The purpose of this study was to examine the efficacy of utilizing the brief assessment model to guide the selection of intervention strategies that would be expected to produce gains in the generalization of students’ reading ability. This study also examined the reliability of the brief assessment model and the social validity of using the model within the school environment. A brief assessment was conducted with each participant during the fall of the school year to determine the most effective instructional strategy. That strategy was then implemented as an intervention. Another brief assessment was conducted in the spring and the results were compared with the fall brief assessment. The instructional strategies identified in the fall were replicated in spring in 3 of the 4 participants. The generalization effects of the identified instructional strategy were monitored. Significant generalized gains in oral reading fluency were observed in 3 of the 4 participants.
Reliability of the
Brief Assessment Model

A Thesis
Submitted to the
Faculty of Miami University
in partial fulfillment of
the requirements for the degree of
Specialist in Education
in School Psychology
Department of Educational Psychology
by
Jamie D. Williamson
Miami University
Oxford, Ohio
2004

Advisor: ______________________________________
Katherine F. Wickstrom

Reader: _____________________________________
Doris Bergen

Reader: _________________________________
Lawrence Sherman

Reader: _________________________________
Richard Hofmann
Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>List of Tables</td>
<td>iii</td>
</tr>
<tr>
<td>List of Figures</td>
<td>iv</td>
</tr>
<tr>
<td>Dedication</td>
<td>v</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>vi</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Review of Literature</td>
<td>2</td>
</tr>
<tr>
<td>Method/Materials</td>
<td>7</td>
</tr>
<tr>
<td>Results</td>
<td>14</td>
</tr>
<tr>
<td>Discussion</td>
<td>18</td>
</tr>
<tr>
<td>References</td>
<td>22</td>
</tr>
<tr>
<td>Appendix A</td>
<td>33</td>
</tr>
<tr>
<td>Appendix B</td>
<td>35</td>
</tr>
<tr>
<td>Appendix C</td>
<td>36</td>
</tr>
<tr>
<td>Appendix D</td>
<td>37</td>
</tr>
<tr>
<td>Appendix E</td>
<td>38</td>
</tr>
<tr>
<td>Appendix F</td>
<td>39</td>
</tr>
<tr>
<td>Appendix G</td>
<td>40</td>
</tr>
<tr>
<td>Appendix H</td>
<td>41</td>
</tr>
<tr>
<td>Appendix I</td>
<td>42</td>
</tr>
</tbody>
</table>
List of Tables

Table 1 - *Mean Differences Between Baseline and Intervention*  
Table 2 - *Percent Differences Between Baseline and Intervention*  
Table 3 - *Percentage of Non-Overlapping Data Points*  

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><em>Mean Differences Between Baseline and Intervention</em></td>
<td>30</td>
</tr>
<tr>
<td>2</td>
<td><em>Percent Differences Between Baseline and Intervention</em></td>
<td>31</td>
</tr>
<tr>
<td>3</td>
<td><em>Percentage of Non-Overlapping Data Points</em></td>
<td>32</td>
</tr>
</tbody>
</table>
List of Figures

Figure 1.1- Chris-Brief Assessment
Figure 1.2- Chris-Extended Analysis
Figure 2.1- Katie-Brief Assessment
Figure 2.2- Katie-Extended Analysis
Figure 3.1- Joe-Brief Assessment
Figure 3.2- Joe-Extended Analysis
Figure 4.1- Maddy-Brief Assessment
Figure 4.2- Maddy-Extended Analysis
Dedication

This work is dedicated to my patient and loving wife, Krista, for believing in me with unwavering faith, and to my advisor, Katherine Wickstrom, for pushing me when I needed to be pushed.
Acknowledgements

I would like to acknowledge the outstanding contributions from my cohort, especially Anne McDonald, Margo Gehring, Casey Swann-Jones, and Sheila Overmyer, and my research assistant, Gretchen Strong, for helping me pull this project together.
Introduction

According to the 2001 23rd Annual Report to Congress on the Implementation of the Education of the Handicapped Act, the percentage of students receiving special services for a specific learning disability has risen from 2.3% in 1978 to 50% in 2001, which represents 2.9 million of the 5.8 million students currently receiving special education services in this country. In contrast, the percentage of students receiving special services across other education categories has remained relatively stable. Within this population of academic referrals for specific learning disabilities, it is estimated that 80% of the students have a reading disability (Lerner, 1993). Given this information, it is imperative that school psychologists seek out more effective methods for assessing and intervening with these concerns.

Traditionally the role of school psychologist has been limited to testing and assessment for special education eligibility with a particular focus on IQ and achievement discrepancies, in regards to learning disabilities. However, assessment procedures that only focus on the identification of learning disabilities often leave practitioners with little to no information on how to intervene. As state and federal standards are increasing the focus on intervention and outcomes of intervention, school psychologists must look to adapt the current service delivery model to meet students’ needs. One approach would be to examine research supported alternative assessment methods and service delivery models for intervening with academic problems. This requires a major paradigm shift that seeks to re-focus the role of the school psychologist from a special education gatekeeper to a problem solver, linking assessment to intervention. Inherent within this shift is the re-evaluation of traditional assessment procedures and service delivery models that focus on classification of student problems to alternative forms of assessment that link assessment to intervention, have higher treatment utility, and produce better outcomes for students (Reschly & Ysseldyke, 2002).

Functional Assessment is one empirically supported alternative assessment tool available for school psychologists to address the demands of these increases in academic referrals. The Functional Assessment model utilizes direct assessment procedures that establish a functional relationship between the target behavior and treatment factors. Although Functional Assessment was originally developed as a means of dealing with
behaviorally-based problems, (Knoster & McCurdy, 2002; McComas, Hoch, & Mace, 2000) there is a substantial body of empirical research that supports its relevance in addressing academic problems (Daly, Martens, Dool, & Hintze, 1998; Daly, Martens, Hamler, Dool, & Eckert, 1999; Daly, Hintze, & Hamler, 2000; Daly, Shroder, & Robinson, 2002; Jones, Harmon, & Wickstrom, 2001; Eckert, Ardoin, Daly, & Martens, 2002; Noell, Freeland, Witt, & Gansle, 2001; Jones & Wickstrom, 2002).

The purpose of this study was to examine the efficacy of utilizing the brief assessment model to guide the selection of intervention strategies that would be expected to produce gains in the generalization of students’ reading ability. In doing so, this study also examined the reliability of the brief assessment model and assessed the social validity of using the model within the school environment. The following sections will define functional assessment, discuss the theoretical foundations of the brief assessment and the instructional hierarchy, and review the current research on the generalization effects.

Literature Review

Defining Functional Assessment

When discussing Functional Assessment, it is useful to differentiate between the terms Functional Assessment and Functional Analysis. Functional Assessment specifically refers to the process of collecting data and formulating hypotheses based on that data. In contrast, Functional Analysis refers to the process of testing those hypotheses by direct manipulation of the hypothetical controlling variable using systemic procedures (Cone, 1997). From this view, Functional Assessment and Functional Analysis are separate but interdependent processes.

Utilizing this perspective, Ervin, Radford, Bertsch, Piper, Ehrhardt, & Poling, (2001) posited that there are four phases of a Functional Assessment (FA): 1) descriptive phase, 2) interpretive phase, 3) verification phase, and 4) intervention phase. The latter two phases are accomplished by conducting a Functional Analysis. The descriptive phase of a Functional Assessment consists of gathering data about potential variables from a variety of sources such as direct observations and interviews with teachers and parents. Once all pertinent data have been gathered, the interpretive phase of the Functional Assessment begins which consists of generating specific hypotheses about variables that may be affecting the target behavior. The FA then moves into the verification phase, where each of the hypotheses is formally tested to determine which of the variables is controlling the target behavior.
Finally, an intervention is developed using the hypothesis that was found to functionally control the target behavior (Ervin et al., 2001).

