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## ABSTRACT

In 1994, the National Assessment of Educational Progress (NAEP) discovered that reading difficulties permeate all segments of the school-aged population. As a result, Congress asked the director of the National Institute of Child and Human Development (NICHD) and the former Secretary of Education to assemble a panel on reading. This National Reading Panel (NRP) proposed that systematic synthetic phonics instruction was effective in improving reading skills for children with learning disabilities and children from low socioeconomic backgrounds. This paper discusses the findings of the NAEP, the NICHD, and the NRP; synthesizes research in reference to synthetic phonics, analytic phonics and systematic and embedded phonics instruction; and discusses study findings which support the usage of systematic synthetic phonics instruction as a means of improving reading skills of urban learners. The systematic synthetic phonics instruction is successful with struggling urban readers because the explicitness of the system does not penalize students for skills they have learned at home. (Contains 12 references.) (PM)

# SYSTEMATIC SYNTHETIC PHONICS

## INSTRUCTION:

### ARE THERE PARTICULAR ADVANTAGES FOR URBAN LEARNERS?

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## **Systematic Synthetic Phonics Instruction: Are there Particular Advantages for Urban Learners?**

### **Abstract**

In 1994, the National Assessment of Educational Progress (NAEP) discovered that reading difficulties permeate all segments of the school-aged population. According to the NAEP, 69% of fourth grade students do not exhibit proficient reading skills. As a result of these dismal statistics, Congress asked the director of the National Institute of Child and Human Development (NICHD) and the former Secretary of Education to assemble a panel on reading. In 1997, the National Reading Panel (NRP) was instituted. The NRP was charged with the difficult task of reviewing all research-based knowledge in reference to reading and reading instruction and ultimately presenting a report to Congress detailing their findings. According to NRP results, systematic synthetic phonics instruction was efficacious in improving reading skills for children with learning disabilities and children from low socioeconomic backgrounds. The focus of this paper is to highlight the advantages of using systematic synthetic phonics instruction with struggling urban readers.

The “gateway” skill in education is the ability to read fluently and independently at an early age (Ash, Brandt, & Esvelt, 1997). If reading is considered as the “gateway” skill, phonics instruction can be considered as the key to the gate in reference to producing a nation of readers. However, research indicates that some phonics approaches are more effective in improving student

achievement than others. Grossen and Bonnie (1994) state, “It is uncontroversial that a systematic, explicit (‘synthetic’) phonic approach using a code-based reader is more effective than implicit (‘analytic or embedded’) phonics, more effective than meaning-based basals, and more effective than a language experience approach.” Findings from the National Reading Panel (NRP) laud the merits of systematic synthetic phonics instruction. NPR findings confirm that systematic synthetic phonics instruction produces the greatest gains in reading skills for learning disabled and low achieving students. NPR findings also substantiate that systematic synthetic phonics instruction is significantly more effective in improving the reading skills of children from low socioeconomic levels than any other type of phonics instruction. In the following pages, I will discuss the findings of the National Assessment of Educational Progress (NAEP), the National Institute of Child Health and Human Development (NICHD) and the NRP; synthesize the research in reference to synthetic phonics, analytic phonics and systematic and embedded phonics instruction; and discuss study findings which support the usage of systematic synthetic phonics instruction as a means of improving reading skills of urban learners.

### **NAEP, NICHD, and NRP findings**

In 1994, the NAEP discovered that reading difficulties permeate all segments of the school-aged population. According to the NAEP, 29 percent of whites, 69 percent of African Americans, 64 percent of Hispanics, 22 percent of Asian Americans and 52 percent of American Indians read below basic levels in the fourth grade (National Assessment of Educational Progress [NAEP], 1995). 1998 NAEP data continued to reveal pervasive reading difficulties among school-aged children. The most recent NAEP reports indicate that 69 percent of fourth grade students are reading below the proficient level (NAEP, 1998). As a result of these dismal statistics, Congress asked the Director of the NICHD and the former Secretary of Education to assemble a panel on reading. In 1997, the NRP was instituted. This panel of 14 individuals was comprised of leading scientists in reading research, teachers, educational administrators, parents and college of education representatives. The NRP was charged with the difficult task of reviewing all research-based knowledge in reference to reading and reading instruction and ultimately presenting a report to Congress detailing their findings. According to NRP results, “Effective reading instruction includes teaching children to break

