

LANGUAGE! 4th Edition

Systemwide Results: 2011-12 to 2013-14

Introduction

Analysis Context

LANGUAGE! 4th Edition data for this analysis come from VPORT®, our data management system, and were pulled at the end of the 2013-2014 school year and combined with data from the 2011-2012 and 2012-2013 school years. Districts are offered the opportunity to put their data into VPORT, but it is not mandatory. This analysis makes use of all data from any district in VPORT. We suspect that within these data are good implementers and not so good implementers of the product. All of the data were used in this analysis. This analysis pulls students' scores from three school years together, allowing us to see student growth for individual school years and across multiple years.

Demographics and Disaggregation

It is important to show the demographic characteristics of the students included in this analysis. Entering demographic information into the VPORT system is optional for all districts. Some districts enter this type of information and some do not. Two avenues were used in this analysis to tell the demographic story. First, demographic data for the districts represented in this analysis were compiled from the U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD)¹. These CCD data were matched for every student possible based on the district students attended. For each level of benchmark assessments, district demographic data will be shown based on the LRS assessment.

This analysis also includes disaggregation of students into two subgroups, students with disabilities (SWD) and English Language Learners (ELL), based on information entered by districts. Since entering these data were optional, it is quite likely that not all SWD and ELL students were identified by the districts. Only students who were explicitly identified as belonging to the SWD or ELL categories were included in this analysis. Systemwide results included the following groups:

- **All Students:** Students who were enrolled in *LANGUAGE!* and had appropriate scores based on the assessment were included in this category.
- **Students with Disabilities (SWD):** Students who were enrolled in *LANGUAGE!*, had appropriate scores based on the assessment, and were identified as having a disability were included in this category. Only students who were explicitly identified as a student with a disability were included in this group.
- **English Language Learners (ELL):** This group included students who were enrolled in *LANGUAGE!*, had appropriate scores based on the assessment, and were identified as being an

¹ <http://nces.ed.gov/ccd/districtsearch/>

English Language Learner. Only students who were specifically identified based on information provided by the district were included in this group.

***LANGUAGE!* 4th Edition Assessment Schedule**

The benchmark assessment schedule, where assessments were administered during a fixed timeframe at the beginning, middle, and end of year, regardless of the amount of instruction students have received, was used to gather the data for this analysis. The benefit of the benchmark assessment schedule was that it provided consistent data at similar time periods across multiple districts. The benchmark assessments measure the constructs being taught within the instructional materials, but are not tied directly to the actual content being taught. These assessments are grouped based on the *LANGUAGE!* books students will be using for instruction. The assessments are grouped into three groups, the Book A and B assessments (AB), the Book C and D assessments (CD), and the Book E and F assessments (EF).

The other assessment schedule is based on the amount of instruction students receive, which we call the end of book assessment schedule. Students take assessments when starting a book and when finishing a book regardless of when the book is started or finished during the school year. Very few districts are still on the end of book assessment schedule. Students using the end of book assessment schedule are not included in this analysis.

***LANGUAGE!* 4th Edition Measures**

All of the *LANGUAGE!* 4th Edition assessments can be given using the paper and pencil version or online where assessments are automatically scored. Scores are entered, either automatically or by teachers, into VPORT. The following describes the assessments featured in this analysis.

- ***LANGUAGE!* Reading Scale (LRS):** The LRS assesses reading comprehension and yields a Lexile® (L) score based on the Lexile Framework for Reading, a normed measurement system developed by MetaMetrics. The Lexile scale ranges from below 200L for beginning readers to above 1700L for advanced readers, although actual Lexile measures can range from below zero to above 2000 Lexiles. For instructional purposes and for matching students with books, scores at or below 0L should be reported to the student with a BR and the negative number. For instance, a BR45 would be the same as -45. Actual Lexile scores, which include scores below zero, are used for accountability purposes and are reported in VPORT at the student level. Students who have BR scores on two consecutive measures may still be making substantive growth. Using the actual Lexile scores will show that growth by student, and in the roll up to class, school, and district. The LRS assessment is untimed and can usually be completed within one class period.
- **Test of Silent Contextual Reading Fluency (TOSCRF):** The TOSCRF is a measure of silent contextual reading fluency and measures the speed with which students can recognize the individual words in a series of printed passages that become progressively more difficult in their content, vocabulary, and grammar. The passages are printed in uppercase without punctuation or spaces between the words. Students are given 3 minutes to draw lines, or click the mouse to draw a line in the online version, between as many words as possible. The TOSCRF was created by PRO-ED in Austin, Texas.

- **Test of Written Spelling 4th Edition (TWS-4):** The TWS-4 is a norm-referenced test of spelling created by PRO-ED of Austin, Texas. It can be used to document the overall improvement in spelling as a result of intervention instruction. It has two equivalent forms. The test is administered using a dictated word format and can be taken online or administered using paper and pencil.

The LRS results are reported using the Lexile score. See Appendix A for additional information about Lexiles. The TOSCRF and TWS-4 results are reported as percentile ranks and standard scores, based on a distribution with a mean of 100 and a standard deviation of 15. The TOSCRF and TWS-4 use percentile rank of a national population as a barometer for growth. A student maintaining yearly growth will have an equivalent percentile rank at the beginning and end of the school year. Students increasing in their performance against the norm will increase their overall percentile rank by the end of the school year. The descriptive ratings provided in the TOSCRF and TWS-4 Examiner’s Manuals are assigned to the TOSCRF and TWS-4 standard scores. See Table 1. Appendix B contains a figure that shows the relative positions of percentile ranks and standard scores to a normal curve.

Table 1. Standard Score Descriptive Ratings for TOSCRF and TWS-4

| Standard Score Intervals | Descriptive Rating |
|--------------------------|--------------------|
| > 130 | Very Superior |
| 121–130 | Superior |
| 111–120 | Above Average |
| 90–110 | Average |
| 80–89 | Below Average |
| 70–79 | Poor |
| < 70 | Very Poor |

LANGUAGE! 4th Edition Results

For this analysis, the Beginning of Year (BOY) and End of Year (EOY) are reported. Results are presented for each complete level, showing all of the measures. For instance, all AB scores are shown for LRS, TOSCRF, and TWS-4 before moving onto the CD and EF scores. For each measure, scores for all students, SWD, and ELL are shown, then scores are shown by grade, and finally scores are shown for each of the academic years in this analysis. Using the LRS at each level of benchmark assessment, demographic characteristics are shown for locale, population bands, and district ethnicity.

LANGUAGE! LRS AB Results

Figure 1 shows LRS results for students who took the AB Benchmarks for all students, students who were identified as receiving SPED services, and students classified as ELL. All students who took the AB Benchmarks gained about 240L, SWD gained approximately 243L, and ELL students also gained 243L. The Actual Lexile Gain for these students was well beyond the Typical Lexile Gain for a 50th percentile student of 50 to 100 Lexiles depending on grade level.

Effect sizes shown above the bracket on the figures are based on the initial (B1 or beginning of the year) and final (B3 or end of the year) score means. Effect sizes are calculated by dividing the difference between initial and final means by the pooled standard deviation of the initial and final score means. Effect size information is based on Cohen (1988)². Effect sizes of .2 are considered small, .5 are medium, and .8 are large. Generally, effect sizes of .3 or more are considered educationally meaningful.

For the LRS AB results, effect sizes ranged from 1.28 to 1.42, which is educationally meaningful and large.

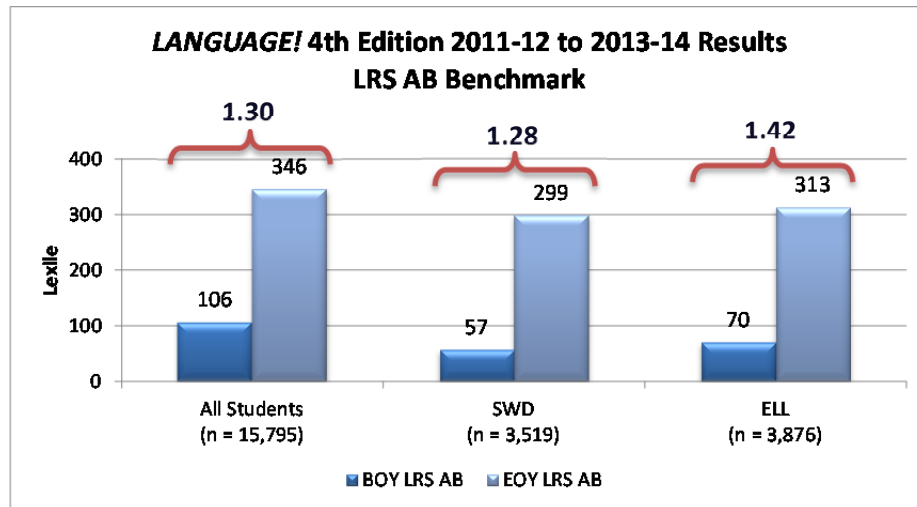


Figure 1. *LANGUAGE!* 4th Edition LRS AB Results for 2011-2012 to 2013-2014 School Years

Table 2 shows the LRS AB results as well as the Actual Lexile Gain and the Typical Lexile Gain for the three groups of students shown in Figure 1. The Typical Lexile Gain is based on the typical growth for a student at the 50th percentile during one year and is determined by MetaMetrics. Students who participate in *LANGUAGE!* are in various grades with different Typical Lexile Gain. Since *LANGUAGE!* books are not grade-specific, the Typical Lexile Gain is expressed by a range, except where actual grade levels are provided.

