



The Improvement of ACT Performance in Illinois for the Last 25 Years

Introduction

There have been many measures of student academic performance in Illinois. Currently, state compliance with No Child Left Behind legislation produces AYP measures, which combine several tests to produce a percentage of students who meet standards. Unfortunately, the way that meeting standards was determined has changed from year to year as tests, testing procedures, and scoring have fluctuated. Additionally, meets/exceeds levels are a less accurate measure of student performance than average scale scores. We also have examined NAEP scores, but students have very little motivation to perform at a high level on those tests, and the selection process has not always been consistent across the state, country, or years of administration.

On the other hand, ACT testing has a decades-long track record of reliability and validity, with individual subject test difficulty levels usually fluctuating only slightly from year to year. ACT tests have clear and meaningful standards (the College Readiness Standards) upon which the tests are based. These standards provide context to the test scores by explaining what students have mastered at each score level. Most importantly, ACT tests are taken seriously by most students and educators, since opportunities for college/university choices and scholarships are heavily influenced by ACT performance. Motivation to perform well on the test is consistently high. Hence, ACT scores currently are the most reliable and valid measures of overall school and district performance in Illinois. And while ACT tests are taken by high schools students, the tests also reflect the efforts of the K-8 schools in preparing the students for high school.

In May, 2013, the ACT Corporation announced that beginning in spring 2013, students with learning disabilities who receive extra time accommodations to complete the test will be included in schools' 2013 Graduating Class ACT Profile Report. Such accommodated students earn significantly lower scores on the average than accommodations-excluded students. Since accommodations-excluded ACT score compilations were the only ones published by ACT until this year, this report's cross-year contrasts require their use to be consistent across all years. Fortunately, ACT scores for 2013 still were available in the original non-accommodated format.

Findings

The graph below depicts overall Illinois Graduating Class ACT Profile Report composite score performance changes, for students without extended time accommodations, since the ACT test was rescaled in 1989.

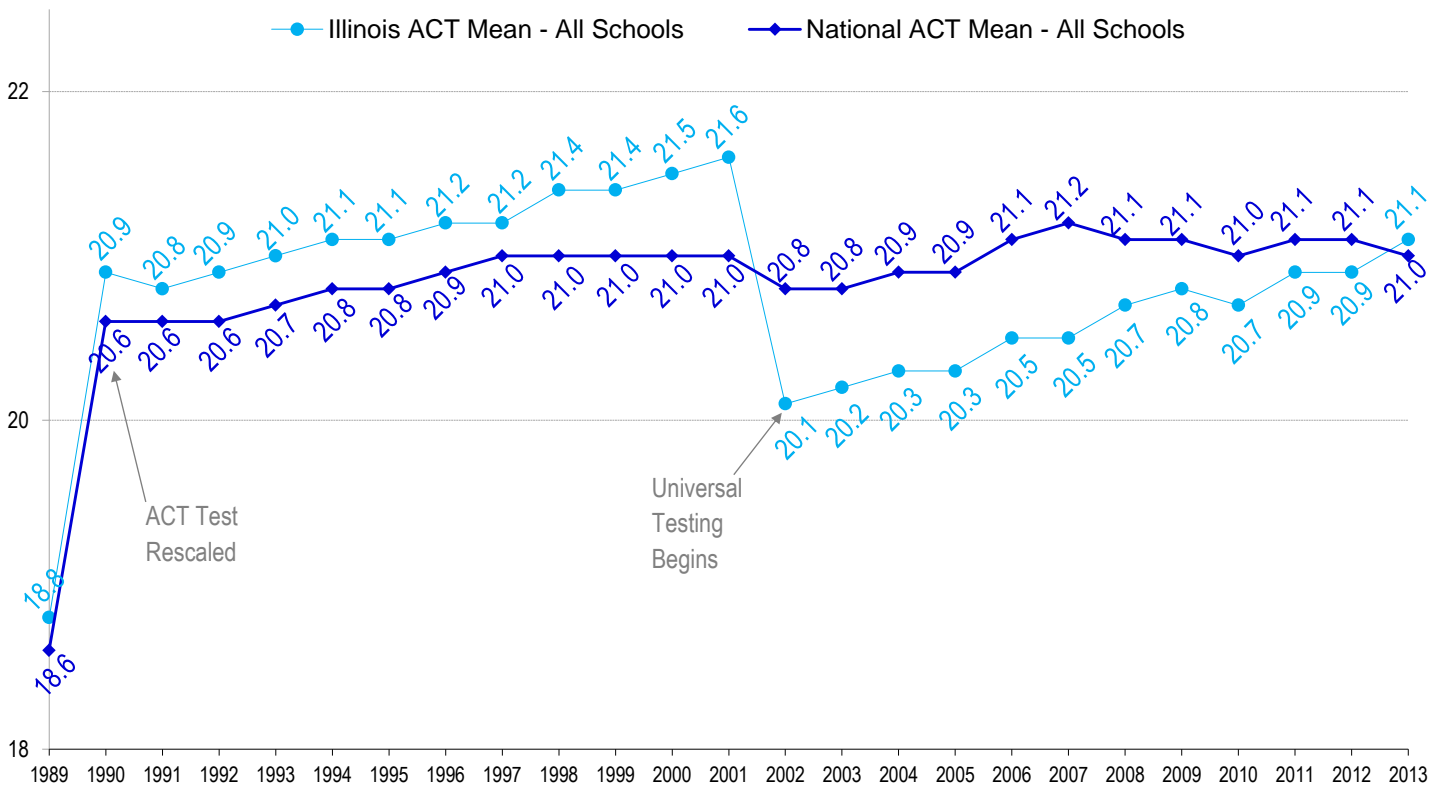
Using the Class of 1990 score mean as the baseline, the graph first displays the eleven subsequent years of potential change during the period of time that only college-bound students in Illinois took the ACT. It then displays the eleven years of potential change since the Class of 2002 baseline, when universal testing began. The large drop in Illinois scores between the Classes of 2001 and 2002 was due to the implementation of universal testing, when ACT testing levels in Illinois changed from 71% of the graduates to 99%. Most of these new test-takers were Illinois' lowest

