COMMENTS

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EXPLORING HIGH AND IMPROVING READING ACHIEVEMENT IN CONNECTICUT

A REVIEW AND RESPONSE

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INTRODUCTION

The National Education Goals Panel has been charged by Congress to "report on promising or effective actions being taken at the national, State, and local levels...to achieve the National Education Goals". Within this context, the Goals Panel has commissioned, along with several other initiatives, a case study to determine which policies, programs, and other factors could account for the significant gains in reading scores in the State of Connecticut between 1993 and 1998. Specifically, Dr. Joan Baron was asked to undertake this critical, albeit complex, task to determine whether reading achievement policy initiatives enacted by the State of Connecticut could be analyzed to identify critical educational policy factors at both state and local levels that were related to gains in reading between 1993-1998. A substantial achievement of this analysis is the use of a well thought out methodology to disentangle policy effects from economic, race/ethnicity, and parental education factors vis-a-vis identifying relative and multivariate influences on reading achievement. Moreover, the study design provided the opportunity to determine the relative effects of state level policies and practices and district-level policies and practices on reading achievement and reading improvement over time. Importantly, this analysis is one of the first to attempt to identify, on a state-wide basis, linkages between progress in reading achievement and types of instructional approaches in those districts making the greatest progress.

The importance of this type of analysis cannot be overstated. For too long, educational policies and practices have been implemented at state and local levels in a haphazard, inconsistent fashion with little objective data employed to guide the process. Because of substantial gains made by many districts in Connecticut in reading achievement scores on the NAEP and other indices of reading improvement, the identification of relationships between State and district educational policies and practices, reading outcomes, and instructional, socioeconomic and demographic factors could possibly serve as a means to inform the

development and application of educational policies and practices in other states. To take advantage of this opportunity, Dr. Baron designed the study to address six major questions:

1. How consistent is the pattern of results on Connecticut's own statewide tests with those on NAEP?

2. To what extent did different economic, educational and racial/ethnic subgroups in Connecticut make progress during the period of growth on NAEP and did the gaps between these subgroups decrease?

3. To what extent can Connecticut's wealth, race/ethnicity and parental education rather than its educational policies, explain its high and rising reading scores?

4. What *state-level* policies and practices are likely to have contributed to Connecticut's improved reading scores?

5. What *district-level* policies and practices are likely to have contributed to the improved reading scores in those districts with the greatest gains?

6. How is reading being taught in the classrooms in the districts who made the greatest gains?

COMMENTS ON THE METHODOLOGY EMPLOYED

The methodology employed reflects a clear strength of this study and should inspire confidence in its conclusions. Data from multiple sources collected via both quantitative and qualitative (interviews) research protocols allowed for an in-depth analysis of State and local policy initiatives that appeared related to the significant gains in NAEP scores and scores obtained on the Connecticut Mastery Test in Reading - Degrees of Reading Power (DRP) by children in those districts which made at least 10 index points growth between 1993 and 1998 on the DRP. In addition, the DRP data were related to NAEP reading data collected from students in grades 4 and 8 in 1992, 1994, and 1998 to provide a measure of reliability. A significant strength of the study is the attempt to disentangle the effects of state and local policy initiatives on reading score gains from the effects of economic, ethnic, racial, and parental education factors.

COMMENTS ON THE FINDINGS OF THE STUDY

No doubt, fourth- and eighth- grade students in Connecticut outperformed most students across the country in both the magnitude of reading proficiency as well as the improvement in proficiency from 1992 to 1998. The statewide reading data reflected a pattern of achievement consistent with the NAEP results indicating a high degree of reliability in both level and pattern of reading ability and improvement over time. Importantly, the level and pattern of reading performance and growth over time cannot be fully explained by the fact that Connecticut is one of the highest ranked states with respect to parental income and education. To be certain, parental income and education will account for a substantial amount of the variance in the level of reading

achievement in any given year. However, these family-background factors CANNOT explain the patterns of growth and improvement in reading scores in Connecticut relative to other

states during the decade of the 90s, given that the median income in the state decreased in both absolute terms and relative to other states during this time period. Moreover, detailed analysis of socioeconomic and racial/ethnic factors indicate that all groups (rich/poor/Black/Hispanic/white) made consistent gains although absolute reading performance continues to distinguish between groups.

