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The Effects of the Great Leaps Reading Program on Students with Severe Reading Disabilities as a Secondary Reading Intervention in an Impoverished Setting

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# Abstract

The Great Leaps Reading Program (GLRP) was developed to supplement the reading instruction of students with reading difficulties (Campbell, 1995). Repeated readings, within each component of the GLRP intervention, were used until a predetermined criterion for mastery was achieved. Three secondary students educated in a rural, Title One school setting participated in the multiple-baseline study over the period of five weeks. Data were collected daily for each participant on each component. Results indicated that a functional relationship between baseline and intervention was demonstrated for all of the components of the GLRP.

The Effects of the Great Leaps Reading Program on Students with Severe Reading Disabilities as a Secondary Reading Intervention in Impoverished Settings

For any child, learning to read is a very arduous task and is possibly the most important accomplishment during a child's educational career (Fisher & Adler, 1999). Yet, the importance does not diminish as the child grows; once a child has learned to read, he or she needs to develop reading fluency and continue to grow into a successful and literate individual. Reading fluency has been referred to as being able to read effortlessly (Clark, 1995) and is the result of automatic decoding (Nathan & Stanovich, 1991), and when students are taught these automatic decoding skills, they are supplied with the tools to dissect the code of written language.

Adams (1990) suggested that the most critical aspect of decoding is being able to easily recognize letters, patterns, and words automatically. Students who are not able to automatically decode read much slower and recognize fewer words, which inhibits comprehension skills (Perfeti, 1985). Consequently, many studies have provided evidence of this relationship between students' reading rates and reading comprehension (Allinder, 2001; Fuchs &Fuchs, 1992; Marston, 1989). Findings suggest that when students are able to decode words effortlessly, they are able to conserve energy to devote to reading comprehension (LaBerge & Samuels, 1974; Joseph, 2002).

Reading Disabilities and Poverty

When the task of learning to read is coupled with a learning disability and being a child of poverty, the task becomes even more grueling and painstaking. Slow development of reading skills has serious consequences for all children, but it is

particularly crucial for children who are already considered at-risk by poverty (Fisher & Adler, 1999). According to current statistics, one fifth and one quarter of American children are living in poverty (Fisher & Adler, 2007), and an estimated eighty percent of students who have learning disabilities have disabilities in reading (Joseph, 2002). Helping these students develop stronger reading skills is critical because reading proficiency is a way to break the poverty cycle and open doors to greater opportunities for children in and out of the school setting (Kellet & Dar, 2007). These children need to be exposed to as much literature as possible so that they can develop their reading fluency and increase their comprehension skills.

A strong predictor of how easily a word is learned can be determined by the number of times a student encounters it (McKeown, Beck, Omanson, & Pople, 1985); the more exposure that a student has to certain vocabulary, the more easily he or she will learn the vocabulary. Children of poverty have very little exposure to print outside of the classroom, and many times their caregivers are illiterate and do not provide experiences in reading or writing (Joseph, 2002; Kellet & Dar, 2007). Because their caregivers may not value reading, children of poverty oftentimes do not value reading proficiency and are not motivated to improve their reading skills, which only continues the cycle of struggling readers (Kellet & Dar, 2007).

One way to increase exposure and motivation for these students is through repeated readings, which is a research driven instructional strategy that has been used to increase oral reading fluency rates by increasing the time students are exposed to certain texts (Samuels, 1979). Using this strategy, students repeatedly read short passages until a predetermined criterion is met (Askew, 1993; Homan, Klesius & Hite, 1993; Weinstein

& Cooke, 1992; Young, Bowers, & MacKinnon, 1996). Beach (1993) found that teachers should do the following when conducting reading fluency instruction: (a) provide guidance to ensure that the reader connects with the passage, (b) pre-teach new vocabulary words that will be encountered, (c) use modeling techniques, (d) create a nonthreatening environment, and (e) use whole texts.

