

# Impact of Re-Auto Placement in Core5 on Reading Performance

Prepared by Paul Macaruso and Jazz Jensen ([research@lexialearning.com](mailto:research@lexialearning.com))

## Key Findings

- Students who were re-auto placed in Core5 (Re-Auto Placed group) had a Start Level in Core5 that fell below students who continued in Core5 where they left off the previous Spring (Business-As-Usual group). The Re-Auto Placed group's lower Start Level may reflect a summer slide, or students showing a decline in reading skills over the summer.
- The Re-Auto Placed group made substantial progress in Core5, reaching an End Level similar to the Business-as-Usual group.
- The Re-Auto Placed group showed a trend toward higher Spring scores on the *GRADE* than the Business-as Usual group, which suggests that re-doing activities in Core5 may help solidify reading skills.
- U.S. national survey results show that Core5 teachers who have re-auto placed students in the Fall overwhelmingly agree on the value of doing so.

## Lexia® Core5® Reading Core5

Lexia® Core5® Reading (Core5) is a technology-based instructional program that is designed to accelerate student mastery of reading skills in grades Pre-K through 5. Core5 contains activities organized into 18 levels: preschool (Level 1), kindergarten (Levels 2-5), first grade (Levels 6-9), second grade (Levels 10-12), third grade (Levels 13-14), fourth grade (Levels 15-16) and fifth grade (Levels 17-8). Students begin Core5 by taking an embedded auto placement test, which places them at an initial level consistent with their reading ability. For example, a second grade student may be placed in Level 6 (below grade level), Level 10 (in grade level), or Level 13 (above grade level). Students who used Core5 during the previous school year continue where they left off in the spring (Core5's default setting) or they may be re-auto placed in the Fall. In other words, it is possible for students to re-take the auto placement test at the beginning of a new school year, although this does not happen automatically. As a component of Lexia's Assessment Without Testing®, students receive a monthly Performance Predictor score which estimates their percent chance of completing all of the Core5 Levels corresponding to their grade (i.e., reaching grade-level benchmark) by the end of the school year. Based on Performance Predictor scores and grade, students are given a weekly usage target (20-60 minutes) that is updated monthly. Consistently meeting usage targets increases the chances that students will reach their end-of-year benchmark.

# Study 1

## Sample

Participants in Study 1 were 65 second graders attending a public school in Massachusetts during the 2017-2018 school year. The students were in one of three classes. Each class was taught by a teacher who had experience using Core5 in previous school years. Students in the study used Core5 during the 2016-2017 and 2017-2018 school years and completed a standardized reading test, the *GRADE* (Williams, 2001), in the Fall and Spring of the 2017-2018 school year. Students in each class were randomly assigned to the two groups. The Re-Auto Placed group (N=34) was re-auto placed in Core5 at the start of the 2017-2018 school year, while the Business-as-Usual group (N=31) continued in Core5 where they left off in the previous spring. The classroom teachers were not told which students were in each group. Nearly all students in the two groups (61/65) met their weekly Core5 online usage targets for at least 20 weeks.

## Beginning-of-Year

### Core5 Level

The Re-Auto Placed group had an average Start Level in Core5 Level (8.5) that was lower than the Business-as-Usual group (9.9). This difference approached significance ( $t(63) = 1.926, p = .06$ ). The Re-Auto Placed group started at a middle-of-first-grade Core5 Level, while the Business-as-Usual group started at an end-of-first-grade Core5 Level (where they left off the previous spring). The Re-Auto Placed group's Start Level in Core5 (8.5) fell significantly below where they left off the previous spring (10.6) ( $t(33) = 5.390, p < .001$ ). This often-seen decline in reading skills following summer break is referred to as "summer slide" (Cooper et al., 1996).

### Scores on the *GRADE*

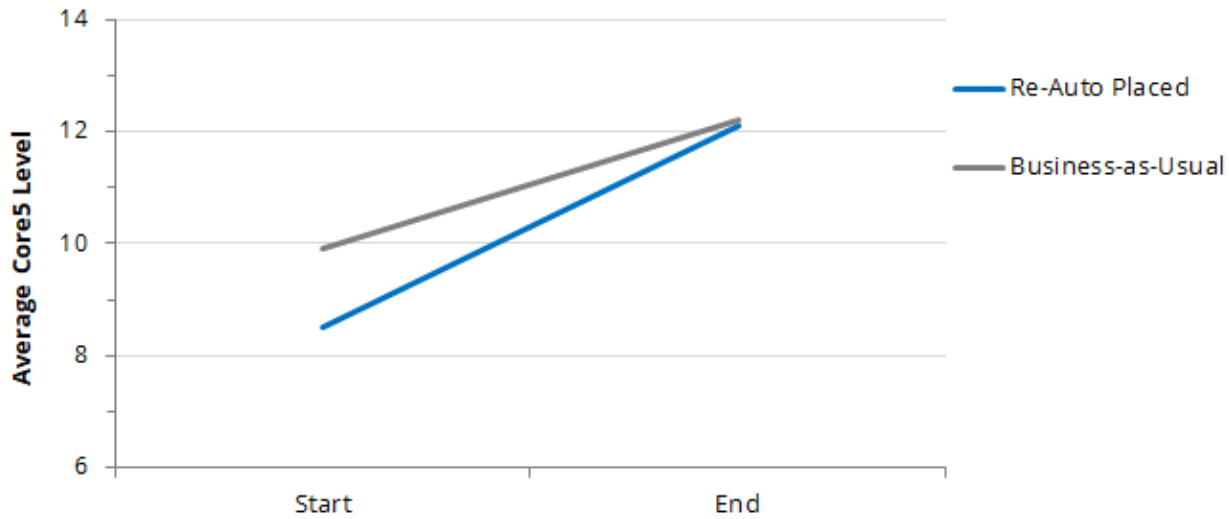
The Re-Auto Placed and Business-as-Usual groups showed comparable scores on the *GRADE* in the Fall of the 2017-2018 school year. Average Total Test standard scores were 96.9 and 94.4 for the Re-Auto Placed and Business-as-Usual groups, respectively.