Table 2. *LANGUAGE!* 4th Edition LRS AB Results for 2011-2012 to 2013-2014 School Years

| LRS AB Groups | Number of Students | BOY Lexile Average | EOY Lexile Average | Actual Lexile Gain from BOY to EOY | Typical Lexile Gain | Effect Size |
|---------------|--------------------|--------------------|--------------------|------------------------------------|---------------------|-------------|
| All Students | 15,795 | 106.15 | 345.73 | 239.58 | 25 to 100 | 1.30 |
| SWD | 3,519 | 56.54 | 299.36 | 242.82 | 25 to 100 | 1.28 |
| ELL | 3,876 | 70.10 | 312.67 | 242.57 | 25 to 100 | 1.42 |

Table 3 shows the LRS AB results by grade level. Providing student grade levels is not mandatory and therefore, some students do not have a grade level specified. For those students who have grade levels and have all of the Benchmark AB LRS scores, the average by grade level was calculated. The Actual

² Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences*. Hillsdale, NJ: Erlbaum.

Lexile Gains for each grade are well beyond the Typical Lexile Gain, and the effect sizes are large and educationally meaningful.

Table 3. *LANGUAGE!* 4th Edition LRS AB Results by Grade Level for 2011-2012 to 2013-2014 School Years

| LRS AB Grade Levels | Number of Students | BOY Lexile Average | EOY Lexile Average | Actual Lexile Gain from BOY to EOY | Typical Lexile Gain | Effect Size |
|---------------------|--------------------|--------------------|--------------------|------------------------------------|---------------------|-------------|
| All Students | 15,795 | 106.15 | 345.73 | 239.58 | 25 to 100 | 1.30 |
| 4th Grade | 4,321 | 48.68 | 305.46 | 256.78 | 100 | 1.52 |
| 5th Grade | 3,760 | 109.72 | 346.54 | 236.82 | 100 | 1.35 |
| 6th Grade | 2,573 | 159.28 | 389.13 | 229.85 | 70 | 1.29 |
| 7th Grade | 1,647 | 161.28 | 386.96 | 225.68 | 70 | 1.19 |
| 8th Grade | 775 | 180.01 | 381.97 | 201.96 | 50 | 1.07 |
| 9th Grade | 569 | 150.83 | 362.16 | 211.33 | 50 | 1.09 |

Figure 2 shows the BOY and EOY LRS AB average Lexile scores have been pretty consistent across each of the school years included in this analysis. Figure 2 shows the overall averages for all students and then the average for each year included in the cohort.

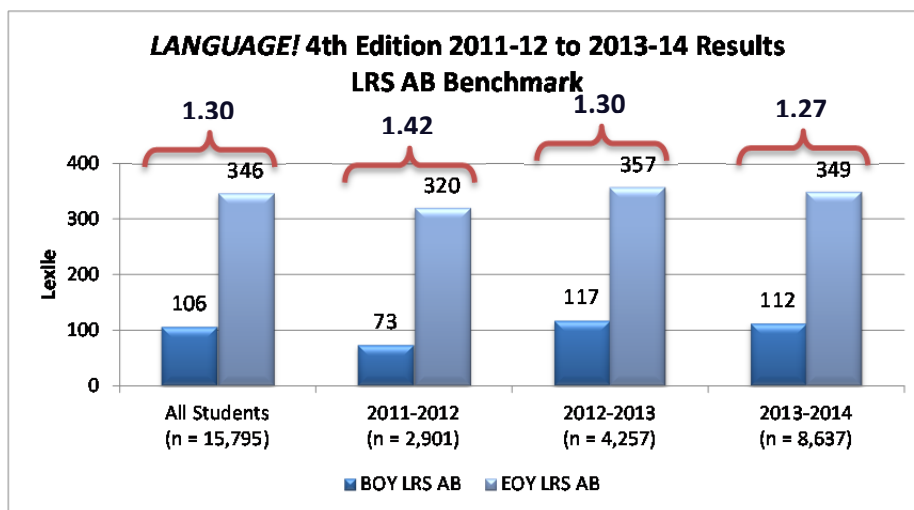


Figure 2. *LANGUAGE!* 4th Edition LRS AB Results by School Years

There were 15,795 students across the 2011-2012 to 2013-2014 school years who had the necessary scores to be included in this analysis. Using the demographic characteristics from the CCD, LRS AB scores are broken down by locale, district population bands, and ethnicity type. Table 4 shows the breakdown of the students, including the BOY and EOY Lexile Average, the Actual Lexile Gain, and Effect Size for each subgroup.

The locale and population bands breakdowns are pretty straightforward. Looking at ethnicity in districts is a bit more difficult because rarely, if ever, do districts match when it comes to ethnic groups. To provide some means of standardization, four major groups were created: Hispanic, African American/Black (Black), Other (including American Indian/Alaska Native students, Asian or Asian/Pacific

Islander students, and Hawaiian National/Pacific Islander students), and White. Districts where one of these four groups represented a majority, equal to or greater than 50% of the population for the district, were identified by that majority group. In districts where there was not one group that represented 50% or more of the district population, groups were placed together and labeled No Majority Group.

Table 4. LANGUAGE! 4th Edition LRS AB Results by Demographic Characteristic for 2011-2012 to 2013-2014 School Years

| LRS AB Demographic Categories | Number of Students | BOY Lexile Average | EOY Lexile Average | Actual Lexile Gain from BOY to EOY | Effect Size |
|-------------------------------|--------------------|--------------------|--------------------|------------------------------------|-------------|
| All LRS AB Students | 15,795 | 106.15 | 345.73 | 239.58 | 1.30 |
| By Locale | | | | | |
| City | 8,509 | 96.22 | 333.55 | 237.33 | 1.32 |
| Rural | 1,542 | 100.27 | 334.51 | 234.24 | 1.33 |
| Suburb | 5,022 | 122.40 | 367.63 | 245.23 | 1.30 |
| Town | 698 | 123.54 | 365.10 | 241.56 | 1.16 |
| By Population Bands | | | | | |
| 1 to 5,000 | 964 | 144.79 | 401.71 | 256.92 | 1.35 |
| 5,001 to 10,000 | 840 | 106.16 | 352.94 | 246.78 | 1.25 |
| 10,001 to 25,000 | 5,083 | 122.17 | 357.92 | 235.75 | 1.28 |
| 25,001 to 50,000 | 3,632 | 118.18 | 352.35 | 234.17 | 1.35 |
| 50,001 to 100,000 | 320 | 104.34 | 322.28 | 217.94 | 1.18 |
| > 100,000 | 4,927 | 73.13 | 317.86 | 244.73 | 1.34 |
| By District Ethnicity | | | | | |
| Black | 865 | 138.15 | 344.14 | 205.99 | 1.13 |
| Hispanic | 5,858 | 55.21 | 303.20 | 247.99 | 1.44 |
| Other | 208 | 20.17 | 255.46 | 235.29 | 1.35 |
| White | 5,558 | 157.72 | 398.90 | 241.18 | 1.27 |
| No Majority Group | 3,277 | 106.49 | 338.08 | 231.59 | 1.36 |

LANGUAGE! TOSCRF AB Results

Figure 3 shows TOSCRF AB results for all students, students who were identified as receiving SPED services (SWD), and students classified as ELL. All students who took the TOSCRF AB gained 6 percentile points, SWD gained 3 percentile points, and ELL students gained 6 percentile points. Effect sizes ranged from 0.33 to 0.44, which are educationally meaningful and small.

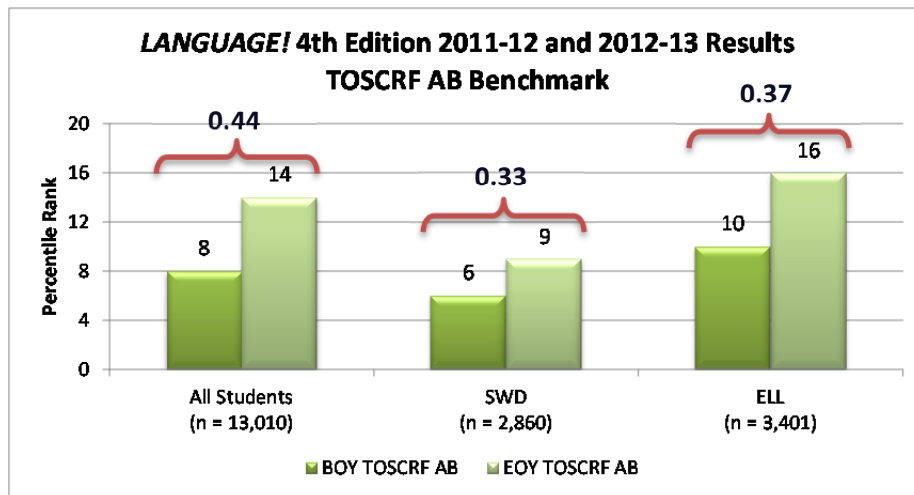


Figure 3. LANGUAGE! 4th Edition TOSCRF AB Results for 2011-12 to 2013-14 School Years

Table 5 shows the TOSCRF AB results as well as the Standard Scores for the three groups of students shown in Figure 3.