apart and manipulate the sounds in words (phonemic awareness), teaching them that these sounds are represented by letters of the alphabet which can then be blended together to form words (phonics), having them practice what they've learned by reading aloud with guidance and feedback (guided oral reading) and applying reading comprehension strategies to guide and improve reading comprehension” (National Institute of Child Health and Human Development [NICHD], 2000). As evidenced by NRP findings, reading is a combination of complex and interconnected skills. However, students will not become proficient readers if they have difficulty with sound symbol relationships. Overwhelmingly, research supports phonics instruction as the primary means of teaching children letter-sound relationships. *Becoming A Nation of Readers: The Report of the Commission on Reading* identifies phonics as one of the “essential ingredients” in any reading program (Anderson, Hiebert, Scott, & Wilkson, 1985). National Institute of Health (NIH) sponsored studies are finding that 95% of the poorest readers can learn to read at grade-level when there is early intervention and appropriate phonics instruction. NIH studies conclude, “ All but five percent of the poorest readers—regardless of income and race- can achieve average test scores after a year of

intensive phonics instruction 30 to 45 minutes a day in kindergarten and first grade” (“Not for everyone,” 1998). NICHD research supports NIH findings and concludes that factors such as intelligence, mental age, perceptual styles, race, or parents’ education cannot be used as measures to predict reading success. In spite of NICHD and NIH findings, children from poor families, children from African- American and Hispanic ancestry, and children who are enrolled in urban schools, have significantly higher rates of reading failure than their middle income, suburban, European- American counterparts (Burns, Griffin, & Snow, 1998). The 1998 NAEP data showed that nearly four in 10 American fourth- graders are failing to read at the basic achievement level (which means that these fourth-grade students exhibit little or no mastery of the reading skills required to perform grade-level work). The number increases to nearly seven in 10 fourth graders who are unable to read at basic achievement levels in the nations highest poverty urban schools. Statistics indicate that reading failure in today’s urban schools has reached epidemic proportions. The consequences are dire for this level of reading failure in our urban schools. As educators, it is imperative that we begin to adopt research-based instructional approaches and strategies that are

proven to increase the reading performance of urban learners. According to the NRP, systematic synthetic phonics is one such approach.

### **Discussion/Comparison of Widely Used Phonics Approaches**

Phonics instruction is described as a way of teaching reading that focuses on sound symbol relationships. The goal of teaching phonics is to enable students to pronounce words by having them associate letters with their corresponding sounds. Phonics instruction can be divided into two distinct methods: explicit “synthetic” and implicit “analytic.” Hempenstall (2001) states:

The term ‘synthetic’ is often used synonymously with ‘explicit’ because it implies the synthesis (or building up) of phonic skills from their smallest unit (graphemes). Similarly, ‘analytic’ is used synonymously with ‘implicit’ because it signifies the analysis (breaking down) of the whole word to its parts. (p.1).

In synthetic phonics, children are directly told the sounds of individual letters (the letter p represents /p/ in pan) and then given the opportunity to practice what they have learned in text that systematically reinforce the sounds and words that they have

been taught (many phonics programs call these text, Decodable text). Johnston and Watson (1999) report:

In synthetic phonics, all the 40+ sounds in the English language are taught very rapidly. Small groups of vowel and consonant letter sounds (i.e., a, s, t, p, n) are taught over a short period of time. Children see these letters right away in the initial, middle, and final positions of words, and sound and blend them together in order to pronounce the words. Consonant and vowel diagraphs, such as sh, th, ai, oa, are taught as well. (p.1).

