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## Early attention problems and teacher-student interactions: their impact on reading achievement

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**EARLY ATTENTION PROBLEMS AND TEACHER-STUDENT INTERACTIONS:  
THEIR IMPACT ON READING ACHIEVEMENT**

**Thesis**

**Submitted to**

**The School of Education and Allied Professions of the  
UNIVERSITY OF DAYTON**

**in Partial Fulfillment of the Requirements for**

**The Degree**

**Educational Specialist in School Psychology**

**by**

**Kathryn Rhea Handley**

**UNIVERSITY OF DAYTON**

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WE HEREBY APPROVE THE THESIS SUBMITTED

BY

Kathryn Rhea Handley

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AS PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

Educational Specialist in School Psychology

  
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## ABSTRACT

### EARLY ATTENTION PROBLEMS AND TEACHER-STUDENT INTERACTIONS: THEIR IMPACT ON READING ACHIEVEMENT

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This purpose of this study was to examine how inattentive behaviors in the classroom impact reading achievement. This study also investigated how this association is mediated by interactions with teachers. Participants were 38 second-grade students and three female teachers from a public school district in Ohio. Rank correlational analysis revealed that student inattention had a weak negative correlation with reading achievement. This is contradictory to previous research which has indicated that inattention is strongly related to difficulties in the area of reading. In addition, teacher-student interactions were not significantly associated with reading achievement. Thus, involvement, autonomy support, and structure provided by the teacher did not mediate the relationship between student inattention and reading achievement. Additional research is needed to further investigate the association among inattention and reading achievement and to provide insight into how interactions with teachers may benefit students over time.

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## Introduction

Researchers have become increasingly aware that quality teacher-student relationships are positively related to academic achievement and positive behavioral outcomes. For instance, Wang, Haertel, and Walberg (1994) reported that many educationally resilient students attribute their success, in part, to a caring and supportive teacher who respected and listened to them. In addition, a longitudinal study conducted by Hamre and Pianta (2001) indicated that teacher-student relationships are "unique predictors of academic and behavioral outcomes in early elementary school, with mediated effects through eighth grade" (p. 634). Further studies have found that positive teacher-student interactions are associated with improvement in social skills (Pianta & Stuhlman, 2004), student work habits (Hamre & Pianta, 2001), academic motivation (Waxman & Huang, 1996), student's self-perceptions as learners (Pretzlik, Olsson, Nabuco, & Cruz, 2003), and student grades (Hamre & Pianta, 2001). Conversely, negative teacher-student interactions are associated with an increase in behavioral and academic problems and less academic engagement in school (Hamre & Pianta, 2001), which may lead to even poorer academic achievement and problems with social and emotional adjustment. Of particular interest for the current study is the extent to which teacher-student interactions influence the reading achievement of second grade students who exhibit inattentive behavior in the classroom.

This study examined the relationship between student's inattentive behaviors in the classroom and reading achievement, mediated by teacher-student interactions. Specifically, it was predicted that:

1. Student inattention, as rated by the teacher, will be negatively associated with reading achievement.
2. Positive teacher-student interactions, as rated by the student, mediate the association among student inattention and reading achievement (i.e. students with high inattention

who have a high level of reading achievement also have an optimum level of teacher-student interactions).

### Literature Review

In order to meet the needs of all students, it is important for education professionals to fully understand the process and the extent to which student perceptions of teacher-student interactions influence student outcomes. Thus far, the literature has demonstrated that teacher-student interactions are reciprocal, meaning the ways in which teachers perceive their students' behavior influences the manner in which the teacher interacts with their students and vice versa (Montague & Rinaldi, 2001; Hamre & Pianta, 2005). In addition, it has been found that children's perceptions of their relationship with their teacher converge with their teacher's perceptions as early as first grade (Valeski & Stipek, 2001).

#### *Interaction Indicators*

A review of the literature indicates that teacher-student interactions have been most commonly examined using the Student-Teacher Relationship Scale (STRS) developed by Pianta (1992) (Birch & Ladd, 1998; Hamre & Pianta, 2001; Pianta & Stuhlman, 2004). The STRS is designed to assess teachers' perceptions of their relationships with individual students. Though the STRS is considered to be an informative assessment of teacher perceptions of child behavior and teacher-student relationships, other research indicates that there is a lack of evidence supporting validity and reliability of the instrument for making decisions about teachers (Pianta, 2001). In addition, the STRS does not take into account the perceptions of the student, which are essential for understanding how teacher-student interactions influence student outcomes (Padron, Waxman, & Huang, 1999). An alternative to the STRS is the teacher context subtest of the Rochester Assessment Package for Schools - Student (RAPS-S; Institute for Research and Reform in Education, 1998). The RAPS-S is a reliable and valid assessment designed to measure teacher-student interactions as perceived by the student.

