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## **EFFECTS OF ON-SITE READING CLINICAL TUTORING ON CHILDREN'S PERFORMANCE**

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### **Abstract**

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This research was conducted to study the effects of field-based clinical tutoring on struggling readers. Struggling readers from two grade levels, 3<sup>rd</sup> and 5<sup>th</sup> were randomly divided into two groups. One group received individualized tutoring in reading for a semester from apprentice reading clinicians (graduate students in Reading Program) and the other group did not. There were 13 sessions of one hour each per week. The reading performance of students in the two groups was compared on the two available measures in the school, (1) letter grade and (2) STAR results (a computerized diagnostic reading assessment program). Observational and anecdotal data from teachers and parents of children participating in the program was received. Seventy-six percent of children improved their letter grade in reading from the beginning of the school year to the end of the year grade in reading compared with 35% of children in the non-tutored group. None of the children in the tutored group dropped a letter grade, however, 17.64% of children in the non-tutored group did drop a letter grade or more. On the STAR scores (see description of STAR under Reading Assessment findings above), the tutored group outperformed the non-tutored group. Fifty-six percent of the children in the tutored group showed improvement in scores from Fall 2001 to Spring 2002 compared with 50% children in the non-tutored group.

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Children who do not learn to read in the early grades have a hard time catching up in reading. Francis, et al, 1996, did a longitudinal study that showed, on average, children who were poor readers in Grade 3 did not “catch up” to their peers in their reading skills. Moreover, 70% of children who were poor readers in Grade 3 were poor readers in Grade 9. Children who don't succeed in reading in early grades begin to fall in a downward spiral in other subject areas as well as they climb the ladder of grade levels in school. Thus, early intervention is critical to alleviate later literacy related problems among children in schools.

The purpose of the present research was to investigate the effectiveness of on-site clinical tutoring intervention among at-risk children receiving the tutoring services from Graduate Reading Interns by measuring growth in their reading skills at the end of one semester. It was hypothesized that children who received tutoring from Graduate Reading Interns (experimental group) would show greater growth over one semester of individualized

tutoring relative to children who did not receive tutoring services (control group). In other words, the study determined if one-on-one tutoring made a difference in reading achievement scores of children being tutored by Graduate Reading Interns.

As part of the graduate program in reading, a reading clinic was offered at the school site for at risk children. Initially, 40 children were selected from grades 3 and 5 for the clinic. Since, only 17 graduate interns had applied for the program, out of 40 children 17 children were randomly picked by the reading resource specialist. The children who were not selected to participate in the clinic served as a comparison group for examining the effectiveness of the tutoring program.

In-service teachers (interns) participated in a graduate reading practicum (part of reading clinical experience), which met weekly over a five-month period for a total of 45 hours. The dual focus of the practicum was to provide instruction and professional development for teachers working towards reading certification and to provide deep instructional intervention to struggling readers. Teachers were trained in various diagnostic and instructional techniques to assist struggling readers. On-site supervision, mentorship and feedback was provided by supervisors. At the end of the program, each intern submitted an individual diagnostic case report on each child and met with parents for a conference to discuss case profiles of tutees.

### **Research Question:**

*Did on-site clinical intervention make a difference in the reading scores of tutored children compared with non-tutored children?*

### **Method**

**Participants:** The inner-city urban elementary school participating in program had economically disadvantaged children with low achievement - majority of the children (over 95%) were on free or reduced lunch programs. The school was in the bottom quartile in the district based on overall academic scores ranking. Participants were --- children in third, and fifth grades who were at the bottom of the quartile in each grade based on test scores.

For the study, 40 children were selected from grade level 3 & 5 across different sections. Since there were 17 graduate reading interns for one-on-one tutoring, 17 of the 40 children were placed in “Experimental” group, who received tutoring. The other 23 children formed the comparison group. Thus the children in the control group, had the same teachers and other factors, as the children in the experimental group, minus the tutoring.