In analytic phonics, children are required to generate sounds that correspond to individual letters as a result of visual and auditory exposure to words containing those letters. For example, in analytic phonics students would be required to generate /f/ from hearing the teacher say fan, fake, and father. After students generate the required sound, they are asked to locate the sound in texts that have not been systematically taught. In analytic phonics, children learn the sounds of the 26 letters in the initial, middle, and final positions in words containing 3 letters. Later on they learn diagraphs (ee, oa) and blends (sp, gr, ng). More complex rules like silent 'e' are taught much later on. Many analytic phonics programs introduce sounds usually at the rate of one per week and often take up to three years to complete. Research suggests that many students are unable to benefit from using analytic phonics

because they are unable to generate sounds. Their inability to generate sounds is usually a result of being unable to segment a word into distinctive sounds. Study findings conclude that phonemic awareness skills (which teach children how to manipulate sounds in words and would assist with the ability to segment words) and knowledge of the alphabetic principle (the concept that written spellings represent spoken words) are necessary prerequisites for successful acquisition of analytic phonics. Fortunately, synthetic phonics allows students to have rudimentary alphabetic knowledge and phonemic awareness skills because these early reading skills are explicitly taught.

In addition to discussing phonetic approaches, we must also focus on the instructional process. There are two distinct ways in which students are taught phonics through “systematic” or “embedded” instruction. In systematic phonics instruction, a planned sequence of phonics elements is taught. Systematic phonic instruction coordinates the introduction of sound-spelling relationships that children are expected to learn with texts that reinforce the sounds that they have been taught. Teachers provide students with corrective feedback of errors and continuous evaluation of progress. In embedded instruction, students are

expected to develop their own reading style by “discovering” phonetic cues that are in the context of other language activities. In this approach students are not explicitly taught phonics elements. Research indicates that embedded phonics instruction is unlikely to improve the reading performance of students who are experiencing reading difficulty (Hempstall, 2001). Hempstall (2001) states the following in reference to embedded phonics, “ Sadly, for struggling students such well-intentioned clues are neither explicit enough, nor are they likely to occur with such frequency to have beneficial impact. This approach is called embedded phonics because teachers are restricted to using only the opportunities for intra-word teaching provided within any given story” (p.2). Overwhelmingly, research supports the efficacy of using systematic synthetic phonics instead of embedded analytic phonics approaches. However the NRP cautions against any particular phonics approach being seen as a panacea. The NRP states, “Because children vary in reading ability and vary in the skills they bring to the classroom, no single approach to teaching phonics could be used in all cases. For this reason, it is important to train teachers in the different kinds of approaches to teach phonics and

in how to tailor these approaches to particular groups of students” (NICHD, 2000).

## **Research Findings in Reference to Synthetic Phonics**

### **Instruction**

Johnston and Watson (1999) conducted a 16-week study with three groups of first grade students: one group of students was instructed using analytic phonics, a second group was instructed using analytic phonics and phonemic awareness, and the third group was instructed using the synthetic phonics approach. Each group received instruction for 20 minutes daily and was introduced to reading scheme books after six weeks in the program. Instruction for the analytic phonics group consisted of learning one letter sound a week utilizing alliterative words and pictures. At the conclusion of the study, students in this group had learned 16 initial letter sounds. Instruction for the analytic phonics and phonemic awareness group consisted of spending 10 minutes daily learning initial letter sounds and the other 10 minutes orally learning to blend and segment phonemes. The synthetic phonics group learned six letters every eight days. These letters were presented in initial, middle, and final positions of words.

Instruction in the synthetic phonics group also consisted of students using magnetic letters to build simple words. Once students had formed each word with magnetic letters, they were required to say the letter sounds and blend them together to pronounce the words. By the end of the study, children in the synthetic phonics group performed nearly seven months above their chronological age on standardized reading and spelling tests. Children in the synthetic phonics group also outperformed their counterparts in the analytic group and analytic and phonemic awareness group by over seven months in reading and eight months in spelling. Johnston and Watson (1999) conclude, “The synthetic phonics group had the best levels of phoneme awareness and rhyme knowledge, performing even better than the children who had explicit phonological awareness training”(p.2). The authors believe that children experience elevated reading scores when they are exposed to letter sounds in the initial, middle, and final position of words and are taught to blend letters as a strategy for identifying unfamiliar words. These fundamental skills are taught much earlier in synthetic phonics programs than in analytic programs. The authors believe that the early introduction of

students to these fundamental skills explains why the synthetic phonics approach is superior.