The Rochester Assessment Package for Schools - Student (RAPS-S; Institute for Research and Reform in Education, 1998) is based on a motivational model outlined by Connell and Wellborn (1991) and further described by Skinner and Belmont (1993). This model is

referred to as a self-systems process model that assumes that children have basic psychological needs and will be most motivated to engage in activities associated with academic performance when those needs are met. These psychological needs, in the academic context, include: (a) academic competency (the need to experience oneself as capable of producing desired outcomes and avoiding negative consequences), (b) autonomy (the experience of choice in the initiation, maintenance, and regulation of activity and the experience of connectedness between one's actions and personal goals and values), and (c) relatedness (the need to feel socially connected and valued) (Connell & Wellborn, 1991). According to the self-systems process model, the extent to which these needs are met is thought to be influenced by three dimensions of teacher-student interactions. These three dimensions include teacher involvement, structure, and autonomy support.

*Involvement.* Involvement, as described by Stiller and Ryan (1992), reflects the extent to which teachers are interested in and take an active role in the student's life and dedicate time and other resources to the student. Skinner, Zimmer-Gebeck, and Connell (1998) further describe involvement as the expression of caring, enjoyment, affection, and emotional availability and accessibility. The few studies that have examined teacher involvement have found that involvement has a strong influence on academic performance in terms of student engagement in both elementary students (Grades 1 -6) (Skinner et al., 1998) and older students (Grades 7 -12) (Stiller & Ryan, 1992; Skinner et al., 1998; Tucker et al., 2002). However, the association between teacher involvement and academic achievement has not yet been examined.

*Structure.* The second dimension, structure, is defined as "the extent to which social and physical contexts provide individuals with both information about the pathways to achieving desired and avoiding undesired outcomes and support and guidance for following those pathways" (Skinner et al., 1998, p. 20). Teachers can provide structure by establishing and communicating clear classroom rules and expectations, by providing fair and consistent

enforcement of those rules and expectations, and by offering instrumental help and support (Skinner & Belmont, 1993; Tucker et al., 2002). Structure in the classroom is associated with feelings of security in that the student understands the teacher's expectations. Although student perceptions of structure have been found to be a major factor in the development of self-control, responsible behavior (Cothran, Kulinna, & Garrahy, 2003), and self-perceived competence (Tucker et al., 2002; Valeski & Stipek, 2001), structure has not yet been examined as a construct that may directly influence academic achievement.

*Autonomy Support.* The final category of teacher interactions, autonomy support, refers to the idea that "an individual in a position of authority (e.g., a teacher) takes the other's (e.g., a student's) perspective, acknowledges the other's feelings, and provides the other with pertinent information and opportunities for choice, while minimizing the use of pressures and demands" (Black & Deci, 2000, p. 742). Teachers can support autonomy by providing students with necessary information while encouraging them to think independently (Tucker et al., 2002) and by allowing students to have some degree of control over learning (Brooks, Freiburger, & Grotheer, 1998). Teachers can also encourage students to understand how to build on prior knowledge and draw clear connections between what they are learning and how it is relevant to their lives (Skinner & Belmont, 1991). Autonomy support has been found to have a direct effect on academic engagement in younger students (Tucker et al., 2002), student motivation (Stiller & Ryan, 1992; Chirkov & Ryan, 2001), and self-determined motivation (Hardre & Reeve, 2003) in older students.

#### *Inattentiveness in the Classroom*

It is known that student characteristics including gender, race, disability status, academic orientation, and various behaviors including externalizing and internalizing symptomology influence the teacher-student relationship (Birch & Ladd, 1998; Murray & Murray, 2004). However, to date, no reports have been published concerning the impact of teacher-student interactions on students who exhibit inattentive behavior in the classroom. This is surprising in

view of the fact that problems with inattention to classroom instruction and schoolwork are reported to be among the most common difficulties exhibited by students (DuPaul, Stoner, & O'Reilly, 2002). Therefore, the current study will examine the association among teacher-student interactions and inattention.

