Tier III Assessments, Data-Based Decision Making, and Interventions

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Within the Response-to-Intervention framework, students who fail to profit from high-quality general education instruction, accommodations, and supplemental instruction progress to a more intensive intervention program, sometimes referred to as "Tier III." This article describes a problem-solving approach to designing such intensive, data-based, and scientifically supported interventions for students with pervasive reading problems who have failed to respond to less rigorous services. The application of well-established (i.e., progress monitoring) and emerging methods (i.e., brief experimental analysis) for optimizing interventions are described. Two case studies are provided to illustrate how these techniques may be combined to implement Tier III interventions.

Over the past 15 years, the way in which students with learning disabilities (LD) are identified and served has received considerable scrutiny, resulting in a movement away from a traditional, psychometrically driven IQ/achievement discrepancy model toward one focused on intervention and measurable outcomes – termed Response-to-Intervention (RtI). The reauthorization of IDEA in 2004 codified this shift by requiring state educational agencies (SEA) to consider and even support local educational agencies (LEA) in their use of RtI-based eligibility criteria. At the same time, SEAs were also prohibited from requiring LEAs to use IQ/achievement discrepancy criterion in determining LD eligibility (Fuchs & Fuchs, 2006; Kame'enui, 2007).

Two major axioms of RtI are (a) learning difficulties are not inherently due to child deficits and (b) most students will experience significant educational gains from targeted, empirically based, and closely monitored interventions (Torgesen, 2007). For many students RtI represents an opportunity to avoid or exit the cycle of failure. For a few, namely those who fail to respond to sustained, empirically validated interventions implemented with fidelity, RtI results in continued individualized intervention offered by special education programs to students with learning disabilities (Gresham, 2001). Many researchers and policy makers, such as the National Reading Panel (National Institute of Child Health and Human Development, 2000), National Joint Committee on Learning Disabilities (2005), and President's Commission on Excellence in Special Education (2002), suggest that a shift to RtI instructional and diagnostic practices is preferable to former practices because students who underperform will be identified and serviced earlier, before underachievement becomes entrenched; students will qualify for the intense, individualized support of special education based on their need for that support rather than arbitrary test scores; and the assessment and intervention processes that lead to LD qualification will inform subsequent educational programming decisions.

In practice, RtI has a number of distinguishing components, including (a) universal screening to identify students at-risk for learning difficulties early, (b) progress monitoring of students' response to interventions, (c) scientifically based multi-tiered interventions to ensure intervention intensity is proportional to individual students' learning needs, and (d) problem-solving to select and improve interventions (Fuchs & Fuchs, 2006). Most students make adequate progress when provided high-quality classroom instruction (i.e., Tier I). Those who do not, receive increasingly intense and targeted interventions (i.e., Tier II) until they either make adequate improvement or are referred for special education services (i.e., Tier III). When less resource-intensive interventions such as those provided in classrooms and small groups are unsuccessful, the student progresses to "Tier III" interventions, which are more individual-

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ized, frequent, and intensive and may be provided by professionals with greater expertise (Gersten et al., 2008). In some service delivery models, Tier III represents a last push to improve academic performance before qualifying the student for special education services; however, in other models Tier III is special education (Vaughn, 2006). Regardless of the model, the purpose is to provide students with some intervention that is evidence-based and more individualized from those previously attempted.

Researchers have begun to identify assessment and intervention approaches for these so called "non-responders." For example, brief experimental analysis (BEA) has received considerable attention in school psychology literature lately because of its potential to quickly identify the most effective intervention from among a pre-set number of interventions for an individual child (Burns & Wagner, 2008). BEA examines whether a student's underachievement is due to a skill or performance deficit and involves testing a number of interventions in a short period of time to determine which method(s) best improves academic performance. The interventions all target one sub-skill and are designed to either increase academic performance by offering a reward for achieving an increased performance goal (motivation), directly teaching the skill (skill acquisition), or providing an opportunity to practice the skill (skill fluency). The intervention method in which there is the greatest improvement in academic performance may identify both the cause of underachievement and the best way to raise performance to grade level standards. Furthermore, BEA individually administered interventions appear to generalize to effective classroom-based interventions (Duhon et al, 2004).

Continuous data collection in order to modify interventions to maximize student progress has is associated with improved academic performance (Stecker, Fuchs, & Fuchs, 2005). In addition, one-on-one targeted instruction may be necessary to produce the frequent and accurate response rate associated with improved results among struggling learners (McMasters, Fuchs, Fuchs, & Compton, 2005). The purpose of this article is to present how these advancements in assessment and intervention can be integrated and applied to assisting students with pervasive reading problems. Two case studies, which are composites of actual intervention cases, will be used to illustrate the practical application of these strategies to providing Tier III interventions.

