2012

Effective Reading Remediation Instructional Strategies for Struggling Early Readers

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WCES-2012

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Abstract

This paper presents a microgenetic study of the emergence of literacy in an eight-year-old student who is in third grade in a public primary school in Midwest, USA and is identified as learning disabled. It describes seven practical teaching strategies that were successfully used with this child for two years. At the end of this two year remediation, the child was able to read fluently at her grade level and exceeded all expectations and predictions of her parents and teachers. These strategies will be beneficial for classroom teachers, reading specialists, and special education teachers who are working with struggling young readers, and are evidence-based practices identified from a review of the literature.

1. Introduction

   Basic literacy skills need to be learned when children are in primary grades. However, many children who have learning disabilities often experience social emotional disorder, also known as conduct disorders, are behind their peers in learning how to read. Those who experience difficulty in reading in early grades will rarely be able to catch up in subsequent years. Currently, the number of students who have learning disabilities and emotional behavioral disorders is rapidly increasing, especially in primary grades. Many teachers however, are not well prepared to use reading remediation strategies when teaching struggling readers in early grades. We will review professional journals in special education, remedial reading instruction, and emotional behavioral disorders to identify and inform teachers of 10 effective remedial reading strategies that are evidence-based practices. Although a growing number of students with emotional behavioral disorders and reading problems receive a major portion of their instruction in general education classrooms, in many cases, teachers neither know nor use reading remediation strategies when teaching struggling kindergarteners and first graders. This study will help all teachers including reading specialist, special education, and general education teachers working with early readers (kindergartens through third graders) to better address the language and literacy issues of students who experience difficulty in becoming literate.

2. Theoretical Framework

   This study is examined through three major theories of literacy development: constructivist, sociolinguistic and emergent literacy theories. Constructivist theory has a broad definition of literacy that includes the complex reasoning and problem-solving that accompanies reading and writing (Johnston, 1985; Schallert, 1991, cited in Klenk, 1994). This perspective considers literacy beyond the performative level (which is usually associated with school tasks such as decoding and handwriting) to include the functional level of literacy for interpersonal communication, the informational level for exchanging knowledge, and the epistemic

level for creative and evaluative uses of literacy (Wells, Chang, & Maher, 1990). A constructivist theory focuses on individual child's language experiences and his or her learning phase when teaching literacy (Cowden, 2010).

The sociolinguistic theory grew from the work of Vygotsky (1978), who believed that parents, caregivers, peers and the community at large were responsible for the development of language and literacy (Diaz, Neal, & Williams, 1990, pp. 259-286; Litowitz, 1993, pp. 184-196; Newman, Griffin, & Cole, 1989; Palincsar, 1986; Palincsar, & Klenk, 1990; Stone, 1993, pp. 169-183). Klenk (1994) believes that the sociolinguistic theory guides teachers to understand that literacy learning is embedded in social contexts, and is influenced by the learner's prior experience and knowledge, the relationship between the novice (learner) and the expert (teacher), the relationships among learners in a classroom, and the mediation of self-regulated, intentional learning through mechanics such as scaffolding, bootstrapping, and proleptic instruction. The emergent literacy perspective informing this study is based on research in early literacy acquisition which refers to a modern perspective of "children's literacy development and learning prior to formal school instruction" (Teale, 1987, p.45; Dyson, 1982; Strickland, 1990; Teale, & Sulzby, 1986; Teale, 1988, p. 177; Ferreiro, 1986; Taylor, 1983).

