



FOUNDATION *for*
CHILD DEVELOPMENT

The 2006 Foundation for Child Development Child Well-Being Index (CWI) Summary

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Child Well-Being Index

About the Research Coordinator for the CWI

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About the Foundation for Child Development

The Foundation for Child Development (FCD) is a national, private philanthropy dedicated to the principle that all families should have the social and material resources to raise their children to be healthy, educated and productive members of their communities.

The Foundation seeks to understand children, particularly the disadvantaged, and to promote their well-being. We believe that families, schools, nonprofit organizations, businesses and government at all levels share complementary responsibilities in the critical task of raising new generations.

For policymakers striving to use research to improve the lives of American children, examination of quality-of-life trends helps to inform and stimulate important public policy conversations. This policy brief summarizes the main findings from the 2006 Foundation for Child Development Index of Child Well-Being (CWI) report¹. It analyzes the 30-year education flatline in depth, exploring why three decades of intense focus on education reform have yielded so little progress. In addition, this brief offers recommendations for state and local policymakers.

Overall, the news is encouraging. According to the 2006 CWI, modest gains in the composite CWI indicate that children are faring better overall. Quality-of-life trends from 1975 to 2004, with projections for 2005, find that child and youth well-being continues to recover from declines in the 1980s.

A snapshot of the data shows that:

- Across the 30-year span, the overall projected CWI for 2005 is at an all-time high, 104.67:
 - Since the lowest ebb of 1994 (92.16), this is nearly a 12 percent gain.
 - Since the base year of 1975, 2005 projected levels represent nearly a five percent gain.
- The long-term trend of increased well-being since 1993 is expected to continue.
- When viewed in terms of recent years, growth is inconsistent and slow, characterized by only fractional gains:
 - 2004 showed a 0.22 gain (103.91) over 2003 (103.69).
 - 2005 shows a projected gain of 0.76 (104.67) over 2004.

While the “big picture” news is positive, both positive and negative trends emerge once the seven domains of well-being are examined. Most notably, substantial and dramatic improvements in safety and risky behavior among young people, especially since 1993, contrast with continued decline in 2004 in health, social connections and a 30-year flatline in education.

¹ The Foundation for Child Development Child Well-Being Index (CWI), 1975-2004, with Projections for 2005: A composite index of trends in the well-being of America's children and youth. <http://www.soc.duke.edu/~cwi/>

The CWI: Tracking Child Well-Being Over Time

Similar in construction to the Consumer Price Index, but with an emphasis on child well-being, the CWI is an evidence-based measure of trends in the social conditions encountered by American children and youth since 1975.