Although numerous studies have examined inattentiveness as measured using the Diagnostic and Statistical Manual of Mental Disorders - Fourth Edition (DSM-IV; APA, 2000) for Attention Deficit Hyperactivity Disorder (ADHD) Predominantly Inattentive subtype, researchers have only recently begun to investigate the particular types of academic problems associated with inattention as a distinct construct. This is an important area of research because two major features of ADHD, inattention and hyperactivity, are best conceptualized as two distinct, yet often co-occurring, constructs (Beiser, Dion, & Gotowiec, 2000; Lahey et al., 1994). In addition, student inattention may be a product of other potential sources such as anxiety and trauma (Pfohl, Jimerson, & Lazarus, 2002), depression (American Academy of Child and Adolescent Psychiatry, 2004), and the classroom environment (Webb & Latimer, 1993).

Inattention is characterized by three major elements (Rowe & Rowe, 1992a). The first major element, sustaining attention, is defined as a mental process in which the individual selectively attends to particular aspects of a task or situation at hand while ignoring other aspects (Papadopoulos, Das, Koder, & Solomon, 2002). Students demonstrating difficulties with attention may be described by their teachers as unable to concentrate and/or unable to pay attention for adequate periods of time (Edelbrock, 1990). Perseverance, the second element of inattention, refers to the student's sense in knowing when to continue with, and not to give up too soon on, a chosen strategy or action, and at the same time, knowing when to abandon a particular strategy or action in the search for a more effective or useful one (Thom & Pirie, 2002). A student who lacks perseverance may fail to finish things that he/she starts, such as homework or in-class assignments (Edelbrock, 1990). The third characteristic, distractibility, is defined by Sohlberg and Mateer (2001) as the shifting of attention from the task at hand to

irrelevant external stimuli such as sounds, sights, and other stimuli that normally occur in the environment as well as internal distractions such as worry or rumination. These characteristics of inattention may have a negative impact on reading achievement.

### *Reading Achievement*

The existing studies that examined inattention as a distinct construct have focused on the association among inattention and reading achievement. For instance, a longitudinal study conducted by Fleming, Harachi, Cortes, Abbott, and Catalano (2004) demonstrated that students who displayed attention problems throughout Grades 3 through 6 as rated by their teachers had lower reading scores on the Northwest Evaluation Association (NWEA) Achievement Level Tests than students who did not have attention problems. Another study demonstrated that attention problems in the first grade predicted reading achievement in the fifth grade, as measured by subtests from the Woodcock-Johnson Psychoeducational Battery-Revised, even after controlling for prior reading achievement, IQ, and other behavioral difficulties (Rabiner, Coie, & the Conduct Problems Prevention Research Group (CPPRG), 2000). Findings from these studies suggest that children with attention problems fail to acquire the critical reading skills taught during first grade and then have difficulty catching up after this occurs. Rowe and Rowe (1992b) further confirmed this finding, stating that the relationship between inattentiveness and reading achievement is cyclical. This means that inattentive behaviors in the classroom had strong negative influences on reading achievement, and lower levels of reading achievement led to increases in inattentiveness.

The current study will add to this research by utilizing the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) to measure reading achievement. The DIBELS measures are a set of standardized, individually administered measures designed to regularly assess and monitor early literacy development (Good, Kaminski, Laimon, & Johnson, 1992). These measures are being used by school psychologists increasingly due to the fact that the DIBELS measures meet the criteria for best practices in assessment of early literacy skills in that they

are prevention-oriented, reliably measure student growth on an ongoing basis, can predict success or failure on criterion measures (high stakes testing), and provide instructional goals, that if met, prevent reading failure (Casey & Howe, 2002). The DIBELS measures also meet the criteria for best practices in developing local norms for academic problem solving. Local norms provide a standard by which to compare a student's performance to others in the student's own school district, building, or classroom (Stewart & Kaminski, 2002). This study will utilize the DIBELS Oral Reading Fluency (ORF) subtest, a measure of accuracy and fluency with connected text. This measure is designed to be administered to second grade students, whom will be the participants of this study.

