# Chicago Fed Letter

## Chicago Workshop on Black–White Inequality: A summary

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The Chicago Workshop on Black–White Inequality, funded by the Searle Freedom Trust, meets on a semiannual basis to explore the causes and consequences of economic inequality between blacks and whites in the U.S. On December 15, 2006, the second meeting of the workshop was hosted by the Federal Reserve Bank of Chicago.

Materials presented at the December 15, 2006, meeting of the workshop are available at http://economics.uchicago.edu/Inequality\_Workshop/Schedule\_dec15.shtml.

**During** most of the twentieth century, each successive generation of black Americans came closer than their predecessors to matching the educational achievement and economic success of their white peers. However, the convergence in skills among children and in labor market success among adults stalled around 1990. The Chicago Workshop on Black-White Inequality is an effort to explore the reasons for the recent lack of progress for blacks relative to whites. Workshop meetings focus particular attention on the black-white gaps in reading, math, and other basic skills that appear to play such a large role in sustaining economic inequality. Because the economy of the twentyfirst century places a high premium on cognitive skills, black-white economic inequality will persist as long as these skill gaps persist.

Workshop meetings involve presentations, prepared discussant remarks, and general discussion among leading economists and other social scientists from around the country, as well as a core working group of six scholars, of whom I am one. The other five are: James Heckman, Steven Levitt, and Kerwin Charles from the University of Chicago; Greg Duncan from Northwestern University; and Roland Fryer from Harvard University. In this *Chicago Fed Letter*, I summarize the workshop's second meeting, which

looked at the effects of several government policies on skill development in children, as well as the measurement challenges faced by social scientists who seek to quantify changes in the black—white skill gap.

#### **Education policy**

Education policy is at the forefront of many discussions of inequality in the United States. The ongoing debate surrounding the No Child Left Behind Act of 2001 (NCLB) highlights the public perception that disadvantaged communities, especially disadvantaged minority communities, receive poor service from their public schools. Much recent research on skill differences between black and white youth seeks to understand the relative importance of black-white differences in family resources and school quality as contributing factors to the skill gap. A first step in this research is understanding how this skill gap changes as black and white children move through school. Numerous studies document that the black-white skill gap is quite large when children enter school. If the gap widens as children age, we cannot be sure that schools are playing a large role because differences in family resources may exacerbate the gap even as black and white children progress through the same school. However, if the gap is stable as children progress through school, then differences in

school quality are neither closing nor widening the skill gap as children age. While such a result would not imply that improving schools in minority neighborhoods would do little to close the black—white skill gap, it would imply that the current gap is not primarily the result of any black—white disparities in public school quality.

#### Measuring progress

One might assume that documenting the facts about the relative progress of black children during school is a fairly straightforward task. Black children either fall further behind their white peers as they progress through school or not. However, the existing literature on this topic does not provide clear answers, and the first session of the workshop meeting demonstrated that this issue is more perplexing than some might imagine. Scholars made presentations based on administrative data from different states. Eric Hanushek, Stanford University, and Steven Rivkin,

scores from each particular scale are transformed into standardized units such that the mean score is zero and the overall standard deviation is one in each year. These results highlight the need for better ways to describe the relative progress of black children. Because test scores have no natural units, Reardon's presentation demonstrated that some claims about the gap between black and white children in terms of basic skills could rest on arbitrary choices of the scale used to report the test scores. He did not have access to either the Texas or North Carolina data and thus could not be sure that scaling choices played a role in creating different results for the two states. However, his analyses raise a broad methodological challenge for education research. Researchers must be able to discuss the size of skill gaps in terms of a meaningful metric. In recent research, working group member James Heckman has argued for methods that seek to express skill gaps in terms of the expected difference in potential

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Amherst College, used administrative data to show that in Texas public schools, the standardized achievement gap between black and white students grows substantially during elementary school. In contrast, Charles Clotfelter, Duke University, presented results using data from North Carolina that suggested the achievement gap between black and white children is large but constant between third grade and eighth grade.

The subsequent discussion of the two presentations highlighted many factors that complicate these calculations, but Sean Reardon, Stanford University, made the most telling point. Reardon demonstrated that conclusions concerning whether or not black children are falling further behind white children as they progress through school can be greatly affected by the scale used to measure test scores. Further, this is true even when

adult earnings available to people of different skill levels. In my capacity as workshop director, I have argued that social scientists should focus more on measures of skill gaps that describe how members of one group rank in the skill distribution of the other group. The amount of overlap between two distributions of scores focuses on how a set of test scores ranks students from the most to least proficient. Descriptions of relative ranks and the overlap between the distributions of scores for two groups provide important information concerning how two different groups perform with respect to a particular skill, and this information does not rely on any arbitrary notion of scale for the scores.

### Recommendations for future policy

The workshop's second meeting dealt not only with basic issues concerning

the size of the black-white skill gap and how it changes as students mature, but it also tackled how current policy decisions may affect the skills of disadvantaged children, especially disadvantaged children in minority communities. Congress will take up the reauthorization of NCLB in 2007, and this debate is at the center of current policy discussions concerning strategies for improving the performance of public schools in disadvantaged communities. Two cornerstones of NCLB are that schools should be judged by student performance on standardized tests and that students should have the option to choose a different public school if the test scores in their current school are consistently below state proficiency standards.