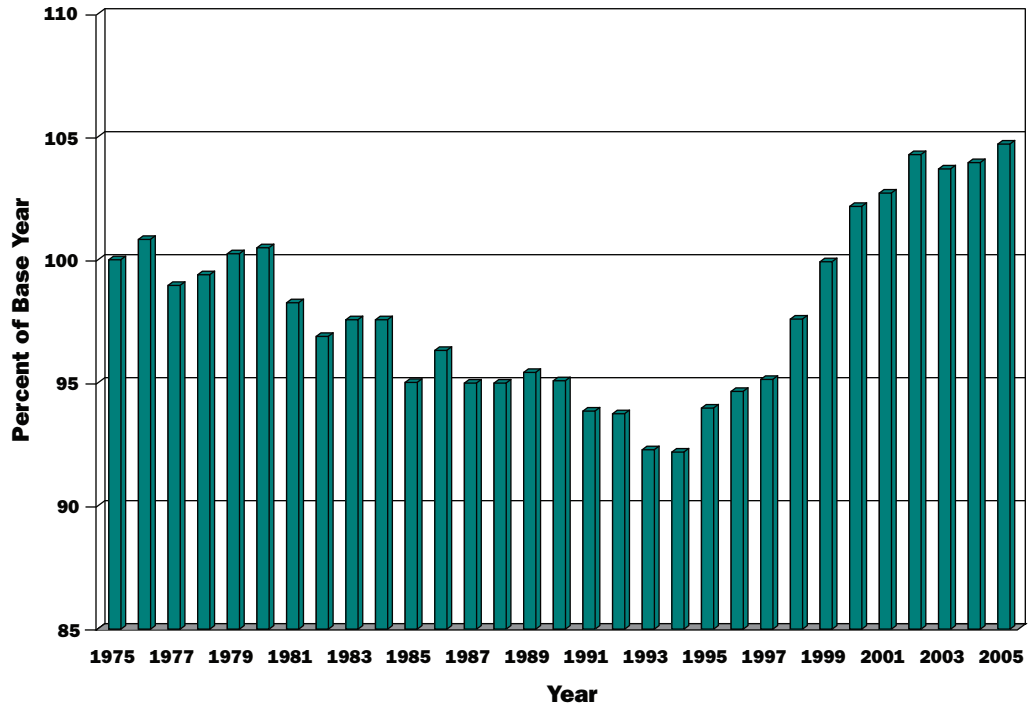
Supported by the Foundation for Child Development (FCD) and created by researchers at Duke University, the CWI analyzes trends in the quality of American children's lives. The CWI is released annually at a public event at the Brookings Institution in Washington, D.C.. While the CPI pinpoints sources of movement in consumer prices, the CWI identifies areas of concern in child well-being that are of use to policymakers.

The CWI offers both a composite measure of children's overall well-being and an analysis of its key components. Drawing from vital statistics and sample surveys, annual time series data are assembled on some 28 national-level Key Indicators in seven quality-of-life domains:

- Family Economic Well-Being
- Health
- Safety/Behavioral
- Educational Attainments
- Community Connectedness/Education
- Social Relationships
- Emotional/Spiritual Well-Being

The CWI gives a comprehensive summary of the direction of change (improvement or deterioration) in the well-being of America's children and youth by assessing children's well-being across these seven component domains. The domains studied have been found in numerous social science studies to be related to an overall sense of subjective well-being or satisfaction with life. Each domain is characterized by specific national indicators of child well-being. Component Indicators of each of the seven domains measured by the CWI may be viewed in Figure 1.

Figure 1.
Composite CWI from 1975-2004 (Projected for 2005)



The CWI: Tracking Child Well-Being Over Time

Major trends in the well-being of children and youth in the United States from the 2006 CWI report include the following:

Improvement

- Of all seven domains of child well-being, the Safety/Behavioral Concerns Domain has shown the most improvement. In 2004, it was over 37 percent higher than the 1975 base year level. This large gain is the result of decreases in teen birth rates, violent victimization rates, violent criminal activity rates, smoking, drinking and drug use.
- The Community Connectedness Domain has improved since 2001 due to increases in the percentage of young adults ages 25 to 29 who receive college degrees along with the percentage of three- to four-year-olds who attend preschool. Projections indicate that this domain will show continued improvement in 2005.
- The Emotional/Spiritual Well-Being Domain has improved fairly consistently since reaching its lowest levels from 1988 to 1991. From 2002 to 2003, an additional decrease in the suicide rate resulted in a slight improvement in the overall domain from 2002 to 2003, a trend projected to continue from 2004 to 2005.

No Change

- There were no improvements in reading scores for ages 13 and 17 on national reading tests, and only slight improvements in math scores since 1978 for ages 9, 13 and 17, keeping the Education Domain at a virtual flatline since the base year.

Mixed

- The Family Economic Well-Being Domain shows mixed results. While it improved during the 1990s, since 2000 the financial status of American families with children has declined. For example, the 2003 poverty rate for families with children under the age of 18 exceeded 1975 baseline levels for the first time since 1999 (17.2 percent in 2003 versus 16.8 percent in 1975). Nonetheless, the family poverty rate remains below the levels of the mid-1990s.

