

STAAR-to-TAKS Comparison Studies

The STAAR-to-TAKS comparison studies were designed to establish empirical links between student performance on high school TAKS assessments and student performance on STAAR EOC assessments. These studies are based on STAAR EOC scores and TAKS scores from a single group of students who took both assessments in 2011. STAAR EOC is intended to be more rigorous than the high school TAKS assessments, so the results of the STAAR-to-TAKS comparison studies were used to identify lower bounds for the STAAR EOC performance standards in each subject area. The table below shows (1) the sample sizes available for each analysis and (2) the correlations between EOC test scores and corresponding TAKS test scores. EOC assessments were linked to the TAKS assessments most commonly taken in the same grade level (e.g., STAAR Algebra I was linked to TAKS Grade 9 mathematics).

All STAAR data for the comparison studies derive from low-stakes test administrations. Specifically, data for all EOC mathematics and science assessments, English I, and U.S. history come from operational administrations in 2011. World history, English II, and English III data come from stand-alone field tests in 2011. Low-stakes testing scenarios generally produce lower levels of motivation among examinees. Although no additional STAAR-to-TAKS comparison studies are planned as Texas transitions from the TAKS program to the STAAR program, it is reasonable to suspect correlations between high-stakes, motivated STAAR scores and high-stakes, motivated TAKS scores would be larger than those reported in the table below.

| STAAR to TAKS Comparison Studies | | | |
|---|--------------------------------|--------------------|---------------------|
| STAAR Test | TAKS Test | Sample Size | Correlation* |
| English I reading** | Grade 9 reading | 112,256 | 0.62 |
| English I writing | Grade 9 reading | 116,941 | 0.60 |
| English II reading | Grade 10 English language arts | 28,588 | 0.59 |
| English II writing | Grade 10 English language arts | 28,176 | 0.63 |
| English III reading | Grade 11 English language arts | 27,564 | 0.49 |
| English III writing | Grade 11 English language arts | 27,385 | 0.60 |
| Algebra I** | Grade 9 mathematics | 98,555 | 0.69 |
| Algebra II | Grade 11 mathematics | 34,281 | 0.58 |
| Geometry | Grade 10 mathematics | 64,004 | 0.65 |
| Biology | Grade 10 science | 22,942 | 0.71 |
| Chemistry | Grade 10 science | 54,070 | 0.69 |
| Physics | Grade 11 science | 113,398 | 0.62 |
| World Geography | N/A | N/A | |
| World History | Grade 10 social studies | 21,172 | 0.69 |
| U.S. History | Grade 11 social studies | 83,994 | 0.66 |

*Correlations are statistical measures of the relationships between STAAR scores and TAKS scores. Correlations can range from -1 to 1; high positive values indicate strong positive relationships. For example, students with high STAAR Algebra I scores tended to have high TAKS grade 9 mathematics scores.

**The English I reading and Algebra I comparison studies will be used to provide TAKS *Met Standard* passing indicators for grade 8 students who are enrolled in English I or Algebra I and take STAAR assessments rather than TAKS assessments in 2012. *Met Standard* passing indicators for these students will be used for Adequate Yearly Progress reporting.