Specific strategies for reading instruction and intervention are extremely important because research has indicated that 75% of students with reading difficulties (even without the label of having a disability or being educated in impoverished settings) in third grade continue to have reading difficulties in ninth grade (Lyon, 1995; Fisher & Adler, 2002). Unfortunately, research validating secondary level reading programs focusing on phonemic awareness and decoding skills is sparse. Additionally, research on such programs with individuals from impoverished settings with dual reading disabilities is nonexistent. At the secondary level, instead of a continuing effort to increase oral reading fluency and comprehension skills by teaching specific instructional strategies and programs, students are expected to be able to increase these skills within core academic classes. As a result, very few phonemic awareness programs have been adopted at the secondary level. In fact, Mercer, Campbell, Miller, Mercer, and Lane (2000) suggest that the reading needs of students at the secondary level are often overlooked. Therefore, it is necessary to substantiate reading programs that are research-based and have specific instructional approaches for adolescents, especially in areas where the students who are struggling with reading are also living in poverty (O'Shea, 1987; Dowhower, 1987; Torgesen, 1886; Herman, 1985; Roshotte & Torgesen, 1985; & O'Shea & Sindelar, 1984).

Currently, only a few studies have been conducted using the Great Leaps Reading Program as an intervention. For example, Mercer, et al. (2001) implemented the GLRP daily with 49 middle school students with learning disabilities in reading. The GLRP, which is made up of phonics, sight words, and an oral reading component, measured the effects of the GLRP intervention on the students' oral reading rates. The purpose of this research was to develop and evaluate the GLRP so that it could be implemented by paraeducators with students with learning disabilities. An experimental pretest/posttest three-group design was used in this study. The participants were divided into three groups that were based on the length that the intervention would be implemented. Three groups received the same intervention for 6 to 9 months, 10 to 18 months, and 19 to 25 months, respectively. Group 1 was administered the intervention by a certified teacher for the least amount of time. Groups 2 and 3 were administered the intervention by paraeducators for longer periods of time. The assessment of the intervention was established through a curriculum-based measurement. Results suggested that all three groups made substantial progress as a result of the intervention, regardless of the trainer. Implications from this study support the use of paraeducators for one-on-one reading instruction and repeated readings as a technique of improving oral reading fluency.

In another related study, Walker, Jolivette, and Lingo (2005) examined and recorded the effects of the GLRP on the reading fluency of a 10 year-old third-grade student with a specific learning disability in reading. Their study included the use of repeated readings and the GLRP intervention in the general education classroom and in the resource classroom setting. The data results indicated that the number of words the student read incorrectly did not decrease from the baseline, but the number of words that

he read correctly increased within a given amount of time, and overall, the student experienced an improvement in his reading fluency by using the GLRP and repeated readings interventions (Walker, et. al. 2005).

A study performed by Scott and Shearer-Lingo (2002) studied the effects of the GLRP in combination with other reading programs on a group of three middle school students with EBD in a self-contained classroom. Their results showed that the reading fluency for these students greatly increased over the baseline and continued to increase throughout the intervention (Walker, et. al. 2005). These studies, as well as others, supported that the GLRP is beneficial to students with LD or EBD by helping to improve their reading fluency, and possibly, even deterring certain behavioral disruptions that correlated with the reading challenges.

Although several studies have been performed using repeated readings and other facets of GLRP, no research has been done at the high school level in an impoverished setting using the GLRP program with students with severe learning disabilities as part of reading competency training. By its nature the Great Leaps Reading Program builds fluency and motivation, which are two components that children with learning disabilities and children of poverty greatly need to increase their reading comprehension base and boost their self-confidence. Therefore, the purpose of this study was to determine the effects of the GLRP on oral reading fluency rates with students who are children of poverty and who have documented learning disabilities in reading in a competency class at the secondary level.

## Method

# **Participants**

All of the participants selected for the intervention were members of one of the Youths Experiencing Success (YES) center classes at a Title 1 high school located in a rural part of a southeastern state. The focus of the YES center was to provide skill remediation for students who had not passed either the reading or math section of the state competency test. The three participants in this study all had documented disabilities in the area of reading.