SETTING AND PARTICIPANTS

The assessment and intervention practices described in this article are based on the services provided by school psychology graduate students in a university clinic while under the direct supervision of a faculty member. Faculty observe the academic assessment and intervention sessions through one-way mirrors, assist by listening devices, and provide continual consultation to ensure scientifically based assessment and intervention practices are employed. Students are referred to the clinic by their parents and accepted for treatment based on a history of underachievement. Approximately half of the students are identified by their school districts as having a learning disability (LD) and all students exhibit at least a two year delay in one or more content areas. Teacher reports indicate most had received some type of intervention prior to being referred to the clinic. Academic difficulties in the areas of reading, writing, and/or math are targeted within this clinic; however, for the purpose of this article, students with academic concerns in the area of reading will remain the focus. The students meet individually with the clinician (i.e., graduate student) for one hour, twice a week for eight weeks. Assessments are conducted during the first two weeks and interventions are implemented during the remaining six weeks. At the end of the treatment, the clinicians meet with the students and their parents to review the results.

Problem Solving

Based on the work of Bergan and Kratochwill (as cited in Shapiro, 2004), problem solving is an iterative process in which interventions are selected based on individual need and the results of the interventions are considered in developing subsequent interventions. Problem solving consists of the following steps: (a) *problem identification:* student achievement deficits are operationalized in terms of discrepancy from benchmark , standard or norm group, (b) *problem analysis:* various hypotheses about why the student has the deficit are generated, (c) *intervention development and implementation:* a treatment plan is developed and implemented based on the hypothesized causes of the deficits and sci-

entific research on intervention effectiveness, and (d) *intervention evaluation:* fidelity of treatment (i.e., whether the treatment plan was implemented as designed) and intervention effectiveness are evaluated to determine whether to continue, modify, or discontinue the intervention. Continuous progress monitoring prior to (i.e., baseline) and throughout the intervention is critical to maximizing the impact of the intervention (Stecker et al., 2005). Problem solving has been found to improve the effectiveness of student study teams (also known as building assistance teams and pre-referral evaluation teams; Kovaleski, Gickling, Morrow, & Swank, 1999; Rosenfield & Gravois, 1996). Problem solving at Tier III to guide one-on-one instruction can be highly effective because student progress is closely monitored, interventions are highly responsive to student learning, and students have a high number of learning trials, which can lead to rapid mastery of skills. For these reasons, problem solving guided the advanced academic assessment and intervention services provided to the students who sought the services of the clinic.

Problem Identification

The clinicians first identified their students' content area or skill-set in greatest need of intervention by reviewing their application (i.e., report card, statewide assessment results, teacher checklist, etc.) and interviewing the student and his/her parent. The Woodcock-Johnson 3rd Edition (WJ-III) (Woodcock, Mather, & McGrew, 2001), an individually administered norm-referenced standardized test of achievement[1], was administered to confirm that the appropriate skill was targeted for intervention. Oral Reading Fluency[2] (ORF), as measured by a reading Curriculum -Based Measurement (CBM), was assessed in each case to establish the child's current level of functioning, identify an intervention goal based on expected rates of growth and pre-established benchmarks, and monitor the child's progress toward the intervention goal. There is considerable evidence that CBM-Reading provides reliable, valid, and sensitive data for making instructional decisions (Fuchs & Fuchs, 1999). Furthermore, instructional placement standards and goal setting guidelines necessary for establishing intervention goals exist for ORF (Shapiro, 2004).

As presented in Table 1, both students profiled had the greatest area of need in reading. A Survey Level Assessment (SLA) of ORF consisting of administering a grade-level CBM probe and subsequent lower grade-level probes until the student met the benchmark for the grade level of the probe, was administered to identify each student's current reading instructional level. Common ORF benchmarks suggested by Fuchs and Deno are: 40 – 60 words correct per minute (WCPM) for 1st and 2nd grade text, 70 – 100 WCPM for 3rd through 6th grade text, and > 120 WCPM for 7th grade text and greater (as cited in Shapiro, 2004).

Thomas, a 9th grade student who receives special education services for a learning disability, met the minimum benchmark for 4th grade material. Thus, 4th grade reading material is not overly frustrating for him but there is ample room for improvement in his ability to fluently read 4th grade material. Britney, who is repeating 3rd grade, easily passed the 2nd grade benchmark but did not meet the 4th grade benchmark; therefore, 3rd grade material will be used to monitor the effects of her intervention. Identifying students' instructional level is critical to designing effective interventions because if the text is too difficult the student will become frustrated from a lack of success, may potentially rehearse errors, and will certainly have a lower and less accurate response rate compared to reading text appropriately matched to his skills. Similarly, providing direct instruction on text that is too easy will produce minimal benefits due to a limited capacity for growth (i.e., ceiling effect) and lack of opportunity to benefit from corrective feedback.

[1]The Woodcock-Johnson Test of Achievement 3rd Edition (WJ-III) was administered during the first three sessions to identify intra-individual areas of strength and weakness and to compare the student's performance to a norm-group. In most cases, the value added by these data is limited because similar information may be gleaned from past performance on annual state tests. However, administering the test provided a non-intervention activity to engage in during the first three sessions while baseline data were collected. It is much easier to arrange short sessions to collect base-line data and lengthen the sessions once the intervention is added in a school-based application of a Tier 3 intervention.

