



Rosetta Stone Foundations and English Language Learner progress

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Education

Key Findings

- This study provides **moderate** evidence, according to the Every Student Succeeds Act (ESSA) evidence standards, for the effectiveness of Rosetta Stone® Foundations.
- Arizona English Language Learner Assessment (AZELLA) Speaking and Listening scores of students in grades 2-12 who used Foundations improved more than scores of a comparison group that did not use the software.
- Increased usage of Rosetta Stone software was associated with greater gains in year-over-year AZELLA test scores.

Introduction

This study investigated the effect of Rosetta Stone Foundations software on year-over-year Arizona English Language Learner Assessment (AZELLA) Listening and Speaking scores¹ in a large urban school district. In conjunction with the targeted school district and university researchers, the Rosetta Stone research team investigated the extent to which English Language Learners (ELLs) in grades 2-12 increased their year-over-year speaking and listening skills.

Methodology

The school district in this study provided data covering the years 2014-15 to 2016-17.² During the school year 2016-17, the Rosetta Stone Foundations program was implemented at schools across the district, and students used it as a supplement to the regular Structured English Immersion (SEI) instruction mandated by the state of Arizona. Usage of the program was determined by individual teachers.

The study examined existing data to measure the impact of Rosetta Stone Foundations usage on the AZELLA, which is administered annually in early spring. In addition to AZELLA scores, the district provided data on socioeconomic status, age, attendance, and disability status. Students using Foundations were compared to non-users.³ Two datasets were used for this analysis: (1) a full dataset comprised of data from over 800 English Language Learners in the target district and (2) a smaller dataset that matched students on several characteristics (matched dataset). Analyses of the data were conducted by independent researchers from the University of Maryland Center for Advanced Study of Language (CASL).

¹ AZELLA Reading and Writing scores were not analyzed because Reading and Writing tests are not comparable from year to year for the dataset used.

² The 2015-16 school year was excluded from the analyses. In 2015-16, the district conducted a short pilot with Rosetta Stone Foundations, but school records for this time period do not indicate which students had access to the software.

³ The non-users consisted of two groups: (1) students who did not receive the intervention in the same year, and (2) students from a year prior to software availability in the district.



Results

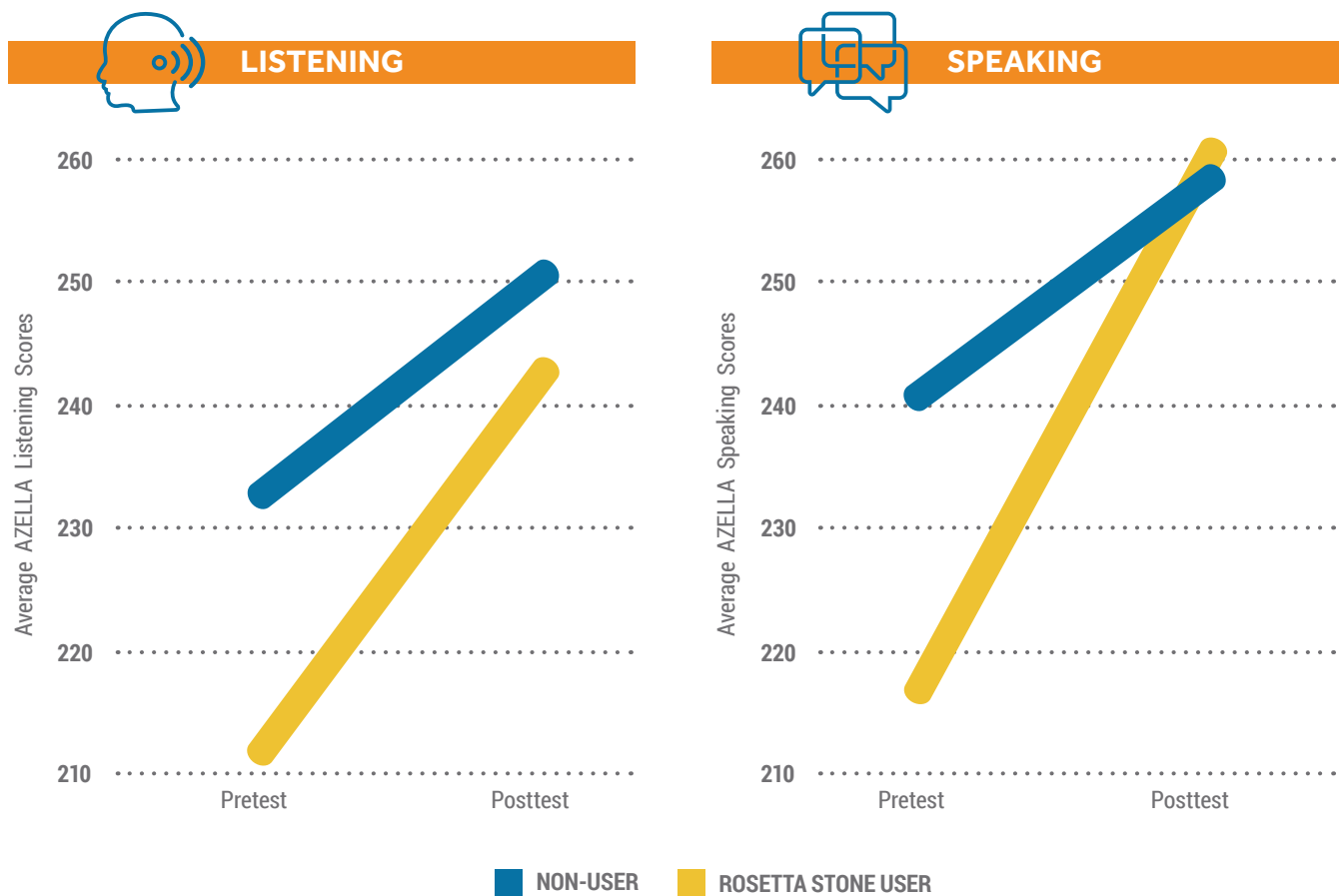
Analysis of the Full Dataset:

The full dataset consisted of data for 878 English Language Learners across 38 schools during the 2014-15 and 2016-17 school years. AZELLA Listening and Speaking scores, amount of Rosetta Stone Foundations usage per year, and demographic data for the students were included in the analysis.

Full Dataset Results:

Rosetta Stone Foundations users improved significantly more than non-users in English listening and speaking skills on AZELLA. (See Figure 1). For Listening, on average, Foundations users showed gains of 32 points, while non-users gained 19 points. For Speaking, on average, Foundations users gained 45 points on the AZELLA Speaking test, while non-users gained just 19 points over the same time period. In addition, greater improvements in listening and speaking on AZELLA year-over-year were associated with higher levels of Foundations usage.

Figure 1: Average Listening & Speaking Scores for Users and Non-Users of Rosetta Stone Foundations



Results

Analysis of the Matched Dataset:

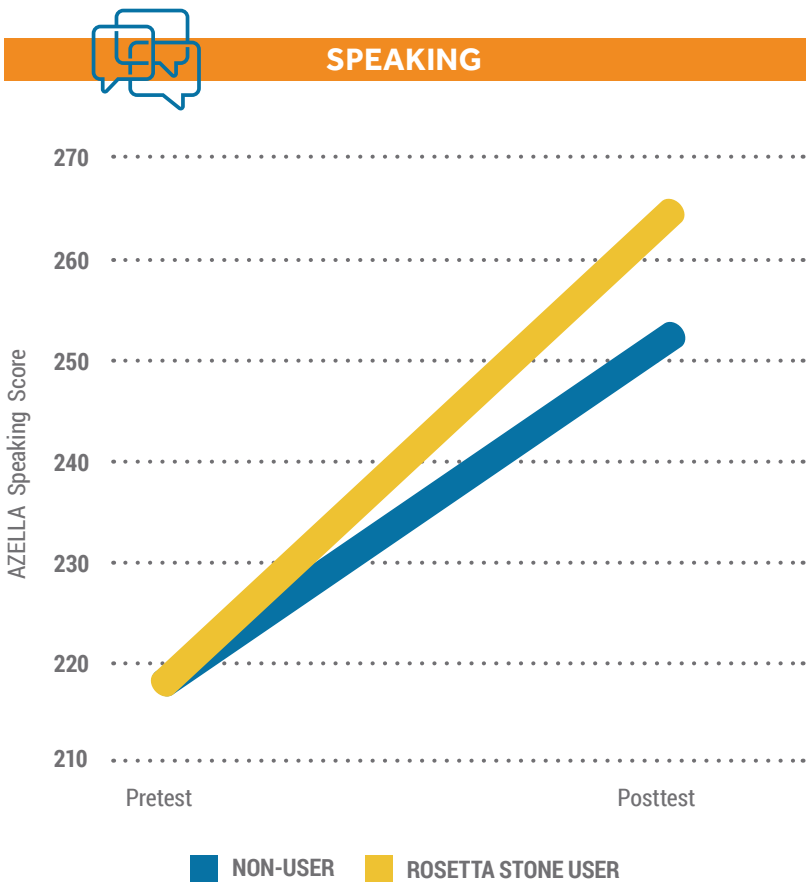
In the full dataset, learners who used Rosetta Stone Foundations started with lower AZELLA scores than did non-users. This was likely a function of the district's decision to provide licenses to those students deemed most in need. To more directly compare students who started at similar levels of English, the CASL researchers employed propensity score matching to select a subset of 392 students (196 RS users and 196 non-users) that were statistically matched on: AZELLA stage at pretest; free/reduced lunch; attendance percentage; disability; and pretest listening and speaking scores.

Matched Dataset Results:

- As in the full dataset, students who used Foundations improved on AZELLA Speaking scores more than the control group.
- For Listening on AZELLA, students who used Foundations did not show significantly different proficiency gains compared to non-users.

The figure below displays the estimated benefit of Rosetta Stone Foundations usage for the Speaking domain. In this matched dataset, it is estimated that Foundations users' speaking scores increase 39% more than non-users' scores.

Figure 2: Predicted Speaking Results for the Matched Dataset



Discussion

This quasi-experimental study used existing data to evaluate the effectiveness of Rosetta Stone Foundations as it was used in a naturalistic environment. For novice learners, like the majority of students in this study, one of the advantages of using Rosetta Stone software is that students can practice individually, thereby increasing the amount of time they would spend speaking as compared to a normal classroom environment. The Rosetta Stone program emphasizes speaking practice. Thus, the robust gains in the speaking domain specifically are an encouraging measure of program effectiveness.

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Our scalable, interactive solutions have been used by over 12,000 businesses, 9,000 public sector organizations, and 22,000 education institutions worldwide, and by millions of learners in over 150 countries.