**Selection Criteria:** Students from 3<sup>rd</sup> and 5<sup>th</sup> grade were selected because of the statewide assessments at these two grade levels. Each year, 3<sup>rd</sup> and 5<sup>th</sup> grade students take the state’s standardized test. The previous year scores for these grade levels had been low. The English results for 2001 showed 46% of third grade and 39% of fifth grade

students passing the State's learning Assessments, far below the 70% pass rate set by the State Department of Education. STAR (a computerized diagnostic reading assessment program) results showed 83% fifth graders and 55% of third graders reading below grade level. Thus, given the high needs of the two grade levels, children were selected from these two grade levels for the study.

The selection criteria ranged from: 1. teacher input, 2. letter grade in reading, 3. test scores, and 4. teacher observation of their reading ability.

**School:**

The school has a population of more than 800 students with about 99 percent children on free and reduced breakfast and lunch, making it a school-wide Title I school. The majority of the students are African American (over 95%). The teacher student ratio is approximately 18:1 in Grades PreK-3 and 28-30:1 in Grades 4 and 5. There are 5 reading / literacy resource teachers. The PTA attendance usually averages 20 parents.

The school wide reading program is based on the Balanced Literacy Approach, using the newly adopted Scotts Foresman basal readers as the foundation to address instruction of the state standards. Based on state scores, the school has moved up from the non-accredited state level to the present position of provisionally accredited.

**Interns / Tutors:** Students enrolled in the graduate program in reading consisted of in-service teachers with years of teaching experience. These practicing teachers were continuing their education for further advancement. As part of the graduate reading program, they are required to do the reading practica. Reading practicum, also called, reading clinic, included 14 hours of working on-on-one with children. The graduate students in the reading clinic were referred to as 'reading interns'. There were 17 interns.

**University Coordinators and Supervisors:** There were two university faculty members who were responsible for training and supervising the interns during the clinic. The supervisors collaborated in a team-teaching situation. The supervisors met with interns prior to clinical session each week. They discussed the lesson plans for the sessions, provided guidance related to diagnostic and assessment data to inform instructional activities for children.

**Supervised observation included following elements during observation:**

- Literate and conducive environment that fosters interest and growth
- Textbooks, literature, tradebooks, software, electronic text, and other hands-on resources are instructionally and developmentally appropriate for the learner via matching materials and learner that stimulate interest and promote reading growth.
- Consistency of clinical plan and its implementation during session, making sure that the goal, method, materials and evaluation are aligned.

- Knowledge of the subject matter – as a professional, interns’ special expertise in reading must be reflected in your in depth knowledge of the subject manifested via your clinical plans, analysis and evaluation of assessments, diagnostic teaching and instructional strategies during session, as well as decision-making points in the clinical intervention.

Adjusting instructional methods and texts to the maturity of learner and instructional goals, varying methodology to maintain learners’ interest and demonstrating knowledge of various methods available for instruction, are significant factors considered during observation, as well as during individual conference with supervisor.

### **Reading Practicum Overview and Procedures:**

The children met one-on-one after-school with reading interns once a week for a total of 13 sessions from January to April. The school arranged for the bus services for picking up children. The school also arranged for after-school refreshments for children on clinic days due to long school day for the children.

The Reading Practicum contributes to the literacy instruction knowledge base by: encouraging reflection on models of reading/language arts instruction; promoting linkages between assessment and instruction; and guiding teachers as they plan and carry out instructional procedures designed towards growth in literacy. A reading clinician must be able to assess reading performance, strategies and skills of a learner, evaluate child’s performance, evaluate texts to match specific instructional needs, and then via diagnostic teaching, assess and evaluate that child’s ability to learn and ascertain those instructional conditions necessary for learning. Last, the teacher must be able to integrate information and design instruction for the child’s continued growth in literacy (Kibby, 1995).