3. Reading Remediation for Struggling Early Readers

Reading print is not a natural biologic process and is a complex process, which requires looking at man-made, arbitrary black letters and words, and matching that written code with our spoken language. To read proficiently one needs to use the brain's natural system for processing sound. These sound or phonologic processing pathways are essential to proficient reading. If other processes are used, reading will require a great deal of effort and remain difficult. Most problems with reading have nothing to do with intelligence or ability, but rather incorrect processing. Teachers can help students understand that difficulties in reading are often caused by weaknesses in phonologic processing and other fundamental skills. Many very intelligent people face difficulty reading. Problems with reading likely occur because proficient phonologic processors are not being used. Teachers who work with struggling readers need to understand that effective remediation directly teaches and develops essential skills to raise the student to the proficient level. They need to make sure the student understands reading remediation is not teaching easy words and concepts but rather building necessary skills to help bring the student up to a proficient level (Gagen, 2007).

An important factor of successful remediation is the student's effort and attitude, which will affect how quickly they learn. Motivated students progress faster than students with a poor attitude. Teachers should help the student with learning disabilities develop a positive attitude toward remediation. Some older students are frustrated with their frequent failures and have developed low self confidence and negative attitude towards reading. Before beginning an intensive reading remediation program, teachers need to help the student understand the remediation program. To that end, teachers may explain the effective remediation plan to the student. Effective remediation instruction improves reading skills when teachers provide direct instructions and consider students' responses to remediation. Response to intervention (RTI) has altered how educators serve students with reading difficulties. Its impact is most evident at the primary level, where the focus is on limiting referrals to special education by preventing reading difficulties (Legere, & Conca, 2010). When students increase significant word recognition skills, background knowledge, and thinking skills, they can advance rapidly and develop proficient reader skills.

4. Microgenetic Research Method

This paper presents a microgenetic study of the emergence of literacy in an eight-year-old student who is in third grade in a public school in Midwest, USA identified as learning disabled. The authors of this paper believe observing a student while teaching a lesson, and measuring and documenting her learning experiences and progress are one of the most fundamental aspects of the emergence of literacy theory. Presently, academic research still overly emphasizes studies providing a snapshot of students' reading achievement, without describing the learning process itself. Child development experts who have been able to observe the development of an individual child assert that literacy learning is a complex process, actually showing gradual and variable change over time (Flynn, O'Malley, & Wood, 2004; Wellman, Cross, & Watson, 2001).

The microgenetic approach examines change as it occurs, thus attempting to identify and explain its underlying mechanisms (Siegler, 2006, 1995; Siegler, & Svetina, 2002). It was used by Werner (1956) to describe a method of repeating presentations to the same participants to measure discrimination in auditory perception. It has its roots in Vygotsky's developmental approach:…to encompass in research the process of a given thing's development in all its phases and changes…fundamentally means to discover its nature, its essence (Vygotsky, 1978, p.65). It involves taking repeated measurements from the same participants over the course of transition in the domain of interest. This contrasts with the usual, cross-sectional methodological approach, which provides snapshots of different competences displayed in two or more age groups, which do not tell us about how change occurs, or what mechanisms underpin change. Likewise, longitudinal studies take multiple measurements over time,

but such studies usually have lengthy intervals between testing sessions. Their results again indicate that a change has occurred, but shed little light on exactly how this happens. Furthermore, conventional cross-sectional and longitudinal studies focus on group data and treat individual variation as statistical noise. The microgenetic method provides an opportunity to identify individuals, which may require different treatment or intervention styles (Flynn, Pine, & Lewis, C, 2006). Most exciting for developmental psychologists is the fact that microgenetic studies, 'reveal not just what children know but how they get there' (Granott, & Parziale, 2002, p.12).

4.1. Participant

The participant of this study is Sam (pseudo-nym), a young White-American female student, eight-year-old student, attending third grade in a public school, and living in a small town in Midwest, USA. From a traditional psychoeducational model of learning disability, Sam's profile would seem to fit a "typical" case of learning disability. For example, Sam had difficulty sitting attentively, had an unusual gait, loved to play with others on the playground, used bright colors in her drawings, seemed to communicate well with her peers, and would periodically leave the instructional setting without permission but would stay within the bounds of the classroom. Sam came to the attention of Emeritus Professor John C. Manning (1995), University of Minnesota, when the school officials of a child who had experienced a change in her learning capabilities in the middle of kindergarten called to consult with him three years later after many medical assessments at two great research institutions. After meeting with the child and school personnel, one of the authors of this paper was asked to join the team of educators to address this child's needs. At the beginning of our work with this child, the medical assessment completed indicated she was developmentally far below her normal age level. Sam's individualized reading program lasted for two years, included working with Dr. Manning and one of the authors once a week, and was challenging yet pleasant.

