Research Results Show Improved Student Achievement and Success with RFB&D’s Learning Through Listening® Programs

Recording for the Blind & Dyslexic® (RFB&D®) provides recorded textbooks and other support materials to students of all grades with visual, learning and other print disabilities. In working closely with classroom educators, curriculum leaders, child study team members and school administrators, RFB&D often receives questions about the effectiveness of its programs.

To answer educators’ questions about the results of our programs and to address the requirements of the No Child Left Behind legislation, we continue to commission scientifically based primary research and case studies to evaluate student achievement.

This research summary reviews several recent research initiatives and case studies commissioned by RFB&D to support the benefits of our Learning through Listening programs.
This study, commissioned by RFB&D® and conducted by faculty members from the Johns Hopkins University Department of Special Education, investigated the effects of audio texts on the acquisition of secondary-level content by students with learning disabilities. Researchers examined:

- The direct effects of audio text on students’ content acquisition;
- The impact of a strategy designed to enhance the efficacy of audio text.

**The Study at a glance:**

- 67 students from eight self-contained special education classes participated in a six-week study.
- Participating students were identified as having visual, learning and other print disabilities.
- Participating students’ IEPs called for specialized accommodations for secondary history content.
- Study subjects were assigned randomly to the control and two experimental groups.
  - One experimental group used audiobooks in history in conjunction with an additional organizational support strategy.
  - The second experimental group used only audiobooks in history.
  - The control group used the standard history textbook with no audiobooks or organizational support strategy.
- All students took both a pre-test and post-test, along with weekly quizzes.
- All students used the same 10th grade textbook content as their general education peers.

**Results:** Students with learning disabilities showed a 38% increase in content acquisition reading scores after using RFB&D’s AudioPlus® textbooks on CD.

**Significant Outcomes**

In their study summary, researchers reported:

- “Clearly, greater access to higher-level materials, specifically RFB&D’s AudioPlus textbooks, holds great promise for students with mild cognitive disabilities.”
- “Use of the audio textbook has the potential to increase student independence.”
- Participating teachers noted that audio textbooks gave students access to “…a generalized routine for expository reading.”

**Researchers:**

Elizabeth A. Boyle, M.A., Research Associate, Department of Special Education, Johns Hopkins University
Michael S. Rosenberg, PhD., Professor, Department of Special Education, Johns Hopkins University
**Reading Assessment Results**

In this study, teachers submitted evaluations for 166 students, based on students’ results on the Brigance Reading Assessment for reading comprehension and word recognition. Each student had an Individual Education Plan (IEP) and all were tested at the beginning and end of the school year after RFB&D’s Learning through Listening® program was implemented. Results in grades 1 through 12 are reflected in the graph below.

**Ancillary Learning Benefits**

As part of this study, teachers were also asked to describe how students benefited from using RFB&D’s AudioPlus® textbooks. In addition to the expected benefits of improved reading comprehension (76%)* and increased interest in reading (76%), educators also observed:

- Significant gains in motivation and self-confidence.
- Increased interest in reading and greater learning independence.

**RESULTS:** Students demonstrated significant achievement gains,* including:

- Average increase in word recognition: .76 grade level.
- Average increase in reading comprehension: .61 grade level.
- 8th grade students advanced one full grade level (1.0) in word recognition and 1.5 grade levels in reading comprehension.
- 9th grade students advanced 1.5 grade levels in both word recognition and reading comprehension.

*A grade level is considered to be one academic year.

**THE STUDY at a glance:**

- 35 schools, 300 teachers and a sampling of students participated.
- Educators completed evaluations including a reading assessment and teacher feedback regarding program and student usage.

---

**Grade Level Increases**

Students demonstrated measurable gains in both word recognition and reading comprehension at nearly all grade levels.

---

**Student Benefits from Audio Textbooks**

Educators observed a range of student benefits resulting from the use of audiobooks, including improved self-confidence, interest and attitude about reading.

---

**RESEARCHERS:**

- Connie Dowling, M.A., Manager, Educational Programs
- Elyse Kantrowitz, M.S., Market Research Analyst

Recording for the Blind & Dyslexic 2004-2005
Key Results

In this study, students reported that using RFB&D’s AudioPlus® textbooks helped their reading in general, specifically helping them improve word recognition, reading rate and comprehension. Teachers also noted:

- The program gave students access to materials for independent work;
- They [teachers] used the audio textbooks for core curriculum, supplements and as the basis for content review;
- As students experienced success with RFB&D’s AudioPlus textbooks, they used the materials more frequently and their skills improved.

Said the researchers, “Taken as a whole, the use of [RFB&D’s] Learning Through Listening® program in the classroom has a positive effect on reading growth for students with mild to moderate learning disabilities, classroom instruction, student and teacher motivation, and the affective development of the students. As such, it is an assistive technology that can make a difference in schools.”

RESEARCHERS:
Melanie R. Kuhn, Ph.D.
Aubrie E. Swan, Graduate Assistant; Carolyn A. Groff, Graduate Assistant
Graduate School of Education, Rutgers University

RESULTS: Students in the intervention group achieved significant increases in standard scores for these essential reading skills: listening comprehension, phonological analysis and blending and reading comprehension.

Key Results

Researchers at Tufts University introduced RFB&D’s AudioPlus textbooks into their research-based literacy program for early readers with reading disabilities. The Tufts program was designed to strengthen students’ automaticity, vocabulary, engagement and orthography. In addition to the achievement gains noted here, researchers stated, “The addition of RFB&D’s AudioPlus textbooks to the Tufts Summer Literacy Program shows promise for future work in fluency and comprehension.”

THE STUDY at a glance:

- 75 students classified as having learning disabilities (LD), ages 10-14, participated in the 28-week study, which included both pre- and post-tests, using the Qualitative Reading Inventory, 3rd Edition, the Test of Word Recognition Efficiency, and coded observations. Students were divided into three groups:
  - Audiobooks during the language arts period;
  - Audiobooks with support of a graphic organizer during the language arts period;
  - Control group used no audio-books or supports during the language arts period.

RESEARCHERS:
Maryann Wolf, Ed.D., Director of Center for Reading and Language Development, Tufts University

The Tufts Summer Literacy Program
Massachusetts Center for Reading and Language Research, Tufts University, 2004-2005