Running Head-- The Fourth Grade Slump

An Analysis of Educational Psychology Issues: “The Fourth Grade Slump”

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The Fourth Grade Slump

Literature Review

The fourth grade slump has been identified as a reading phenomenon that usually takes place around the third or fourth grade. During this time, children, especially those from less affluent and racial minority backgrounds, exhibit an achievement gap from earlier grades (Sanacore & Palumbo, 2009). Compared to those of other industrialized countries, American students rarely score near the international average after elementary school in subjects such as reading and math. This is one speculated effect of the fourth grade slump. This suggests that this achievement gap continues to grow throughout a student’s academic career (Hirsch, 2005) making this issue a concern for teachers of all grade levels.

The fourth grade slump is a crucial educational psychological issue because it encompasses several diverse facets that should be analyzed. These include, but are not limited to, the use of expository versus narrative texts, technology in the classroom, direct instruction and other intensive teaching methods, and the effect of socioeconomic background on educational achievement. Educators and psychologists across the country have been trying to gauge the extent of this phenomenon, its causes, and possible remedies. All three of the preceding issues, as well other observations concerning the state of this field, will be the subject of the rest of this analysis.

There are currently many theories concerning the causes of the fourth grade slump phenomenon. First, the shift from narrative to expository texts in later elementary school years should be addressed. This shift has been associated with the phrase “Moving from learning to read to reading to learn”. When children are first exposed to reading material, it is strictly
narrative. In later elementary school grades they are expected to read expository texts, which involve learning new information and often lack cohesiveness. Comprehension of expository texts relies more on world knowledge than decoding abilities (Best, Floyd, & McNamara, 2003).

Socioeconomic factors have been correlated with the fourth grade slump as well. This is an important point in light of the revelation that expository text comprehension is driven by world knowledge. Students from low income families learn half as many words as those from middle class families before starting school (Sanacore & Palumbo, 2009). However, a variety of both home and school factors contribute to reading ability. Children from less affluent families are less likely to be exposed to books, libraries, and enriching home environments. This is due to both to the lack of financial resources with the family and the profile of the parents. Parents in such families are often less educated than their middle class equivalents and also have less ambitious expectations concerning their children’s academic success. Unfortunately, many schools are “segregated” by economic status, often placing many minority students in the same school system (Lee & Croninger, 1994).

Other school factors may be part of the reading problem in American students. Professor Joseph Sanacore and Professor Anthony Palumbo (2009) believe that the emphasis on reading tests along with the shift from narrative to expository texts is to blame. In recent years, teachers have been encouraged to “teach to the test”. This involves limiting their lesson plans to specifically meet testing standards, and therefore reducing the chance that students will learn about a variety of subjects and in turn increase their vocabulary and world knowledge. In such classrooms there is usually a lack of creative reading material, as the focus is primarily put on textbooks. Larger classrooms with less personal attention are also detrimental to students reading abilities.
Many researchers suggest intensive reading intervention programs as a remedy to the fourth grade slump. One such program is Text Structures. According to Carol Hryniuk-Adamov (2008), Text Structures is an effective program for both teachers and students in regards to the shift from narrative to expository texts. Teachers are given access to a variety of resources, including step by step lesson plans, graphic organizers, vocabulary lessons, and tests that allow students to move from guided practice to independent mastery of the material. Hryniuk-Adamov believes that implementation of this program could help with not only the fourth grade slump, but success in later academic subjects as well.

Researchers Patricia Vadasy and Elizabeth Sanders (2008) evaluated the success of a program called Quick Reads in fourth and fifth grade students in a recent study. Students in the treatment group worked with paraeducators 30 minutes a day, four days per week, for 20 weeks. Repeated reading exercises, consisting of grade appropriate nonfiction science and social science material as well as repeated vocabulary words were completed during these sessions. At the end of the program, testing revealed that the treatment group scored much higher than the control group in the areas of vocabulary, word comprehension, and passage comprehension. However, both groups were still performing below grade level in the area of fluency, leading to the conclusion that intervention in early grades (1st-2nd grade) may be more beneficial than intervention in late grades (4th-5th grade).