All of the participants received either free or reduced lunch and had been attending schools within this district for their entire school careers. All of the students participated in general education classes; however, each was pulled out for at least one hour and 45 minutes daily to attend special education (i.e., one participant was pulled out for two class periods). The three participants were selected based on the following criteria: (a) Each participant had failed Language Arts in middle school; (b) Each participant scored at least two grades below their current grade placement on the Burns and Roe Reading Inventory; and (c) Each participant was selected by their current special education teacher as ones who would benefit from one-on-one instruction. Prior to this study, both general and special education teachers, along with two parents, had expressed concerns about the reading abilities of all of the participants.

### Monae

Monae was a 15-year old ninth grader. She lived with her mother and six siblings in public housing. Monae's mother was currently unemployed, and the family received financial support for basic living needs from the state. Monae was a pleasant young lady

who was eager to please. Her areas of difficulty were in word recognition, phonics, reading comprehension, and fluency. Information gained from her school history indicated that she was referred for special education services in first grade, and she has remained a participant in the program since her placement. She had documented learning disabilities in reading and written expression. She received extended time on all assignments and assessments as an accommodation of her IEP. Monae failed fourth grade and had to repeat it. She continued to struggle with any content that required reading comprehension and fluency.

### Ghani

Ghani was a 14 year old ninth grader who lived with his mother, father, and two sisters. Ghani's parents were migrant workers, and they lived with friends in a house on a farm. Ghani was a reserved young man, but he was excited about participating in this program. Ghani has had difficulty with strategies to attack unknown words which has affected his reading comprehension and fluency. Ghani was referred for special education support in third grade, and he has remained a participant in the program since his placement. Ghani had documented disabilities in reading and written expression and received extended time on all assignments and assessments as accommodations of his IEP.

### Blessed

Blessed was a 15-year old ninth grader. She lived with her mother, father and grandmother in a small house located right beside her school. Blessed was an eager young lady who was excited to participate in this program. Blessed had difficulties in all academic areas. She was referred for special intervention services in 4k and was formally diagnosed with learning disabilities in reading, written expression, and math calculations in first grade. Blessed has received services since she was diagnosed. She received testing in a separate room and extended time on all assignments and assessments.

The study was conducted in a small, rural high school with a total enrollment of about 1200 students. The school's ethnic composition consists of black (N=67.2%), white (N=27.3%), Hispanic (N=5.5%), and American Indian (<1%). The general social and economic climate of this economically deprived area exerts a profound influence on the school and its programs. Students (N=94%) attending this school eat free or reduced lunch.

This high school was selected as the location for the GLRP intervention for several reasons. Firstly, it was one of three high schools in its county offering reading remediation in a new YES center. Secondly, while the curriculum currently adopted by the school system focused only on reading comprehension, there was an interest of adopting a high-interest reading program that addressed the reading needs of adolescents. Thirdly, the first author was a former teacher and had prior knowledge of the students served in the program. Finally, the teacher, paraeducator, and principal at the school were excited about the opportunities that the intervention could potentially provide.

# Experimenter

Setting

The experimenter for the GLRP was the certified English teacher in charge of the YES center and her assistant. The teacher implemented the GLRP for each student and collected data on the three variables. The paraeducator collected interobserver reliability data during each one-minute timing. Both of the instructors received two training sessions with the primary researcher to promote treatment fidelity and interobserver reliability. Training included written instructions of implementing the intervention,

modeling the implementation, and facilitating role-playing as each of the instructors took turns being a participant.

### Data Collection

Dependent Variables. The dependent variables in this study were the number of phonemes, sight phrases, and words in a passage read correctly during consecutive one-minute timings.

Phonemes. The number of errors and phonemes read correctly in one minute served as one set of dependent variables in this research. The instructor recorded the number of phonemes read correctly in one minute from the GLRP phoneme passage on a photocopy of the selected passage. Errors were counted if a student mispronounced a word, misread or substituted a word, omitted a word, reversed a word, or paused for longer than three seconds. However, if the student corrected an error, it was counted as correct.

