

Disrupt the Status Quo. Close the Opportunity Gap.

Research from Kate Gerson's Keynote
Standards Institute - Winter 2017

UnboundEd

Assessment

Finding

Nationwide, 31% of students met or exceeded grade-level expectations in math on the 2015 PARCC assessment.

12% of Black students in Baltimore met or exceeded grade-level expectations.

22% of Hispanic students in Providence met or exceeded grade-level expectations.

15% of economically disadvantaged students in DC met or exceeded grade-level expectations.

The Black vs White Gap in Reading Achievement

Black students scored lower than white students by standard deviations of:

- 0.40 in the fall of Kindergarten
- 0.53 by the end of 1st grade
- 0.61 by 4th grade
- 0.65 by 12th grade

Source

2014-2015 PARCC Results

Baltimore City Schools PARCC Results

Rhode Island PARCC Results

DC Public Schools PARCC Results

1. Fryer & Levitt. (2004). Falling Behind.
2. Stanford Center for Education Policy and Analysis

Grade Level Performance

Finding

1 in 4 Black and Hispanic students who are not reading proficiently in 3rd grade will not graduate high school on time.

Students living in poverty and not reading proficiently in 3rd grade are 13 times more likely to not graduate on time.

When students repeat:

- 0 grades: 7% drop out
- 2 grades: 57% drop out
- 3 grades: 100% drop out

Source

Hernandez. (2011). Double Jeopardy: How Third Grade Reading Skills and Poverty Influence Highly School Graduation.

Hernandez. (2011). Double Jeopardy: How Third Grade Reading Skills and Poverty Influence Highly School Graduation.

Hammond. (2007). Dropout Risk Factors and Exemplary Programs.

Incarceration

Finding

In 2009, 68% of young black men under age 35 who dropped out of high school were incarcerated at some point.

In 2010, a third of all black male high-school dropouts between the ages of 20 and 39 were imprisoned. Incarceration, high school dropouts, and illiteracy are not unrelated problems. In one year, 1/3 of all young black males between the ages of 20 and 39 who dropped out of high school were incarcerated.

60% of Black and Latino prison inmates are functionally illiterate.

Source

Pettit. (2012). Invisible Men: Mass Incarceration and the Myth of Black Progress.

Pettit. (2012). Invisible Men: Mass Incarceration and the Myth of Black Progress.

National Center for Education Statistics. (2007). Literacy Behind Bars: Results From the 2003 National Assessment of Adult Literacy Prison Survey.

College Readiness

Finding

Only 29% of first year college students who take 1-2 remedial courses graduate college within 8 years.

Each year, 60% of college freshmen arrive on campus and find that, although they had earned high school diplomas and in some cases fulfilled other requirements for college entrance, they do not have the math, reading, and writing skills to enroll in credit-bearing courses. Instead, they must take remediation courses, for which they must pay, but earn them no actual college credits.

The costs of remediation at public colleges and universities are substantial for taxpayers. They are also substantial to the college students and their families – Many will accrue debt to pay for non-credit bearing courses to gain the skills they should have had in K-12.

Additionally, the more remedial classes a student takes, the less likely s/he will graduate from college. 57% of students who do not take any remedial courses will graduate college within 8 years. In comparison, 29% of students who took 1-2 remedial courses and only 19% of those who took 4+ remedial courses will graduate within 8 years. The overwhelming number of students who must take remedial courses will simply accrue a lot of debt and will not even get a diploma.

Source

1. Strong American Schools (2008).
2. The National Center for Public Policy and Higher Education and the Southern Regional Education Board. (2010). Beyond the Rhetoric: Improving College Readiness Through Coherent State Policy.

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Work Readiness

Part 1

Finding

In 2014, 73 percent of young adults with a bachelor's degree worked full time, year round, compared with 55 percent of young adults who did not complete high school.

Changes over time in the percentage of young adults in the labor force who worked full time, year round varied by level of educational attainment.