Deterioration

- The Health Domain continues to decline and will likely do so in 2005, largely due to rising levels of obesity. The increase in obesity has negated past accomplishments that include preventing mortality in infants, children and youth since 1975 and increasing health insurance coverage since the late 90s. Today, the Health Domain is almost 30 percent below baseline levels.
- The Social Relationships Domain has fallen below the 1975 base year for every subsequent year, largely due to increases in the percent of children who live in single-parent families.

Also of Note

- From the mid-1980s, studies of trends in the CWI for whites, African-Americans and Hispanics show that major increases or decreases in the CWI are generally reflected in all three major race/ethnic groups. In the domains of Family Economic Well-Being and Educational Attainment, however, disparities among groups are found.

Educational Attainment Domain: A Flatline in Math and Reading Achievement

Despite the nation's significant and long-term investment in education reform, test scores for reading and mathematics have shown little improvement in the 30-year period since 1975. This education flatline continues to restrict overall child well-being

The Educational Attainments Domain consists of two indicators:

- National Assessment of Educational Progress (NAEP) reading scores for ages 9, 13 and 17²
- NAEP mathematics scores for ages 9, 13 and 17

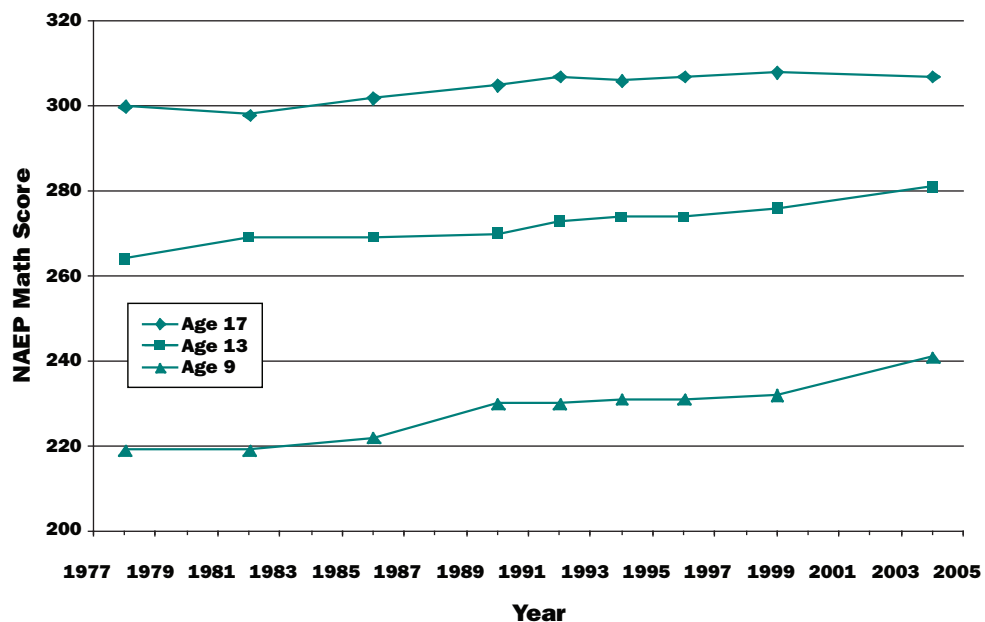
The NAEP, widely considered the “nation’s report card,” is a nationally representative periodic assessment of U.S. student knowledge and abilities in a number of subjects.

Overall, the CWI shows that test scores for reading and mathematics have shown little improvement since the 1970s, with mathematics scores having risen more than reading scores.

Most people agree that raising academic achievement contributes to the well-being of America’s children and the entire nation. Yet the 30-year flatline in NAEP scores appears to indicate that America’s children are treading water. What is wrong with public education, and how can it be fixed? After three decades of education reform, why are national tests of reading and mathematics continuing to show a lack of educational progress? Looking beyond the flatline to the individual age groups and subjects tested, we can begin to understand the possible causes.

As shown in Figure 2, NAEP math scores have only slightly improved between 1978 and 2004. The largest improvements have been for nine-year olds, with an increase of 22 points over the period. Improvements were more modest for 13- and 17-year olds, with increases of 17 and 7 points respectively between 1978 and 2004.