Sight Phrases. The second set of dependent variables for this study was the number of errors and sight phrases read correctly from the GLRP. Data were collected by recording the number of sight phrases read correctly in one minute on a photocopy of the daily reading sight phrase passage. Errors were counted if a student mispronounced a word, misread or substituted a word, omitted a word, reversed a word, or paused for longer than three seconds. However, if the student corrected an error, it was counted as correct. If a student made two or less errors on the phonics section, he would "leap" to the next passage during the next reading instruction. If he made more than two errors, he remained on the selected passage until he read the section with two or fewer errors in less than one minute.

Words in a Passage. The third set of dependent variables was the number of errors and words read correctly in one minute from the GLRP passage. The teacher collected data on this variable by recording the number of words read correctly in one minute on a photocopy of the daily reading passage. Errors were counted if a student mispronounced a word, misread or substituted a word, omitted a word, reversed a word, or paused for longer than three seconds. However, if the student corrected an error, it was counted as correct.

*Pre-test/Posttest*. Before the GLRP was implemented, data were collected to measure the current reading level of each student by using the WJ-R. The scores obtained provided the researcher with the opportunity to see if the student's current reading level corresponded with the reading level suggested by curriculum-based measurements used in the YES Center. These scores were also used to identify where to begin the oral reading passage part of the intervention. Finally, these data were used to compare to data using the same assessment at the end of instruction with the GLRP.

Interobserver Reliability. The certified English teacher in the YES center collected the data to be used in the study. The paraeducator collected data for interobserver reliability. Both of the data collectors were trained in the data collection procedures as outlined in the GLRP. Interobserver reliability data were collected twice a week for each dependent variable and was calculated by dividing the number of agreements between the two observers by the number of agreements plus disagreements and multiplying by 100. Interobserver reliability mean percentages were the following:

(a) phonics (94%), (b) word phrases (96%), and oral reading (97%), (See Table 1).

# Experimental Design

This study used a multiple baseline across participants design. The dependent variables that were measured were the correct number of phonemes, sight phrases, and words read aloud for each one-minute passage. Baseline data was collected on all three participants. Once a stable baseline trend was established, Monae began baseline. After Monae made a "great leap," then the Ghanni began baseline. This continued until Blessed began participating in the intervention.

### Procedure

Intervention. The intervention that was used in this study was the GLRP (Campbell, 1995). The GLRP was designed to increase phonemic skills and the oral reading fluency of the students adhering to the guidelines of the program. The instruction for the treatment was implemented in three successive phases. Each instructional session lasted approximately 5-7 minutes and was provided by the certified teacher on an individual basis. The sessions took place daily for approximately six weeks and used the instructional techniques outlined in the GLRP. The GRLP consisted of three components that were used in sequential order: phonics, sight phrases, and oral reading.

Phonics. Phonics instruction for each student lasted for 1-2 minutes per session. The instructor modeled trouble nonsense sounds, phonemes, or syllable combinations prior to instruction. The phonics component of the GLRP consisted of consonant blends, consonant sounds in isolations, consonant combinations (h), consonant y, CV-VC, CVC, CCV-VCC, CCV, CCCV, C/CC (vowel) r, CCVC, VCC, final e, and letter combinations. After the initial modeling by the instructor, the student was asked to read as many sounds as possible on the first phonics page. Each student read the passage when directed to

"begin" by the teacher for one minute. The students followed the usual reading order of reading from left to right going from top to bottom. The teacher circled any errors made by the student on his photocopy of the passage. When the timing was complete, the instructor provided verbal feedback on any errors made during the timing by reviewing them (i.e., teacher modeling of missed words, student reading missed words, student locating other missed words in the passage, etc.) and graphing the results of the section. If a student made two or less errors on the phonics section, he would "leap" to the next passage during the next reading instruction. If he made more than two errors, he remained on the selected passage until he read the section with two or fewer errors in less than one minute.