[2]ORF probes are available at Dibels.uoregon.edu and Aimesweb.edformation.com

To ensure the Survey Level Assessment adequately measured each child's ORF skills, three probes on three separate days, for a total of nine probes, were administered to each child. The median of each group of three probes was identified, and the median of these three scores was used as the baseline (see Table 1; Good, Simmons, & Kame'enui, 2001). Ideally, baseline data should be collected until they are stable in order to infer changes in the data are due to the intervention and not some pre-existing trend toward improvement; however, most educators and clinicians do not wish to delay intervention long enough to follow this procedure, so it is common practice to collect three data points per day, over the course of three different days to determine a baseline (Shinn, 2002). In the clinic setting, these data points were collected over three separate days spanning a two-week period; however, in a school setting where educators have more frequent access to students, it is possible to obtain a baseline over three consecutive days.

To identify the intervention goals, the guidelines offered by Fuchs, Fuchs, Hamlett, Walz and German (1993) for setting ambitious goals were applied. Accordingly, Thomas' ORF should increase by 1.1 WCPM per week to achieve a post-intervention goal of 78 WCPM (7 WCPM increase from the 71 WCPM baseline). An intervention goal of 61 WCPM was set for Britney based on a baseline score of 52WCPM and an expect growth rate of 1.5 WCPM per week.

Table 1. *Problem Identification Data*

	Thomas	Britney
Demographic Data	Age 14, 9th grade, identified as having a learning disability, receives special education services.	Age 9, 3rd grade, general education, repeating 3rd grade.
WJ-III SS between 85 and 115 are average o Broad Reading o Broad Math o Broad Writing	o 54 SS o 85 SS o 70 SS	o 82 SS o 87 SS o 109 SS
Oral Reading Fluency (ORF); WCPM = words correct per minute	9th Grade Probe: 64 WCPM 8th Grade Probe: 61 WCPM 7th Grade Probe: 60 WCPM 6th Grade Probe: 64 WCPM 5th Grade Probe: 68 WCPM 4th Grade Probe: 70 WCPM	4th Grade Probe: 42 WCPM 3rd Grade Probe: 40 WCPM 2nd Grade Probe: 54 WCPM
Instructional Level	Fourth Grade	Third Grade
Baseline	71 WCPM	52 WCPM
Goal	78 WCPM	61 WCPM

Problem Analysis

Functional assessment of academic behavior (FAAB). Semi-structured parent and student interviews contained in the FAAB were used to collect information on each student's learning ecology, including past and present achievement, motivation, opportunity to learn at home and at school, and home-school communication (Ysseldyke & Christenson, 2002). This information is useful for understanding how long the student has struggled with reading and some possible ecologically based interventions. The FAAB confirmed that the main concern for Thomas was his reading. Thomas reported that he had struggled with reading his whole life, and he tried to avoid reading when he could. His mother reported that he did very little reading at home. She described Thomas as a very motivated and positive student, noting she often received notes from school indicating Thomas was excelling in their citizenship program.

Both Thomas and his mother attended Thomas's last Individualized Education Program (IEP) meeting; however, they were unable to describe the nature of Thomas's disability and the type of interventions and accommodations he was provided. When utilizing the FAAB with Britney, her mother reported that Britney's main concern was reading, because she was retained in 3rd grade for failing to pass the local school district's reading assessment. Her mother also reported that Britney often did not know how to do her homework and made a lot of mistakes. Britney's mother indicated it was hard for her to help her daughter, because she did not always understand the assignment since English is her second language. She reported that she had very little contact with Britney's teacher. Britney reported that she liked school, particularly math, and she knew how to get help on her class work as needed.

