Submitted By:	Donna E. Rutherford, Reading Specialist
	Brain Zone Reading & Tutoring Center, Inc.
Date:	January 6, 2012
Name:	RQ
Gender:	Male
Chronological Age:	7.9-years
Clinical Diagnosis:	Reading below grade level

Client History

RQ's parents brought him to our learning center due to their concerns about his academic performance. Only in first grade, RQ had already been to two different schools as his parents continued to seek a 'better teacher' and 'smaller class size.' Mom had begun to see that RQ's struggles in the classroom were following him to every school setting. He had not received any prior educational services other than staying after school for tutoring from his first grade teacher. His parents noted difficulties in the following areas:

- reading
- encoding and decoding skills
- slow work pace
- attention and distractibility

- phonemic awareness
- reversals of letters and words
- following directions
- forgetfulness

Birth and Development.
RQ's mother was involved in an auto accident, which resulted in bleeding and bed rest for the first trimester. However, RQ was born healthy and full-term at 34-weeks. Mother reported RQ slept and ate well, loved taking baths, and was very affectionate. Typical speech and language development was noted with the usual babbling and imitation of sounds. His first words were at ten-months, with three to four word phrases by 24-months. Both mother and father are bilingual; RQ does not speak Spanish but he understands it quite well.

Medical History.
As a toddler, RQ experienced many ear infections; seven infections in his first year. There were no other relevant or significant medical issues.

Goals.
Parental goals were simply for RQ to "stop confusing his letters and numbers." Our goals for RQ were as follows:

- increase processing speed
- expand ability to think and understand
- increase attention
- decease distractibility
- improve visual processing skills
- improve auditory processing skills

- increase phonemic awareness
- improve letter identification
- expand vocabulary
- improve consistency of decoding skills
- increase reading fluency
- enhance memory skills

Concurrent Treatment/Intervention
- A 20-week intensive remediation program was designed to meet RQ's goals. It consisted of the following elements:
    - The Listening Program Level 1 Kit with Nature Sounds and Bone Conduction
    - Learning Ears by Moyer's Learning Systems
    - Sonday System Reading Remediation Program
    - Brain Builder® Software

Listening Plan

Cycle One listening used the standard *Learning Ears* listening program protocol with two, 15-minute listening sessions, five-sequential days per week, with a TLP Level One Kit with Nature Sounds and Bone Conduction.
- Phase I (4-weeks) – both 15-minute listening sessions were in the home environment.
- Phase II/III (12-weeks) – the morning listening sessions was done in the home. His evening listening session was done in the learning center as an active-listening session. A simple mixer and microphone set-up was used (standard Learning Ears configuration), however, this session did not use bone conduction.
- Phase IV (6-weeks) – both listening sessions returned to the home environment.

Pre/Post Testing

GIBSON TEST BATTERY OF COGNITIVE SKILLS

Test Name	Pre-Test in Years	Post-Test in Years	Change in Years
Processing Speed	7.0	8.9	+1.9
Working Memory	8.9	11.9	+3.0
Logic-Reasoning	10.0	12.3	+2.3
Selective Attention	7.0	7.9	+0.9

TEST OF VISUAL PERCEPTUAL SKILLS, VERSION 3

Subtests	PRE- Scaled Score	PRE- Age Equiv.	POST- Scaled Score	POST- Age Equiv.	Change in Years
Basic Processes					
Visual Discrimination	7	4.0	15	12.1	+8.1
Visual Memory	8	5.3	16	12.0	+6.9
Spatial Relations	16	10.7	15	10.7	+0.0
Form Constancy	17	13.10	15	> 18.11*	> +5.1
Sequencing					
Sequential Memory	8	5.5	9	6.0	+0.7
Complex Processes					
Figure Ground	12	7.6	15	11.2	+3.8
Visual Closure	9	5.2	9	6.1	+0.11

COMPOSITE SCORES FROM TVPS-3

Tests	PRE- Standard Scores	Age Equiv.	POST- Standard Scores	Age Equiv.	Change in Years
Basic Processes	110	7.6	127	11.6	+4.0
Sequencing	90	5.5	95	6.0	+0.7
Complex Processes	103	6.4	110	8.3	+1.11
Overall	105	6.10	117	9.3	+2.5

TEST OF AUDITORY PROCESSING SKILLS, VERSION 3

Subtests	PRE- Scaled Scores	Age Equiv.	POST- Scaled Scores	Age Equiv.	Change in Years
Phonologic Processes					
Word discrimination	8	6.2	13	>9.6*	> +3.4
Phonological segmentation	8	6.5	11	9.0	+2.7
Phonological blending	11	7.6	14	13.4	+5.10
Memory Processes					
Number memory forward	11	9.2	11	10.3	+1.1
Number memory reversed	7	6.0	9	7.6	+1.6
Word memory	11	7.7	11	8.6	+0.11
Sentence memory	7	5.7	11	8.6	+2.11
Complex Processes					
Auditory comprehension	12	9.10	13	11.2	+1.4
Auditory reasoning	10	7.4	13	10.3	+2.11

COMPOSITE SCORES FROM TAPS-3

Tests	PRE- Standard Scores	POST- Standard Scores
Phonologic	95	114
Memory	95	103
Cohesion	105	115
Overall	97	109

WOODCOCK READING MASTERY

Test Name	PRE- Pre-Test in Years	SS	POST- Post-Test in Years	SS	Change in Years
Visual-Auditory Learning	5.5	73	7.3	96	+1.10
Letter Identification	7.1	98	7.4	94	+0.3
Word Identification	7.8	110	8.6	109	+0.10
Word Attack	7.7	106	9.3	115	+1.8
Word Comprehension	7.10	109	8.11	114	+1.1
Passage Comprehension	8.10	118	9.7	116	+0.9

GRAY ORAL READING TESTS

| Test | PRE | | - POST | | |
	Std Score	Age Equiv	Std Score	Age Equiv	Change in yrs.
Rate	9	6.3	12	8.3	+2.0
Accuracy	8	6.6	11	8.3	+1.9
Fluency	8	6.6	11	8.0	+1.6
Comprehension	12	8.0	13	9.0	+1.0

RQ's Oral Reading Quotient, as measured by the GORT, moved from 100- in the 50th percentile ranking to 112- in the 79th percentile ranking.

Questions/Follow-up Recommendations

It was recommended that RQ continue reading therapy to focus his encoding skills, which he continues to struggle with. As well, even though RQ is now a good reader, he tires very quickly when he reads. Therefore, in addition to continuing with daily listening using his TLP Bone Conduction System, it was recommended that he begin the Path To Reading therapy to address the remaining deficit with visual closure, which we believe may be at the root of the reading stamina issue.

Discussion

RQ, his parents, and his teacher are all extremely pleased with the results of his remediation. His latest report card was all A's and B's, with an A+ in Reading! As well, his parents said their quiet little boy with the soft voice that could barely be heard, will now not stop talking! He is using complete sentences when he speaks, he is able to organize his thoughts and give detailed descriptions of his day. These were not mentioned as concerns when RQ first came to see us because his parents had just accepted their little guy exactly the way he was. However, they are now overjoyed to hear him tell a story from begin to end and even using humor!