## Method

### *Participants and Setting*

*Student participants.* Participants consisted of 38 second-grade students (16 boys and 22 girls) from a public school district in Ohio. Only students with written parental consent were chosen to participate in the study. In each classroom, approximately 50.67% of the students had written parental consent to participate. The median age of the students was 8 years, 4 months (SD = 4 months). Of the participating students, 76% were Caucasian, 7.9% were African American, 7.9% were Biracial, 5.3% were Middle Eastern, and 2.6% were Asian. The majority of the student's mothers had a high school diploma (50%), 5.3% had less than a high school diploma, 28.9% had an associates degree, 7.9% had a Bachelor's Degree, and 5.3% had some college experience. The majority of the students' fathers had a high school diploma (63.2%), 2.6% had less than a high school diploma, 13.2% had an associates degree, 7.9% had a Bachelor's Degree, and 5.3% had some college experience. Three participants did not indicate their father's education level.

*Teacher participants.* Three female teachers participated in the study. Of the three second-grade teachers, two had over 20 years of full-time teaching experience and the third teacher had between 10 to 14 years of experience. All three of the teacher participants were Caucasian. Two teachers had a Bachelor's level of education and one had a Master's level of education. The school district serves approximately 3,548 students. In this district, 25.9% of the student population receives free or reduced lunch.

### *Research Design*

A cross-sectional correlational research design was used to examine the strength of the relationship among each of the predictor variables (inattention and teacher-student interactions) and the criterion variable (reading achievement).

### *Procedure*

Permission was granted from the superintendent and two building principals to conduct this study in their schools. The researcher then discussed the study with each of five second grade teachers and requested informed consent to participate in the study. Three of the five teachers consented to participate, for a response rate of 60%. Consent forms were then sent home with 75 students requesting parent or legal guardian consent. The parent/guardian was also asked to complete the Student Information Form and to return both forms in a sealed envelope. Of these students, 38 students returned signed parent/guardian consent forms granting permission for their child to participate in the study. Therefore the student response rate was 50.7%.

Teachers individually completed the CAPS survey for each student and returned them to the researcher. The researcher individually administered the RAPS and DIBELS Oral Reading Fluency measures to each student within a one week period. In a quiet setting, the nature of the study was explained and the student was asked for their assent to participate in the research project in language appropriate to the participant's age and maturity. Participants were informed that they could refuse to answer any question they wished and that they could withdraw from the study at any time. No individually identifying information was recorded; participants were assigned study-specific numbers for identification. All measures were completed during the month of April.

### *Measures*

*Teacher ratings of student inattention.* Student attention was measured using the inattentive items on the Child Attention Problems Scale (CAPS; Edelbrock, 1990). This scale includes seven items from the Teacher's Report Form (TRF) (Achenbach, 1991) that directly assess inattention. Each item is rated on a 3-point scale to denote whether it is "not true" for the child (0), "sometimes true" (1), or "very true" (2). This scale is a pure measure of inattention and does not contain items pertaining to hyperactivity. Examples of items include "Fails to finish

things he/she starts" and "Day-dreams or gets lost in thoughts." The coefficient alpha for this scale is .87.

*Teacher-student interactions.* Student participants were administered selected subscales of the Rochester Assessment Package for Schools - Student (RAPS-S; Institute for Research and Reform in Education, 1998). The RAPS-S is designed to assess student levels of engagement in school, beliefs about themselves, and teacher context. For the purpose of this study, the participants only completed the teacher context section of the RAPS-S. This measure includes 10 items at the elementary level that tap the extent to which the student feels that adult(s): (1) are involved with them, (2) provide support for autonomy, and (3) provide structure. All items are rated on a scale ranging from 1 (very true) to 4 (not at all true). Examples of items include "My teacher doesn't seem to have enough time for me", "My teacher doesn't explain why we have to learn certain things in school", and "My teacher isn't fair with me." Each of the teacher context subscales for students at the elementary level have adequate reliability: involvement  $\alpha = .70$ , autonomy support  $\alpha = .56$ , and structure  $\alpha = .65$  (IRRE, 1995).

*Reading achievement.* The DIBELS Oral Reading Fluency (ORF) (Good & Kaminski, 2002) was used as the measure of reading achievement. The DIBELS ORF is a standardized set of passages and administration procedures typically used to (a) identify children who may need additional instructional support, and (b) monitor progress toward instructional goals (Good, Kaminski, Simmons, & Kame' enui, 2001). The passages are calibrated for the goal level of reading for each grade level. Student performance is measured by having students read a passage aloud for one minute. Words omitted, substituted, and hesitations of more than three seconds are scored as errors. Words self-corrected within three seconds are scored as accurate. The number of correct words per minute from the passage is the oral reading fluency rate. This process is completed for three reading passages. The score used for data analysis is the student's median score.