performing students. With such a greatly different pool of students, comparisons in performance between the Classes of 2001 and 2002 are not very meaningful.

For the other twenty-one annual time frames, Illinois ACT performance has increased in 14 of them, stayed the same in six, and decreased in only one. The .1 point composite score drop for the Class of 2010 was due to a .2 point drop in performance in both the English and science tests. Class of 2011 data show a rebound to a then-new record level for the universal testing era. This rebound would suggest that the Class of 2010 was not somehow less able than the Class of 2009 and 2011. As a psychometrician, I suspect that the PSAE version of the ACT test (which supplies the majority of the ACT Final Class Report scores in Illinois) contained English and science sections that may have been mistakenly scaled to be more difficult (the only other explanation was that everyone in the Class of 2009 across the state was suddenly less able to perform well on only two subject tests, a silly assumption).

As shown in the Appendix, please note that the percentage of graduating seniors tested in Illinois within the college-bound testing period was fairly consistent (averaging 68.6%), as was the percentages within the universal testing period (99.4%). In contrast, only 54% of high school graduates took the ACT test nationally in 2013.

ACT Composite Score Performance in Illinois by Graduating Class



For the Classes of 1990 through 2001, the era of college-bound only testing, the composite scores in Illinois went up .7, 75% higher than the .4 increase for the national average. During the universal testing years, ACT performance increased 1.0 points from the Class of 2002 to the Class of 2013, 5 times the .2 increase for the national average. In fact, the universal testing score mean for Class of 2013 students is equal to or higher than the college-bound-only tested

Classes of 1991 through 1995. Additionally, the scores for Illinois, which include the lowest performing non-college bound students in the state, have now passed the national levels for mostly college-bound-only students.

Furthermore, these contrasts need to consider that Illinois' 144,585 ACT takers for the Class of 2013 constituted 8.4% of the nation's 1,727,041 ACT-tested students (non-accommodated takers). So, for example, the national growth levels for the universal testing era excluding Illinois would be less than .13 points. So, in fact, Illinois had almost eight times the growth of the national average. Such a difference needs to be tempered with the fact that the move to universal testing in a few states during this time would reduce the national growth level slightly.

There are other factors that should have affected Illinois performance across years. A critical factor in student performance is the demographic characteristics of the test takers. The most predictive demographic characteristic of statewide ACT scores currently available is the percentage of students who receive free or reduced lunches. For the Class of 2012 (the most recent data available), **the percentage of free/reduced lunch students alone explained 70.1% of the variance in Illinois high school composite ACT scores** for the Class of 2012. The school report card shows that the free/reduced lunch percentage in Illinois has increased from 37.5% for 2002 to 49.9% for 2013, a 33.0% increase, which would lead us to expect a decline in scores for that period. Despite the increase in traditionally lower scoring students, overall scores have increased.

Also, Illinois began testing English Language Learner (ELL) students with the ACT for the 2008 PSAE testing of the Class of 2009. While some ELL students are provided with state accommodations and do not show up in the ACT final score compilations, many do not receive accommodations and are counted. ELL students perform at a much lower level on the ACT than non-ELL students. However, the influx of ELL scores also did not produce the expected decline in overall scores.

Incidentally, the scores reported above are for all schools, as listed in ACT data records (most of which can be found at <http://www.act.org/newsroom/data/>). ACT scores on page 3 of the statewide Illinois State Report Cards are limited to public schools only, which consistently are .2 to .3 points lower than the overall state average. Again, ACT's most widely published figure was based upon a pool that included time-accommodated students for the first time ever. This year's figure of 21.1 for non-accommodated students, the one comparable to all prior year data, is found on page 11 of the Illinois Graduating Class ACT Profile Report

Conclusion

ACT test scores currently are the best measure of overall academic performance in Illinois' schools and districts. **Illinois' improvement on the ACT in the past decades has been both consistent and substantial overall.** Also, despite the fact that demographic changes would have predicted lower Illinois ACT performance in recent years, Illinois performance has kept increasing at a rate much higher than for the nation. Performance is now higher than it was for the early 1990's, when only college-bound students took the test. While Illinois schools continue to have plenty of room for improvement, this growth shows that they have taken the challenge of school improvement seriously and have achieved substantial success.

Appendix

Percentage of Graduating Illinois Seniors Taking the ACT - Classes of 1994 through 2010