As noted earlier, Functional Assessment was originally developed as a means for dealing with behavioral difficulties. When dealing with behavioral difficulties, functional assessment allows one to establish experimental control over a given target behavior utilizing a single subject design. For example, if a teacher seeks out consultation to help deal with a student who is being disruptive during class, the process of conducting a functional assessment could be used to develop an intervention. First, the target behavior would need to be operationally defined. This would involve discussing the problem behaviors with the referring teacher and deciding on a primary focus for the functional assessment. If the target behavior is defined as “talking out during class”, it could be measured as the number of times the target student spoke out of turn during the language arts class period. Second, a baseline measure would be taken in order to establish the validity of the concern and the frequency of occurrence before intervention. Third, hypotheses are developed utilizing the perspective outlined by Shapiro & Kratochwill (2000) that suggests behavioral problems are typically maintained by four types of reinforcement: 1) attention, 2) access to materials, 3) escape or avoidance, or 4) sensory reinforcement. Third, the hypotheses are each tested in hopes of exercising experimental control over the variable that is maintaining the students negative behavior. Fourth, an intervention program is designed based on the results of the functional analysis, and progress is monitored. Utilizing functional assessment enables one to link assessment and intervention development, thereby increasing the likelihood that the intervention will be effective.

Experimental Analysis of Academic Concerns

When applying FA to academic concerns, such as reading ability, there are some important methodological changes to note. First, the descriptive phase of FA for academic concerns utilizes teacher and parent interviews, and systematic observations, in addition to direct assessment measures of academic skills such as curriculum-based measurement (CBM) and permanent product reviews (e.g. record review, work samples). The purpose of the descriptive phase of the FA is to operationally define the target behavior. When applying FA to academic concerns, the target behavior is often defined and measured in terms of a discrete academic skill (i.e. oral reading fluency, reading comprehension, or mathematical computational fluency). There is ample empirical evidence to support oral reading fluency
as a reliable and valid indicator of reading ability (e.g. Shinn, 1989; Shinn, Good, Knutson, Tilly, & Collins, 1992).

Second, the interpretive phase of the FA looks different when applied to academic concerns, specifically with the development of hypotheses. The growing body of empirical evidence suggests that deficits in academic skills can be divided into two broad categories: performance deficits and skills deficits (Lentz, 1988). Performance deficits are motivational deficiencies, where a student has the necessary skills to complete an academic task but is not motivated to display those skills. Skills deficits present when a student has not yet acquired the skills necessary to complete an academic task. Daly, Witt, Martens, and Dool (1997) further divided these deficits in academic skills and posited that there are five common factors that affect student academic performance: 1) “they do not want to do it,” 2) “they have not spent enough time doing it,” 3) “they have not had enough help to do it,” 4) “they have not had to do it that way before,” and 5) “it is too hard.” When dealing with academic concerns, these five factors that affect academic performance can serve as the major hypotheses for conducting the functional assessment.

Third, the verification phase of the FA typically involves conducting a functional analysis where each of those hypotheses is individually tested by direct manipulation of the controlling variables. This is usually done over multiple sessions in order to determine if there is a functional relationship between the target behavior and the hypothesized variable. However, given the time constraints of working within the school system, it is often more efficacious to conduct a brief experimental analysis when dealing with academic concerns (Daly et al., 1997). Like a functional analysis, a brief experimental analysis examines the effects of the hypothesized variable on the target behavior. The major difference between the two is that the brief experimental analysis involves testing each hypothesis in only one or two sessions using a multi-element design with an initial baseline period. The conditions are ordered in a semi-random manner when dealing with a behavioral concern, and when dealing with an academic concern, the conditions are ordered by ease of implementation in the regular education classroom, with easiest conditions to implement being tested first. The effects of each condition on the target behavior are recorded and compared to the baseline. The most effective condition is then implemented as an intervention.
**Instructional Hierarchy**

Daly et al., (1997) stated that in order to be valuable for instructional decision-making, brief experimental analyses must be grounded in a conceptual framework that directs the selection of interventions. Further, Daly et al., (1998) expanded that notion by suggesting two conceptual frameworks that may be an appropriate foundation for conducting brief experimental analyses of academic responding. The first of these conceptual frameworks addresses the problem in terms of the origin of the deficit. That is, whether the problem lies within the demonstration of the skill or the acquisition of the skill. If the student has acquired the academic skill but is not displaying the skill, it is a performance deficit. If the student has failed to acquire the necessary academic skills, it is considered a skills deficit (Lentz, 1988). The second conceptual framework, the Instructional Hierarchy (IH) involves ordering the treatment selection by ease of application in the natural setting and the conceptual relevance. The IH focuses on the natural progression and development of academic skills, and in doing so allows for clarification of the roles that different treatment conditions have in that progression (Haring, Lovitt, Eaton, & Hanson, 1978; Daly, Lentz, & Boyer, 1996).

The IH is comprised of four skill development stages: 1) acquisition, 2) fluency, 3) generalization, and 4) adaption. The acquisition stage is the period of time between the acquisition of the skill and the accurate but inconsistent display of the skill. The fluency stage is characterized by accurate responding in a rapid and proficient manner. The learner must demonstrate the skill consistently with higher levels of fluency and accuracy. The generalization stage focuses on displaying the skill with both accuracy and proficiency across multiple settings. The adaption stage is where the learner is able to take the skill and apply it across novel environments (Haring et al., 1978; Daly et al., 1996).

**Generalization**

The brief assessment model for oral reading fluency has been primarily researched as a method of increasing both accuracy and fluency, with the hope that this will prompt an increase in the generalization of the skill (Daly et al., 1999; Daly et al., 2000; Eckert et al., 2002). However, there has been little research on the direct generalization gains achieved through the use of this model.

A study by Daly et al., (1998) examined the utility of the brief assessment model in the selection of reading interventions. During the study a brief assessment was conducted
with each student. The students were instructed using curriculum based intervention passages and progress was monitored using separate generalization passages, which were the intervention passages rewritten to contain a high percentage of content, or word, overlap. The generalization passages had an average of 87% content overlap. The study found that a brief experimental analysis could be conducted with academic concerns such as oral reading fluency and that for some participants high content overlap during intervention is more likely to produce generalized gains in oral reading fluency. The study also found that during a brief experimental analysis, an effective intervention condition could be identified and replicated.

Daly et al. (2002), examined the generalization effects of the interventions identified during the brief assessment. A brief assessment was conducted with each student and an effective intervention condition was identified. The students were then tutored using the identified intervention method on one passage out of their reading series and progress was monitored by timing them on three randomly selected passages from the series. The median correct words per minute were then graphed. The study found robust generalization gains in all participants. Overall, this particular study provided a strong foundation for exploring the issue of generalization of oral reading fluency, but there were some important methodological issues to note. First, there was no mention of whether the reading passages used for intervention and progress monitoring were controlled for readability. Second, there were no interobserver agreement data collected. These issues could undermine the procedural integrity of the research design and reliability of the data. Third, the baseline data for one of the subjects appeared to have an upward trend and may not be considered a stable baseline. This limits the integrity of the experimental control and the confidence in the increases seen in the oral reading fluency.