A series of studies has confirmed the technical adequacy of the DIBELS ORF. Tindal, Marston, and Deno (1983, as cited by Good & Kaminski, 2002) reported from their study that test-retest reliabilities for elementary students ranged from .92 to .97 while alternate-form reliability of different reading passages drawn from the same level ranged from .89 to .94. In addition, Good and Jefferson (1998, as cited by Good & Kaminski, 2002) reported criterion-related validity coefficients ranging from .52 - .91. Instructions for administering the DIBELS ORF, the DIBELS ORF Assessment Integrity Checklist, and a sample passage developed by Good and Kaminski (2002) can be found in the Appendix.

## Results

Table 1 provides the means, standard deviations, and ranges for each of the study variables. Overall, the student participants demonstrated a low level of inattentive behaviors in the classroom ( $M = 3.21$ ,  $SD = 3.84$ ). Scores on the Rochester Assessment Package for Schools - Student (RAP-S) ranged from 17 to 38 ( $M = 29.16$ ,  $SD = 5.84$ ). Scores on the DIBELS Oral Reading Fluency measure ranged from 27 to 191 ( $M = 86.11$ ,  $SD = 36.63$ ).

Before conducting further analysis of the data, tests of normality were conducted to investigate whether the data were normally distributed. First, the skewness and kurtosis values for DIBELS ORF, CAPS, and RAP-S scores were compared with twice the standard error (Price, 2000). These statistics revealed that for the CAPS scores, the skewness statistic was 3.23 times its standard error and that the skewness statistic for the DIBELS ORF scores was 2.25 times its standard error. In addition, the Shapiro-Wilk (SW) test of normality indicated that the CAPS variable was significant at the .001 alpha level ( $p = .000$ ). Therefore, it was concluded that the scores for the CAPS measure were not normally distributed. As a result, nonparametric statistics were used for analyses involving these variables. Table 2 contains the Shapiro-Wilk test results in addition to skewness and kurtosis statistics.

### *Association among Student Inattention and Reading Achievement*

The first hypothesis predicted that student inattention as rated by the teacher would be negatively associated with reading achievement. To investigate this relationship a Spearman's rank correlational analysis was conducted. As shown in Table 3, student inattention was found to have a weak negative correlation with reading achievement ( $r_s = -.399$ ;  $p < .05$ ).

### *Mediation Analysis*

According to Baron and Kenny (1986) and Neu (2000), a variable functions as a mediator when the variable meets the following three conditions: (1) the mediating variable (e.g., teacher-student interactions) must significantly relate to the independent variable (e.g., student inattention); (2) the independent variable must significantly relate to the dependant

variable (e.g., reading achievement); and (3) when the relation among Paths a and b are controlled, a previously significant relation between the independent and dependent variables is no longer significant (see Figure 1 for illustration of the mediational model). Therefore, initial Spearman's rank correlations were calculated between scores resulting from the CAPS, RAPS-S, and DIBELS measures (see Table 3). As mentioned previously, student inattention, as rated by their teachers, had a weak negative correlation with reading achievement ( $r_s = -.399$ ;  $p < .05$ ). Likewise, the results indicated that teacher-student interactions were not significantly associated with reading achievement ( $r = .238$ ; ns) or student inattention ( $r = -.009$ ; ns). Since these relationships were not significant, the requirements of the mediation analysis were not satisfied. Therefore, the mediational analysis could not proceed.

## Discussion

The purpose of the present study was to examine the relationship between student's inattentive behaviors in the classroom and reading achievement, mediated by involvement, autonomy support, and structure provided by the teacher. First, the association among student inattention and reading achievement was examined. The findings indicate that student inattention, as rated by their teachers, was weakly associated with reading achievement. These results are contradictory with prior research which has recognized that inattentive behavior is strongly related to difficulties in the area of reading (Merrell & Tymms, 2001; Rabiner, Coie, & the Conduct Problems Prevention Research Group (CPPRG), 2000).

