Longitudinal Cohort Report, 2002-03 to 2008-09

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At-a-Glance

Longitudinal Texas Assessment of Knowledge and Skills (TAKS) achievement trends provide a way in which the Dallas Independent School District can measure the relative success of the curriculum and the long term success of students’ attainment of subject matter expected to be learned at each grade level. The TAKS is a criterion-referenced test of the state’s curriculum, the Texas Essential Knowledge and Skills (TEKS). In brief, the TAKS is a set of measures (tests) of specific expectations covering the objectives in the TEKS at each grade level. In 2003-04, the State of Texas mandated the TAKS as the foundation of the revised State accreditation system. All public schools and districts in the State of Texas were required to meet minimum standards in terms of the number of students passing the TAKS to achieve an accredited status.

Cohort analyses are presented to examine the passing trends of an intact student group as they pass from grade level to grade level by year. For example, cohort comparisons contrast the results of the same students in grade two in 2003-04 with their performance at grade three in 2004-05, grade four in 2005-06, and so on. Passing is defined as achieving a mean scaled score of 2100, while Commended performance is defined as a mean scaled score of 2400.

Longitudinal cohort trends in achievement are examined to assess the effectiveness of the curriculum and instruction on students who remain in the district across several years. Trends noted in the study can have implications for planning new instructional programs, as well as indicating the relative success or failure of recent programs. Longitudinal trends also provide information about the degree to which the district is achieving its goal of having all students reading at or above grade level. Longitudinal trends in Reading, Mathematics, Science and Social Studies were investigated for grade five in 2003 through grade 11 in 2009.

Reading (Cohort grades 5 to 11)

Figure 1 presents TAKS Reading cohort passing rates for grade five in 2003 to grade 11 in 2009. Overall, the data show that there has been an increase in performance. The overall passing rates ranged from 50% at grade five in 2003 to 90% at grade 11 in 2009. The sharpest overall increase was observed between grades eight and 11 (71% to 90%, respectively). White and Hispanic Never limited English proficient (LEP) students showed the best overall performance.

Mathematics (Cohort grades 5 to 11)

Figure 3 shows TAKS Mathematics cohort performance trends for each student group. Overall, there has been an increase in performance by all student groups. The overall passing rates ranged from 41% at grade nine (2007) to 77% at grade 11 (2009). A decline in performance was observed from grade six to grade nine with a sharp increase from grade 10 to 11. White and Hispanic Never LEP students showed the best overall performance.
Figure 3. A comparison of TAKS Mathematics cohort passing rates by grade, student group, and year, 2003-2009.

Figure 4 shows the Commended mathematics performance trends by student group. As a group, there has been an increase in performance from grade five to grade 11. The overall passing rates ranged from 6% at grade seven in 2005 to 21% at grade 11 in 2009. The trends showed a decline from grade six to grade seven, a slight gain from grade seven to nine and a sharp increase from grade 10 to 11. Again, White and Hispanic Never LEP students showed the best overall Commended performance.

Writing (Cohort grades 4, and 7)

Writing is measured separately at grades four and seven. Figure 5 shows TAKS Writing cohort results at grade four in 2006 and grade seven in 2009. All groups posted an increase from grade four to grade seven. At grade four, the passing rates ranged from 79% for At-Risk students to 95% for White students, while at grade seven, the passing rates ranged from 87% for At-Risk students to 96% for White students. At-Risk (18%), Hispanic LEP (17%), and Ever LEP (16%) students, respectively, showed the greatest increase in performance. However, White and Hispanic Never LEP students continued to show the best overall performance.

Social Studies (Cohort grades 8, 10, and 11)

Data presented in Figure 7 show TAKS Social Studies cohort results for grades eight (2006), 10 (2008) and 11 (2009). All student groups showed relatively high passing rates. At grade eight, the passing rates ranged from 68% for At-Risk students to 97% for White students. At grade 10, the passing rates ranged from 84% for Hispanic LEP students to 100% for White students, and at grade 11, the passing rates ranged from 94% for Hispanic LEP students to 100% for White students. Special Ed. (↑27%), Hispanic LEP (↑27%) and Ever LEP (↑26%) students showed the greatest change in percent passing, yet, White, and Hispanic Never LEP students continued to show the best overall performance.
The Social Studies Commended passing rates also showed an increase in performance from grade eight to grade 11. Figure 8 displays the Commended cohort passing rates by grade, student group, and year. The Commended passing rates ranged from 8% for Hispanic LEP students at grade eight to 77% for White students at grade 11. The illustration shows a slight increase in performance from grade eight to grade 10 and a sharp increase from grade 10 to 11. White (↑25%), Hispanic Never LEP (↑22%), and Ever LEP (↑20%) students showed the greatest change in percent passing. Again, White and Hispanic Never LEP students showed the best overall Commended performance.

Science (Cohort grades 5, 8, and 10)
Science added grade eight in 2006 so cohorts were possible for grades five, eight, and 10. Figure 9 illustrates the TAKS passing rates for cohort grades five, eight, and 10. All student subgroups showed an increase in performance from 2004 to 2009. The passing rates ranged from 26% at grade five (Ever LEP) to 90% (White) in 2009. Special Ed. (↓6%), and African American (↓4%) students experienced the greatest loss in percent passing from grade five to grade eight, but rebounded from grade eight to grade 10. White and Never LEP students continued to show the best over all performance.

A cursory review of the 2008 and 2009 TAKS data at the state level revealed similar trends from year to year. In most cases when Dallas ISD results decreased or increased from year to year, state results also had the same pattern. This finding indicates that the patterns are more a function of the test difficulty (or lack of) than showing growth of lack of growth. It is hoped with the vertical scaling of the TAKS, that longitudinal results would be more meaningful. 2009 was the first year that vertical scales were provided to the majority of the tests.

For additional information, see Longitudinal Cohort Report, 2002-03-2008-09 (EA09-101-2) at: www.dallasisd.org/inside_disd/depts/evalacct/