Table 5. *LANGUAGE! 4th Edition TOSCRF AB Results for 2011-2012 to 2013-2014 School Years*

| TOSCRF AB Groups | Number of Students | BOY Percentile Average | BOY Standard Score Average | BOY Descriptive Rating | EOY Percentile Average | EOY Standard Score Average | EOY Descriptive Rating | Effect Size |
|------------------|--------------------|------------------------|----------------------------|------------------------|------------------------|----------------------------|------------------------|-------------|
| All Students | 13,010 | 8 | 79.05 | Poor | 14 | 83.95 | Below Average | 0.44 |
| SWD | 2,860 | 6 | 76.83 | Poor | 9 | 80.28 | Below Average | 0.33 |
| ELL | 3,401 | 10 | 80.86 | Below Average | 16 | 85.13 | Below Average | 0.37 |

Table 6 provides the TOSCRF AB results by grade level. Providing the students' grade levels is not mandatory and therefore, some students do not have a grade level specified. For those students who have grade levels and had all of the TOSCRF AB scores, the average by grade level was calculated.

Table 6. *LANGUAGE! 4th Edition TOSCRF AB Results by Grade Level for 2011-2012 to 2013-2014 School Years*

| TOSCRF AB Groups | Number of Students | BOY Percentile Average | BOY Standard Score Average | BOY Descriptive Rating | EOY Percentile Average | EOY Standard Score Average | EOY Descriptive Rating | Effect Size |
|------------------|--------------------|------------------------|----------------------------|------------------------|------------------------|----------------------------|------------------------|-------------|
| All Students | 13,010 | 8 | 79.05 | Poor | 14 | 83.95 | Below Average | 0.44 |
| 4th Grade | 3,819 | 8 | 79.40 | Poor | 16 | 85.20 | Below Average | 0.53 |
| 5th Grade | 3,250 | 9 | 80.47 | Below Average | 16 | 85.00 | Below Average | 0.41 |
| 6th Grade | 2,067 | 9 | 79.86 | Below Average | 16 | 84.64 | Below Average | 0.44 |
| 7th Grade | 1,236 | 8 | 79.11 | Poor | 13 | 83.04 | Below Average | 0.37 |
| 8th Grade | 587 | 6 | 77.30 | Poor | 10 | 80.81 | Below Average | 0.32 |
| 9th Grade | 396 | 5 | 74.74 | Poor | 6 | 76.63 | Poor | 0.16 |

Figure 4 shows the BOY and EOY TOSCRF AB average percentile ranks have been pretty consistent across each of the school years included in this analysis. Figure 4 shows the overall averages for all students and then the average for each year.

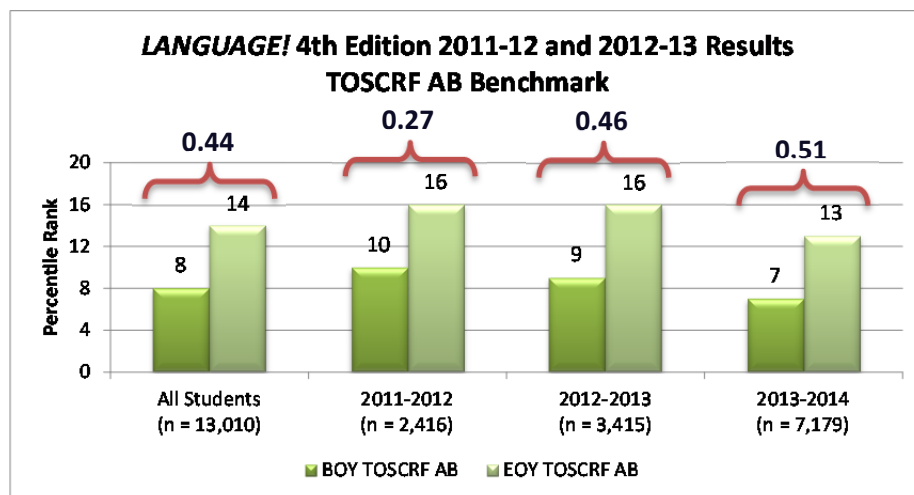


Figure 4. *LANGUAGE! 4th Edition TOSCRF AB Results by School Years*

LANGUAGE! TWS-4 AB Results

Figure 5 shows TWS-4 AB results for all students, students who were identified as receiving SPED services (SWD), and students classified as ELL. All students who took the TWS-4 AB gained 5 percentile points, SWD gained 4 percentile points, and ELL students gained 5 percentile points. Effect sizes ranged from 0.32 to 0.36, which are educationally meaningful and small.

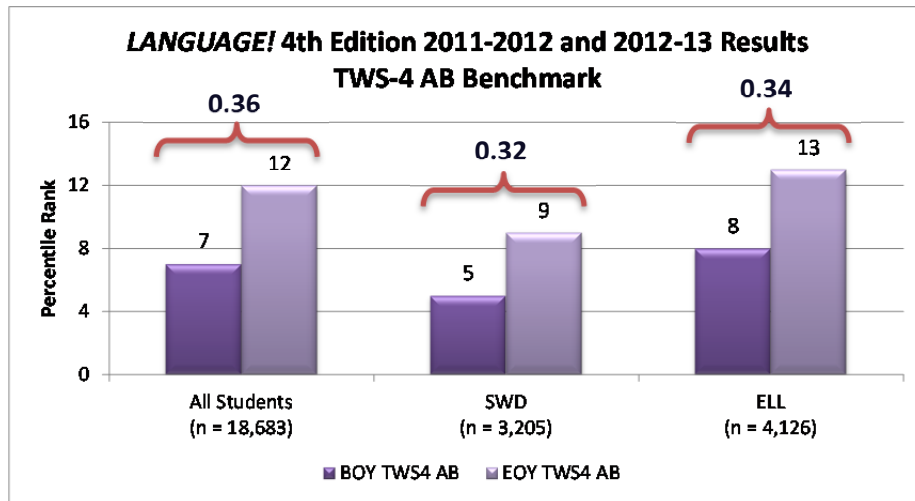


Figure 5. LANGUAGE! 4th Edition TWS-4 AB Results for 2011-12 to 2013-14 School Years

Table 7 shows the TWS-4 AB results as well as the Standard Scores for the three groups of students shown in Figure 5.

Table 7. LANGUAGE! 4th Edition TWS-4 AB Results for 2011-2012 to 2013-2014 School Years

| TWS-4 AB Groups | Number of Students | BOY Percentile Average | BOY Standard Score Average | BOY Descriptive Rating | EOY Percentile Average | EOY Standard Score Average | EOY Descriptive Rating | Effect Size |
|-----------------|--------------------|------------------------|----------------------------|------------------------|------------------------|----------------------------|------------------------|-------------|
| All Students | 18,683 | 7 | 77.55 | Poor | 12 | 81.92 | Below Average | 0.36 |
| SWD | 3,205 | 5 | 75.91 | Poor | 9 | 79.53 | Below Average | 0.32 |
| ELL | 4,126 | 8 | 79.29 | Poor | 13 | 83.31 | Below Average | 0.34 |

Table 8 provides the TWS-4 AB results by grade level. Providing the students' grade levels is not mandatory and therefore, some students do not have a grade level specified. For those students who have grade levels and had all of the TWS-4 AB scores, the average by grade level was calculated.

Table 8. LANGUAGE! 4th Edition TWS-4 AB Results by Grade Level for 2011-2012 to 2013-2014 School Years

| TWS-4 AB Groups | Number of Students | BOY Percentile Average | BOY Standard Score Average | BOY Descriptive Rating | EOY Percentile Average | EOY Standard Score Average | EOY Descriptive Rating | Effect Size |
|-----------------|--------------------|------------------------|----------------------------|------------------------|------------------------|----------------------------|------------------------|-------------|
| All Students | 18,683 | 7 | 77.55 | Poor | 12 | 81.92 | Below Average | 0.36 |
| 4th Grade | 5,216 | 8 | 79.17 | Poor | 13 | 83.17 | Below Average | 0.34 |
| 5th Grade | 4,189 | 7 | 78.34 | Poor | 12 | 82.23 | Below Average | 0.32 |
| 6th Grade | 3,155 | 6 | 77.09 | Poor | 12 | 82.39 | Below Average | 0.43 |
| 7th Grade | 1,886 | 6 | 76.81 | Poor | 10 | 81.41 | Below Average | 0.37 |
| 8th Grade | 825 | 4 | 74.13 | Poor | 8 | 79.08 | Poor | 0.41 |
| 9th Grade | 475 | 3 | 71.99 | Poor | 6 | 77.06 | Poor | 0.38 |

Figure 6 shows the BOY and EOY TWS-4 AB average percentile ranks have been pretty consistent across each of the school years included in this analysis. Figure 6 shows the overall averages for all students and then the average for each year.