**Clinical Intervention / Tutoring** -- This intervention took place on-site (in the school, as opposed to traditional reading clinic at a university campus) in a one-on-one supervised setting. Tutees were assigned randomly to Interns. Interns met with the tutees in classrooms in the school building, since the tutoring took place after-school, most of the classrooms were available. Each session lasted for an hour.

### **Assessments and Instructional Activities:**

Interns followed clinical lesson plans during the session. Initial sessions focused on learning about tutees’ strengths and needs. Because there is much variance in the reading strategies of children and the instructional paths leading to improved reading, the information needed in reading diagnosis varies from child to child and clinician to clinician. Depending on the individual learner, diagnosis typically included (but not limited to) the following: graded word recognition, reading inventory (includes, word recognition, miscue analysis, oral and silent reading evaluation, comprehension assessments for narrative and expository texts, reading rate, listening comprehension, summary of student’s performance), administration of a standardized test, such as, Woodcock Reading Mastery Test or Peabody Picture Vocabulary Test, Phoneme

Awareness (Spelling) (Johns, 2001), Phoneme Segmentation (Johns, 2001), Writing (Johns, 2001).

A sample of suggested instructional activities included following elements: Word Activities (word sort, concept sort, sound sort, open sort, sentence building), Pre-Reading Activities (previewing, predicting, picture walk, activating prior knowledge), During Reading Activities (guided reading, monitoring reading, shared reading, echo reading, alternate reading, assisted reading, independent reading), Post Reading Activities (retelling, main ideas, summarizing, connecting with student's life), Identifying Words (alphabetic principle, phonemic awareness, segmenting and blending phonemes, grapho-phonics, initial and final sounds, consonant clusters, vowels, syllables, onset, rime patterns, structural analysis, word patterns, sight vocabulary, using context to predict words, CSS), Writing (drafts, topic journals, LEA, editing, spelling patterns, response to literature), Comprehension (retelling, questioning, literal, inferential, understanding fiction and non-fictional texts, , making connections, processing texts, K-W-L, DRTA, establishing purpose), Fluency (phrasing, repeated reading), Developing vocabulary (word map, semantic maps, graphic-organizer, using context, word parts, classifying, grouping).

Assessment must inform instruction. Instructional intervention typically included but was not limited to: alphabetic principle, phonemic awareness, concept of word, guided reading at instructional level; word study; developing vocabulary, promoting comprehension, organizing information, study skills, fluency training; reading to / with the child and interactive writing. Intervention was specific to individual assessment results and needs of the client. Together, the supervisor and clinician ensured that cultural / linguistic / physical / emotional / and social needs of the learners were addressed in clinical sessions. Interns were required to meet the specific clinical sessions recommended in the course. They were observed and provided written evaluation of the observed session by the supervisors.

Reading interns diagnosed each tutee and developed a specific plan of remedial instruction to address individual needs. Ongoing assessment guided the individualized instruction tailored to each child's specific strengths and needs. Classroom teacher input and parent input was constantly sought by the reading interns to further assist tutees. Assessment, evaluation and observational data guided instruction in subsequent sessions. Instruction was adjusted as per the results of the on-going assessments.

### **Measures and Procedures:**

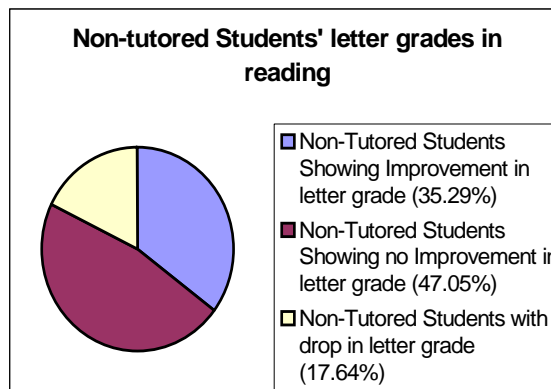
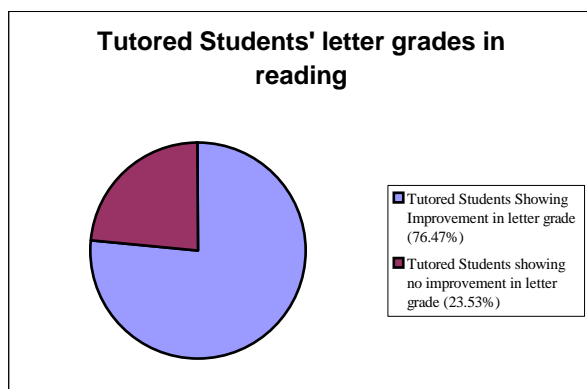
For measuring outcomes of the study, the two formal indicators used were: (1) Letter grades in reading received by children at the end of the school year, (2) STAR Scores. Qualitative data obtained from teacher surveys and parent surveys provided enriching understanding for all participants.