4.2. Data Collection

The current microgenetic study intends to document whether the change in the student's reading behavior was sudden or gradual, or to identify whether it was preceded by a particular behavior, or accompanied by a teacher instructing differently in particular. Our study reports when, and how, progress and change in the child's reading ability occurred while we closely examine the characteristics of this transition. Our study follows three critical principles of microgenetic study: 1) Observations of the student have spanned a two-year period of change in her reading ability. 2) Density of observations is high in comparison with the rate of the change. 3) Child observations are analyzed intensively to establish the process of gaining emerging literacy abilities. This study collects detailed information about Sam's progress over a period of transition and documents her sudden jumps, regressions, and periods of equilibrium. These elements of process of gaining emerging literacy abilities provide an indication of how Sam's knowledge and reading ability progressed from one level to another, often more sophisticated, level.

4.3. Data Analysis

The following instructional techniques have been utilized to help Sam make progress in becoming literate and to analyze which instructional approaches work well and why.

Graphemic/phonemic association through a computer keyboard

Sam was learning by association of letter names and sounds (graphemic/phonemic association) through a computer keyboard and objects/people that the child could recall. It was an elaborate system and was showing promise for gaining decoding ability. The child used graphemic/phonemic association when writing. She wrote impulsively, ignoring lines, but did not stray off the edges of the paper.

Identifying the individual words of the sentence

When Sam was included with two other students to read and discuss a pictorial/written newspaper article written for learning challenged students, her attention wandered everywhere except in the direction of the print. With permission from the instructional leader her teacher asked to have a copy of the newspaper, two blank papers, two pencils, and a clear space to work with the child. When the teacher read the chosen sentences, it was clear that the child could remember sentences that were read without any visual cues. That was an important clue to the next step. The teacher and student each used a folded paper that was only 1 1/2 "X 4 1/4" to write the response to a question related to a sentence from the newspaper as the following sample dialogue shows.

Teacher: "Which word from the sentence in the newspaper rhymes with the word *will*?"
Sam: The child responded from her memory, "*hill*."
Teacher: "Find the word *hill* in the newspaper."
Sam: She was able to find the word *hill.* Now Sam had a chance to identify the individual words of the sentence and match them with her memory. Her memory was assisting her with the visual cues of letters and words.
Teacher: "Take a long look at the word, *hill*." After removing the newspaper, the teacher said, "Write the word *hill*."
Sam: The child was able to write the word correctly. The teacher wrote the word also.
Teacher: "What word did you write?"
Sam: The child responded, "*hill*."
Teacher: "Check the word letter for letter with the word in the newspaper. Do they look the same?"
        "Does your word have same letters as my written word?"
        "Put a dot beside your word." (If the word were written incorrectly, the child was asked to correct it.)

Using linguistic clues, meaning clues, and visual memory

Sam continued learning more words using linguistic and meaning clues, and visual memory to write each word. Often, Sam asked to give the clues. The teacher asked which word in the sentence rhymed with "scary." It took the teacher off guard until the word "very" was noted. Both the child and teacher wrote the word. She was able to stay within the confines of the space provided which was the point of having a small space for writing each word. This time the teacher asked the child to acknowledge success by drawing a bunch of grapes. The process continues with practicing reading the words chosen, finding clean spaces to rewrite the words written earlier. Upon reflection of the lesson, the teacher found that Sam could use her auditory skill with language to memorize the sentence chosen from the newspaper. When only two sentences were visible to the child during this session, she used this information to find the words using linguistic and meaning clues successfully. She was able to use visual memory to write three and four letter words successfully.