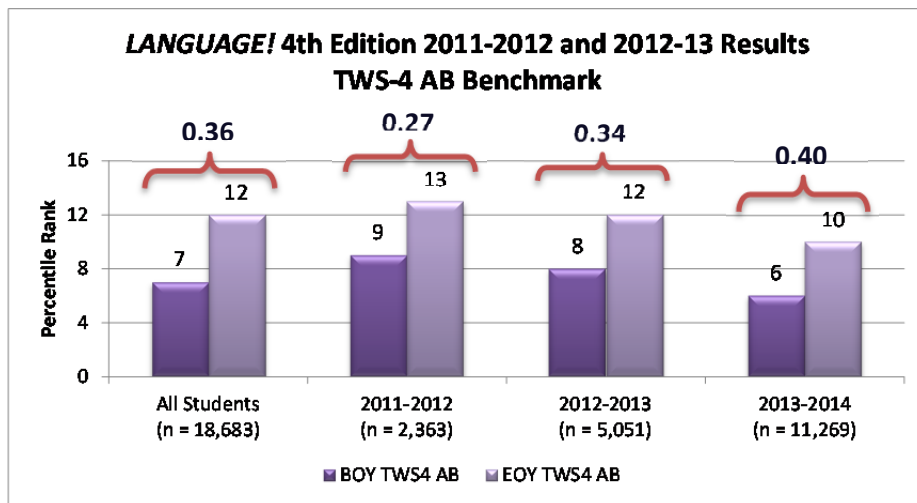


Figure 6. LANGUAGE! 4th Edition TWS-4 AB Results by School Years

LANGUAGE! LRS CD Results

Figure 7 shows LRS results for students who took the CD Benchmarks for all students, students who were identified as receiving SPED services (SWD), and students classified as ELL. All students who took the CD Benchmarks gained about 172L, SWD gained approximately 161L, and ELL students gained 170L. The Actual Lexile Gain for these students was well beyond the Typical Lexile Gain for a 50th percentile student of 25 to 100 Lexiles depending on grade level. Effect sizes ranged from 0.91 to 1.05, which are educationally meaningful and large.

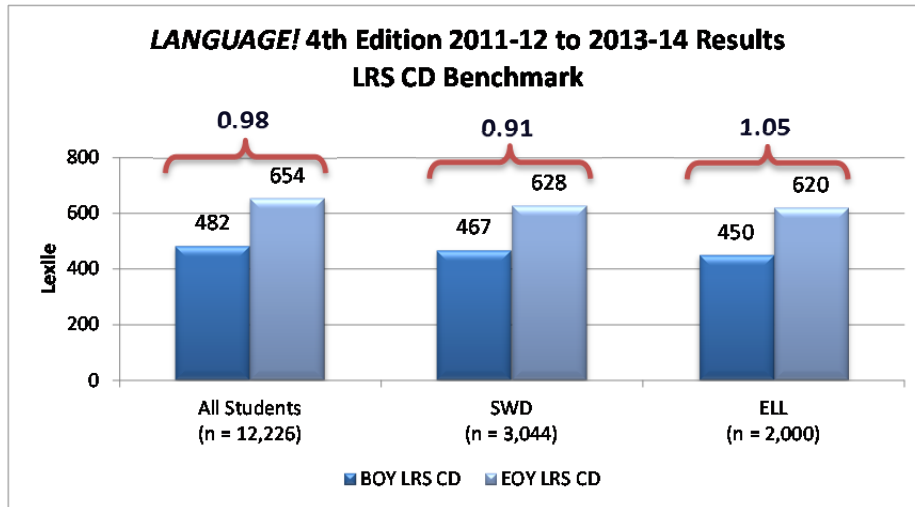


Figure 7. LANGUAGE! 4th Edition LRS CD Results for 2011-2012 to 2013-2014 School Years

Table 9 shows the LRS CD results as well as the Actual Lexile Gain and the Typical Lexile Gain for the three groups of students. The Typical Lexile Gain is based on the typical growth during one year defined by MetaMetrics. Students who participate in LANGUAGE! are in various grades with different Typical Lexile Gain. Since LANGUAGE! books are not grade-specific, the Typical Lexile Gain is expressed by a range, except where actual grade levels are provided.

Table 9. LANGUAGE! 4th Edition LRS CD Results for 2011-2012 to 2013-2014 School Years

| LRS CD Groups | Number of Students | BOY Lexile Average | EOY Lexile Average | Actual Lexile Gain from BOY to EOY | Typical Lexile Gain | Effect Size |
|---------------|--------------------|--------------------|--------------------|------------------------------------|---------------------|-------------|
| All Students | 12,226 | 481.78 | 654.05 | 172.27 | 25 to 100 | 0.98 |
| SWD | 3,044 | 466.74 | 628.39 | 161.65 | 25 to 100 | 0.91 |
| ELL | 2,000 | 449.61 | 620.01 | 170.40 | 25 to 100 | 1.05 |

Table 10 shows the LRS CD results by grade level. Providing the students' grade levels is not mandatory and therefore, some students do not have a grade level specified. For those students who have grade levels and had all of the LRS CD scores, the average by grade level was calculated. The Actual Lexile Gains for each grade are well beyond the Typical Lexile Gain, and the effect sizes are generally large and educationally meaningful.

Table 10. *LANGUAGE!* 4th Edition LRS CD Results by Grade Level for 2011-2012 to 2013-2014 School Years

| LRS CD Grade Levels | Number of Students | BOY Lexile Average | EOY Lexile Average | Actual Lexile Gain from BOY to EOY | Typical Lexile Gain | Effect Size |
|---------------------|--------------------|--------------------|--------------------|------------------------------------|---------------------|-------------|
| All Students | 12,226 | 481.78 | 654.05 | 172.27 | 25 to 100 | 0.98 |
| 5th Grade | 638 | 385.19 | 584.45 | 199.26 | 100 | 1.27 |
| 6th Grade | 2,264 | 446.35 | 622.34 | 175.99 | 70 | 1.06 |
| 7th Grade | 2,738 | 472.97 | 653.16 | 180.19 | 70 | 1.07 |
| 8th Grade | 2,326 | 496.96 | 664.80 | 167.84 | 50 | 0.96 |
| 9th Grade | 2,029 | 526.00 | 686.40 | 160.40 | 50 | 0.94 |
| 10th Grade | 1,063 | 551.44 | 703.39 | 151.95 | 25 | 0.84 |
| 11th Grade | 491 | 501.27 | 658.22 | 156.95 | 25 | 0.85 |
| 12th Grade | 183 | 526.27 | 666.23 | 139.96 | 25 | 0.75 |

Figure 8 shows the BOY and EOY LRS CD average Lexile scores have been pretty consistent across each of the school years included in this analysis. Figure 8 shows the overall averages for all students and then the average for each year.

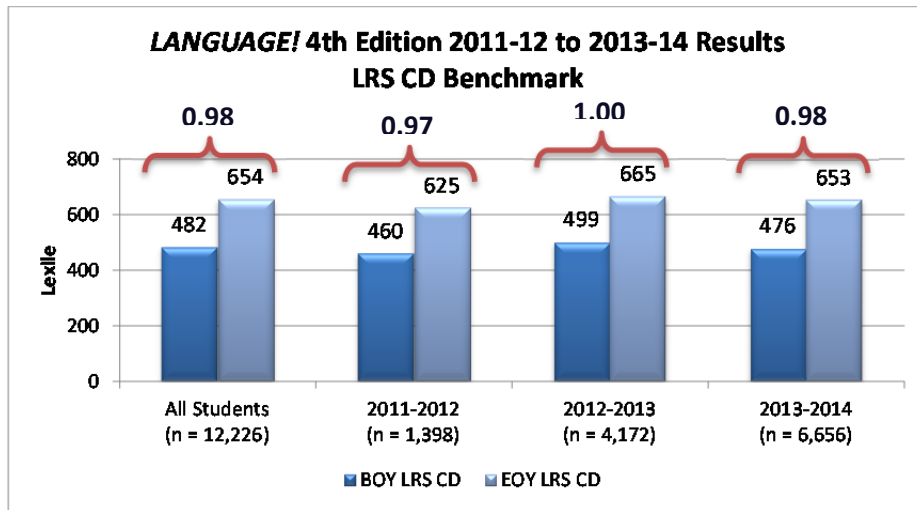


Figure 8. *LANGUAGE!* 4th Edition LRS CD Results by School Years

There were 12,226 students across the 2011-2012 to 2013-2014 school years who had the necessary scores to be included in this analysis. Using the demographic characteristics from the CCD, LRS CD scores are broken down by locale, district population bands, and ethnicity type. Table 11 shows the breakdown of the students.