### **About STAR**

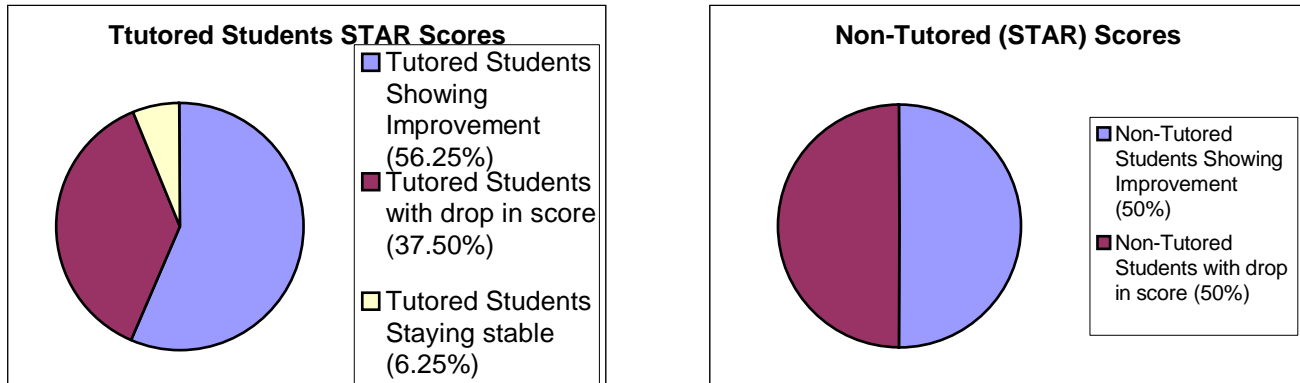
STAR reading is a computerized diagnostic reading assessment program produced by the Renaissance Learning Company. Students are presented with "cloze" type sentences and offered 3 or 4 answer choices (depending upon reading level) from which to choose the best word to complete the sentences. Questions continually adjust to each student's response pattern, becoming harder as the assessment program pinpoints the student's reading level. This assessment gives a Grade Equivalent (GE) Reading Level for each student. The GE indicates that a student's reading skills are comparable to those of an average student at that grade and month. For example, a GE of 3.5 indicates that the student has reading skills comparable to average third graders after the fifth month of school. STAR scores are also given Percentile Ranks so that teachers will know how a student with a particular GE Reading Level compares with the national norming sample for students with the same school age. The percentile rank for a particular GE will change during the school year. For example, in September, a third grade student (school age of 3.0) with a GE of 2.7 (indicating a reading level slightly below grade level) will be in the 41<sup>st</sup> percentile rank. By the end of third grade, if that same student (now a school age of 3.9) improves to a GE of 2.8 (now at the end of the year much further below grade level), the percentile rank will drop to the 21<sup>st</sup> rank.

**Data Analysis and Results:** Excel program was used to analyze data. As a way of examining the effects of the program, scores of experimental and control group were compared.