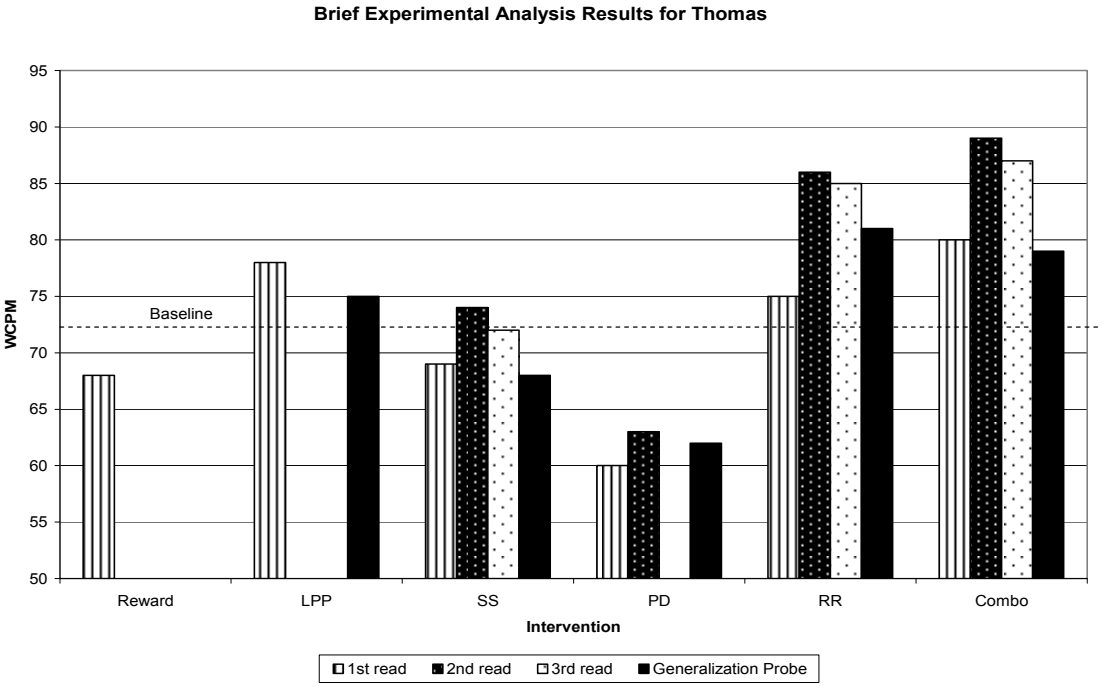
Error analysis. An error analysis of the students' responses to the WJ-III reading subtests and ORF probes was conducted by examining patterns of additions, omissions, and substitutions. An analysis of Thomas' errors indicated that he frequently left off the ending of verbs, occasionally skipped entire words and phrases without noticing, and misread content vocabulary (e.g., photosynthesis, chlorophyll). Britney was observed to read most consonant-vowel-consonant (CVC) words accurately but to have difficulty decoding longer, multi-syllable words. She also misread some high frequency words (e.g., their, said, one), read through punctuation, and lost her place easily if not tracking with her finger.

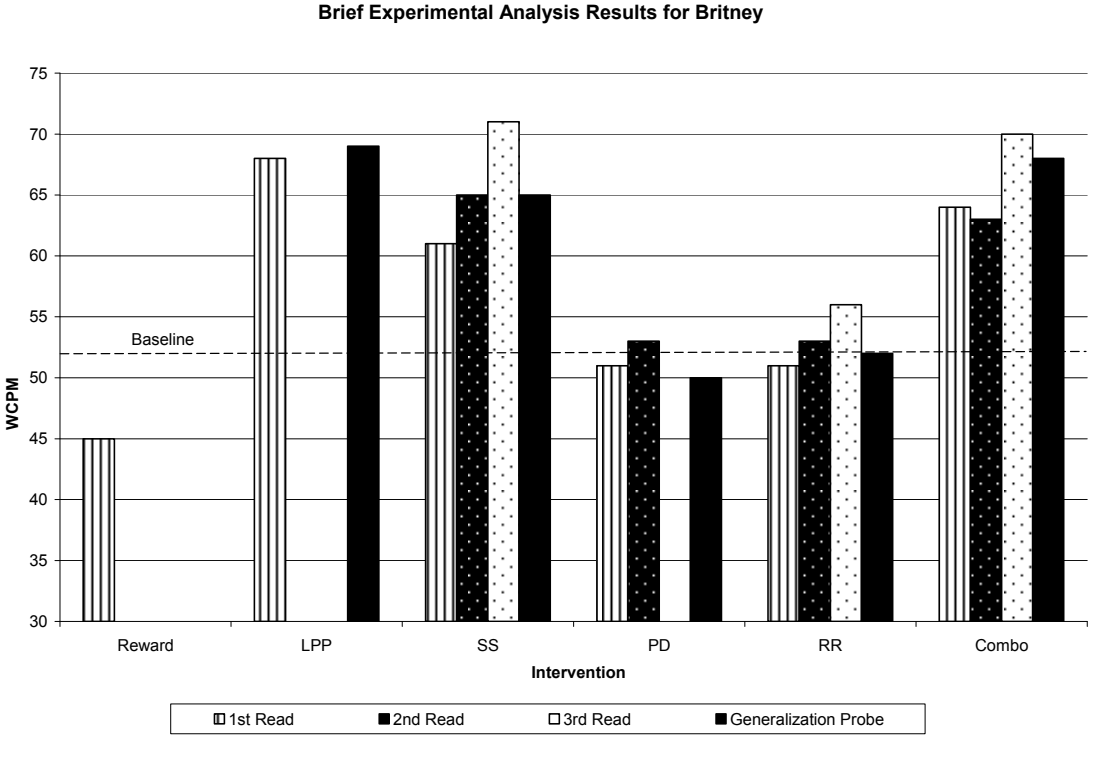
Table 2. *Problem Analysis Data*

Assessment	Thomas	Britney
Functional Assessment of Academic Behavior (FAAB) - Parent & Child Report	The main concern is reading; he has struggled with reading his whole life; he tries to avoid reading and does very little reading at home; he is a motivated and positive student; and his mother reported that his teachers keep her informed.	The main concern is reading; she was retained in 3rd grade because she didn't pass the reading benchmark; her mother also reported Britney often does not know how to do her homework and makes a lot of mistakes.
Error Analysis	Frequently leaves off the ending of verbs, skips words and phrases while reading, misreads content vocabulary (photosynthesis, chlorophyll), slowly decodes compound words.	Over-relies on alphabetic-principle to decode, difficulty blending, misses some high frequency sight words, loses place easily if not tracking with finger.