Table 11. *LANGUAGE!* 4th Edition LRS CD Results by Demographic Characteristic for 2011-2012 to 2013-2014 School Years

| LRS CD Demographic Categories | Number of Students | BOY Lexile Average | EOY Lexile Average | Actual Lexile Gain from BOY to EOY | Effect Size |
|-------------------------------|--------------------|--------------------|--------------------|------------------------------------|-------------|
| All LRS CD Students | 12,226 | 481.78 | 654.05 | 172.27 | 0.98 |
| By Locale | | | | | |
| City | 6,421 | 476.07 | 641.21 | 165.14 | 0.97 |
| Rural | 1,400 | 508.64 | 675.23 | 166.59 | 0.92 |
| Suburb | 3,508 | 475.11 | 657.48 | 182.37 | 1.02 |
| Town | 860 | 505.74 | 701.01 | 195.27 | 1.06 |
| By Population Bands | | | | | |
| 1 to 5,000 | 1,238 | 518.97 | 707.68 | 188.71 | 1.05 |
| 5,001 to 10,000 | 1,428 | 519.24 | 695.47 | 176.23 | 1.02 |
| 10,001 to 25,000 | 2,189 | 464.65 | 645.88 | 181.23 | 1.04 |
| 25,001 to 50,000 | 4,753 | 482.75 | 643.17 | 160.42 | 0.95 |
| 50,001 to 100,000 | 343 | 402.68 | 606.08 | 203.40 | 1.09 |
| > 100,000 | 2,238 | 463.28 | 636.23 | 172.95 | 0.97 |
| By District Ethnicity | | | | | |
| Black | 529 | 397.21 | 599.68 | 202.47 | 1.12 |
| Hispanic | 2,614 | 434.06 | 603.71 | 169.65 | 1.00 |
| Other | 30 | 520.23 | 639.47 | 119.24 | 0.82 |
| White | 7,223 | 508.13 | 679.10 | 170.97 | 1.00 |
| No Majority Group | 1,793 | 468.44 | 642.59 | 174.15 | 0.99 |

LANGUAGE! TOSCRF CD Results

Figure 9 shows TOSCRF CD results for all students, students who were identified as receiving SPED services (SWD), and students classified as ELL. All students who took the TOSCRF CD gained 13 percentile points, SWD gained 10 percentile points, and ELL students gained 18 percentile points. Effect sizes ranged from 0.59 to 0.78, which are educationally meaningful and medium.

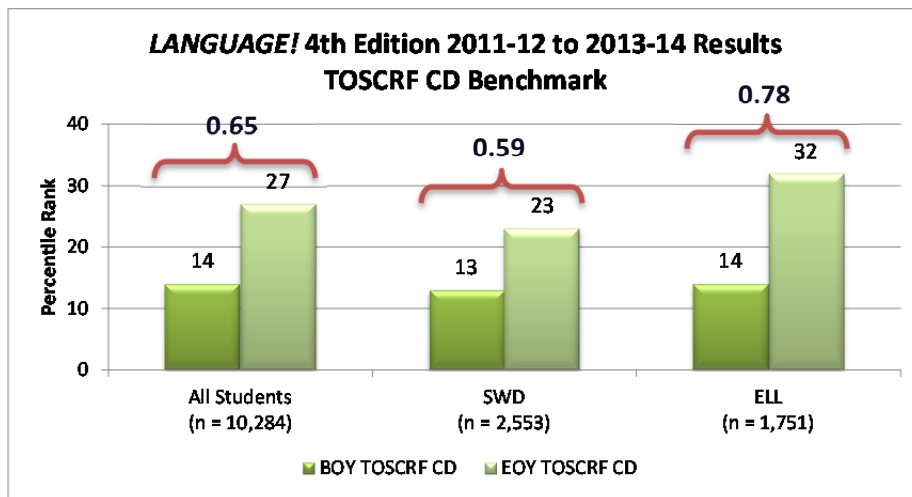


Figure 9. *LANGUAGE!* 4th Edition TOSCRF CD Results for 2011-12 to 2013-14 School Years

Table 12 shows the TOSCRF CD results as well as the Standard Scores for the three groups of students shown in Figure 9.

Table 12. LANGUAGE! 4th Edition TOSCRF CD Results for 2011-2012 to 2013-2014 School Years

| TOSCRF CD Groups | Number of Students | BOY Percentile Average | BOY Standard Score Average | BOY Descriptive Rating | EOY Percentile Average | EOY Standard Score Average | EOY Descriptive Rating | Effect Size |
|------------------|--------------------|------------------------|----------------------------|------------------------|------------------------|----------------------------|------------------------|-------------|
| All Students | 10,284 | 14 | 84.15 | Below Average | 27 | 91.37 | Average | 0.65 |
| SWD | 2,553 | 13 | 82.88 | Below Average | 23 | 89.31 | Below Average | 0.59 |
| ELL | 1,751 | 14 | 84.31 | Below Average | 32 | 93.17 | Average | 0.78 |

Table 13 provides the TOSCRF CD results by grade level. Providing the students' grade levels is not mandatory and therefore, some students do not have a grade level specified. For those students who have grade levels and had all of the TOSCRF CD scores, the average by grade level was calculated.

Table 13. LANGUAGE! 4th Edition TOSCRF CD Results by Grade Level for 2011-2012 to 2013-2014 School Years

| TOSCRF CD Groups | Number of Students | BOY Percentile Average | BOY Standard Score Average | BOY Descriptive Rating | EOY Percentile Average | EOY Standard Score Average | EOY Descriptive Rating | Effect Size |
|------------------|--------------------|------------------------|----------------------------|------------------------|------------------------|----------------------------|------------------------|-------------|
| All Students | 10,284 | 14 | 84.15 | Below Average | 27 | 91.37 | Average | 0.65 |
| 5th Grade | 575 | 16 | 85.07 | Below Average | 30 | 92.38 | Average | 0.69 |
| 6th Grade | 1,972 | 14 | 84.45 | Below Average | 34 | 93.58 | Average | 0.83 |
| 7th Grade | 2,340 | 18 | 85.53 | Below Average | 30 | 93.26 | Average | 0.69 |
| 8th Grade | 2,032 | 16 | 84.50 | Below Average | 30 | 91.65 | Average | 0.64 |
| 9th Grade | 1,601 | 13 | 82.85 | Below Average | 23 | 89.02 | Below Average | 0.59 |
| 10th Grade | 884 | 13 | 85.52 | Below Average | 21 | 87.99 | Below Average | 0.51 |
| 11th Grade | 316 | 8 | 79.25 | Poor | 13 | 83.08 | Below Average | 0.37 |
| 12th Grade | 84 | 8 | 79.10 | Poor | 12 | 82.40 | Below Average | 0.33 |

Figure 10 shows the BOY and EOY TOSCRF CD average percentile ranks have been pretty consistent across each of the school years included in this analysis. Figure 10 shows the overall averages for all students and then the average for each year.

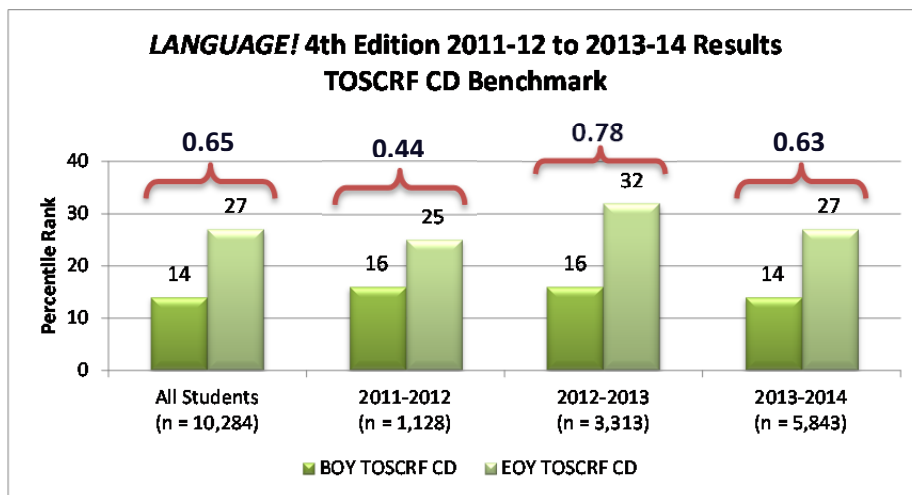


Figure 10. LANGUAGE! 4th Edition TOSCRF CD Results by School Years

LANGUAGE! TWS-4 CD Results

Figure 11 shows TWS-4 CD results for all students, students who were identified as receiving SPED services, and students classified as ELL. All students who took the TWS-4 CD gained 7 percentile points, SWD gained 6 percentile points, and ELL students gained 9 percentile points. Effect sizes ranged from 0.35 to 0.44, which are educationally meaningful and small.