Figure 2.
NAEP Math Scores, 1978-2004

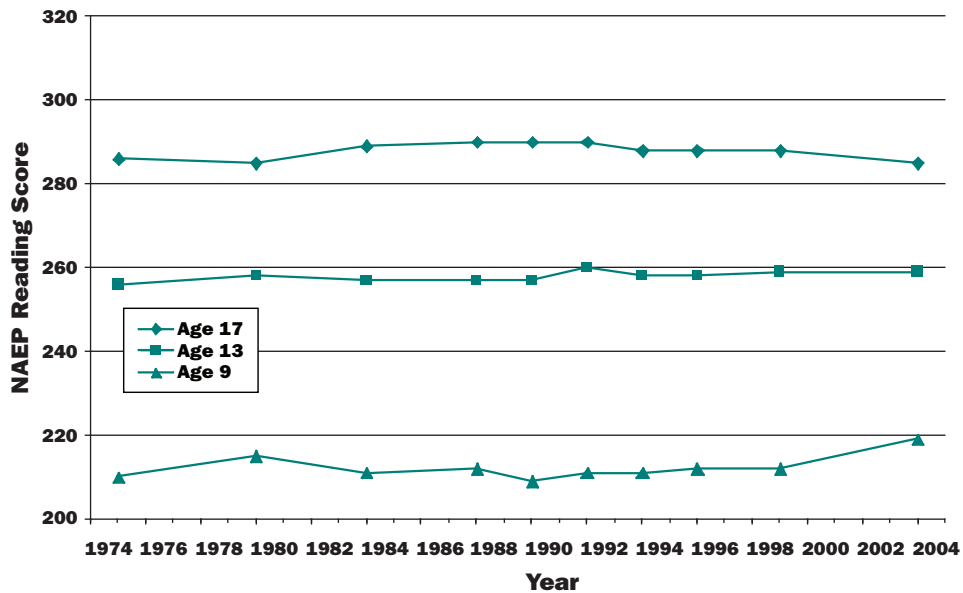


²NAEP is conducted by the National Assessment Governing Board (NAGB), and is overseen by the U.S. Department of Education, National Center for Education Statistics.

Educational Attainment Domain: A Flatline in Math and Reading Achievement

Figure 3 shows the trend in NAEP reading scores for the three ages. The nine-year-olds show improvement between 1999 and 2004. Reading scores for the 13-year-olds have changed very little. Since 1992, reading scores have declined for the 17-year-olds.

Figure 3.
NAEP Reading Scores, 1975-2004



Improvements for Younger Students

The largest improvements in NAEP mathematics and reading scores have been for nine-year-olds. Improvements in math and reading in the early years are associated with the increased availability and quality of Prekindergarten (PK) programs.

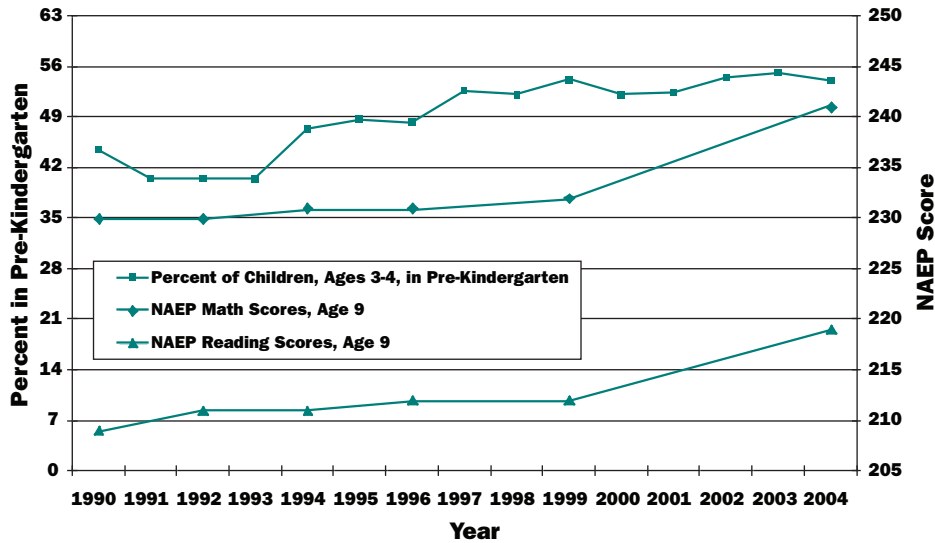
Although the numbers of children enrolled in state PK programs are rising, access to quality PK is the exception to the rule, and depends on where children live and their family's income. Twelve states provide no support for PK while states such as Oklahoma, Georgia, and Florida make PK universally available. There is greater recognition of the importance of early education and the great potential return on investment to the state, yet it is often subject to unstable funding levels due to budget shortfalls.