A study by Jean Stockard (2010) suggests that the timing of reading intervention in schools should be rethought as well. In her study, Direct Instruction methods were utilized in 113 schools in a low income school district. Students participated in the study from first through fifth grade; their growth was measured using the Reading Comprehension and Reading Vocabulary subsets of The Comprehensive Test of Basic Skills each spring. Students in the Direct Instruction
treatment schools scored lower on the tests in the first year, but by fifth grade they were significantly outperforming students from the control schools, despite socioeconomic status or race. The Direct Instruction students had increased their vocabulary scores by 19% in fifth grade, (compared to 4.7% in the control schools), performing above the national average.

Students participating in the Core Knowledge program also perform above the national average on measures of reading and vocabulary. This may be due to the fact that the intensive curriculum extends throughout the grade system. Children in a Core Knowledge school were followed from kindergarten to sixth grade. The study showed that students of varying socioeconomic backgrounds exhibited fairly equal performance on standardized reading tests compared to students in the control schools, where affluence and performance levels were positively correlated (Hirsch, 2005).

Findings published by Jennifer Leach, Leslie Rescorla, and Holly Scarborough (2003) also suggest that intensive reading programs should extend throughout the middle school years. This is because some reading deficits are “late identified”, meaning that they are not noticed until fifth grade are later. Their study, which sought to explain why some students’ reading deficits were late identified, concluded that some reading deficits are in fact late emerging. For this reason, it is important that reading programs are utilized in both elementary and middle schools to prevent a sixth or seventh grade slump.

Increased classroom technology may help counter the fourth grade slump as well. Laptop use in classrooms promoted literary skills in elementary and middle school students. Students that were involved in technology programs were more likely to write longer papers, edit papers, and use graphic organizers as categorization and study tools. After two years in the program, students in the treatment group showed higher increases in test scores compared to the control
group. There were, however, some disadvantages to laptop use in the classroom. First of all, it took teachers the whole first year of the program to teach students the necessary skills to use the laptops effectively. Secondly, the laptops presented some disadvantages when students were expected to take standardized tests in paper form (Suhr, Hernandez, Grimes, Warschauer, 2010). In any event, further studies concerning technology use and the fourth grade slump should yield interesting results.

Other small changes within classrooms may play a big role in helping prevent the fourth grade slump as well. Expository texts should be introduced in earlier grades during the “learning to read” process. This will make the shift to “reading to learn” less dramatic (Best et al., 2003). Encouraging independent reading inside and outside the classroom is another strategy. Teachers should also assign interesting books of either narrative or expository nature to supplement their required textbooks. Textbooks should also be chosen on the basis of educational value and coherency (Sanacore & Palumbo, 2009).

The fourth grade slump is a complicated but vital educational psychology issue. Its source is due to many causes and its solution will be due to many changes within our current educational system. The most important conclusion that can be drawn from this research is that while there may not be a critical period for learning to read, there is a critical period for learning to read well to promote later academic success. Countering the fourth grade slump will most likely lead to the diminishment of other related achievement gaps in later grades across a variety of subjects as well. The only way to do so is through the implementation of a variety of programs and long term change throughout our school system. More research, both on the causes of the fourth grade slump and possible solutions will need to be conducted in the next few years.
Annotated Bibliography


Members of the Department of Psychology at the University of Memphis, Rachel Best, Randy Floyd, and Danielle McNamara designed a study to better understand the ways that young readers face difficulties in understanding texts. They believe that the main cause of the 4th grade slump is the shift from “learning to read” to “reading to learn”. This corresponds with a shift from narrative texts, which young students are familiar with, to expository texts, which present new information and often lack cohesiveness. Their study examined 61 3rd graders responses to 12 questions following both a narrative and expository text. Their results agreed with previous studies that readers with greater domain knowledge have better memory for and greater understanding of information conveyed in a text. The data supported that the main skill involved in reading narratives is decoding skills—efficient decoding left more room in working memory for comprehension. The ability to understand expository texts was based on knowledge—more knowledgeable children were able to make more inferences about the text. The researchers proposed some solutions to this issue, including teaching reading strategies and increasing cohesion and quality of textbooks. Leaving this problem unaddressed in third grade leads to an even greater learning deficit in subsequent higher grades.