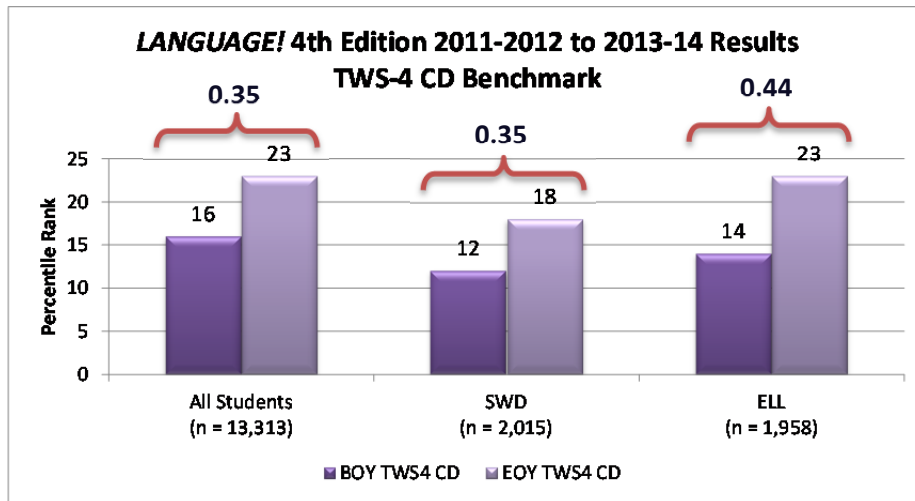


Figure 11. LANGUAGE! 4th Edition TWS-4 CD Results for 2011-12 to 2013-14 School Years

Table 14 shows the TWS-4 CD results as well as the Standard Scores for the three groups of students shown in Figure 11.

Table 14. LANGUAGE! 4th Edition TWS-4 CD Results for 2011-2012 to 2013-2014 School Years

| TWS-4 CD Groups | Number of Students | BOY Percentile Average | BOY Standard Score Average | BOY Descriptive Rating | EOY Percentile Average | EOY Standard Score Average | EOY Descriptive Rating | Effect Size |
|-----------------|--------------------|------------------------|----------------------------|------------------------|------------------------|----------------------------|------------------------|-------------|
| All Students | 13,313 | 16 | 84.83 | Below Average | 23 | 89.10 | Below Average | 0.35 |
| SWD | 2,015 | 12 | 81.51 | Below Average | 18 | 85.78 | Below Average | 0.35 |
| ELL | 1,958 | 14 | 83.70 | Below Average | 23 | 88.96 | Below Average | 0.44 |

Table 15 provides the TWS-4 CD results by grade level. Providing the students' grade levels is not mandatory and therefore, some students do not have a grade level specified. For those students who have grade levels and had all of the TWS-4 CD scores, the average by grade level was calculated.

Table 15. LANGUAGE! 4th Edition TWS-4 CD Results by Grade Level for 2011-2012 to 2013-2014 School Years

| TWS-4 CD Groups | Number of Students | BOY Percentile Average | BOY Standard Score Average | BOY Descriptive Rating | EOY Percentile Average | EOY Standard Score Average | EOY Descriptive Rating | Effect Size |
|-----------------|--------------------|------------------------|----------------------------|------------------------|------------------------|----------------------------|------------------------|-------------|
| All Students | 13,313 | 16 | 84.83 | Below Average | 23 | 89.10 | Below Average | 0.35 |
| 5th Grade | 793 | 12 | 82.02 | Below Average | 18 | 86.38 | Below Average | 0.37 |
| 6th Grade | 3,419 | 16 | 85.38 | Below Average | 25 | 89.96 | Average | 0.37 |
| 7th Grade | 2,811 | 16 | 85.23 | Below Average | 23 | 89.47 | Below Average | 0.36 |
| 8th Grade | 2,120 | 14 | 84.34 | Below Average | 23 | 88.65 | Below Average | 0.36 |
| 9th Grade | 2,082 | 18 | 85.75 | Below Average | 25 | 90.08 | Average | 0.36 |
| 10th Grade | 867 | 16 | 85.11 | Below Average | 23 | 89.04 | Below Average | 0.31 |
| 11th Grade | 443 | 12 | 82.37 | Below Average | 18 | 85.61 | Below Average | 0.25 |
| 12th Grade | 103 | 14 | 83.85 | Below Average | 18 | 86.35 | Below Average | 0.21 |

Figure 12 shows the BOY and EOY TWS-4 CD average percentile ranks have been pretty consistent across each of the school years included in this analysis. Figure 12 shows the overall averages for all students and then the average for each year.

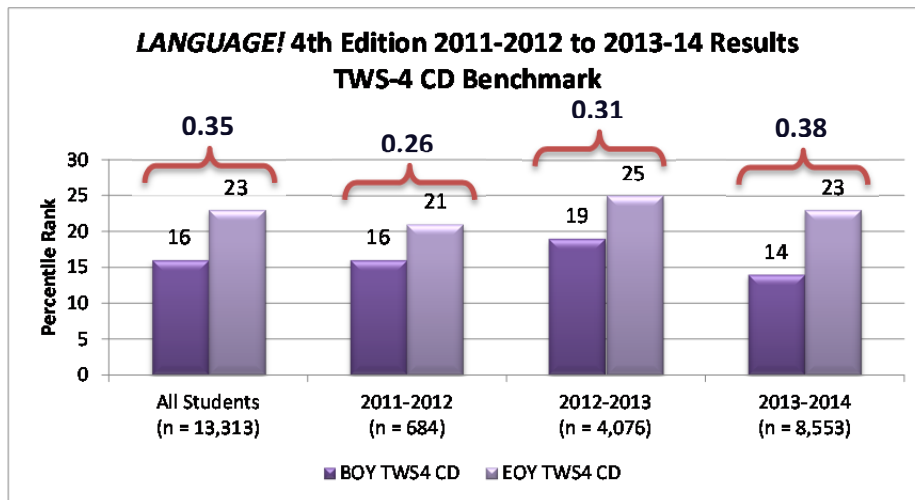


Figure 12. LANGUAGE! 4th Edition TWS-4 CD Results by School Years

LANGUAGE! LRS EF Results

Figure 13 shows LRS results for students who took the EF Benchmarks for all students, students who were identified as receiving SPED services (SWD), and students classified as ELL. All students who took the EF Benchmarks gained about 103L, SWD gained approximately 98L, and ELL students gained 103L. The Actual Lexile Gain for these students was beyond the Typical Lexile Gain for a 50th percentile student of 25 to 70 Lexiles depending on grade level. An additional consideration at this level is that there are generally fewer instructional minutes per day at the EF level than at the AB and CD levels, usually about half the instructional minutes. Effect sizes ranged from 0.62 to 0.75, which are educationally meaningful and medium in size.

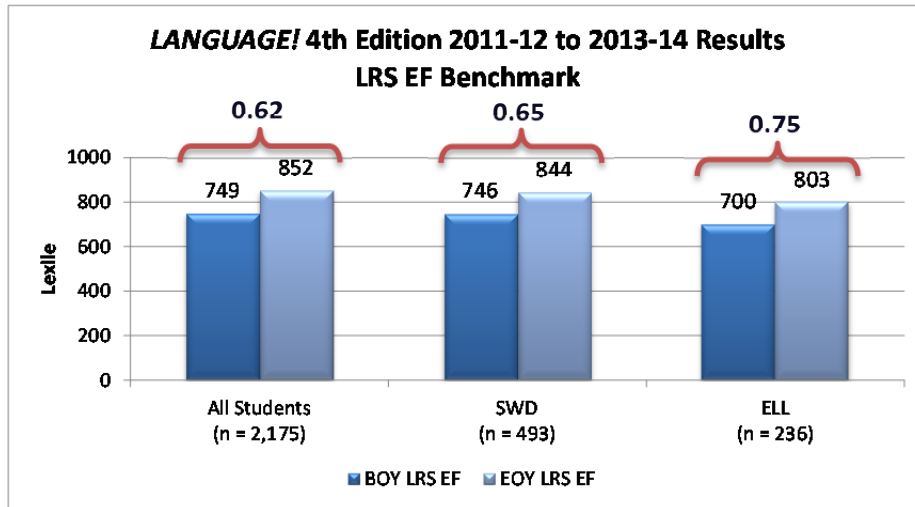


Figure 13. *LANGUAGE!* 4th Edition LRS EF Results for 2011-2012 to 2013-2014 School Years

Table 16 shows the LRS EF results as well as the Actual Lexile Gain and the Typical Lexile Gain for the three groups of students. The Typical Lexile Gain is based on the typical growth during one year defined by MetaMetrics. Students who participate in *LANGUAGE!* are in various grades with different Typical Lexile Gain. Since *LANGUAGE!* books are not grade-specific, the Typical Lexile Gain is expressed by a range, except where actual grade levels are provided.

Table 16. *LANGUAGE!* 4th Edition LRS EF Results for 2011-2012 to 2013-2014 School Years

| LRS EF Groups | Number of Students | BOY Lexile Average | EOY Lexile Average | Actual Lexile Gain from BOY to EOY | Typical Lexile Gain | Effect Size |
|---------------|--------------------|--------------------|--------------------|------------------------------------|---------------------|-------------|
| All Students | 2,175 | 749.37 | 851.89 | 102.52 | 25 to 70 | 0.62 |
| SWD | 493 | 745.70 | 844.29 | 98.59 | 25 to 70 | 0.65 |
| ELL | 236 | 700.42 | 802.64 | 102.22 | 25 to 70 | 0.75 |

Table 17 shows the LRS EF results by grade level. Providing the students' grade levels is not mandatory and therefore, some students do not have a grade level specified. For those students who have grade levels and had all of the LRS EF scores, the average by grade level was calculated. The Actual Lexile Gains for each grade are well beyond the Typical Lexile Gain, and the effect sizes are generally large and educationally meaningful.