U-Turn for Older Students

While NAEP reading scores show little to no improvement over the period studied, the news seems most alarming for older students. Reading scores for 13 year-olds have changed very little, while reading scores for 17-year-olds made a U-turn in the mid-90s and lost much of the progress achieved in the late 1980s.

Figure 4 shows the expected positive association between increases in PK enrollment and increases in the NAEP scores four or five years later. Increases in PK enrollment rates may be leading indicators of subsequent increases in age-nine test scores. If this association continues to hold, further increases in PK enrollments will result in continued improvement in the age-nine test scores.

Figure 4. Percent Enrolled in Pre-Kindergarten, Ages 3-4 and NAEP Mathematics and Reading Scores, Age 9, 1990-2004



To examine how a trend might change if the characteristics of students remained the same over time, a technique called demographic standardization was employed. NAEP scores were standardized based on the makeup of the population at the beginning (1978) and end (2004) of the NAEP mathematics and reading assessments.

Figure 5. NAEP Reading Scores, Age 17: As Reported and Standardized to 1980 and 2004 Parents' Highest Level of Education

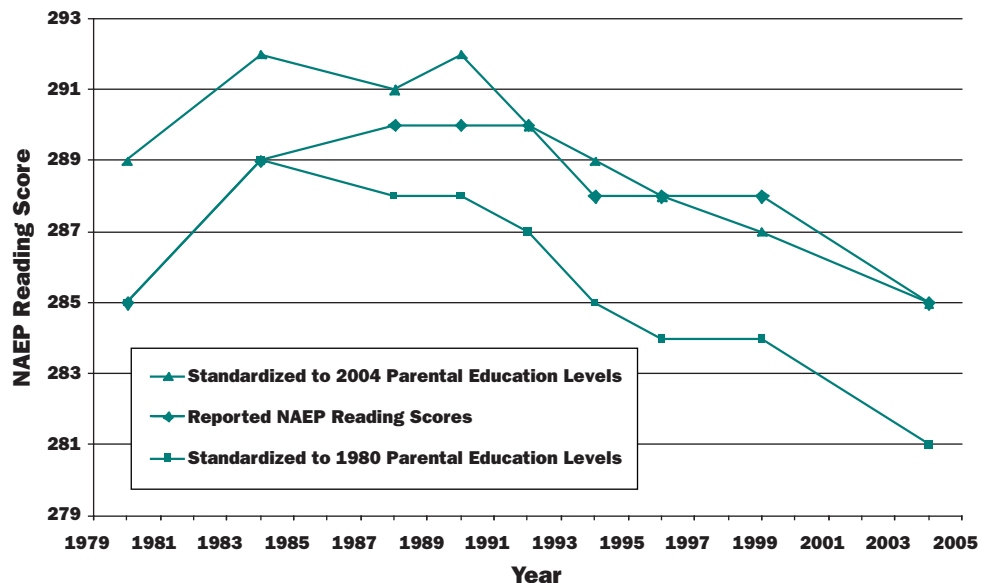


Figure 5 shows NAEP reading scores as standardized by parents' highest level of education in 1980 and 2004. If the education level of the parents of 17-year old students had remained the same from 1980 to 2004, then NAEP reading scores would have been 4 points lower in 2004, creating an even more extreme U-turn in scores. Similarly, if scores are standardized to the 2004 distribution of parents' education from 1980 to 2004, the 1980 reading scores would have been 4 points higher.

