENTS' BACKGROUND.

Whether African-American children require or at least learn better from teaching practices that differ from those that work well with most white children remains in dispute. One wide-ranging review of quantitative research concluded that on the whole, there is little reason to believe that black children do require special instructional approaches (Ferguson, 1998). Yet one accomplished scholar makes a persuasive case that many black children profit from more explicit, direct instruction and discipline practices (Delpit, 1995).

This scholar argues that the culture of most schools in the US is a white middle class culture that values and demands certain "ways of talking, ways of writing, ways of dressing, and ways of interacting" (Delpit, 1995). To succeed in school, children who do not grow up in a middle class culture need to learn the culture of school, more or less as one would learn a second language. Learning a second language does not imply that something is wrong with one's first language. The second language is simply a code for communicating and functioning in a context that is different from the code used at home. For many African-American and other minority children, so too is the culture of the school a code — both a language and a set of rules for behavior — that is different from the code used at home.

Teachers must enable children who come to school without this code to acquire it, first by making it clear that their home language is rich, expressive, and appropriate for many contexts, and then by explaining that school requires a different language and different ways of acting. Beyond this, teachers should balance explicit instruction in the conventions of Standard English with "progressive" methods of instruction. For example, students who do not know the vocabulary, syntax, spelling, and punctuation of Standard English will not necessarily "pick up" these conventions on their own, simply by writing, and they will suffer the consequences in later education and in the job market if they do not do so. Teachers should combine "mini-lessons" in an explicit instructional style with opportunities to write about topics of interest to the student, along with less structured individual "conferences" designed to improve the student's ability to say what she means to say within the conventions of standard English.

If many African-American children must learn and adapt to the culture of the school, this scholar's research suggests, schools should also adapt their styles of disciplines to fit those employed in many African-American homes. Some middle class teachers avoid asserting their power directly and forcefully. They assume that their position as teacher gives them authority, and that no more than suggestions or questions should be necessary to shape children's behavior. Yet in many African-American communities, authority comes not from the role or position that a person occupies, but from the force and skill she uses in asserting authority.

Thus, we are faced with an apparent conflict between a research review indicating that no special techniques are required to teach African-American students effectively and a countervailing view that schools need to recognize and respond to the cultural patterns of many black homes. Perhaps direct instruction and explicit discipline provide the foundation for success with challenging curricula and instruction based on sound general principles.

FIND REASONS TO EXPECT EACH STUDENT TO SUCCEED.

That teachers' expectations strongly influence students' effort and performance has been known for decades, if not centuries (Rosenthal and Jacobsen, 1968). Research shows that most African-American students value their teachers' approval highly. More highly, in fact, than their parents'approval. The same is not true for most white students. The value that black students place on their teachers' approval makes them especially vulnerable to the way teachers view and treat them. Not only are they vulnerable to overtly racist treatment. They are also vulnerable to being overlooked — to the simple failure to recognize their talents or potential.

"Stereotype threat" further compounds the vulnerability. That is, minority students must contend not only with fear of failing at an intellectual task, but also with the fear that they will confirm negative stereotypes if they do fail. So the pressure they experience in challenging situations is doubled (Steele and Aronson, 1998). To avoid failure under such pressure, some conclude that their prospects of succeeding in school are small and that academic success is simply not a promising basis for developing or maintaining self-esteem.

When this attitude of disengagement spreads throughout a school, a student's "identity as an authentic black is held hostage" (Steele, 1992) and working hard to achieve in school is seen as "acting white" (Fordham and Ogbu, 1986). A recent study of North Carolina high schools suggests that black students see working hard to achieve in school as "acting white" only when there are few or no black students in the upper track of their high school (Darity, Castellino, and Tyson, 2001). In other words, the "acting white" stigma may be the creation of discriminatory practices in some schools, not an attitude that is endemic to black youth culture. This underlines the importance of assuring equity in tracking practices.

By communicating to each student that he or she is "a valuable person with good prospects," teachers can help black students overcome the complex of vulnerabilities they face (Steele, 1992). The key seems to be a combination of warm personal relationships and high expectations. Neither really promotes good performance without the other. Warm relationships provide the security necessary for students to engage with academic work, while high expectations challenge them to excel.

DEMAND SUCCESS BY HOLDING BOTH SCHOOLS AND STUDENTS ACCOUNTABLE.