Table 17. LANGUAGE! 4th Edition LRS EF Results by Grade Level for 2011-2012 to 2013-2014 School Years

| LRS EF Grade Levels | Number of Students | BOY Lexile Average | EOY Lexile Average | Actual Lexile Gain from BOY to EOY | Typical Lexile Gain | Effect Size |
|---------------------|--------------------|--------------------|--------------------|------------------------------------|---------------------|-------------|
| All Students | 2,175 | 749.37 | 851.89 | 102.52 | 25 to 70 | 0.62 |
| 6th Grade | 165 | 705.38 | 857.33 | 151.95 | 70 | 0.93 |
| 7th Grade | 281 | 753.55 | 861.92 | 108.37 | 70 | 0.67 |
| 8th Grade | 399 | 745.87 | 847.47 | 101.60 | 50 | 0.57 |
| 9th Grade | 493 | 748.83 | 840.37 | 91.54 | 50 | 0.60 |
| 10th Grade | 429 | 759.81 | 853.14 | 93.33 | 25 | 0.60 |
| 11th Grade | 309 | 761.79 | 866.13 | 104.34 | 25 | 0.59 |
| 12th Grade | 77 | 760.09 | 841.88 | 81.79 | 25 | 0.49 |

Figure 14 shows that the BOY and EOY LRS EF average scores have been pretty consistent across each of the school years included in this analysis. Figure 14 shows the overall averages for all students and then the average for each year.

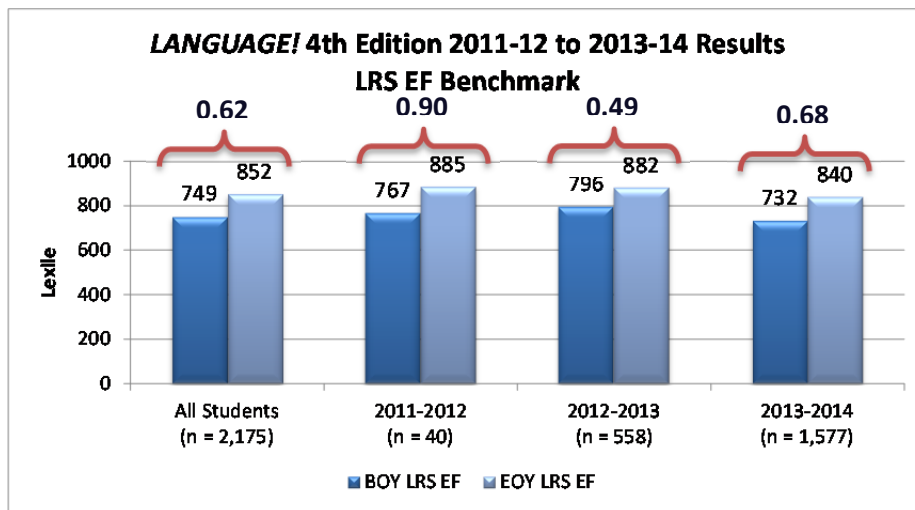


Figure 14. LANGUAGE! 4th Edition LRS EF Results by School Years

There were 2,175 students across the 2011-2012 to 2013-2014 school years who had the necessary scores to be included in this analysis. Using the demographic characteristics from the CCD, LRS EF scores are broken down by locale, district population bands, and ethnicity type. Table 18 shows the breakdown of the students.

Table 18. *LANGUAGE!* 4th Edition LRS EF Results by Demographic Characteristic for 2011-2012 to 2013-2014 School Years

| LRS EF Demographic Categories | Number of Students | BOY Lexile Average | EOY Lexile Average | Actual Lexile Gain from BOY to EOY | Effect Size |
|-------------------------------|--------------------|--------------------|--------------------|------------------------------------|-------------|
| All LRS EF Students | 2,175 | 749.37 | 851.89 | 102.52 | 0.62 |
| By Locale | | | | | |
| City | 922 | 728.48 | 825.93 | 97.45 | 0.62 |
| Rural | 245 | 779.07 | 863.59 | 84.52 | 0.47 |
| Suburb | 756 | 730.73 | 846.70 | 115.97 | 0.76 |
| Town | 250 | 855.38 | 951.42 | 96.04 | 0.56 |
| By Population Bands | | | | | |
| 1 to 5,000 | 426 | 840.53 | 929.80 | 89.27 | 0.51 |
| 5,001 to 10,000 | 182 | 739.20 | 852.74 | 113.54 | 0.75 |
| 10,001 to 25,000 | 527 | 729.83 | 850.38 | 120.55 | 0.79 |
| 25,001 to 50,000 | 914 | 724.32 | 816.20 | 91.88 | 0.59 |
| 50,001 to 100,000 | 49 | 737.49 | 861.61 | 124.12 | 0.75 |
| > 100,000 | 75 | 712.25 | 845.07 | 132.82 | 0.87 |
| By District Ethnicity | | | | | |
| Black | 20 | 730.90 | 907.80 | 176.90 | 1.12 |
| Hispanic | 236 | 839.75 | 914.85 | 75.10 | 0.39 |
| Other | 0 | | | | |
| White | 1676 | 744.79 | 849.99 | 105.20 | 0.67 |
| No Majority Group | 241 | 695.99 | 798.37 | 102.38 | 0.67 |

LANGUAGE! TWS-4 EF Results

Figure 15 shows TWS-4 EF results for all students, students who were identified as receiving SPED services (SWD), and students classified as ELL. All students who took the TWS-4 EF gained 9 percentile points, SWD gained 8 percentile points, and ELL students gained 11 percentile points. Effect sizes ranged from 0.33 to 0.52, which are educationally meaningful and small to medium in size.

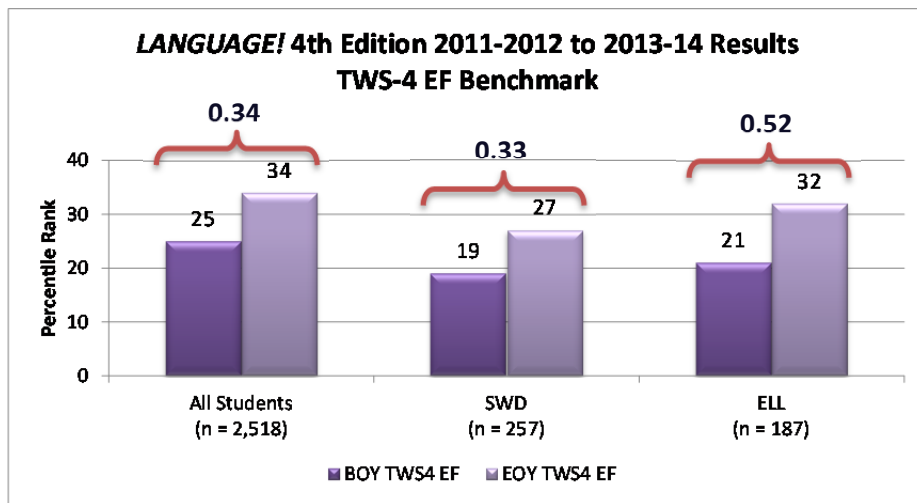


Figure 15. *LANGUAGE!* 4th Edition TWS-4 EF Results for 2011-12 to 2013-14 School Years

Table 19 shows the TWS-4 EF results as well as the Standard Scores for the three groups of students shown in Figure 15.

Table 19. *LANGUAGE!* 4th Edition TWS-4 EF Results for 2011-2012 to 2013-2014 School Years

| TWS-4 EF Groups | Number of Students | BOY Percentile Average | BOY Standard Score Average | BOY Descriptive Rating | EOY Percentile Average | EOY Standard Score Average | EOY Descriptive Rating | Effect Size |
|-----------------|--------------------|------------------------|----------------------------|------------------------|------------------------|----------------------------|------------------------|-------------|
| All Students | 2,518 | 25 | 89.69 | Average | 34 | 93.76 | Average | 0.34 |
| SWD | 257 | 19 | 87.26 | Below Average | 27 | 90.97 | Average | 0.33 |
| ELL | 187 | 21 | 88.16 | Below Average | 32 | 93.43 | Average | 0.52 |

Table 20 provides the TWS-4 EF results by grade level. Providing the students' grade levels is not mandatory and therefore, some students do not have a grade level specified. For those students who have grade levels and had all of the TWS-4 EF scores, the average by grade level was calculated.