Similar results were obtained in a study conducted by Barbara R. Foorman (1998). Foorman's study involved 285 disadvantaged children in eight inner city schools in Houston, Texas. (These inner city students were identified as the most at-risk 18 per cent of children in these schools.) In Foorman's study, students were divided into three groups: Group A received intensive synthetic phonics instruction, Group B received embedded phonics instruction, and Group C received implicit phonics instruction. These students received instruction for an entire school year. At the end of the year, Group A evidenced standardized tests scores that were close to the national average in the areas of decoding (43<sup>rd</sup> percentile) and passage comprehension (45<sup>th</sup> percentile); in comparison Group B's decoding (29<sup>th</sup> percentile) and passage comprehension (35<sup>th</sup> percentile) and Group C's decoding (27<sup>th</sup> percentile) and passage comprehension (33<sup>rd</sup> percentile) scores were substantially lower.

A longitudinal study conducted by Joseph Torgeson at Florida State University (1999) provides further documentation in reference to the efficacy of systematic synthetic phonics

instruction. Torgeson's research focused on children with ontologically based reading disabilities. (Torgeson states that the children with ontologically based reading disabilities have difficulty acquiring accurate and fluent word reading skills.) In Torgeson's study 1,500 children were assessed to ascertain their levels of phonological awareness and letter knowledge at the beginning of their kindergarten year. Of these 1,500 students, 180 children who were identified as being the most at-risk for reading failure by the time they entered the second grade were chosen. The demographics of the study group were approximately 50% minority (African American) and were equally comprised of males and females. The 180 children in the study were given one of four types of experimental interventions ranging from regular classroom instruction to intense explicit phonics based reading instruction. (For the purpose of this paper, I will focus on the two student groups who received phonics instruction.) Group one received the most explicit approach, which Torgeson called Phonological Awareness plus Synthetic Phonics (PASP); Group two received Embedded Phonics. Throughout the 2-½ year study, the drop out rate was 23% (138 of the 180 students finished the study). According to Torgeson, 26% of the children were retained

in kindergarten or first grade, however students in the PASP group experienced retention rates of only 9%. Children in the PASP group were also less likely to be referred for special education services than their counterparts in the Embedded Phonics group (18% vs. 42%). Results of the intervention reported that students in the PASP group exhibited scores that were close to the national average in the areas of word reading ability (standard score 'ss'=98.2 and ss of 100 being the mean) and using phonemic information to sound out novel words (ss=99.4). Students in the PASP group also received scores that were close to the national average in the area of speed of word reading. Results of the study concluded that students in the PASP group had the strongest scores in phonological awareness and phonemic decoding.

Johnston and Watson, Torgesen, and Foorman's research findings in support of the usage of systematic synthetic phonics instruction are encouraging. However, I found it extremely difficult to find extensive longitudinal studies in reference to this phonetic approach. In my opinion, sample sizes in the aforementioned studies were too small to generalize conclusions to the entire school aged population. Further longitudinal study with an increased number of participants is warranted.

## **The Advantages of using Systematic Synthetic Phonics Instruction with Urban Learners**

The NRP made the following statements in reference to systematic synthetic phonics instruction, “For children with learning disabilities and children who are low achievers, systematic phonic instruction, combined with synthetic phonics instruction produced the greatest gains. Moreover, systematic synthetic phonics instruction was significantly more effective in improving the reading skills of children from low socioeconomic levels” (NICHD, 2000). I formulated two questions as a result of the NRP’s statements concerning systematic synthetic phonics instruction: Why is systematic synthetic phonic instruction more effective with low achieving students and students who are from low socioeconomic (SES) backgrounds? and; Are there particular advantages for using this approach with urban learners? In my quest for answers, I contacted Barbara Foorman who is considered as one of the nations leading reading researchers. Dr. Foorman stated, “Systematic phonics instruction in the first two years of school is highly effective for all kids regardless of SES. However, the effectiveness of phonics also interacts with student characteristics such that the students with the lowest phonemic