Educational Attainment Domain: A Flatline in Math and Reading Achievement

Demographic Standardization

Using demographic standardization to analyze NAEP math and reading scores over time, the most striking results were found for 17-year-olds when looking at levels of parental education. Increases in levels of parental education have led to increases in scores, particularly in math, showing that improvements in parents' education are transferred to their children³.

Also of note, increases in student diversity have led to decreases in scores in reading and to a smaller extent math for 17-year-olds.

A Deeper Look at Possible Underlying Causes for the Flatline

First, telling gaps between low NAEP scores and state assessment results drive home the point that state-driven standards and accountability systems differ widely. Under No Child Left Behind, each state creates its own standards and tests. Yet often states striving to avoid high-stakes consequences set an artificially low bar for performance to achieve the goal of proficiency.

Second, as promising practices in education come and go, so do the ways in which schools teach our children. With No Child Left Behind, a renewed emphasis on research-based practices has reinforced the need for results. This movement hopes to stem the tide of the program or method of the day, in exchange for practices that have been shown to drive achievement and that can be replicated.

Third, serious disparities continue to exist in the test scores of minority and white students. On average, African-American children start school a year behind white students in vocabulary knowledge and skills, primarily due to the effects of poverty and limited family resources. The racial/ethnic gap in learning for older students has been attributed to a number of factors associated with opportunities to learn, including courses taken, teacher perceptions and school environments. Test scores of Hispanic students are affected by school resources, language ability and parent literacy.

Fourth, much has happened over the last decade that is starting to shake up the outmoded teaching profession, yet teachers, states and the federal government are resistant to change. Merit pay proposals, for example, have met strong resistance yet are breaking through in states like Colorado, Florida and Texas. Most teachers report that current pre-service and professional development programs do not prepare them adequately to be effective in the classroom for today's children.

³ Demographic standardization is a technique used to examine how a trend might occur if the characteristics of students remained the same over time.

Policy Recommendations and Summary

Policy Recommendations

Federal

- The federal government should establish national standards based on the National Assessment of Educational Progress (NAEP).

States

- In advance of federal action – and to encourage it – states should adopt NAEP standards.
- In addition to increasing support for state level PK programs, states need to be laying a learning foundation from PK to third grade to sustain and reinforce the early gains we have seen. This can include standards and assessment tools, and certifications that are aligned from PK to grade three.

School Districts

- Consider hiring master and mentor teachers, or other proven professional development models, as a means of ensuring qualified teachers in difficult-to-staff subjects like mathematics and science.

Principals

- To improve teacher quality, use teacher evaluations and compensation in ways that build student achievement and teacher success.

Summary

While we are seeing overall improvement in the well-being of children and youth, the flatline in education gives us reason to review the reform efforts of the last 30 years and recognize where we have seen improvements. From these successes we can look to public policy efforts to extrapolate what may be working.

Given the progress in reading for nine-year-olds and research findings such as the Abecedarian and Perry projects, the concurring increased access and attention to PK to 3 can be highlighted as something for policymakers' further review and implementation⁴.

The CWI is intended to inform and stimulate policy debate and serve as a guide for action. Toward this end, we will continue to monitor and report development in the well-being of America's children to identify social change and foster the development of meaningful policy. Incorporated into public policy debate, these trends offer the potential to improve the lives of children in ways that protect their futures, enabling them to become healthy, educated and productive members of their communities.

⁴ The Carolina Abecedarian Project <http://www.fpg.unc.edu/~abc/>
High/Scope Educational Research Foundation <http://www.highscope.org/About/homepage.htm#AboutUs>



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