A study by Jones & Wickstrom (2002), examined the generalization effects of the interventions identified during the brief assessment. A brief assessment was conducted for each student and one intervention method was identified and replicated. The generalization effects were measured by administering a separate generalization passage, which contained 80% of the words found in the intervention passage. The study found that 4 out of 5 of the students involved showed gains on the generalization passages.
Purpose of the Study

Given the empirical support for using oral reading fluency as a reliable and valid indicator of reading ability (Shinn, 1989; Shinn et al., 1992), utilizing the brief assessment model to guide the selection of intervention strategies would be expected to produce gains in the generalization of students’ reading ability. A brief assessment was conducted with each participant during the fall of the school year to determine which instructional strategy was the most effective. Then another brief assessment was conducted in the spring in order to identify the most effective strategy and compare the results with the fall brief assessment. The purpose of this study was threefold. First, the study was to examine the reliability of the brief assessment model. It was hypothesized that the strategy identified during the spring brief assessment would be the same strategy identified in the fall. Second, the student was to examine the generalization effects of the brief assessment model. It was also hypothesized that the strategy identified during the brief assessment would produce generalized gains in oral reading fluency for each participant. Third, the study was to assess the social validity of using the brief assessment model within the school environment. The social validity was measured by looking at teacher and student satisfaction with the reading program, the instructional strategies used, and the outcomes of the intervention. It was hypothesized that the students and teachers would have a high level of satisfaction with the reading program, the instructional strategies used, and the outcomes of the intervention.

Method

Participants

Participants were 4 elementary students (Chris, Katie, Joe, and Maddy) from a rural school district in southwest Ohio. The student body was primarily Caucasian from middle to lower socioeconomic status, subsequently all of the participants were Caucasian. All of the participants were in the fourth grade, and were identified by their teachers as having significant oral reading difficulties. In addition, two of the four students were previously identified as having a specific learning disability in reading. Explicit written informed consent was obtained from each participant’s parent or legal guardian. In addition, written assent was obtained from each of the participants. Explicit written informed consent was also obtained from each participant’s teacher (see Appendices A, B, & C).
Tutors

The tutors that participated in the study were second year graduate students in the school psychology program, and an undergraduate research assistant majoring in psychology and special education at Miami University. Each tutor was thoroughly trained in administration and scoring of CBM probes, and the brief assessment model before any tutoring began. Training consisted of an extensive review of the available literature and class discussion on the brief assessment model, in addition to didactic skills practice. In order to demonstrate their proficiency, the tutors also completed a mastery exercise involving CBM procedures and the brief assessment model before the tutoring sessions began.

Setting

Tutoring sessions took place in an available, quiet room at the participant’s school (e.g. classroom, resource room, library, office).

Materials

There were two sets of reading passages used during this study: instructional passages and progress monitoring passages. Instructional passages were selected from an outside curriculum and featured two versions of each passage. The original passages were rewritten to contain at least 80% of the same words. These passages were used only during intervention. Progress monitoring passages were selected from the district’s current literature-based reading series (see Appendix D; Harcourt, Brace, & Company, 2001). The passages were developed by utilizing standard procedures for developing curriculum based measurement passages as outlined by Shapiro (1996). In order to control for grade level estimates, grade readability was calculated for each passage using procedures outlined by Fry (1977). Fry’s method involved calculating the number of syllables and sentences per 100 words. Each passage was re-typed in a font similar to the font used by the reading series, and was approximately 100-180 words. The progress monitoring passages were used during baseline, brief assessment and for progress monitoring throughout the study.

Measures

The measures used consisted of CBM oral reading fluency, treatment acceptability surveys, student satisfaction surveys, and teacher satisfaction surveys.

Oral reading fluency. As stated earlier, oral reading fluency has been shown to be a valid indicator of reading ability (Shinn, 1989; Shinn et al., 1992). Oral reading fluency served as the dependent measure. During the brief assessment it was measured in correct
words per minute (CWPM) on a single passage. During baseline and progress monitoring it was measured as the CWPM median of three passages. The CWPM was defined as the total number of words the student read minus the number of errors the student made during a one-minute reading of a selected passage. Errors per minute (EPM) were also measured to aid in the progress monitoring and decision-making during the brief assessment. The EPM was defined as the number of words, out of the total words read, that the student did not read correctly (Shapiro, 1996). During all sessions, the tutor read a set of standardized instructions to the student. The student was asked to read the passage, told that the tutor could not supply any unknown words, and encouraged to do their best reading. Then the tutor instructed the student to begin and started timing the reading when the student began reading. The tutor followed along while the student read and marked the errors and stopping point at the end of one minute on a separate copy of the passage (Shapiro, 1996).

*Social validity.* When examining social validity, it is important to consider these aspects: a shared goal between the consumers and interventions of a treatment strategy, treatment acceptability, and treatment satisfaction (Wolf, 1978; as cited by Bailey & Burch, 2002). In this study, the latter two aspects served as the focal point for examining social validity. Treatment acceptability and satisfaction were measured using four adapted rating forms: The Children’s Intervention Rating Profile (Witt & Elliott, 1985), the Intervention Outcome Index (Flugum & Reschly, 1994), the Teacher Satisfaction Questionnaire (Wickstrom, 2002), and the Intervention Rating Profile-15 (IRP-15) (Martens, Witt, Elliott, & Darveaux 1985).

The Children’s Intervention Rating Profile (CIRP) (Witt & Elliott, 1985) consisted of seven questions, and was designed to measure the student’s perceptions and acceptability of the reading program (see Appendix E). The CIRP has demonstrated technical adequacy as a highly reliable instrument (.89), on a norm population exceeding 1000 children. There are currently no predictive validity data available (Elliott, 1986).

The Intervention Outcome Index (Flugum & Reschly, 1994) consisted of five questions designed to assess teacher perceptions about the improvements in the student reading ability and general impressions of the reading program (see Appendix F).

The Teacher Satisfaction Questionnaire (Wickstrom, 2002) was designed to serve as a global measure of the teacher’s satisfaction with the reading program. The questionnaire consists of seven questions that address the teacher perceptions of the utility and
effectiveness of the reading program. There are no technical data currently available on the Teacher Satisfaction Questionnaire (see Appendix G).

The Intervention Rating Profile-15 (IRP-15) (Witt & Martens, 1983; Witt & Elliott, 1985) consisted of 15 questions designed to assess a teacher’s perception of how appropriate an intervention is for a student (see Appendix H). The Intervention Rating Profile-15 (IRP-15) has demonstrated high technical adequacy (Martens, Witt, Elliott, & Darveuax 1985). Witt and Martens (1983) found the reliability of the IRP, as determined by Cronbach’s alpha, to be .98.

**Experimental Conditions**

The brief assessment involved comparing the effects of four different instructional strategies with the oral reading fluency rate at baseline. The instructional strategies were: 1) providing incentives for increased performance (Incentive Condition), 2) providing practice in reading (Repeated Reading), 3) modeling the reading skills and providing error correction and drill (Listening Passage Preview/Phrase Drill), and 4) providing instruction with 3rd grade material (Easier Material). The effects of each intervention were monitored by measuring correct words per minute (CWPM) on timed 4th grade reading passages. These particular instructional strategies used during the brief assessment are specifically designed to assess four of the major factors that impact academic performance: 1) “they do not want to do it,” 2) “they have not spent enough time doing it,” 3) “they have not had enough help to do it,” and 4) “it is too hard” (Daly et al., 1997).

**Baseline.** The baseline phase of the first brief assessment consisted of reading several timed CBM passages across multiple sessions and continued until a stable baseline was achieved. The baseline phase did not involve any intervention strategies. During each baseline session each student was given three passages to read. The students were asked to orally read a passage for 1 minute while the examiner recorded the errors and CWPM. The median score of the three passages was recorded. The baseline phase of the second brief assessment consisted of reading three timed CBM passages during only one session and taking the median CWPM score. This baseline phase reestablished the student’s oral reading fluency level before intervention a second time.

**Incentive.** The incentive condition involved providing a reward for reaching a pre-established goal of 40% above baseline. Students were allowed to choose a reward (pens, pencils, stickers, or stamps) that they would be willing to work for. The purpose of this
condition was to determine whether or not the reading deficit was related to motivational difficulties rather than skill deficits (Lentz, 1988). The effectiveness of intervening with performance/motivational issues has been well documented in the literature (e.g., Ayllon & Roberts, 1974; Staats & Butterfield, 1964; Staats, Minke, Findley, Wolf, & Brooks, 1964).