Brief experimental analysis of behavior (BEA). Next, the clinicians conducted a BEA in order to identify the type of intervention likely to produce the best results. In BEA, a single subject design is employed to observe the student's response to various interventions (Daly, Andersen, Gortmaker, & Turner, 2006). For example, to determine whether oral reading fluency can be improved by employing motivational strategies, the clinician offers the student a highly desirable reward if she improves upon her last ORF rate by 30%. If the student's performance is improved in this condition, the clinician may conclude that underachievement is due to lack of motivation rather than a skill deficit and subsequent interventions would focus on increasing the student's motivation to read. By comparing Britney's and Thomas' performance in the 'reward' condition to their baseline, one can conclude that offering incentives to increase their motivation to read was not effective (see Figure 1); therefore, their reading problems were likely due to a skill rather than motivation deficit. Subsequent analyses focused on determining whether modeling, corrective feedback, or practice lead to improved oral reading fluency rates (Daly, Witt, Marten, & Dool, 1997).

Figure 1. *Results of brief experimental analysis for Thomas and Britney*





Based on the work of Daly et al. (2006), four interventions for reading skill deficits were attempted independently and then in one combination, with each student. To examine the effects of modeling on the children's ORF, listening passage preview (LPP) was attempted. In LPP, the clinician reads a passage aloud while monitoring that the student follows along with her finger. Next, the student reads the same instructional passage aloud. Both Britney and Thomas read more fluently compared to their baseline performance after the passage had been read aloud to them (see Figure 1). In order to assess whether they generalized the knowledge they gain through LPP, they read a novel probe which contained many of the same words as the instructional probe (i.e., high word overlap). Britney's performance on the generalization probe remained much better than her baseline performance suggesting that she not only learned to read the instructional probe more accurately after hearing it read aloud, but she was able to generalize the knowledge. Thomas, however, did not perform as well on the generalization probe compared to his baseline performance suggesting he might profit more from some other type of intervention.

The next two interventions, syllable segmentation (SS) and phrase drill (PD), provide corrective feedback and accurate practice to increase ORF. SS involves providing corrective feedback and direct instruction in alphabetic principle (i.e., letter-sound correspondence and blending). The student reads an instructional passage twice while the clinician notes errors (misread or omitted words). The clinician then provides direct instruction on decoding each syllable of the error word. The student practices reading each syllable and blending the syllables to form the word. After receiving error correction on each misread word, the student re-reads the entire passage. Britney made dramatic improvement over her baseline performance in this condition, and she maintained this improvement on the generalization probe. Thomas' reading, however, did not appear to be improved much by SS.

Phase Drill (PD) combines corrective feedback and practice to improve ORF. In this condition, the student reads the entire passage while the clinician identifies any error words. Next, the clinician reads the first misread word aloud and then prompts the student to read the word aloud in isolation. If he pronounces it correctly, he reads the entire phrase or sentence containing the error word three times. After this process is completed for each misread word, the student reads the entire instructional passage and the generalization passage. Neither Thomas' nor Britney's ORF increased much past baseline in this condition, which suggests that PD is not a very effective intervention for these two students.

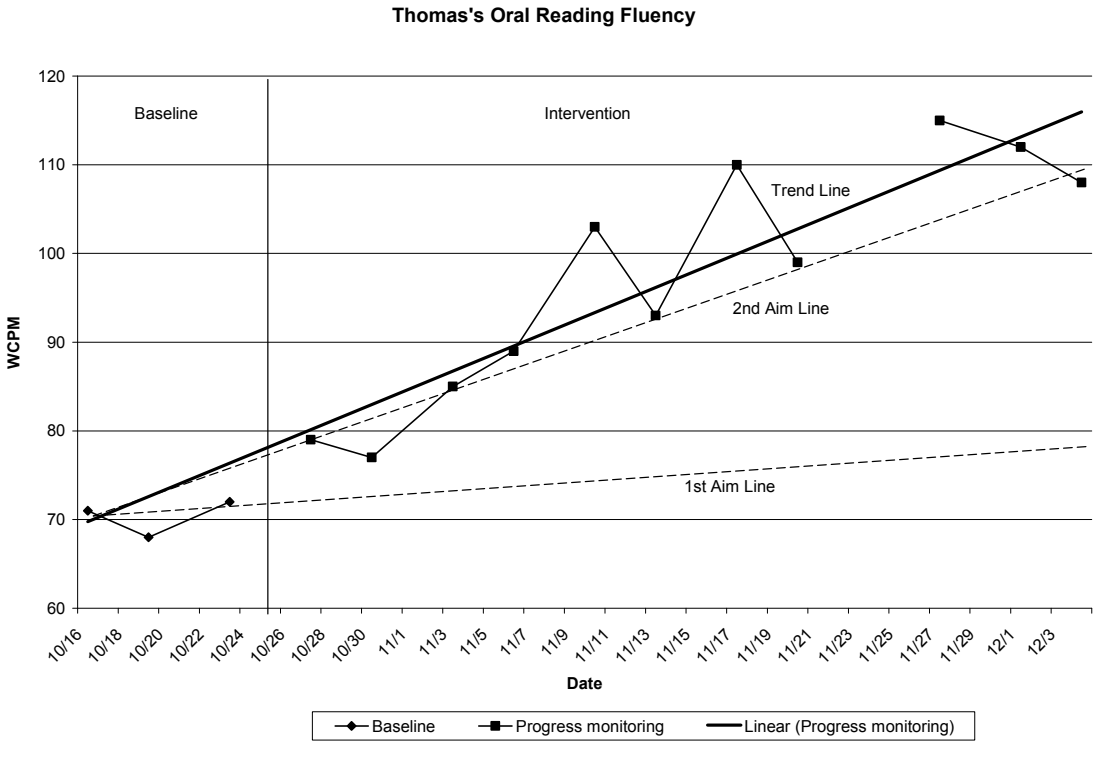
Another intervention, Repeated Reading (RR), involves having a student read a passage three times and providing feedback about her fluency after each read. Students like Thomas benefit from the multiple opportunities to respond as his performance on both the third read of the instructional probe and the generalization probe (which is read only once) was much improved over baseline. Britney did not seem to benefit from RR probably because she repeated many of her errors.