From 2000 to 2014, the percentage of young adults without a high school credential (i.e., without a high school diploma or its equivalent) who worked full time, year round decreased from 59 to 55 percent.

The corresponding percentage for young adults with an associate's degree decreased from 71 to 66 percent.

Source

National Center for Education Statistics. (2016). The Condition of Education.

National Center for Education Statistics. (2016). The Condition of Education.

National Center for Education Statistics. (2016). The Condition of Education.

National Center for Education Statistics. (2016). The Condition of Education.

Work Readiness

Part 2

Finding

In contrast, the percentage of young adults with a master's or higher degree who worked full time, year round increased from 70 to 74 percent during the same period.

Young adults with a bachelor's degree earn almost twice as much as young adults who did not complete high school. For young adults who worked full time, higher education is correlated to higher earnings.

Those with a bachelor's degree earned an average of \$49,900 in 2014, which is almost twice as much as compared to those without a high school diploma, who earned \$25,000 on average. This pattern of higher earnings associated with higher levels of educational attainment also held for both male and female young adults as well as for White, Black, Hispanic, and Asian young adults.

Source

National Center for Education Statistics. (2016). The Condition of Education.

National Center for Education Statistics. (2016). The Condition of Education.

National Center for Education Statistics. (2016). The Condition of Education.

What's Going On?

Part 1

Finding

- 49% of public school students are not white
- 18% of public school teachers are not white

In a recent study, Partners at a number of law firms scored the same memo far differently when told that the author was Caucasian or African American.

- The researchers drafted a research memo from a hypothetical third year litigation associate. Deliberately inserted 22 different errors.
- Distributed to 60 different partners from 22 different law firms, of whom 23 were women, 37 were men, 21 were racial/ethnic minorities, and 39 were Caucasian.
- While all of the partners received the same memo, half the partners received a memo that stated the associate was "African American" while the other half received a memo that stated the associate was "Caucasian."
- On a five point scale, reviews for the exact same memo averaged a 3.2 for the "African American" author and 4.1 for the "Caucasian" author.
- Overall the memo presumed to have been written by a "Caucasian" was "evaluated to be better in regards to the analysis of facts and had substantively fewer critical comments."
- Partners found more spelling and grammar errors, more technical writing errors, and more errors in facts in the "African American" Thomas Meyer's memo.

Source

1. National Center for Education Statistics. (2013).
2. National Center for Education Statistics. (2013).

Reeves. (2014). Written in Black & White Exploring Confirmation Bias in Racialized Perceptions of Writing Skills.

What's Going On?

Part 2

Finding

The Health and Human Services Sector Exhibits Bias

- Analysis of grant data from the National Institute of Health (NIH), African American scientists—and not other types of minorities—are less likely to receive government funding for a research project, even when they have the same credentials as their White peers. An African American researcher's chances of winning an NIH grant is 10 percentage points lower than a White researcher's chances.

The Sharing Economy Exhibits Bias

- A field experiment created twenty Airbnb accounts, identical in all respects except for guest names: ten that are distinctively "African-American" and ten distinctively "White" names, divided into five male and five female names within each group. Airbnb profiles include no picture of the putative guest.
- Inquired about the availability of roughly 6,400 listings on Airbnb across five cities.
- Widespread discrimination against guests with distinctively "African-American" names. "African-American" guests received a positive response roughly 42% of the time, compared to roughly 50% for "White" guests.
- Both African-American and White hosts discriminated against "African-American" guests; both male and female hosts discriminated; both male and female "African-American" guests were discriminated against.
- Estimated that a host incurs a cost of roughly \$65-\$100 in foregone revenue by rejecting an African-American guest.

Source

Ginther et al. (2011). Race, Ethnicity, and NIH Research Awards.

Edelman, Luca, & Svirsky. (2016). Racial Discrimination in the Sharing Economy: Evidence from a Field Experiment.