Repeated Reading. The repeated reading condition allowed the student to practice the passage. During the repeated reading condition, the student read the passage out loud four times, and was timed during the fourth reading. The purpose of this condition was to increase the student’s opportunity to respond as well as isolate the effects of increased practice without error correction. Intervention techniques that utilize increased practice and increased opportunity to respond have been well substantiated within the reading intervention literature (e.g., Herman, 1985; Rashotte, & Torgesen, 1985).

Listening Passage Preview/Phrase Drill. During the listening passage preview/phrase drill condition, the tutor read the passage aloud for the student, and then the student read the passage to the tutor while the tutor highlighted the errors. The tutor then showed the student his/her errors and drilled the student on the phrase with the error. This “phrase drill” was repeated with every error up to 15 errors. The student then read the passage again and was timed. The purpose of the listening passage preview/phrase drill condition was to model the passage for the student and provide performance feedback/error correction during the student reading. Both techniques, listening passage preview and the phrase drill, have been shown to have positive effects on oral reading fluency (e.g., Daly & Martens, 1994; O’Shea, Munson, & O’Shea, 1984).

Easier material. During the easier material condition, the student was timed on third grade material without any additional intervention. The purpose of the easier material condition was to establish whether or not the grade level material was too difficult for the student.

Design

For the brief assessment, a brief multielement design was used to investigate the effects of each instructional strategy on the oral reading fluency rates (CWPM; Cooper et al., 1992). The treatment conditions were ordered from least intrusive to most intrusive, with regard to classroom implementation, and the effects of each condition on oral reading fluency were recorded, with each condition being tested within one session. A multiple baseline was
then utilized with the brief assessment embedded in a treatment evaluation design, with comparisons being made between baseline and treatment phases.

**Procedures**

Participants were selected based on referrals from the fourth grade teachers. Once the students were referred for tutoring, an informed consent was sent home with the students explaining the tutoring program to the parents. The procedures during this phase were divided into three sub-phases: 1) Baseline phase, the 2) Brief Assessment phase, and 3) Intervention Implementation phase. Before beginning the baseline phase, the tutor met with the participant’s teacher in order to clarify the teacher’s concerns regarding the student reading difficulties. The tutor also explained the tutoring program to the teacher and answered any questions about the tutoring program, and a record review was conducted. The baseline phase was then started.

The baseline phase of the study established the reading level of the student before brief assessment and intervention. The tutors administered six passages for each baseline session with a brief 5-minute break in the middle. The median correct words per minute (CWPM) of each consecutive three passages were calculated and graphed. The tutors continued the baseline phase until a stable baseline was established, which was approximately 2 to 5 sessions. A stable baseline was defined by two requirements: 1) there was no upward trend, and 2) the variability of the data points was less than 20% (Alberto & Troutman, 1999). Once a stable baseline was achieved the brief assessment phase began.

During the brief assessment phase four conditions were tested based on the factors that affect academic performance as outlined by Daly et al., (1997): Incentive condition, Repeated Reading, Listening Passage Preview/Phrase Drill, Easier Material. The conditions were presented in that order which is grounded in the conceptual framework of the IH (Daly, et al, 1997). Each condition was tested briefly, and CWPM and EPM were recorded. The incentive and repeated reading conditions were tested during one session, followed by the listening passage preview and easier material conditions during the next session (see Appendix I, for the steps used during each condition). The brief assessment phases lasted for approximately 2 to 3 sessions.

Once all conditions were tested an additional baseline passage was administered and the condition that was shown to be most effective was retested. The return to baseline was necessary in order to establish a functional relationship (i.e. a replication). If the condition
proved to be effective in increasing the oral reading, then that condition was implemented as an intervention during the intervention phase for 3-6 weeks. The criterion for an effective treatment condition was a 40% increase in CWPM above the baseline mean.

For each intervention session, tutors followed specific instructions and steps in order to increase intervention integrity (see Appendices J & K). During each 30-minute session, students were tutored with the particular intervention using the Instructional passages. Tutors provided as much instruction as possible within the 30-minute session. The number of instructional passages used during a session varied by student. The CWPM were not tracked during the instructional passages. At the end of the session, the students were asked to read aloud for 1-minute from a progress monitoring passage and the CWPM were tracked. Average length of the intervention phase was two weeks.

In the spring, approximately three months following the first intervention period, the brief assessment was completed a second time. The baseline phase of the second brief assessment consisted of reading three timed CBM passages and taking the median CWPM score in order to re-establish/verify the initial baseline oral reading fluency. Again, each condition was tested briefly following the same procedures used during the fall and CWPM and EPM were recorded. Once all conditions had been tested, the condition that was shown to be most effective was replicated, in order to establish a functional relationship. If the condition proved to be effective in increasing oral reading, then that condition was implemented as an intervention during the intervention phase for 5-7 weeks utilizing the same format as the first intervention period.

Once the second intervention phase was completed, the student’s teachers were asked to complete the Intervention Outcome Index (Flugum & Reschly, 1994), the Teacher Satisfaction Questionnaire (Wickstrom, 2002), and the Intervention Rating Profile-15 (Martens, Witt, Elliott, & Darveaux 1985). In addition, each of the students were asked to fill out the Children’s Intervention Rating Profile during the last session (Witt & Elliott, 1985). After all of the survey data were collected, a meeting was scheduled with each teacher that participated and the results for their individual students were discussed.

Reliability of Oral Reading Fluency

The inter-rater agreement of the oral reading fluency measures, CWPM, was assessed by audio recording all sessions and having a second observer listen to approximately 50% of the timed probes. The second observer was an undergraduate research assistant majoring in
psychology and special education at Miami University, and was thoroughly trained in administration and scoring of CBM probes. The second observer independently scored and calculated the CWPM for sessions. The interobserver agreement was calculated by dividing the lower estimate by the higher estimate and multiplying by 100 (House, House, & Campbell, 1981). The interobserver agreement mean for CWPM was 95, with a range of 85-100.

Procedural Integrity

A fidelity checklist was developed as a measure of treatment integrity, in order to monitor the adherence to the program procedures. The fidelity checklist outlined the essential steps of each of the instructional methods and, verified that the tutors used the correct passage, gave appropriate instructions, and whether or not the student read the passage. The tutors were required to complete the fidelity checklist at the end of every session during both the spring and fall (see Appendix I). All sessions and interviews were audio recorded and treatment fidelity was assessed by a second observer. The average procedural integrity across cases was 99%.

Results

The results of the individual brief assessments and extended analyses for the four participants are summarized in Figures 1.1 through 4.2. On figures, it is important to note that baseline points on the graph represent a collapsed mean for each baseline period. An aim line was also incorporated into the graph in order to provide a visual representation of the data trends.

Brief Assessment

Two brief assessments were conducted for each student and an effective intervention method was identified and replicated each time. During Chris’s first brief assessment (Figure 1.1), his baseline mean was 78 CWPM (see Table 1) and both the Repeated Reading (RR) condition and the Listening Passage Preview/Phrase Drill (PD) produced gains in oral reading fluency (ORF) that were 40% over baseline. The PD condition was used as the reversal condition due to the lower number of errors. During the second brief assessment (Figure 1.1), Chris’s baseline mean was 68 CWPM (see Table 1) and the RR condition produced gains in ORF that were 40% over baseline. During Katie’s brief assessments (Figure 2.1) her baseline mean was 50 CWPM, for the first brief assessment, and 65 CWPM, for the second brief assessment (see Table 1) and the RR condition produced gains in oral
reading fluency (ORF) that were 40% over baseline both times. During Joe’s first brief assessment (Figure 3.1) his baseline mean was 32 CWPM (see Table 1) and both the Repeated Reading (RR) condition and the Listening Passage Preview/Phrase Drill (PD) produced gains in oral reading fluency (ORF) that were 40% over baseline. The PD condition was used as the reversal condition due to the lower number of errors. During the second brief assessment (Figure 3.1), Joe’s baseline mean was 54 CWPM (see Table 1), but there was no clearly effective condition identified. Since the PD condition produced the highest gains in ORF, it was reversed and subsequently produced gains in ORF that were 40% over baseline.