Standards and accountability systems may be thought of as a "tough love" version of high expectations — *demanding* that students do the good work they are capable of. The underlying premise is that with the proper system level expectations and incentives, educators' behavior will change, and attitudes or expectations will ultimately follow behavior. Evidence from a survey of North Carolina principals supports the premise. Over 80 percent of principals say that they now focus more resources on low-performing students, and principals who initially opposed the ABCs accountability system are just as likely to report that it has prompted them to make changes to improve instruction as are principals who favored it (Ladd, forthcoming).

There is not yet sufficient evidence to be sure that school accountability can help close gaps, but there are some hopeful signs that it can do so. The gap in the percent of black versus white students at or above grade level has closed significantly in the years since the ABCs school accountability system was instituted in North Carolina (Zhang, 2000). The increased rate of improvement after the ABCs were instituted makes it plausible that the accountability system has contributed to closing the gaps.

Student accountability, asserted through promotion standards, has been vigorously opposed by some advocates for minority students (North Carolina Justice and Community Development Center, 2001; Perry et al., 2000; Ernst and Malhoit, 2001). Despite these reservations, last year the State Board of Education adopted a policy that students who fail End of Grade examinations even after repeated attempts accompanied by remedial help may not be promoted without a well-grounded and well-documented exception granted by their principals. The promotion standards take effect for fifth graders this spring, and for students in grades three and eight over the next few years. So evidence about their effects is not yet available.

Meanwhile, the best evidence concerning the effects of such "no social promotion" policies come from Chicago. Early research on the Chicago policy indicates that most students made impressive standardized test score gains (Roderick et al., 2000). On average, 6th and 8th grade students gained almost two grade levels more than would have been expected without the policy in place. Students with the lowest prior scores made the largest measured gains.

With the positive findings came two troubling notes: third graders' learning gains actually declined after the policy was implemented, and students who were retained were not helped by a second pass through the grade they failed. Why the difference between the effects on third graders and the effects on older children? Some observers say that students in the 6th and 8th grades were not working particularly hard before the policy was adopted. The policy pushed both teachers and students to bear down. But 3rd graders were already working reasonably hard at mastering material that was new to them. The policy simply made them more anxious, which was counterproductive.

The results for retained students are less puzzling. They received only modest assistance during the year of retention. Yet these were students with whom neither intensive assistance during the year before retention nor a strong summer program had made much headway (see below). Only careful diagnosis and more targeted and powerful interventions are likely to help these children — far more than simply recycling them through the same grade again.

Thus, school and student accountability systems show promise for reducing the black-white achievement gap and have begun to deliver on some of their promise. But the jury is still out on just how effective they will prove to be and whether their benefits will be accompanied by some of the worrisome effects seen in Chicago. Only if they are accompanied by strong and sustained interventions to support students at risk of failure will their promise be realized and their negative effects minimized.

North Carolina's promotion standards do provide for a "personal education plan" for retained students, but it is not yet clear how vigorous the support for retained students will actually be. Decades of research on policy implementation (McLaughlin, 1990) suggests that the implementation of personal education plans will vary sharply from district to district, school to school, and even from student to student. Districts that want to minimize the negative effects of retention may wish to specify and monitor an approach to supporting retained students rather than leaving it to each school to develop and implement personal assistance plans on their own.

SUPPORT STUDENTS WITH INDIVIDUAL TUTORING, MORE COMPREHENSIVE REFORMS, SUMMER PROGRAMS, AND FOLLOW-UP ASSISTANCE.

As advocates for at-risk students have argued forcefully, it is unreasonable to expect and demand success without providing at-risk students with effective assistance to meet the expectations and standards (North Carolina Justice and Community Development Center, 2001). Research provides some guidance about what to do — and what not to do — for students at risk for retention. First, what not to do. A 1997 evaluation of Title I, the largest federal program for disadvantaged students, indicated that many common ways of using Title I funds are ineffective, including the use of classroom aides, small reductions in class size, and "pull-out" small group remediation (Puma et al., 1997).

In contrast, individual tutoring does appear to be effective. Research on tutoring specifies characteristics of both effective tutoring practice and effective tutors (Slavin and Madden, 1989; Wasik and Slavin, 1993; Ross et al., 1995). Effective tutoring is done one-on-one, supplements rather than supplants normal classroom instruction, and focuses on the regular curriculum. Programs that

spell out what the tutor should do are more effective than programs that leave the approach to the discretion of each individual tutor. In most effective programs, tutors model or demonstrate the skills to be cultivated, then coach the student through the process, gradually reducing this "scaffolding" as the student grows more proficient.