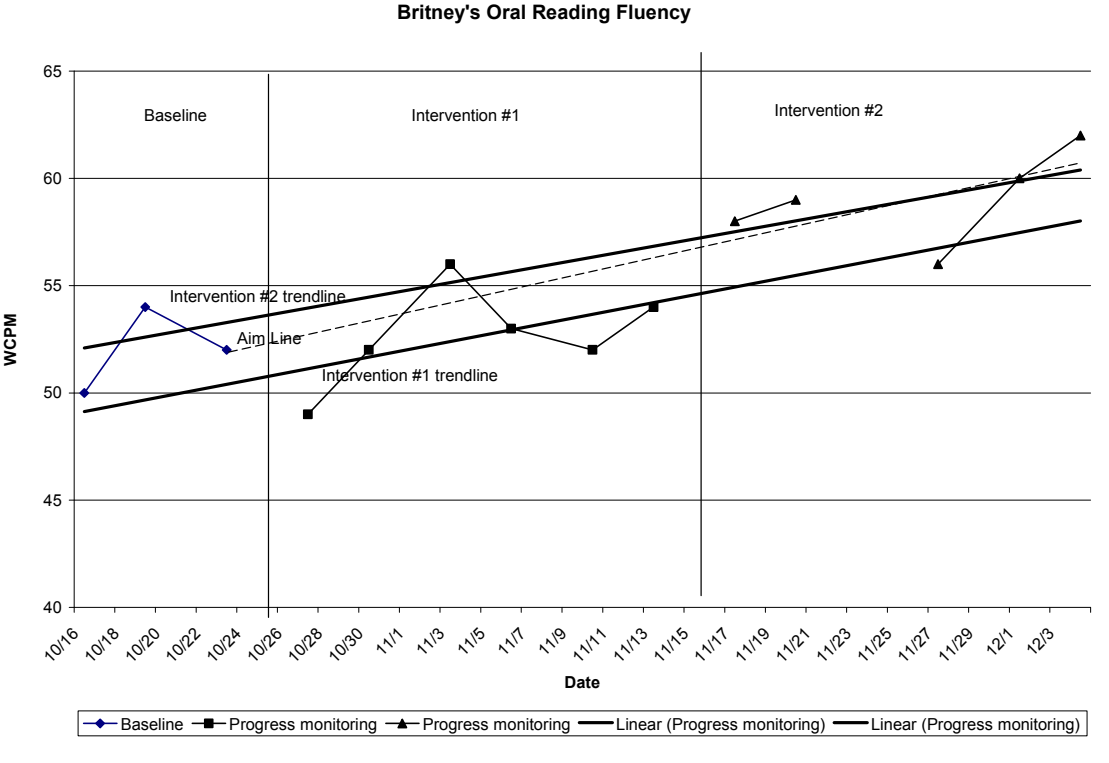
The final intervention investigated in BEA is a combination of the two most effective conditions for each student to determine if two interventions are better than one. Accordingly, Britney received a brief intervention based on combining LPP with SS and Thomas received a brief intervention based on combining LPP with RR. Both students ORF was much greater than their baseline ORF in the combination condition, and Thomas' was even greater than his performance in the most effective single intervention condition (i.e., LPP).