Second, the results of the current study revealed that involvement, autonomy support, and structure provided by the teacher did not mediate the relationship between student inattention and reading achievement. In fact, teacher-student interactions were not significantly associated with reading achievement. These findings were surprising due to the fact that teacher-student interactions are unique predictors of academic engagement (Skinner et al., 1998), motivation (Chirkov & Ryan, 2001; Stiller & Ryan, 1992), and self-perceived competence (Tucker et al., 2002; Valeski & Stipek, 2001). While teacher-student interactions did not have an impact on reading achievement, these interactions may have beneficial affects on other aspects of educational outcomes not examined in this study. To date, this is the first study to examine these specific constructs of teacher interactions as predictors of reading achievement.

A few limitations to this study should be noted. One limitation of the current study is the fact that only about half of the students eligible for the study were given parental consent to participate. One of the teacher participants of this study noted that several of the students in her class that had the most attention problems did not participate in this study. Therefore, a larger sample size may have resulted in a more normal distribution of student scores. An additional limitation of the current study is that the measure of student inattention was based on a single rating. Although the teachers were asked to rate the items based on how accurately

they describe the student *now* or *within the last week*, a weekly rating over a period of two to three weeks may have provided a more accurate depiction of student behavior. Finally, it is important to note that this was a nonexperimental study and firm conclusions about the causal role of inattention in producing reading problems cannot be made.

The results of this study have important implications for future research. While previous research has identified inattention as a significant factor associated with underachievement in reading, the results of the current study suggest that inattention may not be as strongly related to reading achievement as once thought. Since a limited number of students participated in this study, it is important for future studies to replicate these findings before any conclusions can be made. Furthermore, additional research is needed concerning teacher-student interactions specifically in the form of involvement, autonomy support, and structure. While the current study did not reveal an association among teacher-student interactions and reading achievement longitudinal research in this area may provide insight into how these interactions may benefit students over time.

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## Appendix

Dynamic Indicators of Basic Early Literacy Skills (DIBELS) 6th Edition  
Directions for Administration, Assessment Integrity Checklist and Sample Passages

**Materials:** Student copy of passage; examiner copy, clipboard, stopwatch; colored scoring pen.

**Directions for Administration – Part 1: Oral Reading Fluency**

1. Place the reading passage in front of the student.
2. Place the examiner copy on clipboard and position so that the student cannot see what you record.
3. Say these specific directions to the student:

*Please read this (point) out loud. If you get stuck, I will tell you the word so you can keep reading. When I say, "stop" I may ask you to tell me about what you read, so do your best reading. Start here (point to the first word of the passage). Begin.*

4. Start your stopwatch when the student says the first word of the passage. The title is not counted. If the student fails to say the first word after 3 seconds, tell them the word and mark it as incorrect, then start your stopwatch.
5. The maximum time for each word is 3 seconds. If the student does not provide the word within 3 seconds, say the word and mark the word as incorrect.
6. Follow along on the examiner copy of the probe. Put a slash ( / ) over words read incorrectly.
7. At the end of 1 minute, place a bracket ( ] ) after the last word provided by the student, stop and reset the stopwatch, and say

*Stop. (remove the passage)*

## DIBELS™ Oral Reading Fluency Assessment Integrity Checklist

**Directions:** As the observer, please observe setup and directions, time and score the test with the examiner, check examiner's accuracy in following procedures, and decide if examiner passes or needs more practice.