Sight Phrases. Sight phrase instruction began immediately after the phonics instruction. During this part of the intervention, the students read word phrases made of current sight phrases in their reading passage for the day (e.g., he is, she is, they were, it is, you are, I am, and she is). The instructor reviewed the error words from the previous day's assessment for the student, and then asked the student to read the phrases passage on his/her own. This instruction lasted approximately 1-2 minutes with the student reading from left to right and from top to bottom of the instructional page. Reading did not begin until the student was directed to do so by the teacher's prompt of "begin." The instructor circled any errors made by the student on his passage copy during the 1-minute reading. Students were provided feedback of any errors made by reviewing them (i.e., teacher modeling of missed phrases, student reading missed phrases, student locating other missed phrases in the passage, etc.) and graphing the results of this section.

Oral Reading. Students completed their daily GRLP instruction with the oral reading component. During this phase, each student was asked to read selected passages two-grade levels below his or her reading level. For example, if a student's reading level was 3.0 on the WJ-R, then the student began his or her oral reading passages at the 1.0 level. Students were asked to read as much of a selected story in the reading passage section as possible in one minute. The entire instructional phase of this component, including the passage reading, lasted for 1-2 minutes. As the student read the passage, the instructor circled any errors made by the student on his copy of the passage. As with the other instructional components, the student read from left to right going from top to bottom. Students were provided feedback of any errors made by reviewing them (i.e., teacher modeling missed words, student locating missed words, student practicing reading missed words, etc.) with the instructor and graphing the results of the section. If a student made two or less errors on the phonics section, he would "leap" to the next passage during the next reading instruction. If he made more than two errors, he remained on the selected passage until he read the section with two or fewer errors in less than one minute.

Progressing and Charting. Progressing to a new passage was determined if the student met the criterion for advancement. Each advancement was called a "great leap." The number of words that needed to be read correctly during oral reading was determined by the rates of fluency suggested by the GLRP. For this study, the rates for fluency for each component ranged from 100 to 180 correct words per minute. In the GLRP, each passage within each component had a predetermined criterion for mastery. To advance or "leap" to the next passage, the student would have to meet the criteria suggested by the

GLRP for each passage. For each assessment, the number of correct words read and the errors made were circled on the instructor's passage copy, recorded, and graphed. "Great Leaps" would be identified graphically by circling the data point on the graph when a "great leap" occurred.

Baseline. During the baseline phase, one minute timed readings occurred for each participant using the phoneme, sight word, and reading passages associated with the GLRP. Instructions were given to the participants to read a selected phoneme, sight phrase, and reading passage in their GLRP as fast and as accurately as they could for one minute. This was done for all three participants until a stable trend was established for Monae. Baseline continued for Ghani and Blessed until Monae made her first "great leap." When that happened, Ghani started the intervention phase. Blessed continued the baseline condition until Ghani made his first "great leap." Data were collected daily for each of the dependent variables of the GLRP. No feedback was given to the participants during baseline.

Procedural reliability. Data were collected to determine if the intervention was implemented as specified by the GLRP guidelines. A checklist was developed to determine treatment integrity. The checklist was used to determine if the teacher practiced before each session, collected data for exactly one minute for each session on each of the reading fluency variables, and recorded the data graphically and accurately. The researcher collected procedural reliability 50% of the time during treatment (See Table 2).

# Data Analysis

Data were analyzed using visual inspection of the graphs including changes in the trends and levels (Kazdin, 1982). Performance data for baseline and intervention are presented in Figures 1-3.

*Monae*. A stable baseline was obtained for Monae prior to intervention. Monae's reading fluency increased for all three components of the intervention: phonemes, words in a story, and phrases read in a minute.

During baseline, the phonemes read correctly ranged from 58 to 64 phonemes read correctly per minute. Throughout the intervention, data indicated that Monae consistently read between 57 and 76 phonemes per session, which indicates a positive change in trend and level. The number of word phrases read correctly ranged from 60 word phrases read correctly to 84 word phrases read correctly throughout the course of the intervention. The number of words in a story read correctly ranging from 70 at the beginning to 95 at the end.