Intervention Development and Implementation

Individualized interventions based on direct assessment of each student's reading skills were developed. For Thomas, the results of the BEA, error analysis, and the FAAB suggest he would profit from more practice in reading. Therefore, a portion of the intervention was devoted to Guided Repeated Oral Reading of text at his instructional level (4th grade) to improve his fluency and accuracy. The effectiveness of guided oral reading is well established (National Reading Panel, 2000) and repeated reading with corrective feedback appears to be one of the most effective types of guided oral reading (Otaiba & Rivera, 2006). Thus, Thomas repeatedly read a 4th grade passage until he met the pre-established criterion of 95 WCPM. When Thomas made an error (such as dropping the suffix of a word, substituting a word, or omitting a word) the clinician tapped her pencil, which signaled Thomas to re-read the word. If Thomas failed to read the word correctly, the examiner provided the word. The error analysis indicated

Figure 2. *Progress monitoring data for Thomas and Britney*





his content vocabulary may have been underdeveloped. Accordingly, the examiner pre-viewed vocabulary and modeled reading passages from Thomas' science and social studies textbooks prior to Thomas reading the passage (i.e., Listening Passage Preview). A list of misread words was created and Thomas and the clinician defined each word using a dictionary, examined the Greek and Latin roots to the words (when applicable), and wrote sentences containing the words (Bromely, 2007). Thomas then entered each word onto a page in his vocabulary notebook, which included listing synonyms and antonyms, writing a paragraph that contained the word at least twice, and drawing a picture to represent the word (Bromely, 2007). Words selected at random from his vocabulary notebook were written on flashcards and reviewed throughout the intervention. Finally, Thomas and his mother, in consultation with the clinician, established a household rule that Thomas would read 35 minutes every day before watching television or playing videogames. In addition, Thomas was involved in charting his ORF data, which encouraged him to consider his progress toward the intervention goal.

Britney's difficulty decoding multi-syllable words and favorable response to the BEA Syllable Segmentation interventions suggest she would benefit from direct instruction on reading the parts of the multi-syllable word and then blending the parts to read the whole word (Bursuck & Damer, 2007). Britney read a list of multi-syllable words from a third grade text by segmenting the parts (i.e., 'im-ple-ment') and then blending the parts to read the whole word. If she made an error on a part, she was instructed to say the sounds of each letter in the part (i.e., /m/ /e/ /n/ /t/) and then re-read each part and finally read the whole word. Once she read the list three times with no errors, she read the passage that contained the words. The Fold-in Technique was employed to improve Britney's sight word vocabulary. This technique provides "a high level of repetition with guaranteed success" (Shapiro, 2004, p. 203) by drilling the student on seven "known" and three "unknown" sight words. Britney is bilingual, speaking primarily Spanish at home and English at school, so the clinician confirmed that Britney knew the definition of each word before adding it to the fold. In addition, Britney's mother was encouraged to read to Britney in Spanish at home on a nightly basis because many literacy skills developed in one language transfer to another (Goldenberg, 2008). Finally, Britney was directed to use a mask when reading which involves covering the text she had previously read in order to focus her gaze as she read.

Intervention Evaluation

Faculty observations of the graduate student clinicians followed by consultation sessions ensured high fidelity to the intervention plans. The parents were also asked to complete a reading log with their children to determine how often the home interventions were implemented in order to increase accountability all around.

Thomas responded very favorably to the intervention. His reading log indicated he spent at least 20 minutes per day pre-viewing and reading his text books. He reported that his general education science and social studies grades had improved from pre-viewing the text and vocabulary. Thomas also began to enjoy quiet reading time at home. Finally, Thomas' performance on three ORF probes (the median of which are graphed in Figure 2) administered at the end of each session indicated dramatic improvement. By the second week of the intervention, it became apparent that Thomas would exceed the intervention goal so a more ambitious goal was set. By the end of the six-week intervention, Thomas had made remarkable gains in ORF. The trend line trajectory indicates his ORF of 4th grade passages increased by 44 WCPM. A Survey Level Assessment found sixth grade material to be within his instructional range. Finally, Thomas correctly matched 22 vocabulary words (selected at random from his vocabulary notebook) to their definitions on a five-minute probe (Espin, Shin, & Busch, 2005).

By the third week, it was apparent that Britney would not meet her intervention goal unless the intervention was modified. Based on a review of the data collected in the problem analysis phase, observations, interviews, and error analysis conducted during the first three weeks of the intervention phase, the following modifications were made: (a) discontinued the mask as it appeared to be more of a distraction than an asset; (b) added Listening Passage Preview (LPP) of 3rd grade high-interest story books; (c) provided direct instruction on prefixes and suffixes; (d) taught Britney to recognize cognates (i.e., words that are similar in English and Spanish such as "telephone' and 'teléfono') to encourage transfer of her

literacy skills across her two languages; and (e) loaned Spanish "We Both Read" shared reading books (published by Treasure Bay) to Britney's mother to read at home after she had reported uncertainty about how to promote her daughter's literacy skills. The data graphed in Figure 2 clearly indicate the revised intervention produced better results.