What's Going On?

Part 3

Finding

Source

Some examples of ways unconscious bias can reveal itself in school:

- Disproportionality in discipline
- Disproportionality in special education designation
- Disproportionality in lower performing “tracks”
- Teacher mindsets, beliefs, behaviors: “orientation”
- Dominant discourse regarding “smart” “bright” “slow” students

Safir. (2016). 5 Keys to Challenging Implicit Bias.

Black boys and girls have higher suspension rates than any other group of students. Suspension is a leading indicator for dropping out and future incarceration.

Civil Rights Project. (2012).

More than 3 million students are suspended each year, which is more than the total number of seats in all major league baseball and football stadiums in the country combined. Such a high number of suspension is alarming because besides losing instructional time, suspension is one of the leading indicators of whether a student will drop out of high school or become incarcerated in the future.

Losen and Gillespie. (2012). Opportunities Suspended: The Disparate Impact of Disciplinary Exclusion from School.

What's Going On?

Part 4

Finding

Disproportionality in Discipline Exists

132 preschool educators watched a video of preschoolers and were asked: “Who would require most of your attention?”

- 42% said: the Black boy
- 13% said: the White girl
- No challenging behaviors were actually observed.

132 Participants (recruited at a large conference of early educators)

- Task 1, participants viewed a series of video clips lasting 6 minutes. They were told the study is on how teachers detect challenging behavior in the classroom. None of the videos contained challenging behavior.
- Following the administration of the video clips, participants were shown a screen with photos of the four children they had previously seen in the balanced clips (a Black boy, a Black girl, a White boy, and a White girl). When expecting challenging behaviors, teachers gazed longer at Black children, especially Black boys. 42% indicated that the Black boy required the most of their attention, followed by 34% (White boy), 13% (White girl), and 10% (Black girl).
- Task 2, participants read a standardized vignette of a preschooler with challenging behavior and were randomized to receive the vignette with the child’s name implying either a Black boy, Black girl, White boy, or White girl, (Latoya, Emily, DeShawn, Jake)
- Participants rated White children’s behavior as more severe than Black children’s. White teachers appear to hold Black preschoolers to a lower behavioral standard.

Source

Gilliam et al. (2016). Do Early Educators’ Implicit Biases Regarding Sex and Race Relate to Behavior Expectations and Recommendations of Preschool Expulsions and Suspensions?

What's Going On?

Part 5

Finding

“Who Believes in Me” Study: In 16,000+ student-teacher dyads, two teachers reported their educational expectations for each 10th grade student.

- A White teacher was about 30 percent less likely than a Black teacher to predict the same student will complete a four-year college degree.
- Non-Black teachers were 12 percentage points more likely than Black teachers to predict Black students wouldn't finish high school.
- Black female teachers were 20 percent less likely than White teachers to predict their student wouldn't graduate high school.
- White male teachers are about 10–20 percentage points more likely to have low expectations for Black female students.

Source

Gershenson, Holt, & Papageorge. (2015). "Who Believes in Me? The Effect of Student-Teacher Demographic Match on Teacher Expectations."

We Haven't Seen Real Results Against Readiness Standards Yet.

Florida: 2015-2016 saw a 1% improvement in ELA and a 1% improvement in math.

- ELA Grades 3-10
 - 2015 % Level 4-5 = 28%
 - 2016 % Level 4-5 = 28%
- Math Grades 3-8
 - 2015 % Level 4-5 = 28%
 - 2016 % Level 4-5 = 29%

Washington, DC: 2015-2016 saw a 1% improvement in ELA and a 3% improvement in math.

- ELA Grades 3-10
 - 2015 % Level 4-5 = 25%
 - 2016 % Level 4-5 = 26%
- Math Grades 3-Geometry
 - 2015 % Level 4-5 = 21%
 - 2016 % Level 4-5 = 24%

Florida Standards Assessment Results:

- 2016 data source
- 2015 data source

DC Standards Assessment Results:

- DCPS PARCC Assessment Results

Doing What Research Says is Right for Kids

Aligned Materials

Finding

The choice of instructional materials almost as important as teacher quality.