Not surprisingly, the most effective tutors are certified teachers. What may surprise some, however, is that tutoring of younger students by older ones ("cross-age tutoring") seems to have the next largest net effect on student learning — larger than tutoring by aides or volunteers. In part, this may be because the student tutors themselves learn through the process along with the students they are helping. Paraprofessionals or aides have generally not been found to be effective tutors, but there is some evidence that if the aides are selected specifically for their good reading and writing skills and are given proper training, they can be effective (Farkas, 1998a; Farkas 1998b).

Though tutoring clearly can help, even advocates of tutoring concede that it is often not sufficient to close achievement gaps. They argue for "comprehensive school reform." The proposition that coordinated whole-school change is necessary to improve outcomes for disadvantaged students was first put forward in the 1997 evaluation of Title I mentioned earlier (Puma et al., 1997; Fashola and Slavin, 1998). Researchers propose that thoroughgoing changes in curriculum, instruction, classroom management, and assessment for all students, supported by sound professional development and broadened participation in school governance, would represent a more effective route to better outcomes. There is considerable evidence to support the proposition that whole school reforms are more successful than reforms that target individual elements within a school Puma et al., 1997; Fullan, 1991; Protheroe and Perkins-Gough, 1998; Herman and Stringfield, 1997; Doherty, 2000). The strength of research support for specific comprehensive school reform models varies greatly. Yet there is sufficient support for some models to warrant careful consideration by schools and districts searching for ways to close achievement gaps.

Even comprehensive efforts to support success during the school year may not be enough. Mandatory summer programs for students at risk can substantially reduce retentions (Roderick et al., 1999; Roderick et al., 2000). The six to seven week Chicago program is taught by qualified teachers, features small classes (sixteen students or fewer), focuses squarely on the required reading and mathematics curricula, and allows for individual attention (one or more tutors per class). As a result of the program, retentions have been cut significantly.

DESEGREGATE SCHOOLS AND PROGRAMS WITHIN SCHOOLS.

Until recently, one might have assumed that desegregation is a step that has already been taken. Some would also argue that the results did not justify the extraordinary social and political dislocations that accompanied it. Yet there is strong evidence that segregation is neither a thing of the past nor merely a superficial matter of who sits next to whom. North Carolina's schools are resegregating at a rapid pace. North Carolina now has 220 schools with minority enrollments of 80 percent or more — double the number of such schools in 1993 (Simmons and Ebbs, 2001). In substantially desegregated North Carolina schools, just over half of African-American students (51.1%) score at or above grade level on state tests. In segregated schools, the figure is 7.5 percentage points lower (43.6%) (Simmons and Ebbs, 2001). Middle class black students suffer the greatest damage from segregation, scoring significantly worse in segregated schools than in an integrated setting (Simmons and Ebbs, 2001).

Just how desegregation matters is complex. There is clear evidence that schools with a substantial white presence get more resources of the sort that matter to student achievement, such as good teachers and access to instructional materials (Grissmer et al., 2000). Predominantly black schools have much higher percentages of uncertified and inexperienced teachers than do predominantly white or integrated schools.

If desegregation makes such a difference in student learning, why has research using large national data bases generally found the effects to be so modest? One reason may be the patterns of resegregation within nominally desegregated schools. Research has found that the percentage of black students in Academically and Intellectually Gifted programs, Honors, Advanced Placement, and International Baccalaureate programs and courses is generally substantially lower than the percentage of black students in the schools (Darity, Castellino, and Tyson, 2001). So "desegregated" schools often harbor resegregation within the school, which masks the contribution of desegregation to improved student learning.

In sum, separate is not equal, either in terms of student learning or in terms of the resources devoted to African-American students in segregated schools. Desegregation of schools and within schools helps equalize opportunities to learn, expectations, discipline, key resources, and student achievement.

Conclusion

The black-white test score gap narrowed rapidly from the late sixties until the early eighties (Hedges & Nowell in Jencks & Phillips, 1999). In fact, if the progress of that period had continued at the same rate, by now there would be no gap at all. Unfortunately, the upward trend lines leveled off in the early eighties. Yet the rapid progress that was made confirms that the gap is neither an immutable fact of nature nor of intractable socioeconomic patterns. Research shows that the ten steps suggested here could close it sharply. None of them is both easy and inexpensive. In the process of trying to carry them out, several states and districts have encountered unexpected pitfalls. Yet it is clearly possible to take these steps, and they do yield results. States, districts, and schools that want to close the gap can do it.