Since each intervention plan consisted of a number of different scientifically based interventions selected for their likelihood of success based on BEA, FAAB, and error analysis data bundled together, it is impossible to discern which intervention or combination of interventions caused the positive responses; however, improving the trajectories of struggling readers is more important than identifying which intervention is most effective, especially considering that what is effective in one time and place with a particular student may not be effective at a later time or different place. What is critically important is that students' responses are monitored using formative assessments in order to make mid-course corrections if the intervention is failing to produce the desired outcome. Students who require Tier III interventions have little time to lose on ineffectual interventions because reading problems persist and tend to become more severe with the passage of time (Good, Simmons, & Smith, 1998).

APPLICATION TO SCHOOL SETTING

How can clinical training in Tier III assessments and intervention apply to psychologists working in schools? In our work, we have found it takes considerable effort and determination to carry these activities into professional school-based practices. Certain limitations and adjustments need to be addressed, including the availability of resources, the need for informed parent consent, and fidelity of treatment.

A relevant issue in implementing a three-tiered model successfully is the availability of resources in schools. Considering the case studies presented in this article focused on one clinician working with one student at a time, it is necessary to address whether it is possible to replicate a similar student to practitioner ratio within a school setting. Successful implementation is more a matter of utilizing available resources efficiently and appropriately, rather than attempting to acquire additional resources. Tier I requires high-quality instruction within the general education curriculum, not requiring any additional supports in the form of educators, materials, or time. Students who do not make adequate progress within the general curriculum receive additional academic support in Tier II. The critical components of Tier II include identifying these students who require more targeted interventions and implementing these interventions within small groups. To make this process as efficient as possible within the classroom, Tier II interventions can include small groups targeting specific skill deficits matched to each of the five main areas of reading instruction (phonemic awareness, alphabetic principle, fluency with text, vocabulary, and comprehension) identified by the National Reading Panel (2000; Burns & Coolong-Chaffin, 2006). Each teacher can be matched up with one group of students focusing on one of these five areas, allowing for highly focused interventions and grouping across grades (Burns & Coolong-Chaffin, 2006).

With a system such as this put into place, resources are maximally utilized and all students receive differentiated instruction matched to their needs. It also allows for school psychologists, reading specialists, and resource specialists, as well as other support staff, to be available for both consultation throughout the first two tiers and implementation of individualized instruction for those students now in Tier III who did not make adequate progress in Tiers I and II. The case studies presented in this article employ individualized interventions implemented in a one-on-one setting. Tier III can include this type of one-on-one support or small groups (i.e., two or three students) which employ the same strategies described throughout this article.

In regard to treatment fidelity, clinicians in these two case studies were under direct supervision by a faculty member who ensured that intervention practices were employed the way they were intended. In a school setting, such practices may include having a consultant observe the intervention and provide performance feedback or developing a checklist the interventionist completes after each session. In schools, it is important to utilize all available teachers, specialists, and other support staff in implementing and monitoring interventions; therefore, it may be most beneficial and time efficient for interventionists to complete a self-monitoring tool assessing intervention integrity specific to the components included in the intervention plan. In order to evaluate integrity, the components of the intervention must be opera-

tionally defined and then a checklist or rating scale including those components can be developed (Roach & Elliot, 2008). Intervention integrity monitoring tools may provide practitioners the opportunity to address both interventionists' difficulties and successes in implementation, and lead to more meaningful intervention plans (Roach & Elliot, 2008).

Not all of the services provided by school psychologists require informed parent consent. According to the National Association of School Psychologists (2010), parent consent is not required for "a school-based school psychologist to review a student's educational records, conduct classroom observations, assist in within-classroom interventions and progress monitoring, or to participate in educational screenings conducted as part of a regular program of instruction" (p. 4). Parent consent is required, however, if the consultation about a particular student is likely to be extensive and ongoing (NASP, 2010). Depending on LEA guidelines, an assessment plan signed by a parent or guardian with educational rights may or may not be required to move through Tier III. If there is a suspected disability and intervention data will be used to make a special education eligibility decision, then it is necessary to get informed parent consent (i.e., signed assessment plan). If students are receiving differentiated instruction and individualized interventions as a part of their regular program of instruction within the curriculum, informed parent consent may not be necessary. It should be noted, however, that a signed assessment plan is required when administering an individually administered, norm-referenced, standardized assessment, such as the WJ-III, demonstrated in the case studies.

CONCLUSION

The dawning of RtI does not eliminate the need for professionals with expertise in reading delays and learning disabilities; rather, it presents an opportunity for retooling by adopting some of the promising assessment and intervention methodologies that have emerged in the past decade. Many of the activities required in a data-driven system such as RtI are already in a school psychologist's skill-set (i.e., assessment, consultation, data analysis, and intervention design), making for a very natural shift in their roles in schools (Allison & Upah, 2006). There remains considerable debate about whether tests of processing and cognition, essential to traditional refer-test-diagnosis practices, produce information that enhances students' learning outcomes (Flanagan, Ortiz, & Alfonso, 2008; Gresham, Restori, & Cook, 2008). Parents often want to know why their child is struggling to learn to read when the skill comes more easily to other children. One day science may provide these answers but until then, clinicians and specialists who collect data to design and evaluate interventions and provide high-quality services proportional to student need are providing the utmost scientifically based practices.

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