During Maddy’s first brief assessment (Figure 4.1) her baseline mean was 11 CWPM (see Table 1), but there was no clearly effective condition identified (using the 40% increase as a guideline). Since the PD condition produced the highest gains in ORF and a lower number of errors, it was reversed and subsequently produced gains in ORF that were 40% over baseline. During the second brief assessment (Figure 4.1), Maddy’s baseline mean was 20 CWPM (see Table 1) and the PD condition produced gains in ORF that were 40% over baseline.

In all of the students an effective condition was identified and replicated. In addition, the conditions identified as the most effective intervention during the first brief assessment were also identified in the second brief assessment in all students except Chris. During Chris’s first brief assessment the RR and PD conditions were identified, but the PD was chosen because of the lower number of errors. During Chris’s second brief assessment, it was the RR condition that produced the most sizable gains in ORF. These finding confirm the hypothesis that the strategy identified during the spring brief assessment would be the same strategy identified in the fall.

**Intervention Phase**

The results of the intervention phase are included in figures 1-4 and Table 1-3. During Chris’s first intervention phase (Figure 1.2), his baseline mean was 78 CWPM and the extended analysis mean was 60 CWPM using Listening Passage Preview/Phrase Drill (PD) as the intervention method, which is a 23% decrease in the baseline mean (see Tables 1 & 2). During Chris’s second intervention phase (Figure 1.2), his baseline mean was 68 CWPM and the extended analysis mean was 79 CWPM using Repeated Reading (RR) as the intervention method, which is a 16% increase in the baseline mean (see Table 1 & 2). In terms of overall growth in CWPM from the initial baseline, Chris had 21% non-overlapping
data points (see Table 3). This means that 21% of Chris’ progress monitoring data points were higher than his baseline mean.

During Katie’s first intervention phase (Figure 2.2), her baseline mean was 49 CWPM and the extended analysis mean was 59 CWPM using Repeated Reading (RR) as the intervention method, which is a 20% increase in the baseline mean (see Table 1 & 2). During Katie’s second intervention phase (Figure 2), her baseline mean was 65 CWPM and the extended analysis mean was 96 CWPM using the Repeated Reading (RR) as the intervention method, which is a 48% increase in the baseline mean (see Table 1 & 2). In terms of overall growth in CWPM from the initial baseline, Katie had 100% non-overlapping data points (see Table 3). This means that 100% of Katie’s progress monitoring data point were higher than her baseline mean.

During Joe’s first intervention phase (Figure 3.2), his baseline mean was 32 CWPM and the extended analysis mean was 37 CWPM using Listening Passage Preview/Phrase Drill (PD) as the intervention method, which is a 16% increase in the baseline mean (see Table 1 & 2). During Joe’s second intervention phase (Figure 3.2), his baseline mean was 54 CWPM and the extended analysis mean was 48 CWPM using Listening Passage Preview/Phrase Drill (PD) as the intervention method, which is an 11% decrease in the baseline mean (see Table 1 & 2). In terms of overall growth in CWPM from the initial baseline, Joe had 93% non-overlapping data points (see Table 3). This means that 93% of Joe’s progress monitoring data point were higher than his baseline mean.

During Maddy’s first intervention phase (Figure 4.2), her baseline mean was 11 CWPM and the extended analysis mean was 13 CWPM using Listening Passage Preview/Phrase Drill (PD) as the intervention method, which is a 18% increase in the baseline mean (see Table 1 & 2). During Maddy’s second intervention phase (Figure 2), her baseline mean was 20 CWPM and the extended analysis mean was 15 CWPM using the Listening Passage Preview/Phrase Drill (PD) as the intervention method, which is a 25% decrease in the baseline mean (see Table 1 & 2). In terms of overall growth in CWPM from the initial baseline, Maddy had 87% non-overlapping data points (see Table 3). This means that 87% of Maddy’s progress monitoring data point were higher than her initial baseline mean.

These data show that 3 out of 4 of the participants had greater than 87% of non-overlapping data points. When examining effectiveness of treatment using the criteria
established by Scruggs & Mastropieri, (1998) when the percentage of non-overlapping data points is between 70-90% the treatment is considered effective (see Table 3). These findings support the hypothesis that the strategy identified during the brief assessment would produce generalized gains in oral reading fluency for each participant.

**Social Validity**

The social validity of the brief assessment model was investigated quantitatively using the Children’s Intervention Rating Profile (CIRP; Witt & Elliott, 1985), the Intervention Outcome Index (IOI; Flugum & Reschly, 1994), the Teacher Satisfaction Questionnaire (TSQ; Wickstrom, 2002), and the Intervention Rating Profile-15 (IRP-15; Martens, Witt, Elliott, & Darveaux 1985), but interpreted qualitatively due to low subject sample.

The examiner asked each of the participants to complete the CIRP. The CIRP was analyzed by looking at the total score and some individual items. The total score range for the CIRP is 7-42, with 42 being a very high level of satisfaction with the intervention program. Chris’s score on the CIRP was a 41, which indicated that he had a high level of satisfaction with the intervention program. Katie’s score on the CIRP was also a 41, which indicated that she had a high level of satisfaction with the intervention program. However, she did indicate on one of the items that she was not completely sure if this was the best way to help with her reading difficulties, but still reported a high level of overall satisfaction with the program. Joe’s score on the CIRP was a 42, which indicated that he had a very high level of satisfaction with the intervention program. Maddy’s score on the CIRP was a 39, which indicated that she had a high level of satisfaction with the intervention program. However, she also indicated on one of the items that she was not completely sure if this was the best way to help with her reading difficulties, but still reported a high level of overall satisfaction with the program.

The IOI was completed by the participants’ teachers and was analyzed by examining the composite scores of the individual items across all participants. The first item addressed the issue of intervention acceptability. This item was scored on a scale of 1 to 5, with 1 being “strongly disagree,” 3 being “no opinion,” and 5 being “strongly agree.” The mean score was 4.5 with a range of 4-5, which suggested that the teachers felt that this was an acceptable intervention program for the students. The second item addressed the general improvement of the student. Teachers were asked if they felt that the students’ reading skills
had improved, and all of the participant’s teachers responded with yes. The third question addressed the degree of improvement in the students reading ability, whether small, moderate, or large. Two teachers reported that the degree of improvement was moderate, while the other two reported that the degree of improvement was small and small-to-moderate, respectively. The fourth item addressed whether or not the teacher felt that the goals of the intervention were met. All of the participants’ teachers reported that the intervention goals were accomplished. The fifth item addressed the overall functioning of the student after the intervention program. This item was scored on a scale of 1 to 5, with 1 being “much worse,” 3 being “about the same,” and 5 being “much better.” The mean score on this item was 4, which indicated that all of the participants’ teachers felt that the students were performing better after participating in the reading program.

The TSQ was completed by each participant’s teacher and was analyzed by looking at the total score. The total score range for the TSQ is 6-30, with 30 being a very high level of satisfaction with the intervention program. Chris’s teachers score on the TSQ was a 29 with a mean item score of 4.8, which indicated that she had a very high level of satisfaction with the intervention program. Katie’s teachers score on the TSQ was a 28 with a mean item score of 4.7, which indicated that she had a very high level of satisfaction with the intervention program. Joe’s teachers score on the TSQ was a 26 with a mean item score of 4.3, which indicated that she had a fairly high level of satisfaction with the intervention program. Maddy’s teachers score on the TSQ was a 25 with a mean item score of 4.2, which indicated that she had a fairly high level of satisfaction with the intervention program.