SELECTED BIBLIOGRAPHY

Adelman, Clifford. *Answers in the Tool Box: Academic Intensity, Attendance Patterns, and Bachelor's Degree Attainment*. Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement, 1999.

Barnett, W. Steven. "Long-term effects of early childhood programs on cognitive and school outcomes," *The Future of Children* 5, no. 3 (1995): 25-50.

Darity, William, Domini Castellino, and Karolyn Tyson. *Increasing Opportunity to Learn via Access to Rigorous Courses and Programs: One Strategy for Closing the Achievement Gap for At-Risk and Ethnic Minority Students*. Report prepared for the North Carolina Department of Public Instruction and submitted to the North Carolina State Board of Education. Raleigh, N.C.: NCDPI, 2001.

Delpit, Lisa. *Other People's Children: Cultural Conflict in the Classroom*. New York, N.Y.: The New Press, 1995.

Ferguson, Ronald and Helen Ladd. "How and why money matters: An analysis of Alabama schools." In *Holding Schools Accountable*, edited by Helen Ladd. Washington, D.C.: Brookings, 1996.

Finn, J., et al. *The Enduring Effects of Small Classes*. Paper presented at the annual meeting of the American Educational Research Association. New Orleans, LA.: American Educational Research Association, 2000.

Fordham, Signithia and John Ogbu. "Black Students' School Success: Coping with the Burden of 'Acting White,'" *Urban Review* 18, no. 3 (1986).

Jencks, Christopher and Meredith Phillips. "The Black-White Test Score Gap: An Introduction." In *The Black-White Test Score Gap*, edited by Christopher Jencks and Meredith Phillips. Washington, D.C.: Brookings, 1998.

Kulik, James and Chin-Lin Kulik. "Effects of Ability Grouping on Student Achievement," *Equity and Excellence* 23, no. 1-2 (1987).

Ladd, Helen. "School-Based Educational Accountability Systems: The Promise and the Pitfalls." Forthcoming in the *National Tax Journal*.

Porter, Andrew. "The Effects of Upgrading Policies on High School Mathematics and Science." In *Brookings Papers on Education Policy*, edited by Dianne Ravitch. Washington, D.C.: Brookings, 1998.

Roderick, Melissa, et al. *Update: Ending Social Promotion*. <http://www.consortium-chicago.org> Chicago, IL.: Consortium on Chicago School Research, 2000.

Simmons, Tim and Susan Ebbs. "Separate and unequal, again." *News and Observer*. 7 March 2001, reprint edition of series published 18, 19, 20, 25 February 2001.

Slavin, Robert. "Grouping for Instruction in the Elementary School," *Educational Psychologist* 22, no. 2 (1987).

Slavin, Robert and Olatokunbo Fashola. *Show Me the Evidence! Proven and Promising Programs for America's Schools*. Thousand Oaks, CA.: Corwin Press, 1998.

Slavin, Robert and Nancy Madden. "What Works for Students at Risk: A Research Synthesis," *Educational Leadership* 46, no. 5 (1989).

Steele, Claude. "Race and the Schooling of Black Americans," *The Atlantic Monthly* 269, no. 4 (1992).

Wright, Paul, Sandra Horn, and William Sanders. "Teacher and Classroom Context Effects on Student Achievement: Implications for Teacher Evaluation." *Journal of Personal Evaluation in Education* 11 (1997).

NOTE: We thank the Cemala Foundation of Greensboro and the Spencer Foundation of Chicago for their generous support of the review of research underlying this report. The report also profited from feedback from our colleagues Carolyn Cobb of the NC Department of Public Instruction, Elizabeth Cunningham of the Research Council, and Karolyn Tyson of UNC-Chapel Hill. Patrick Harman and Helen DeCasper of SERVE, Carolyn Cobb and Brad McMillen of the Department of Public Instruction, and our former Research Council colleague Sherick Hughes contributed ideas and material used in earlier drafts of the report. Responsibility for any errors of fact or interpretation that may remain, however, is solely our own.

A fuller version of this report, complete with footnotes, a bibliography, and an appendix on Comprehensive School Reform models, is available from the Research Council and at www.firstinamerica.northcarolina.edu.

The *First in America* project at the North Carolina Education Research Council can be reached at 919.843.8127 or fia@ga.unc.edu.

North Carolina Education Research Council
Post Office Box 2688
Chapel Hill, North Carolina 27515-2688
Telephone: 919.843.8127
Email: fia@ga.unc.edu
Website: firstinamerica.northcarolina.edu