Given additional assistance and resources, at-risk children can improve their performance as evident from the results of one-on-one clinical tutoring. The children who received one-on-one, after-school clinical reading sessions outperformed the comparison group and their own previous performance in terms of both test letter grades and test scores. Particularly worth mentioning is the success story of a 5<sup>th</sup> grader, who had the highest unit test score on his final reading test. He increased from an F to a B in reading within 4 months of intervention. Overall, 76% of tutored children improved their letter grade in reading from the beginning of the school year to the end of the year grade in reading, compared with 35% of children in the non-tutored group. None of the children in the tutored group dropped a letter grade, while 17.64% of children in the non-tutored group did experience a decrease in their letter grade. See charts illustrating these findings.



Similarly, 56% of the children in the tutored group showed improvement in their STAR scores from fall 2001 to spring 2002, as compared with approximately 50% of the children in the non-tutored group.



However, it is the qualitative affective aspects of intervention results in challenging settings that are of more human value. Specially, the improvement in children's attitude towards reading, willingness to read on their own, gain in their confidence and trust as observed by their teachers and parents provided the valuable measures of growth as a result of this initial intervention.

Many teachers reported that the benefits from the Reading Clinic transferred into other subject areas as well for many children besides improving their confidence and self-esteem. The students even turned into budding young authors as they worked together to complete a group book project, "I Am Proud To Be An American".

At the end of the clinical intervention, parents were invited to school to have one-on-one conferences with the tutoring interns of their child. During these conferences, interns reviewed the assessment results and instructional activities that were used during the intervention with the parents. Parent conferences were followed by a group celebration where each participating child received a certificate of appreciation.

The reading resource specialist at the school stated at the parent reception, *"for some it is their attitude that has improved. For others, it may be their willingness to attend as they gain confidence and trust. And for other students, their academic performance has grown."* This reflected that the intervention had affected various aspects of a learner besides reading. It is a well evident fact that when students perform better in academics they begin to feel good about themselves and their self-esteem improves.

Parents were asked to provide input regarding the intervention in terms of their child's performance. Comments from parents and teachers about how their child benefited from the program included:

*"Reading skills have increased, better attitude and willingness to learn more."*

*"She has improved in every area of her subject."*

*"My child has pulled up his grades."*



*“... is not afraid of challenge and is willing to read out loud.”*

*“...’s self-esteem has improved since taking this ... Reading Clinic, she volunteers more, and she is not as shy or withdrawn. She participates more and raises her hand to volunteer more often now.”*

*“... really enjoyed her tutoring sessions. She uses the knowledge gained in her sessions in her reading group in class. The program helped to strengthen her oral reading as well as communication skills. She still talks about her tutor. They seemed to have a very good relationship. She still talks about emailing her tutor. She seems to self-correct more often when reading after attending the program. She is more verbal when comprehensions questions are asked about a story. She also takes more Accelerated Reader Tests.”*

One teacher wrote about her student that *“... seemed to be more interested, enthusiastic and encouraged about reading after attending the program. She seemed more confident and would volunteer to read aloud more often. She also used reading strategies regularly.”*

The majority of teachers and parents rated the program highly.

### **Reading Interns’ Experience:**

Teachers’ comments included, *“I liked the way that I got a chance to really diagnose a child and apply the results to his instruction.”* Another teacher noted, *“This course provided me with practice I need to effectively tutor a child with reading difficulties. I learned how to administer and evaluate reading assessments. I also learned a variety of instructional strategies that can correct reading difficulties.”*

Protocols from parent and teacher surveys indicated that intervention not only improved reading performance of children but also their self-esteem, confidence and ability in other subjects areas as well. Multiple measures including observational evidence enriched our understanding of learners’ outcomes as a social reality. Academic gains do influence social and affective domains of learners.

Long term effects of teacher-training programs must be examined with reference to teacher and student learning outcomes. By training the trainers, we hope to provide and create opportunities to access information for other teachers and students on a recurring basis at various school sites. Effective intervention programs take adequate training; supervision of tutors and well-planned tutoring sessions (Klenk and Kibby, 2000, p.679). The results of this research clearly indicate that clinical intervention makes a difference for the development and outcomes of reading skills of children.

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