The IRP-15 was completed by each participant’s teacher and was analyzed by looking at the total score. The IRP-15 utilized a 6-point likert-type scale with a total score range of 15-90, with 90 being a very high level of satisfaction with the intervention program. Chris’s teacher’s score on the IRP-15 was an 84 with a mean item score of 5.6, which indicated that she had a high level of satisfaction with the intervention program. Katie’s teachers score on the IRP-15 was an 89 with a mean item score of 5.9, which indicated that she had a very high level of satisfaction with the intervention program. Joe’s teachers score on the IRP-15 was a 67 with a mean item score of 4.5, which indicated that she had a moderate level of satisfaction with the intervention program. Maddy’s teachers score on the IRP-15 was a 69 with a mean item score of 4.6, which indicated that she had a moderate level of satisfaction with the intervention program. These findings support the hypothesis that the students and
teachers would have a high level of satisfaction with the reading program, the instructional strategies used, and the outcomes of the intervention.

Discussion

The purpose of this study was to examine the reliability of the brief assessment model, the generalization effects of the brief assessment model, and assess the social validity of using the brief assessment model within the school environment. This was done by conducting a brief assessment with each participant during the fall of the school year in order to determine which instructional strategy would potentially be the most effective. Then the identified condition was implemented as an intervention for the duration of the semester. This process was then repeated in the spring and the results were compared with the fall brief assessment in order to establish the reliability and determine if there were any generalized gains in oral reading fluency.

This study was able to confirm the results of earlier work on the brief assessment model (e.g. Daly et al., 1998, 1999), which illustrated that the brief assessment model can effectively isolate a specific intervention for intervening with reading fluency difficulties. During the first brief assessment, the listening passage preview/phrase drill strategy was identified for three of the participants, and repeated reading was identified for the other participant. During the second brief assessment, the listening passage preview/phrase drill strategy was identified for two of the participants, and repeated reading was identified for the other two participants. In all but one of the participants the condition identified as the most effective strategy during the first brief assessment was also identified during the second brief assessment. In Chris’s case, the strategy identified during the second brief assessment was a less intensive strategy, which could be a result of the previous intervention period and the progress made.

These data also support earlier findings that suggested that the brief assessment could effectively isolate competing hypotheses (e.g. motivation, lack of practice, not enough help, or it’s too difficult) for the students reading difficulties. These data indicate that the brief assessment has some reliability. The conditions identified as the most effective intervention during the first brief assessment was also identified in the second brief assessment in 3 of the 4 participants. Utilizing descriptive statistics, such as comparison of condition means, mean percentage differences, percentage of non-overlapping data points, these data suggest that there were generalized gains in oral reading fluency for 3 of the 4 participants. The effects
are not very obvious through visual inspection, but when looked at as overall gains in oral reading fluency from baseline to the end of the reading program all but one of the participants had gains of 25% over baseline (see Table 2). In addition, when examined in terms of non-overlapping data points from baseline to the end of the reading program all but one of the participants had greater than 87% of non-overlapping data points, which is considered effective (see Table 3; Scruggs & Mastropieri, 1998). According to Scruggs & Mastropieri (1998), 50-70% of non-overlapping data points is considered “questionable,” 70-90% of non-overlapping data points is considered “effective,” and above 90% of non-overlapping data points is considered “very effective.” These data support the hypotheses that the first brief assessment would produce similar results as the second, and that the strategy identified would produce generalized gains in oral reading fluency.

The results of this research should be interpreted with some degree of caution due to inherent limitations. First, there were a limited number of instructional and progress-monitoring passages used. There were two separate sets of passages used during this study each with 25-27 passages, the instructional passages and the progress-monitoring passages. The instructional passages were taken from an outside curriculum and originally developed for a separate research study that looked at the generalization effects of the brief assessment using passages with high content overlap (greater than 80%), which means that each passage had an alternate form with at least 80% of the words in common. This could have affected the quality of the intervention/instruction portion of the reading program, and variety of words the students were exposed to, which in turn may have lead to higher generalization effects in some students. There were also 27 progress-monitoring passages, which were used to measure the generalization effects. Due to the low number of passages and high number of progress monitoring incidents, the passages were used multiple times with roughly 3 to 4 weeks between each passage. This could have inflated any recorded generalization effects due to potential practice effects. Future research should use utilize a larger pool of progress monitoring passages and a greater variety of instructional passages in order to minimize any possible interference.

Second, there was no stacking or overlapping of instructional strategies. When working in the schools it is often necessary to combine different intervention methods in order to produce to the most effective and individualized reading program. Thus, for students like Chris and Maddy, layering on another intervention strategy could have a
positive impact on the generalized outcomes. Future studies should incorporate an additive model to determine the most effective package for particular students. This researcher decided not to use intervention stacking in hopes of determining whether or not the strategy identified during the brief assessment would have generalized gains. Third, there are limitations of using teacher and self-report as a sole measure of social validity. Future studies should include additional measures related to student outcomes (e.g. reading proficiency test scores, classroom grades).

Fourth, it should be noted that a few extraneous variables occurred that could not be controlled for, and could have had either positive or negative effects on the outcomes. For example, because the students were all in different classrooms, they may have been getting widely varied reading instruction within the classroom. Also, because of the limited number of tutors available the one to one relationship may have had some impact on some students’ performance. In addition, due to schedule constraints the appointment times may not have been the most optimal for some students.

Given the results and limitations of this study, the researcher feels that conducting a brief assessment of oral reading fluency is worthwhile and meaningful endeavor. It allows practitioners to select interventions that are more likely to be effective for an individual student in a relatively short amount of time. However, it is imperative that research on the brief assessment continue in order to better understand implications and refine the procedures. In addition, future research should focus on feasibility of using the brief assessment across different skills, such as math, writing, and reading comprehension.
References


Figures

Figure 1.1

Brief Assessment: Chris

Condition

Intervention: Chris

Session
Figure 2.1

Brief Assessment: Katie

Figure 2.2

Intervention: Katie
Figure 3.1

Brief Assessment: Joe

Figure 3.2

Intervention: Joe
Table 1

*Mean Differences Between Baseline and Intervention*

<table>
<thead>
<tr>
<th>Student and Brief Assessment</th>
<th>Baseline Mean</th>
<th>Intervention Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chris</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA #1</td>
<td>78</td>
<td>60</td>
</tr>
<tr>
<td>BA #2</td>
<td>68</td>
<td>79</td>
</tr>
<tr>
<td>Katie</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA #1</td>
<td>50</td>
<td>59</td>
</tr>
<tr>
<td>BA #2</td>
<td>65</td>
<td>96</td>
</tr>
<tr>
<td>Joe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA #1</td>
<td>32</td>
<td>37</td>
</tr>
<tr>
<td>BA #2</td>
<td>54</td>
<td>47</td>
</tr>
<tr>
<td>Maddy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA #1</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>BA #2</td>
<td>20</td>
<td>15</td>
</tr>
</tbody>
</table>
Table 2