Edward Hirsch Junior presents his ideas on the need for radical educational reform in his essay “Education Reform and Content: The Long View”. He argues that the causes of the 4th grade slump can not merely be attributed to socioeconomic factors. Past methods, such as direct instruction, have proved to help reduce the effects of the fourth grade slump, but have failed to support superior reading skills in later grades. The problem with many studies concerning reading achievement is their short longitudinal nature. Our current US school system is one reason for the 4th grade slump phenomenon; unlike many other industrialized countries, we do not have coherent curriculums and fail to utilize classroom time effectively to promote the highest levels of learning. The Core Knowledge program, which has been put into effect in several hundred middle schools, is one American educational program that Hirsch does consider to have an effective curriculum. A study comparing one of these schools to another that does not implement the program gave impressive results. The study followed the children from kindergarten to 6th grade, and showed that as time went on, the children in the Core Knowledge program were significantly outperforming their peers on reading tests. This was true for both advantaged and disadvantaged children, who performed on fairly equal levels compared to the control school, where advantaged children outperformed the disadvantaged.

Author Carole Hryniuk-Adamov advocates the use of the Text Structures program to increase reading comprehension in terms of expository texts throughout the grade system. Her essay argues that students are first expected to read narrative texts, which do not predict the level of success they will reach when reading informational texts. The sudden shift to expository texts often leaves children confused; they are often unable to distinguish main ideas from supporting claims. The ability to comprehend and write expository texts is vital to academic success throughout the life span. The program Text Structures is one way to promote success in this area. This program offers step by step lesson plans for teachers including graphic organizers, vocabulary lessons, and tests that can be integrated into a highly systematic method of teaching. This system also utilizes the gradual release of responsibility model of instruction, which moves students from guided practice to independent mastery.


Scholars Dee Lance, Brenda Beverly, Lea Evans, and Kim McCullough argue that both regular developing students and children with language-based learning disabilities (LLD) need intensive instruction in order to overcome reading problems. In order to gain reading comprehension skills, students should be exposed to methods that address vocabulary skills and text-level comprehension monitoring. Word identification is the first step in initiating this process. Four methods are presented to facilitate word identification: emphasizing letter-sound decoding, syllable neighborhoods, decoding by analogy, and multiletter chunking. Next, teachers should promote reading comprehension by utilizing the following four strategies: list-group-label, contextual redefinition, directed reading, and collaborative strategic reading. Explicit instruction in both the areas of word identification and reading comprehension is extremely beneficial to LLD and other students with reading problems.


Researchers Jennifer Leach, Leslie Rescorla, and Holly Scarborough conducted a study to investigate late-identified reading deficits in children above the primary grades. This was done by comparing reading, spelling, and other literacy related skills of early and late-identified RD children. The study sought to answer three questions about how heterogeneous late-identified RD children’s reading strengths and weaknesses were, how the profiles of early-identified RD
children compared to those of late-identified RD children, and if late-identification was a result of school weaknesses or later development. 74 4th graders and 87 5th graders participated. They were sorted into groups of Early School Identified, Late School Identified, Parent Concerned, and No History (or parent concern). They were administered tests measuring reading and spelling skills and cognitive and language abilities. Data from the late-identified RD students showed that they did not just have problems in comprehension, but in word level processing as well. The specifics of these different children’s deficits were heterogeneous. The data also showed that the late-identified and early-identified RD students were very similar in profiles, except in reading speed, which the older children excelled in compared to the younger students. The study suggests that late-identified RD students probably have late emerging reading deficits, which should be taken into account and remedied in schools.


Valerie Lee and Robert Croninger identified the relationships between home and school in concern to the development of literary schools for middle-grade students of various socioeconomic backgrounds. Their findings conclude that a variety of home and school factors contribute to literacy development. Middle class students were more likely to have higher educated parents (who had higher expectations for the children), more access to books and magazines at home, and take more trips to the library. Schools that utilized team teaching strategies, parent involvement, and were considered to be safer and fostered positive student/teacher relationships often had students with higher literacy levels. The authors suggest that reform is necessary in schools and should be encouraged in homes in order to bridge this social and economic gap. English teachers should also encourage more reading, writing, and editing within the classroom, especially in later middle school grades, in order to promote literacy and reading comprehension.