Physical and visual attention to print

Sam needed to work on physical attention as well as visual attention to print since she moved her body in continuous motion throughout the lesson. Although she was able to follow directions, she would leave the instructional area when she felt overly challenged. To increase Sam's attention level, the teacher brought new materials (books, songs, braiding, knitting, folding, finding a pen pal for her to email) and new literacy experiences. For example, Sam made up songs and began to write stories both at school and at home. She practiced reading to first grade children and to a multiply challenged child.   The teacher and the child made recordings of books and songs for the challenged child for listening experiences at home.

Write journal entries and stories

Sam loved to write journal entries and stories by hand and on the computer. She was motivated to write, revise, and edit many journal entries and stories, which helped her become proficient with writing on the computer. Sam's interest and success in reading were springboards for further instruction. Her knowledge of oral language, auditory memory, and the fact she could write responses, even though they were less than legible, was an accomplishment for her.

Take piano lessons

Sam's mother asked to meet with the teacher to determine if it would be advisable for the child to take piano lessons at this time, since she was requesting them. Would piano lessons interfere with her literacy learning? The teacher assured the mother that learning to play the piano would indeed reinforce her literacy learning, because it is reinforcing her ability to pay attention and focus.

Participate in reader's theater

Reader's theater is a great way to let Sam's classmates know she was making progress. Sam's classmates and teachers prepared a readers theater and performed in the second grade classes. It was a hit. However, on the way to perform for the fourth grade students, Sam wanted to bow out. The special teacher spent many minutes encouraging her and the child agreed reluctantly. She held the readers theatre book so only her eyes were showing a bit and the teacher joined her for the reading part.

Participating in the reader's theater changed her classmates and her own perception as a learning productive peer and member of her class.

5. Findings

At the beginning of the fifth grade year this child had gone from five special categories for special help to one (math). By mid-year she needed only occasional special classes in math. She was in a regular classroom for literacy. She showed us her new notebook with her much improved writing. When the teacher and colleague went to see her during a literacy lesson, this child ignored both, and let them know she had graduated from their assistance. In a few months she let her special teacher know that the literacy class she was in was too easy for her. She was moved to a more challenging class. One of her classmates said he didn't think Sam would ever be working with classmates at his level of accomplishment. Her special teacher assured her that was an unusual way of giving her a compliment. The end of year fifth grade standardized literacy testing indicated that this child was among the top few of her class in literacy in her school. Now the author would only see this child at a distance.

6. Discussions and Implications

Through the microgenetic method, examination was possible of the individual participants' behavior over time both between-participant variability, potentially showing different types of transition, and within-participant variability, which is often the indication that change is taking place. It provided an opportunity to examine the differences, and the underlying sources of differences, between individuals over time. Teaching reading to students with learning disabilities can be a challenging task for teachers. Teachers who seek ways to help students who are learning disabled can consider the principles and approaches of effective literacy instruction suggested by this microgenetic study. This case study shows that students with learning disabilities need alternative instruction and assessments. Assessments are useful as a guide to help ascertain a student's placement, acquire funding sources to support the education of the child, and provide the primary educators direction for instruction.

However, with students who have multiple difficulties and have had an over abundance of assessments, standardized assessments can become tedious and strain the attention of the student to persist. This study describes an example of student and teacher experiences and delineates instructional activities that provide informal assessments by the educator to provide the most efficient, enlightening, and productive experiences with students identified as needing their special needs in the learning literacy addressed. This summary of Sam's journey in the literacy acquisition process demonstrates how teachers can pay attention to what the child can do, understand the child's needs, and continue to encourage a student persistently and to repeatedly practice reading and writing using a variety of learning tools. Teachers should believe that they can help students with a serious reading disability to become successful readers through interventions built on sound practices for reading instruction.

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