awareness and alphabetic knowledge benefit the most from phonics. Urban learners are often disproportionately represented at the lower levels of phonemic awareness and alphabetic knowledge because of lack of exposure to these skills at home or in pre-K.” According to Dr. Foorman’s information and as the result of my research, I concluded that the primary advantage for using systematic synthetic phonics instruction with urban learners is the explicitness of the approach. Many of the other phonetic approaches that I have studied are based on the premise that learners will come to school with a certain set of skills that are characteristic of Anglo students who are middle income. In my opinion, the explicitness of systematic synthetic phonics instruction is beneficial to urban learners because they are not penalized for skills (such as phonemic awareness and the alphabetic principle) that they have not been taught in their home environment prior to entering kindergarten. There are several other advantages of systematic synthetic phonics instruction that apply to all learners. The advantages are as follows:

- Learners are taught how to blend letters as a strategy for identifying unfamiliar words.

- Learners are given an opportunity to practice what they learn in texts that systematically reinforce the sounds and words that they have been taught (Decodable Text).
- All phonics elements are explicitly taught.

### **Conclusion**

President Bush defines reading as the new civil right. Unfortunately, many urban learners are failing to receive their inalienable right to become proficient readers. Research indicates that if students are not taught how to read at a proficient level, the likelihood of them becoming productive members of society is minimal. As educators, we must ensure that students in urban schools read as well as their suburban counterparts. It is imperative that students are provided with reading instruction that research proves is effective with all learners. We must begin to question current educational practices and find new reading approaches that will eradicate the disparities that permeate American schools.

## References

- Anderson, R., Hiebert, E., Scott, J., & Wilkson, I. (1985). *Becoming a Nation of Readers: The Report of the Commission on Reading*. Washington, DC: National Institute of Education.
- Ash, B., Brandt, S., & Esvelt, S. (1997, June). *Reading Curriculum Proposal: Minority Report- research Synthesis*. Paper presented at the curriculum adoption meeting for the Snohomish School District, Washington.
- Burns, S.M., Griffin, P., & Snow, C.E. (Eds.). (1998). *Preventing Reading Difficulties in Young Children*. Washington, DC: National Academy Press.
- Foorman, B.R., Francis, D.J., Fletcher, J.M., Mehta, P., & Schatschneider, C. (1998). The role of instruction in learning to read: Preventing reading failure in at-risk children. *Journal of Educational Psychology*, 90, (1), 37-55.
- Grossen, Bonnie (Eds.). (1993-1994). *Focus: Beginning reading instruction*, Overview, Effective School Practices.
- Hempenstall, K. (2001, October 31). Some issues in phonics instruction Implicit and explicit phonics instruction. *Education News*, pp. 1-7.
- Johnston, R., & Watson, J. (1999). Synthetically Successful? *Literacy Today*, 19, pp.1-2.
- National Assessment of Educational Progress. (1995). *NAEP 1994 Reading: A First Look—Findings from the National Assessment of Educational Progress (Revised Edition)*. Washington, DC: U.S. Government Printing Office.
- National Assessment of Educational Progress. (1998). *The NAEP 1998 Reading Report Card*. Washington, DC: National Center for Education Statistics.

National Institute of Child Health and Human Development. (2000, April 13). *National Reading Panel Reports Combination of Teaching Phonics, Word Sounds, Giving Feedback on Oral Reading Most Effective Way to Teach Reading*. Washington, DC: Author.

Not for everyone? 95% can read if given phonics instruction. (1998, September 30). *The Baltimore Sun Online*, p. A13.

Torgesen, J.K., (1998-1999). *Research on the Prevention and Remediation of Phonologically Based Reading Disabilities*. (Research was supported by grant #HD30988 from the National Institute of Child Health and Human Development). Tallahassee, Florida: Florida State University, Center for the Study of Reading.

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