Table 20. *LANGUAGE!* 4th Edition TWS-4 EF Results by Grade Level for 2011-2012 to 2013-2014 School Years

| TWS-4 EF Groups | Number of Students | BOY Percentile Average | BOY Standard Score Average | BOY Descriptive Rating | EOY Percentile Average | EOY Standard Score Average | EOY Descriptive Rating | Effect Size |
|-----------------|--------------------|------------------------|----------------------------|------------------------|------------------------|----------------------------|------------------------|-------------|
| All Students | 2,518 | 25 | 89.69 | Average | 34 | 93.76 | Average | 0.34 |
| 6th Grade | 206 | 23 | 88.75 | Below Average | 34 | 94.35 | Average | 0.47 |
| 7th Grade | 503 | 32 | 92.54 | Average | 42 | 96.65 | Average | 0.36 |
| 8th Grade | 480 | 25 | 89.62 | Average | 37 | 94.54 | Average | 0.36 |
| 9th Grade | 502 | 23 | 89.18 | Below Average | 32 | 93.42 | Average | 0.38 |
| 10th Grade | 417 | 23 | 88.70 | Below Average | 30 | 91.84 | Average | 0.28 |
| 11th Grade | 290 | 23 | 88.81 | Below Average | 30 | 92.02 | Average | 0.28 |
| 12th Grade | 64 | 19 | 86.92 | Below Average | 23 | 88.84 | Below Average | 0.17 |

Figure 16 shows that the average BOY and EOY TWS-4 EF percentile ranks have differed a bit across each of the school years included in this analysis. The first two school years have relatively few students, with the majority of students in the most current year. Figure 16 shows the overall averages for all students and then the average for each year.

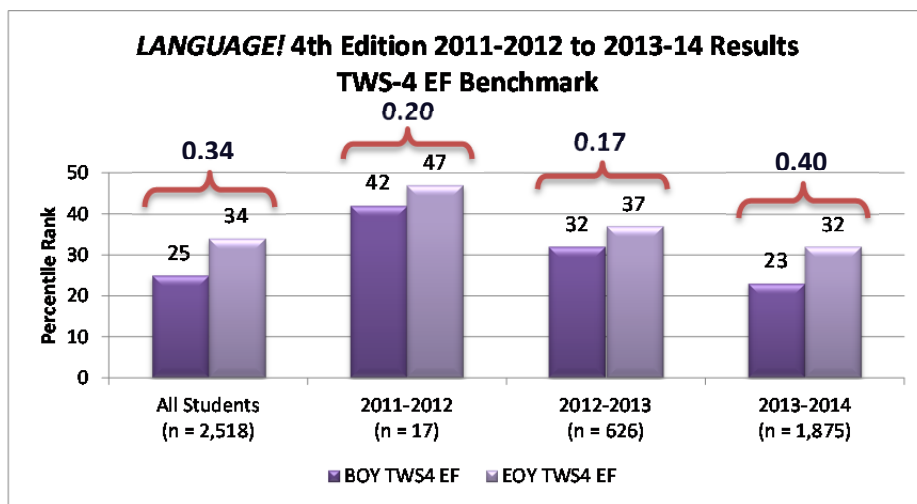


Figure 16. *LANGUAGE!* 4th Edition TWS-4 EF Results by School Years

Summary

Students receiving instruction in *LANGUAGE!* 4th Edition in the A and B Books gained about 240 Lexiles across the school years, much more than the gain of an average student. This will allow these students to start to close the achievement gap. The TOSCRF and TWS-4 assessments for the AB students support the growth shown on the LRS with students moving from a poor standard score descriptive rating to a below average rating.

Students receiving instruction in *LANGUAGE!* 4th Edition in the C and D Books gained about 170 Lexiles across the school years. This is also much more than is typical of a student at the 50th percentile. The TOSCRF and TWS-4 assessments for the CD students support the growth shown on the LRS. The students taking the CD assessments move from a below average standard score descriptive rating to an average rating or just below an average rating.

The results for students receiving instruction in *LANGUAGE!* 4th Edition in the E and F Books show an average gain of about 100 Lexiles. This is interesting because most of the students at this level are only receiving about half of the suggested instructional time. There are a variety of reasons for this including the difficulty of scheduling a 90-minute intervention period in middle and high school. The TWS-4 supports the LRS growth with students moving from just below the standard score average range into the average range, with standard scores close to 94. A standard score of 100 is at the 50th percentile.

The *LANGUAGE!* 4th Edition program provides instructional materials for students to get to grade level by starting at the appropriate location and working upwards from there. The results in this analysis support this assertion. Results also show that students with disabilities (SWD) and students identified as English Language Learners are benefitting from *LANGUAGE!* 4th Edition instruction. Finally, when studying the results disaggregated by district characteristics, it shows that students from the different locales (city, rural, suburb, and town), from districts of different sizes, and from districts with different majority populations, are all making roughly the same amount of progress. *LANGUAGE!* 4th Edition is working across the districts and across the country.

Appendix A

Complete information about Lexiles may be obtained from MetaMetrics; visit www.lexile.com. Table 21 shows the range of Lexiles for reader measures and text measures for the approximate middle 50th percentile, or the interquartile range. The Text Measures columns came from research studies designed to examine collections of textbooks designated for specific grades. The “stretch” text measures in the far right column represent the demand of text that students should be reading to be college and career ready at the end of Grade 12.

Table 21. Lexile Ranges by Grade Level

| Grade | Reader Measures (Interquartile range, mid-year) | Text Measures (25 th to 75 th percentile, Interquartile, Mid- Year) | “Stretch” Text Measures (25 th to 75 th percentile, Interquartile, Mid-Year) |
|-----------|---|--|--|
| 1 | Up to 300L | 230L to 420L | 220L to 500L |
| 2 | 140L to 500L | 450L to 570L | 450L to 620L |
| 3 | 330L to 700L | 600L to 730L | 550L to 790L |
| 4 | 445L to 810L | 640L to 780L | 770L to 910L |
| 5 | 565L to 910L | 730L to 850L | 860L to 980L |
| 6 | 665L to 1000L | 860L to 920L | 950L to 1040L |
| 7 | 735L to 1065L | 880L to 960L | 1000L to 1090L |
| 8 | 805L to 1100L | 900L to 1010L | 1040L to 1160L |
| 9 | 855L to 1165L | 960L to 1110L | 1080L to 1230L |
| 10 | 905L to 1195L | 920L to 1120L | 1110L to 1310L |
| 11 and 12 | 940L to 1210L | 1070L to 1220L | 1210L to 1360L |

Table 22 shows expected Lexile growth rates by grade level for the 50th percentile reader. For this analysis, the estimated growth per week is used where a grade level is known to estimate the growth for students in a 30-week intervention.

Table 22. Expected Lexile Growth by Grade Level

| Grade Level | Expected Growth During One Year | Estimated Growth Per Week (36 weeks) | Grade Level | Expected Growth During One Year | Estimated Growth Per Week (36 weeks) |
|-------------|---------------------------------|--------------------------------------|-------------|---------------------------------|--------------------------------------|
| 2 | 300L | 8L | 7 | 70L | 2L |
| 3 | 100L | 3L | 8 | 50L | 1L |
| 4 | 100L | 3L | 9 | 50L | 1L |
| 5 | 100L | 3L | 10 | 25L | 1L |
| 6 | 70L | 2L | 11 | 25L | 1L |

Appendix B

Figure 17 shows the relative positions of percentile ranks and standard scores to a normal curve.

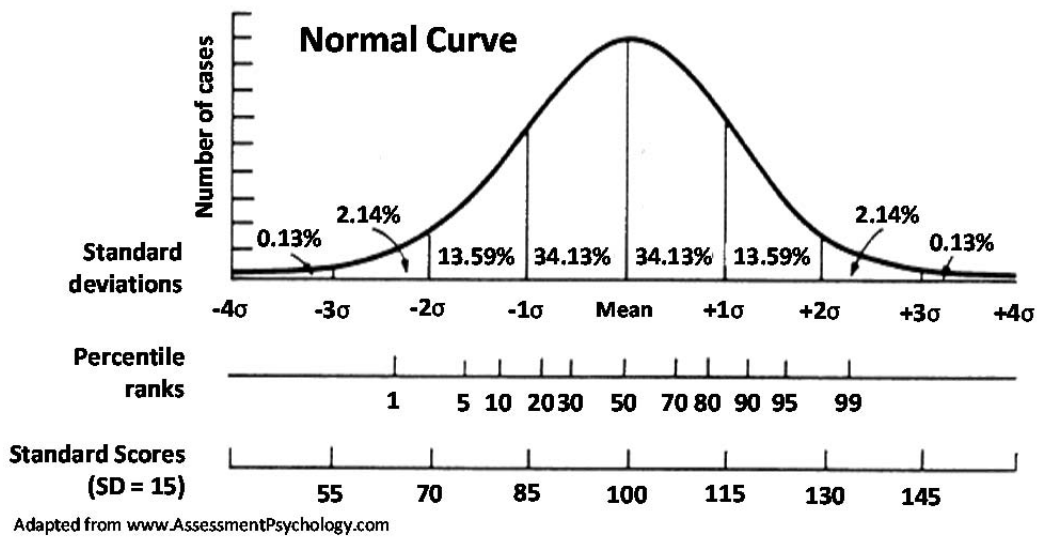


Figure 17. Normal Curve with Percentile Ranks and Standard Scores