*Ghani.* A stable baseline was obtained for Ghani prior to intervention. Ghani's reading fluency increased for two of the components of the intervention: phonemes read and words read in a story per minute. The phrases component of the intervention, though it had a slight positive trend, did not yield the same definite results as the other two components of the intervention.

Data indicated that Ghani's number of phonemes read correctly ranged from 47 to 70 read correctly per minute, which indicates a positive change in trend and level throughout the course of the intervention. Throughout the intervention, data indicated that Ghani consistently read between 60 and 70 phrases per minute. The number of words in a

story read correctly ranged from 65 at the beginning to 81 by end of the intervention period.

Blessed. A stable baseline was obtained for Blessed prior to intervention.

Although the data for Blessed indicated a slight positive trend for two components of the intervention, it did not yield as definite results as compared to other data.

Data indicated that Blessed's number of phonemes read correctly ranged from 58 to 62 phonemes throughout the course of the intervention. The number of word phrases read correctly per minute ranged from 61 to 70 throughout the intervention. Finally, the number of words in a story read correctly per minute during the course of the intervention ranged from 63 to 73 throughout the intervention (See Figures 1, 2, and 3 for graphical representation of the collected data).

### Discussion

The current study investigated the effects of using the GLRP as an effective intervention for secondary students educated in impoverished settings diagnosed with severe disabilities in the area of reading. The results of this study provide support for the use of the GLRP to increase the oral reading fluency rates of students with severe disabilities in reading educated in impoverished settings.

Throughout the six-week period of the GLRP intervention, all three participants made progress in their fluency reading rates. Since all three of the students had been previously diagnosed with severe disabilities in the area of reading, these gains are impressive. For all of the participants, a definite change in trend and level was established for at least two components of the intervention: word phrases and words in a story.

Monae was considered to be the highest functioning of the three participants, and she made the largest gains throughout the intervention. She was very eager to please, which was a large motivational factor in her performance. She had had difficulties in all areas of reading, and over the period of the intervention, she made significant gains in all three areas of the intervention—word recognition, phonics, and fluency. Extended time on all assignments and assessments is an accommodation that Monae has used in all of her classes since her diagnosis.

Ghani's baseline data showed that his performance level was slightly lower than that of Monae, but throughout the intervention, he made very similar gains in the area of phonics. For Ghani, word attack skills and strategies were lacking, but he did make an important gain in this component. Ghani enjoyed participating in this program, so his openness and excitement may have contributed to his success. It should be noted that Ghani has used extended time on assignments and assessments as an accommodation in all of his classes.

Blessed was considered to be the lowest functioning reader of the group, and she also had the most severe disabilities, which included disabilities in reading and math calculations. Nevertheless, she was very eager and excited about participating in the program. Blessed made consistent gains in the areas of words read correctly and words in a story read correctly per minute, but these gains were not significant as compared to the gains of the others in the group. Considering Blessed's struggles in academic areas in the past and the severity of her disabilities, these gains are impressive. It is important to note that Blessed receives testing in a separate room and extended time as accommodations for all assignments and assessments.

## Limitations

The curriculum for the YES center has been predetermined by the school district since the center's inception. For the investigation to occur, the principal decided that it was important to continue with the other curriculum along with the GLRP. Center instruction began with each student working with the GLRP and being assessed each time. However, the standard curriculum was continued after the daily intervention and assessment.

Data of the current study occurred over a six-week period. For the effects of using this program as a curriculum, the study could have been lengthened to better represent the length of a semester or year. However, this was the first phase of what is hoped to be an ongoing GLRP research effort. Hopefully, the time frame of the intervention, the participants, and the setting of this study will serve as comparisons for future phases implemented in differing scenarios.

No generalizations can be made as a result of this study. Generalizing the findings of the three participants in the second study conducted on the GLRP would not be feasible. Increasing the number of participants would help to create more of a research base for the use of this intervention. Since the cited studies and this study used participants in middle and high school settings, none of the results of the two could be applied to elementary settings.