Percent Differences Between Baseline and Intervention

<table>
<thead>
<tr>
<th>Student and Brief Assessment</th>
<th>Percent Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chris</td>
<td></td>
</tr>
<tr>
<td>BA #1</td>
<td>-23%</td>
</tr>
<tr>
<td>BA #2</td>
<td>16%</td>
</tr>
<tr>
<td>Overall*</td>
<td>1%</td>
</tr>
<tr>
<td>Katie</td>
<td></td>
</tr>
<tr>
<td>BA #1</td>
<td>20%</td>
</tr>
<tr>
<td>BA #2</td>
<td>48%</td>
</tr>
<tr>
<td>Overall*</td>
<td>96%</td>
</tr>
<tr>
<td>Joe</td>
<td></td>
</tr>
<tr>
<td>BA #1</td>
<td>16%</td>
</tr>
<tr>
<td>BA #2</td>
<td>-11%</td>
</tr>
<tr>
<td>Overall*</td>
<td>50%</td>
</tr>
<tr>
<td>Maddy</td>
<td></td>
</tr>
<tr>
<td>BA #1</td>
<td>18%</td>
</tr>
<tr>
<td>BA #2</td>
<td>-25%</td>
</tr>
<tr>
<td>Overall*</td>
<td>27%</td>
</tr>
</tbody>
</table>

* Overall represents the percent difference between the mean CWPM of initial baseline for the first brief assessment and the mean of the second extended analysis.
Table 3

*Percentage of Non-Overlapping Data Points*

<table>
<thead>
<tr>
<th>Student</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chris</td>
<td>21%</td>
</tr>
<tr>
<td>Katie</td>
<td>100%</td>
</tr>
<tr>
<td>Joe</td>
<td>93%</td>
</tr>
<tr>
<td>Maddy</td>
<td>87%</td>
</tr>
</tbody>
</table>
Appendices

Appendix A

Consent

Dear Parent or Guardian:

Last fall your child participated in a reading program at ______________________ Elementary that was designed and implemented by the School Psychology Program at Miami University. This was an experimental reading program designed to examine the effectiveness of a particular reading strategy for your child. At the conclusion of that tutoring program, your child was identified as a student who would potentially benefit from an extension of the reading program.

The Reading Program. Students who participate in the reading program will receive one-on-one tutoring approximately twice a week from February until April. Each tutoring session will last approximately 30 minutes, and will involve the same reading intervention strategy used last fall. In addition, your child’s teacher will be asked to complete three short questionnaires regarding your child’s participation in the tutoring program.

Potential Benefits. Although the program is an experimental reading program, your child has already shown some gains in his/her reading ability. We hope to further those gains by continuing with the reading program. Your child will also receive an individualized progress report at the conclusion of the program, which will provide a summary of the program and a list of recommendations for continuing your child’s program and specific instructions for implementing the program at home or at school. In addition, your child’s participation will help the fields of educational and school psychology further their understanding of reading difficulties and potential remediation strategies.

Voluntary Participation. Your child’s participation in the reading program is entirely voluntary. There will be absolutely no penalty if you do not want your child to participate in the reading program. In addition, you have the right to withdraw your child from the reading program at any time. This project has been approved by principal ______________________ at ____________________ Elementary school.

Confidentiality. All information collected during the reading program will be kept confidential and cannot be released without your explicit written permission. Neither your or your child’s name will be used to identify the information collected. Instead all participants receive a unique study code and all information collected will be sorted and identified by that code.

If you would like your child to participate in the reading program please sign and return the second page. You may keep this page for your records. If you have any questions, please contact my supervisor, Dr. Katherine F. Wickstrom, or myself at 529-6621. If you have questions regarding the rights of the participants, you may contact the Office of the Advancement of Scholarship and Teaching (513) 529-3734. Thank you for your consideration.

Respectfully Yours,

Jamie Williamson, M.S.
Graduate Student
Miami University
School Psychology Program

Katherine F. Wickstrom, Ph.D.
Assistant Professor
Miami University
School Psychology Program
Appendix A

Consent Form

Date: ____________

Your child has been invited to participate in an extension of the reading program at _______________________ Elementary school. Students who participate in the reading program will receive one-on-one tutoring approximately twice a week from March until April. Each tutoring session will last approximately 30 minutes, and will involve the same reading intervention strategy used last fall.

I, ________________________, as legal guardian, give permission for my child ________________________ to participate in the reading program at _______________________ Elementary School.

_________________________________________________________  ____________
Signature                                                  Date

If you have any questions about the reading program please contact my supervisor or myself at 529-6621.

Respectfully Yours,

Jamie Williamson, M.S.                                      Katherine F. Wickstrom, Ph.D.
Graduate Student                                           Assistant Professor
Miami University                                           Miami University
School Psychology Program                                  School Psychology Program

Please sign and return to school with your child.

Thank You.
Appendix B

Assent Form

Date: ____________

Dear Student,

You have been invited to continue the reading program at ___________________.

Elementary school. Students who participate in the reading program will receive one-on-one tutoring approximately twice a week from March until April. Each tutoring session will last approximately 30 minutes, using the same reading intervention strategy used last fall.

I, ______________________, would like to participate in the reading program at _____________________ Elementary School.

_________________________________  _____________
Signature                     Date
Appendix C

Teachers Consent Form

Date: __________

Your Student has been invited to participate in an extension of the reading program at _________________ elementary school. Students who participate in the reading program will receive one-on-one tutoring approximately twice a week from March until April. Each tutoring session will last approximately 30 minutes, and will involve the same reading intervention strategy used in the fall. In addition, you will be asked to complete three short questionnaires regarding the tutoring program.

I, _____________________ as the primary reading teacher, agree to participate in the reading program involving my student ______________________ at _____________________ elementary school. I understand that my participation is entirely voluntary and that I may withdraw my consent at anytime.

________________________________________  ______________________
Signature                                      Date

If you have any questions about the reading program please contact my supervisor or myself at 529-6621. If you have questions regarding the rights of the participants, you may contact the Office of the Advancement of Scholarship and Teaching at (513) 529-3734.

Respectfully yours,

Jamie Williamson, MS
Graduate Student
Miami University
School Psychology Program

Katherine F. Wickstrom, PhD
Assistant Professor
Miami University
School Psychology Program
There was once an old woman who lived all alone in a small house at the edge of a town. She was very poor. And all she had to eat was beans and chips and thin cornmeal mush. Of course, she ate a few vegetables from her garden. But, most of the time she took them into town on market day to sell or trade for what she needed for her simple life.

But the old woman was very thrifty. By saving carefully, a penny a day, she was able to buy herself a big ham. She kept it hanging from a hook in a cool dark closet behind the kitchen, and she only cut a thin slice from the ham on very special days— or if she was lucky enough to have company join her for a meal.

One evening a couple of young men who were traveling through the country stopped at the old woman’s house and asked if they could have lodging for the night.
**The Children’s Intervention Rating Profile (CIRP)**  
(Adapted from Witt & Elliott, 1985)

<table>
<thead>
<tr>
<th>I agree</th>
<th>I do not agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Case #: ___________  
Date: ___________

Tutor: Please read each item to the student and have him/her circle their agreement or disagreement.

1. The tutoring used to deal with my reading problems was fair....................................
   
2. The tutor was too hard on me............................
   
3. Going to tutoring caused problems with my friends..
   
4. There are better ways to help with my reading besides this tutoring............................
   
5. This tutoring would be a good method to use with other students..................................
   
6. I liked the tutoring program............................
   
7. I think that this tutoring method will help me do better in school............................

Comments:
ACADEMIC TUTORING PROGRAM  
Miami University™ School Psychology Program  

INTERVENTION OUTCOME INDEX  
(Adapted from Flugum & Reschly, 1994)

Case #: ________  Date: 

Directions: The purpose of this questionnaire is to obtain your feedback about the current functioning of your student, as well as your impressions about the Tutoring Program. Please complete this questionnaire before your final meeting with the tutor.