Fine	Needs Practice	
✓ box to indicate Fine or Needs Practice		
<input type="checkbox"/>	<input type="checkbox"/>	1. Performs standardized directions verbatim: <i>Please read this out loud. If you get stuck, I will tell you the word so you can keep reading. When I say, "stop" I may ask you to tell me about what you read, so do your best reading. Start here. Begin.</i>
<input type="checkbox"/>	<input type="checkbox"/>	2. Holds clipboard and stopwatch so child cannot see what (s)he records.
<input type="checkbox"/>	<input type="checkbox"/>	3. Starts stopwatch after child says the first word of the passage.
<input type="checkbox"/>	<input type="checkbox"/>	4. For first word, waits 3 seconds for child to read the word. After 3 seconds, says the correct word, starts the stopwatch, and scores the first word as incorrect.
<input type="checkbox"/>	<input type="checkbox"/>	5. For all words, if child hesitates or struggles with a word for 3 seconds, says the correct word and scores the word as incorrect.
<input type="checkbox"/>	<input type="checkbox"/>	6. Puts a slash through words read incorrectly.
<input type="checkbox"/>	<input type="checkbox"/>	7. Follows discontinue rule if child does not get any words correct in first five words.
<input type="checkbox"/>	<input type="checkbox"/>	8. At the end of 1 minute, places a bracket (e.g., ] ) after the last word provided and says "Stop."
<input type="checkbox"/>	<input type="checkbox"/>	9. Records the number of correct words.
<input type="checkbox"/>	<input type="checkbox"/>	10. Shadow score oral reading fluency with the examiner. Is he/she within 2 points on the final score?
<input type="checkbox"/>	<input type="checkbox"/>	11. Performs retell standardized directions verbatim: <i>Please tell me all about what you just read. Try to tell me everything you can. Begin.</i>
<input type="checkbox"/>	<input type="checkbox"/>	12. If the student does not say anything for 3 seconds, say "Try to tell me everything you can." This prompt can be used only once.
<input type="checkbox"/>	<input type="checkbox"/>	13. If the student does not say anything or gets off track for 5 seconds, circle the total number of words in the student's retell and say, "Stop."
<input type="checkbox"/>	<input type="checkbox"/>	14. At the end of 1 minute, circle the total number of words in the student's retell and say, "Stop."
<input type="checkbox"/>	<input type="checkbox"/>	15. Shadow score the retell with the examiner. Is he/she within 2 points on the final score?

## Sample Passage

Benchmark 1.1  
DIBELS™ Oral Reading Fluency

## Mom's New Job

Yesterday my mom started her new job. Her job is to drive a school bus every morning. She took driving classes to get ready for her new job. She had to get a special license, too. She wears a dark blue uniform with a yellow vest.

Now that she is driving a school bus, my mom has to get up even earlier than we do. She has to be at work on time or the children won't get to school on time. She does her best to get everyone to school on time.

When I came down to the kitchen for breakfast yesterday, Dad and Mom were eating cereal and drinking coffee together. Since Mom has to leave early, I knew she wouldn't have time to make my breakfast anymore. I sat down and fixed myself a bowl of cereal.

"Did you make my lunch, Mom?" I asked.

"I made it for you," said Dad. "I made mom's and mine, too."

"We're all going to take turns making lunches," Mom said. "Next week you'll get to make all three lunches."

That afternoon when I came home from school, I smelled something good. There was mom in the kitchen, taking chocolate chip cookies out of the oven.

"I made a treat for our lunches tomorrow," she said. "Here, you may have one."

"How was your second day on the job, Mom?" I asked.

"Just great, honey. I love my new job," she said.

Retell:

Total:

Table 1

*Means, Standard Deviations, and Ranges for Student Inattention, Teacher-Student Interactions, and Reading Achievement by Gender*

Variable	Mean	S.D.	Range
Student Inattention			
Male	4.38	4.69	0 - 14
Female	2.36	2.92	0 - 11
Overall	3.21	3.84	0 - 14
Teacher-Student Interactions			
Male	26.88	6.32	17 - 37
Female	30.82	4.97	22 - 38
Overall	29.16	5.84	17 - 38
Reading Achievement			
Male	77.31	28.36	27 - 113
Female	92.50	41.09	45 - 191
Overall	86.11	36.63	27 - 191

Table 2

*Distribution Characteristics of the Study Variables*

Variable	SW Statistic	<i>p</i>	Skewness	Kurtosis
Student Inattention	.813	.000**	1.239	.694
Teacher-Student Interactions	.953	.109	-.346	-.539
Reading Achievement	.944	.056	.861	.723

Note: \*\* $p < .01$

Table 3

*Spearman Rank Correlations among Teacher and Student Variables*

	1	2	3	4	5	6	7	8	9
1. Student Inattention	--	.009	-.399*	-.165	-.179	-.196	-.192	-.249	-.113
2. Teacher-Student Inter.		--	.265	-.197	.292	-.240	-.195	.124	.305
3. Reading achievement			--	-.204	.160	.105	-.022	.195	.420**
4. Teacher Exp				--	-.025	-.091	.098	.091	-.139
5. Gender					--	-.150	.140	.327	.477**
6. Ethnicity						--	.362*	.230	-.112
7. Language							--	.289	.136
8. Father Educ.								--	.466**
9. Mother Educ.									--

Note: \* $p < .05$ ; \*\* $p < .01$

Figure Caption

Figure 1. Mediation model as described by Baron and Kenny (1986).

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