

Language LAB™ Pilot Studies

Language LAB™ was initially piloted in the spring of 2010 with kindergarten through fourth grade students in three school districts — two in Texas and one in Nevada. The purpose of the first pilot focused on selecting items and establishing qualifying scores for the screeners, choosing intervention materials, and deciding how much time to allot to each station. A pilot version of the *Language LAB™ Screener* was administered to 50 students in each grade level (K–4). An item analysis was used to determine which items were most predictive of oral language weaknesses. Qualifying scores were established based on these findings and students that failed the *Screener* were selected to participate in approximately eight weeks of the intervention. During this time, the SLPs provided feedback to the authors regarding the length of time required for each station, the effectiveness of the intervention materials and homework, and the clarity of the lessons. As a result of the feedback from the pilot SLPs, adjustments were made to the intervention materials, lesson plans, and the time allotted for each station.

The second pilot was completed in the same school districts during the fall of 2010. During this pilot the student selection process included a review of student performance on state-mandated, criterion-referenced reading comprehension tests (which served as the universal screener) and teacher recommendations. Students whose performance levels were not commensurate with their same age and grade peers were administered final versions of the *Language LAB™ Screeners*. Using previously established qualifying scores, students were selected for participation in the fall 2010 pilot program. **Table 1.1** reveals student progress monitoring data for 32 students. This table also indicates that not all students were able to complete the full 15 hours of intervention because some of them began the program at later dates during the fall semester; however, a majority of the students were progressing at expected rates and were recommended to continue the program for the remaining time. Six of the students were referred for special education evaluations.

1. 40.6% of the students (n=13) improved language skills as measured by pre-intervention and post-intervention screening measures and exited the program.
2. 40.6% of the students (n=13) progressed at expected rates and were recommended to continue with the program for their remaining hours.
3. 18.8% of the students (n=6) did not respond at the expected rate of progress and were referred to special education for a comprehensive evaluation.

Overall, 81% of the students (n=26) either exited or were progressing at the expected rate. Additionally, the use of *Language LAB™* aided in the early identification of students needing a referral for a possible learning disability.

Table 1.1 *Language LAB*[™] Pilot Study Results

Hours of Intervention	Recommended to Exit <i>Language LAB</i> [™]	Continue Remaining Hours of <i>Language LAB</i> [™]	Refer for Special Education Evaluation	Total Students
5 – 9 hours	7	11	2	20
10 – 15 hours	6	2	4	12
Total Students	13	13	6	32

Limitations and Need for Further Research

Although *Language LAB*[™] met all the expectations of the SLPs that implemented the program and feedback was extremely positive, it should be noted that the second pilot study was not without limitations due to the relatively low subject numbers and that not all subjects received the full 15 hours of intervention. The authors will continue collecting data on the effectiveness of *Language LAB*[™] and this data will be released in future updates at www.superduperinc.com/languagelab.

Case Study – Gracie, 1st Grade

The following is a description of one student’s progress in the *Language LAB*[™] pilot during the fall of 2010. Gracie was a first grade student struggling with reading comprehension activities in the classroom. At the end of her kindergarten year, she did not demonstrate mastery of the reading comprehension questions on the state-mandated, criterion-referenced reading test. At the beginning of her first grade year, the test was administered. Gracie was performing at the “still developing” level and only answered two of the story comprehension questions correctly. On the *Language LAB*[™] *Screener*, Gracie demonstrated six errors (out of nine items) including story retell, noun-verb agreement, irregular past tense, adverb phrases, asking questions, and conditional dependent clauses. *Language LAB*[™] intervention was recommended. She also received reading intervention to target decoding and fluency with another professional. In *Language LAB*[™], Gracie demonstrated consistent progress on the target skills and storytelling. After eight hours of intervention in *Language LAB*[™], the *Screener* was re-administered. Gracie demonstrated all nine (9) skills on the *Screener*. In the classroom, Gracie’s teacher reported progress in the area of listening comprehension and oral expression; however, she continued to struggle with reading fluency and decoding skills. Based on each of these data sources, it was recommended that Gracie exit *Language LAB*[™] and continue the reading intervention program.