1. This was an acceptable intervention for the student’s reading problems.
   - Strongly Disagree  Disagree  No Opinion  Agree  Strongly Agree

2. The student’s reading has improved.
   - No  Yes

3. The degree of improvement is:
   - Small  Moderate  Large

4. The goals of the intervention were accomplished.
   - No  Yes

5. Following the tutoring program intervention, the overall functioning of the student is:
   - Much Worse  Worse  About the Same  Better  Much Better

Please feel free to make additional comments:
Appendix G

ACADEMIC TUTORING PROGRAM
Miami University School Psychology Program

TEACHER SATISFACTION QUESTIONNAIRE

Case #: _______ Date: 

Directions: The purpose of this questionnaire is to obtain feedback concerning your overall satisfaction with the Academic Tutoring Program. Please read the following questions and answer each carefully by selecting the option which best represents your personal reaction. Return in the self-addressed, stamped envelope at your earliest convenience.

1. During the meetings, the tutor did not offer useful information.
   Strongly Disagree 1 2 3 4 5 Strongly Agree

2. I am satisfied with the progress in the student’s reading.
   Strongly Disagree 1 2 3 4 5 Strongly Agree

3. The tutor was prompt in arriving to meetings and tutoring sessions.
   Strongly Disagree 1 2 3 4 5 Strongly Agree

4. The Academic Tutoring Program was not a valuable use of time.
   Strongly Disagree 1 2 3 4 5 Strongly Agree

5. The tutor communicated effectively with teachers and students.
   Strongly Disagree 1 2 3 4 5 Strongly Agree

6. Overall, I am very satisfied with my participation in the Academic Tutoring Program.
   Strongly Disagree 1 2 3 4 5 Strongly Agree

Additional Comments:
## Appendix H

### ACADEMIC TUTORING PROGRAM

Miami University™ School Psychology Program

**The Intervention Rating Profile-15 (IRP-15)**

(Adapted from Witt & Elliott, 1985)

**Case #: ________  Date:**

**Directions:** The purpose of this questionnaire is to obtain information about your reaction to the tutoring program. Please circle the number that best describes your agreement or disagreement with each of the following statements about the tutoring program and intervention developed for the referred student. Please answer **all questions** even if you are unsure of your response.

<table>
<thead>
<tr>
<th>Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. This is an acceptable intervention for the child’s reading problem.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>2. Most teachers would find this intervention appropriate for a student with reading difficulties.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>3. This intervention should prove effective for the child’s reading problem.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>4. I would suggest the use of this intervention to other teachers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Strongly Agree</td>
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<td>5. The child’s reading problem is severe enough to warrant the use of this intervention.</td>
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<td>Strongly Agree</td>
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<td>6. Most teachers would find this reading program suitable for the reading problem identified.</td>
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<td>Strongly Agree</td>
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<td>7. I would be willing to use the intervention in the classroom setting.</td>
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<td>Strongly Agree</td>
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<td>8. This intervention would <strong>not</strong> result in negative side-effects for the child.</td>
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<td>Strongly Agree</td>
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<td>9. This reading program would be appropriate for a variety of children.</td>
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<td>Strongly Agree</td>
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<td>10. This intervention is consistent with those I have used in the classroom setting.</td>
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<td>Strongly Agree</td>
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<td>11. The intervention is a fair way to handle the child’s reading problem.</td>
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<td>Strongly Agree</td>
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<td>12. The intervention is reasonable for the identified reading problem.</td>
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<td>Strongly Agree</td>
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<td>13. I like the procedures used in the intervention.</td>
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<td>Strongly Agree</td>
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<td>14. This intervention is a good way to handle this child’s reading problem.</td>
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<td>Strongly Agree</td>
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<td>15. Overall, this intervention would be beneficial for the child.</td>
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<td>Strongly Agree</td>
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## FIDELITY CHECKLIST

**Baseline**  
Session #: ______  Date: ______________  
- Used the Progress Monitoring passage.  
- Gave appropriate instructions.  
- Student read Progress Monitoring passage.  

CWPM: ______  EPM: ______

**Incentive**  
Session #: ______  Date: ______________  
- Used Progress Monitoring passage.  
- Gave appropriate instructions (stated contingency).  
- Proper goal determined from baseline.  
- Student selected reward choice.  
- Student read Progress Monitoring passage.  

CWPM: ______  EPM: ______

- Reward provided if earned; reward not provided if not earned.  Reward: ____________________________________________

**Repeated Reading**  
Session #: ______  Date: ______________  
- Used Progress Monitoring level passage.  
- Gave appropriate instructions.  
- Student read Progress Monitoring passage 3 times with no examiner corrections.  
- Student read Progress Monitoring passage.  

CWPM: ______  EPM: ______

**Listening Passage Preview/Phrase drill**  
Session #: ______  Date: ______________  
- Used Progress Monitoring level passage.  
- Gave appropriate instructions.  
- Examiner read passage once @ 90-100 words per minute.  
- Student read passage aloud; examiner highlighted errors.  
- Examiner read 15 word errors correctly to student.  
- Student read phrases containing 15 error words three times.  
- Student read Progress Monitoring passage.  

CWPM: ______  EPM: ______

**Easier Material**  
Session #: ______  Date: ______________  
- Used lower level Progress Monitoring passage.  
- Gave appropriate instructions.  
- Student read lower level Progress Monitoring passage.  

CWPM: ______  EPM: ______
### INTERVENTION FIDELITY CHECKLIST

**Repeated Reading**  
**Intervention Session #: ______  
Date: _______________

- Used Instructional Passage.  
- Gave appropriate instructions.  
- Student read entire Intervention Passage 3 times with no examiner corrections.

- Used Instructional Passage.  
- Gave appropriate instructions.  
- Student read entire Intervention Passage 3 times with no examiner corrections.

- Used Instructional Passage.  
- Gave appropriate instructions.  
- Student read entire Intervention Passage 3 times with no examiner corrections.

**Last reading for day:**  
- Used Progress Monitoring Passage.  
- Gave appropriate instructions.  
- Student read Progress Monitoring Passage for 1 minute.

CWPM: ________  
EPM: ________  

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**Repeated Reading**  
**Intervention Session #: ______  
Date: _______________

- Used Instructional Passage.  
- Gave appropriate instructions.  
- Student read entire Intervention Passage 3 times with no examiner corrections.

- Used Instructional Passage.  
- Gave appropriate instructions.  
- Student read entire Intervention Passage 3 times with no examiner corrections.

- Used Instructional Passage.  
- Gave appropriate instructions.  
- Student read entire Intervention Passage 3 times with no examiner corrections.

**Last reading for day:**  
- Used Progress Monitoring Passage.  
- Gave appropriate instructions.  
- Student read Progress Monitoring Passage for 1 minute.

CWPM: ________  
EPM: ________
INTERVENTION FIDELITY CHECKLIST

Case #: __________   ✓ = completed

**Listening Passage Preview/Phrase Drill**

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<thead>
<tr>
<th>Session</th>
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| Used Instructional Passage. |
| Gave appropriate instructions. |
| Examiner read entire passage once @ 100 words per minute. |
| Student read entire passage aloud; examiner highlighted errors. |
| Examiner read (up to) 15 word errors correctly to student. |
| Student read **phrases** containing 15 error words three times. |

| Used Instructional Passage. |
| Gave appropriate instructions. |
| Examiner read entire passage once @ 100 words per minute. |
| Student read entire passage aloud; examiner highlighted errors. |
| Examiner read (up to) 15 word errors correctly to student. |
| Student read **phrases** containing 15 error words three times. |

| Used Instructional Passage. |
| Gave appropriate instructions. |
| Examiner read entire passage once @ 100 words per minute. |
| Student read entire passage aloud; examiner highlighted errors. |
| Examiner read (up to) 15 word errors correctly to student. |
| Student read **phrases** containing 15 error words three times. |

**Last reading for day:**

| Used **Progress Monitoring** Passage. |
| Gave appropriate instructions. |
| Student read Progress Monitoring Passage for 1 minute. |

CWPM: _______   EPM: _______