## End-of-Year

### Core5 Level

As described earlier, the Re-Auto Placed group began the school year below the Business-as-Usual group in terms of average Start Level in Core5. By the end of the school year, the Re-Auto Placed group had made substantial progress in Core5, reaching an End Level similar to the Business-as-Usual group (see Figure).

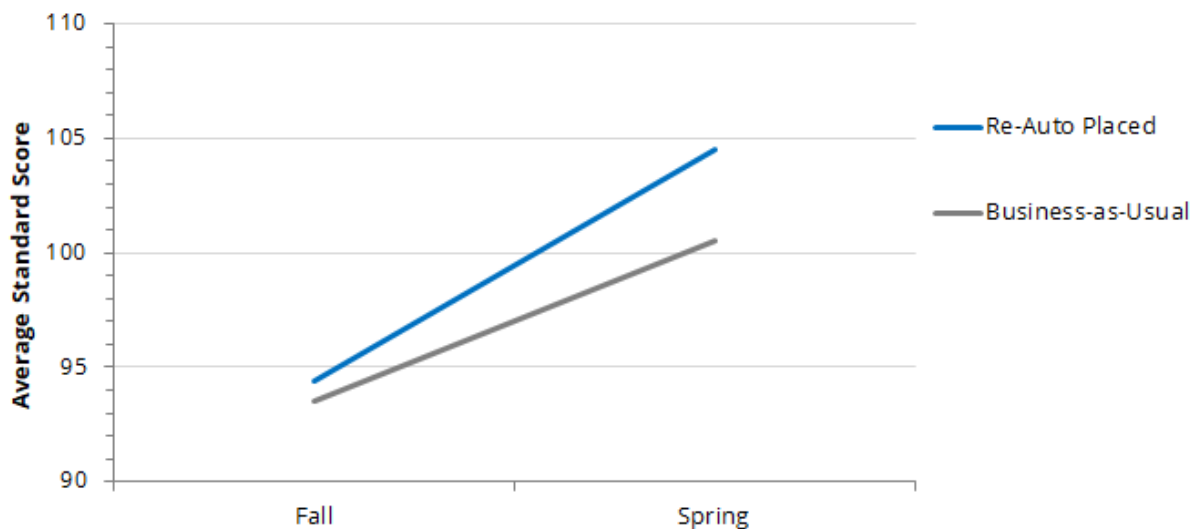
### Changes in Core5 Levels



### Scores on the *GRADE*

As described earlier, the Re-Auto Placed and Business-as-Usual groups showed comparable Total Test standard scores on the *GRADE* in the Fall. In the Spring, the average Total Test standard score for the Re-Auto Placed group (105.1) was somewhat higher than the Business-as-Usual group (101.5). This trend which favors the Re-Auto Placed group, though not statistically significant ( $t(63) = .885$ ,  $p = .38$ ), is most evident on the Comprehension subtests of the *GRADE* (see Figure).

### Changes in *GRADE* Comprehension Scores



## Study 2

### Sample

Participants in Study 2 were 373 teachers randomly sampled from a list of U.S. teachers using Core5 in the 2018-2019 school year. The teachers were included in this study because they reported re-auto placing some of their students at the beginning of the school year. The teachers answered survey questions on their views of auto placement in Core5.

### Survey Findings

The teachers' responses clearly showed a positive attitude toward re-auto placement. The vast majority (88%) "strongly agree" or "agree" with the statement: "I appreciate the data I received about my students after they completed Core5's auto placement." In addition, 80% "strongly agree" or "agree" that "Core5's auto placement succeeded in placing my students into appropriately leveled content." Finally, 91% of those who responded gave a "strongly agree" or "agree" response to the statement: "Repeating Core5 units from last year helped my students review key concepts."

### Summary and Implications

Results from Study 1 show that the Re-Auto Placed group began Core5 at a Start Level below the Business-as-Usual group. However, the Re-Auto Placed group made substantial progress in Core5, reaching an End Level similar to the Business-as-Usual group. In addition, the Re-Auto Placed group ended the school year with scores on the *GRADE*, a standardized test of reading, slightly higher than the Business-as-Usual group. Results from Study 2 reveal that teachers find the use of re-auto placement to be valuable for them as teachers and for their students.

Together, these results strongly suggest that re-auto placement is not detrimental to students' reading growth. In fact, it is possible that re-doing activities as a result of re-auto placement may help solidify reading skills in students.