# Future Research

The opportunities for future research using the GLRP as a fluency intervention with students are endless. Future studies should be conducted at all school levels (elementary, middle, and high schools), with various subjects (at-risk students, general

education students, and those with disabilities). Since there are so few studies using this intervention, studies should follow various methodologies of research (i.e., group experimental, single subject, qualitative). Using various research methodologies and implementing the program with various students across many levels would add to the data-base needed so that the substantiation of future findings can occur. Results pointed out from the findings of Mercer et al. (2000) and this study show the potential of using the GLRP intervention as a reading fluency strategy with older learners. More clearly, the opportunities for future research using the GLRP as a fluency intervention with students are unlimited.

# Appendix A

# Procedural Reliability Checklist

1. Did the instructor model the correct pronunciation of phonemes, sight phrases, or
words that needed clarification before the session began? Yes No
2. Did the instructor ask the Student to read as many phonemes, sight phrases, or words
as possible before each timing? Yes No
3. Did the instructor use a timer to ensure that the data collection occurred for one minute
on each variable? Yes No
4. Did the instructor circle the phonemes, sight phrases, and words read incorrectly
during each data collection procedure for each independent variable? Yes No
5. Did the instructor follow the GLRP guidelines and count the number of words read
correctly for each variable? Yes No
6. Is the data graphed for each dependent variable? Yes No
7. Is the room free from distracters or other extraneous variables during the session?
Yes No
8. Did the instructor provide immediate feedback following data collection for each
dependent variable? Yes No

## References

- Adams, M.J. (1990). Beginning to read: Thinking and learning about print. Cambridge, MA: MIT Press.
- Allinder, R.M. (2001). Improving fluency in at-risk readers and Students with learning disabilities. *Remedial & Special Education*, 22, 48-72.
- Askew, B.J. (1993). The effect of multiple readings on the behaviors of children and teachers in an early intervention program. *Reading & Writing Quarterly:*Overcoming Learning Disabilities, 9, 309-315.
- Beach, S. A. (1993). Oral reading instruction: Retiring the bird in the round. *Reading Psychology*, 14, 333-338.
- Campbell, K.U. (1995). *Great leaps reading program*. Gainesville, FL: Diarmuid. Clark, C. H. (1995). Teachings about reading: A fluency example. *Reading Horizons*, 35, 250-266.
- Daly, E.J. III, & Martens, B.K. (1994). A comparison of three interventions for increasing oral reading performance: Application of the instructional hierarchy. *Journal of Applied Behavior Analysis*, 27, 459-469.
- Dowhower, S. L. (1987). Effects of repeated reading on second-grade transitional readers' fluency and comprehension. *Reading Research Quarterly*, 22, 389-406.
- Fisher, C. & Adler, M.A. (1999). Early reading programs in high poverty schools:

  Emerald Elementary beats the odds. Ann Arbor, MI: University of Michigan,

  Center for the Improvement of Early Reading.

- Fuchs, L.S., & Fuchs, D. (1992). Identifying a measure for monitoring Student reading progress. *School Psychology Review*, 21, 45-58.
- Fuchs, L.S., Fuchs, D., Hamlett, C.L., Walz, L., & Germann, G. (1993). Formative evaluation of academic progress: How much growth can we expect? *School Psychology Review*, 22(1), 27-48.
- Herman, P. A. (1985). The effect of repeated readings on reading rate, speech pauses, and word recognition accuracy. *Reading Research Quarterly*, 20, (5), 553-565
- Homan, S. E., Klesius, J.P., & Hite, c. (1993). Effects of repeated readings and non-repetitive strategies on Students' fluency and comprehension. *Journal of Educational Research*, 87, 94-99.
- Joseph, L. M. (2002). Best practices in planning interventions for students with reading problems. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology IV* (pp. 803-816). Bethesda, MD: National Association of School Psychologists.
- Kazdin, A. E. (1982). Single-case research designs. New York: Oxford.
- Kellet, M., & Dar, A. (2007). Children researching links between poverty and literacy.