Joseph Sanacore and Anthony Palumbo, Professors of Education at Long Island University, present their understanding of the fourth-grade slump phenomenon and possible remedies in their essay “Understanding the Fourth-Grade Slump: Our Point of View. They begin their essay by exploring reasons for achievement gaps between low income and more affluent families. One reason is that children from low income families are exposed to half as many words before starting schools than middle class children. The bulk of their publication concerns the fourth-grade slump in relation to our current system of education. Based on their experience
and research, they have hypothesized that the current emphasis on test preparation and textbook learning is in fact detrimental to students’ acquisition of reading and vocabulary skills. Possible solutions include promoting independent learning by allowing time for “pleasure reading” in schools. Instead of the drastic shift from narrative to expository texts that begins to take place around fourth grade, Sanacore and Palumbo suggest that expository texts be introduced at a younger age and narrative texts be used to supplement text book reading in later grades. By making such changes as well as reducing class sizes for more personal attention and providing a variety of reading materials, both professors believe that the fourth-grade slump can be greatly reduced if not eliminated in the future.


Jean Stockard of the National Institute for Direct Instruction, conducted a study on the results of Direct Instruction for students from grades 1-5 in a low income school district. Working off a previous study, Stockard decided to see how DI would affect students and possibly counter the 4th grade slump if implemented in later elementary grades. Her study follows students who remained in the same school within the Baltimore City Public School System for at least five years. Students from 113 schools were split into the control and treatment group based on school curricula. Student growth was measured using the Reading Comprehension and Reading Vocabulary subsets of The Comprehensive Test of Basic Skills in the spring of each year. Although students in the DI schools scored lower on the tests in the first year, by fifth grade they were significantly outperforming the control schools and exceeding the national average, regardless to socioeconomic status or race. The DI students had increased their vocabulary scores by 19% in fifth grade, compared to 4-7% in the control schools.


Kurt Suhr, David Hernandez, Douglass Grimes, and Matt Warschauer researched the effect of one-on-one laptop programs on the fourth-grade slump. This was done by comparing longitudinal changes in English Language Arts (ELA) scores on the California Standards Test (CST) in students involved in a laptop program and those who were not. Two elementary and two middle schools participated. Both the treatment and control group consisted of 54 fourth graders that were assessed for two years. Interviews, observations, and surveys revealed that the schools utilizing the program used the laptops primarily for writing papers, researching, presenting, and making graphic organizers. For both groups, the ELA scores on the CST in third grade served as a baseline to compare with scores from 5th grade. The pretest showed that there
were no significant differences in ELA scores from the control and treatment groups. The posttest showed that the control group seemed to suffer from a fifth grade slump, but the treatment group did not. The data showed that the use of laptops did not completely prevent a reading comprehension slump, but did seem to reduce it. The positive effects for laptops appeared in the second year, most likely because the first year focused on teaching the children how to use the applications, rather than teaching content. The study concluded that laptops may be an effective way to promote literacy skills, although they did present some disadvantages.


Patricia F. Vadasy and Elizabeth A. Sanders, from the Washington Research Institute and University of Washington respectively, conducted a study on the effectiveness of the reading fluency intervention program *Quick Reads* in fourth and fifth grade students with below-grade-level reading skills. Teachers nominated students who had never been retained, had low reading fluency and comprehension levels, and who they believed would benefit from the tutoring program. The eligible students were randomly assigned to dyads and then to either the treatment or control group; 54 students were placed in the intervention program (treatment) and 65 continued in their regular classrooms (control). Students in the treatment group worked with paraeducators of varying educational backgrounds for 30 minutes a day, four days per week, for 20 weeks. The repeated reading exercises consisted of grade appropriate nonfiction science and social science material containing repeating vocabulary words. The results of the studies showed that although the treatment group greatly outperformed their peers in the control group in the areas of vocabulary, word comprehension, and passage comprehension, both groups still remained below grade level in terms of fluency according to the posttest. These results were not consistent with the researchers’ hypothesis, and led them to further hypothesize the importance of prevention in early grades (1st-2nd grade) rather than intervention in later schooling years (4th-5th grade).