Two presentations examined the likely consequences of these policy priorities. The first by Justine Hastings, Yale University, and Douglas Staiger, Dartmouth College, used data from a public school choice experiment in North Carolina to examine the determinants of school choice decisions. They reported that public school choice programs are often most valuable for families that are white and economically advantaged because the best public schools tend to be predominately white and geographically distant from disadvantaged neighborhoods. During the initial years of NCLB, there have been persistent problems with students not being able to exercise their right to public school choice because the best public schools often face excess demand. The work presented by Hastings and Staiger suggests that, even if the best public schools are forced to expand to take in students from failing schools, these high-performing schools will often be located far away from disadvantaged communities, making it difficult for students from such communities to change schools. This feature of NCLB stands in stark contrast to voucher plans or proposals to expand the number of charter schools that are allowed. Both voucher plans and the expansion of charters provide mechanisms for new schools to open in communities with schools that are currently failing to meet the NCLB standards for test score performance. Nonetheless, Hanushek correctly pointed out that NCLB does expand

resources available to disadvantaged students because the act only mandates public school choice for students who attend persistently failing schools.

Next, Diane Whitmore Schanzenbach, University of Chicago, and I described specific aspects of the NCLB testing program that may be problematic. Using However, once this announcement is made, failing schools have the incentive and opportunity to coach students in ways that may inflate their scores on these particular assessments. Once a situation is created where some schools coach their students more than others for the state assessments, the results of

of such a system will not be easy because, as Reardon pointed out earlier, measures of how much student achievement is growing over time rely on somewhat arbitrary choices concerning the scale used to report test scores. Still, the bottom line is that if the reauthorization of NCLB does not include provisions that reward schools for all the progress that students make, the law will continue to provide strong incentives over the short term for some schools to ignore their most disadvantaged students.

The children of women who work more and earn more as part of their participation in welfare-to-work experiments enjoy noteworthy gains in academic achievement, compared with the children of women who were randomly denied access to the same experimental programs.

data from a period of high stakes testing in Chicago Public Schools that predates the NCLB, we showed that the relative performance of elementary school students on the tests used to generate accountability measures greatly overstates their future relative performance in high school. However, this was not true in the period before the tests became part of the accountability system. When these assessments became high stakes exams, failing schools faced strong incentives to coach students for the exams; thus, efforts to game the system may have resulted in test scores that provided less reliable information concerning the relative performance of schools.

NCLB outlines three roles for standardized tests. First, tests should be aligned with state-specific curriculum standards so that tests cover what teachers are supposed to be teaching. Second, schools should be held accountable for the test results of their students, and principals and teachers in failing schools should improve or be replaced. Third, states should publish report cards that provide public information about the performance of their schools on standardized assessments. At some level, it may be too much to rely on one set of exams for all three of these purposes. The desire for alignment with curriculum standards leads states to announce that specific tests designed by a specific company or group of researchers will be the standard for assessment in each year.

these assessments will provide less valuable information concerning the actual relative performance of students from various schools.

Further, Schanzenbach and I also discussed concerns about the NCLB provisions for scoring schools based on the test results of their students. NCLB dictates that schools are judged solely by the fractions of students in different groups who achieve a certain proficiency level. A given school receives no immediate reward for greatly improving the achievement of students who are far below grade level unless it brings them all the way up to the state's standard for proficiency. Thus, in the short term, schools may have incentive to simply ignore students who are truly disadvantaged. The Chicago Public Schools adopted a testing system in the 1990s that also had this feature in some grades with respect to reading. In our research, we have found that during the 1990s, in Chicago, students at the bottom of the achievement distribution did not experience the type of gains that other students experienced, and there is some evidence that they may have done worse after the reform began. NCLB is likely to serve the most disadvantaged students poorly unless the reauthorization includes a provision that rewards schools for improving the performance of each child, even if these students do not make it all the way to their state's proficiency standard. However, the implementation

#### Impact of work incentive programs

The December 15, 2006, gathering was the second meeting of the Chicago Workshop on Black-White Inequality, and it involved one presentation that echoed a theme from the inaugural meeting on April 21, 2006. This theme was the impact of the earned income tax credit (EITC) and certain welfareto-work programs that offer single mothers the opportunity to increase their family incomes if they work more. At our first meeting, Gordon Dahl, University of California, San Diego, and Lance Lochner, University of Western Ontario, discussed their finding that increases in EITC benefits appear to generate more

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work, higher family incomes, and higher achievement among children. At our second meeting in December, Greg Duncan presented work with several co-authors that found similar patterns in welfare-to-work experiments. The children of women who work more and earn more as part of their participation in welfare-to-work experiments enjoy noteworthy gains in academic achievement, compared with the children of women who were randomly denied access to the same experimental programs. At this point, it is not clear what accounts for this result. We are not sure whether it reflects the effects of higher family income per se, changes in family attitudes and aspirations associated with a mother working, changes in child care arrangements associated with a mother working, or some combination of these factors. In any case, the results suggest that when disadvantaged parents benefit from stronger incentives to earn income, their children also often benefit. Duncan's work is part of a growing literature that highlights the role of early childhood environments as determinants of skill development.

#### Conclusion

The discussions at the most recent meeting of the Chicago Workshop on Black—White Inequality confirmed the need for further research into differences in achievement between black and white students, because the skill gap undoubtedly contributes to income inequality later in life. While there is no consensus concerning whether or not black—white differences in school quality contribute greatly to skill differences, there is clear

evidence that black children begin school well behind their white peers and that the home environments of black and white children differ greatly in many dimensions that affect children's cognitive development. Future workshop meetings will devote more attention to the links between black-white differences in economic resources and black-white differences in home environments for children. Existing studies show that black children live in home environments that are quite different from those of their white peers, and these differences appear to matter for cognitive development. However, more research is needed before we can fully understand how the economic prospects available to black adults shape family structures, parenting styles, and the allocation of resources to children's development.