  York, UK: The Open University, John Rowntree Foundation.
- LaBerge, D., & Simmons, S. J. (1974). Toward a theory of automatic information processing in reading. *Cognitive Psychology*, *6*, 293-323.
- Lyon, G. R. (1995). Research initiatives in learning disabilities: Contributions from scientists supported by the National Institute of Child Health and Human Development. *Journal of Child Neurology*, *10*,120-126.

- Marston, D. B. (1989). A curriculum-based measurement approach of assessing academic performance: What it is and why do it. In N. Shinn (Ed.), *Curriculum-based measurement: Assessing Special Children* (pp 18-78). New York: Guilford.
- McKeown, M. G., Beck, I. L., Omanson, R. C., & Pople, M. T. (1985). Some effects of the nature and frequency of vocabulary instruction on the knowledge and use of words. *Reading Research Quarterly*, 20, 522-535.
- Mercer, C.D., Campbell, K.U., Miller, M.D., Mercer, K.D., and Lane, H.B. (2001).

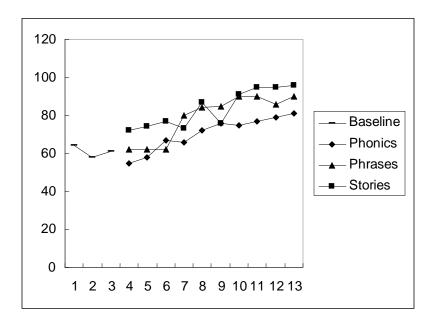
  Effects of a reading fluency intervention for middle schoolers with specific learning disabilities. *Learning Disabilities Research & Practice*, 4, 197-189.
- Nathan, R. G., & Stanovich, K. E. (1991). The causes and consequences of differences in reading fluency. *Theory Into Practice*, *30*, 176-184.
- O'Shea, L. J. (1987). The effects of repeated readings and attentional cues on the reading fluency and comprehension of learning disabled readers. *Learning Disabilities*\*Research\*, 2, (2), 103-109.
- O'Shea, L. J. & Sindelar, P. T. (1984). The effects of repeated readings and attentional cueing on the reading fluency and comprehension of third graders. Paper presented at the Annual Meeting of the American Educational Research Association. New Orleans, April.
- Perfetti, C. A. (1985). *Reading ability*. New York: Oxford University Press.
- Roshotte, C. A. & Torgesen, J. K. (1985). Repeated reading and reading fluency in learning disabled children. *Reading Research Quarterly*, 20, (2), 180-188.
- Samuels, S. J. (1979). The method of repeated readings. *The Reading Teacher*, *32*, 403-408.

- Scott, T. M., and Shearer-Lingo, A. (2002). "The effects of reading fluency instruction on the academic and behavioral success of middle school students in a self-contained EBD classroom." *Preventing School Failure*, 46, 167-173.
- Torgesen, J. K. (1986). Computers and cognition in reading: A focus on decoding fluency. *Exceptional Children*, *53*, (2), 157-162.
- Walker, L., Jolivette, K., Lingo, A. (2005). "Improving reading fluency: A case study using the great leaps reading program." *Beyond Behavior*. 4(2), 21-27.
- Weinstein, G., & Cooke, N. L. (1992). The effects of two repeated reading interventions on generalization of fluency. *Learning Disability Quarterly*, 15, 21-28.
- Young, A.R., Bowers, E.G., & MacKinnon, G.E. (1996). Effects of prosodic modeling and repeated reading on poor readers' fluency and comprehension. *Applied Psycholinguistics*, 17, 59-84.

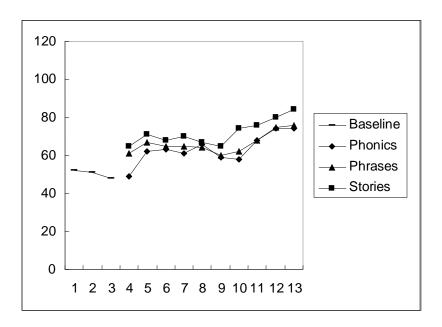
Figure 1

Number of Correct Phonemes, Word Phrases, and Correct Words Across Participants

# Monae



# Ghani



# Blessed