Adoption of new higher standards alone was not enough to raise student achievement; however when accompanied by a high-quality primary curriculum, student achievement was impacted more than the well documented factor of teacher quality. In fact, the selection of a moderately-aligned commercial textbook for elementary math was associated with a significant positive effect size (0.10 standard deviation), more so than having a top tier teacher compared to an average teacher. By contrast, the selection of a low-quality math curriculum was found to hold students back by an even larger effect size (0.15 SD). Curriculum must be intentionally and coherently structured.

Almost all teachers develop or choose their own instructional materials.

Most Assignments do not Meet the Expectations of the Standards

Results from EdTrust's analysis of 1,500+ middle school assignments:

- 4% of tasks push student thinking to higher levels.
- 5% of tasks are highly aligned to the standards.
- 16% of tasks require citing evidence from text.
- 38% of tasks are aligned to the appropriate grade-level standard.

Source

Effect of Curriculum:

Kane et al. (2016). Teaching Higher: Educators' Perspectives on Common Core Implementation.

Effect of Teacher Quality:

Hanushek & Rivkin. (2010). Generalizations about Using Value-Added Measures of Teacher Quality.

Opfer, Kaufman, & Thompson. (2016). Implementation of K-12 State Standards for Mathematics and English Language Arts and Literacy.

The Education Trust. (2015). Checking In: Do Classroom Assignments Reflect Today's Higher Standards.

Doing What Research Says is Right for Kids

Balancing Conceptual & Procedural

Finding

Teachers with Greater Knowledge of the Math They Teach Help Students Learn More Math

- In a 2005 study, researchers asked math teachers to document the math content they taught that day, as well as the instructional practices used to teach the content. Teachers also took a survey of the content knowledge of the math they were teaching in the classroom. They found that generally speaking, teachers in first and third grade who have higher knowledge of the math content they teach have students who show greater growth in math. This was particularly true in third grade.

Source

Cahill, Rowen, & Ball. (2005). Effects of Teachers' Mathematical Knowledge for Teaching on Student Achievement.

Complex Texts on the Same Topic to Build Knowledge

What the research says:

- Students learn more from working with texts at a variety of levels.
- Reading several texts on the same topic improves students' comprehension.

General Statement based on a collection of studies

What is prevalent:

- Most students read materials (about disparate topics) at, or modified to be at, their reading level.
- Questions and assignments don't ask students to make meaning.

General Statement based on a collection of studies

Doing What Research Says is Right for Kids

Complex Texts on the Same Topic to Build Knowledge

Finding

There is no research to support “Just-right” readers.

“I have sought studies that would support the original contention that we could facilitate student learning by placing kids in the right levels of text. Of course, guided reading and leveled books are so widely used it would make sense that there would be lots of evidence as to their efficacy. Except that there is not.” - Dr. Timothy Shanahan

Using topic-based text sets, not reading about disparate topics, supports all elements of reading.

There are many examples of Higher Poverty / Higher Performance schools.

Source

Shanahan (2011). Rejecting Instructional Level Theory.

- Priebe, Keenan, & Miller. (2012). Accuracy and Fluency.
- Reutzel & Morgan. (1990). Literal and Inferential Comprehension.
- Best, Floyd, & Mcnamara. (2008). Comprehension of Text.
- Miller & Keenan. (2009) Reader’s Ability to Remember Key Points Over Incidental Information.
- Rapp, Van Den Broek, McMaster, Kendeou, & Espin. (2007). Ability to Use Context to Make Sense of New Information in the Text.
- Oral Reading (Priebe et al, 2012; Taft & Leslie, 1985)

New York State Education Department

**For more resources, please visit our website:
<http://www.unbounded.org>**

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