Given that genuine and robust improvements in reading scores have occurred in Connecticut since 1992, what can be learned from an analysis of State and local educational policies and the magnitude and nature of the improvements? In addressing this overarching question, Dr. Baron has done a masterful job of identifying, via several data sources, a number of policy candidates that could be influential in promoting these trends and thoughtfully reviews each. For example, her interview data suggest that individuals from districts characterized by improvements in reading scores credit the State's accountability initiatives reflected in the use of CMT scores to inform curriculum and instructional practices, the formal reporting of the CMT scores, and the explicitness and practicality of CMT-related materials (sample objectives, instructional strategies, etc.) provided by the State in conjunction with the test scores. Likewise the formal delineation of goal standards and reporting of district's reading performance relative to those standards were viewed positively, albeit not unanimously by those interviewed. Moreover, the State initiative to develop and report State and National Educational Reference Group data provides districts with a context for more accurate comparisons between their students' reading performance and students elsewhere who are similar in economic, racial/ethnic, and parental education backgrounds.

State initiatives in providing enhanced financial and human resources to low achieving districts has been credited with influencing improvements in reading scores as has the State's commitment to attracting and supporting quality teachers. The fact that teacher salaries in Connecticut are the highest in the world explains to some degree why Connecticut can recruit and retain more teachers with advanced degrees and experience. Of significant importance is Connecticut's Beginning Educator Support and Training (BEST) Program that promotes high standards for teachers and provides systematic training opportunities to beginning teachers to increase the probability that they can achieve those standards. Interview data indicate that this program has had a positive effect on the training of mentors by ensuring that mentors have an explicit understanding of the State's expectations for beginning teachers.

Finally, the State continues to develop new initiatives and to enhance ongoing projects relevant to reading development and instruction which serves to maintain and reinforce an emphasis on the importance of reading. These initiatives include legislation to promote reading by age 9, frequent State Board of Education discussions on reading and reading improvement, the Governor's Reading Challenge, expanding the number of family resource centers, and developing new guidelines for identifying children with learning disabilities on the basis of a comprehensive review of the scientific literature. Connecticut has also placed a premium on early identification of children at-risk for reading failure and the provision of year-long

instructional resources (including summer) that can be provided to children to prevent reading difficulties. This is a critical initiative and essential, in this reviewer's opinion, to continuing to improve the probability that all children will learn to read.

The improvement of reading scores in Connecticut has also been clearly influenced by policy initiatives at the local district level. Many of these initiatives emphasize accountability factors, leadership factors, and very importantly, the nature and type of reading instruction. Without a doubt, many local districts in Connecticut have taken a strong stance on the latter initiative - that of emphasizing the point that how reading is taught is extremely important in ensuring proficient reading development in all students. Unlike many teachers in local districts in other states, a large number of Connecticut teachers in high performing districts approach reading development and reading instruction conceptually rather than from a method-driven or "one size fits all" perspective. Dr. Baron's data indicate that there is a significant emphasis on understanding the critical concepts and components that children need to master in order to read well (e.g., phonemic awareness, phonics, fluency, reading comprehension), as well as the understanding that while some children will need to be taught these concepts in a direct, systematic and explicit manner, other children can develop them in a more implicit fashion.

Likewise, in many high performing districts there appears to be a clear understanding that children require consistent exposure to rich and interesting literature even though in some cases the literature is initially provided by reading to those students who have not yet mastered sufficient basic reading skills to read text in a fluent and automatic manner. The district interview data suggested strongly to this respondent that teachers in many high performing districts genuinely embrace a "balanced" approach to reading instruction and clearly understand that different instructional approaches and strategies are necessary to address the specific needs of individual children. While many school districts tout such an approach, few have provided the training and support to teachers to acquire the complex teaching skills necessary to realizing such balance. Connecticut seems to be moving forward productively in this direction.

In summary, I found Dr. Baron's identification and analysis of State and local policy factors related to reading success and improvement to be comprehensive, insightful, and highly informative. Indeed, other states and districts will benefit from Connecticut's focus on accountability at all levels, robust and consistent measurement of reading behavior, relating in a programmatic and practical fashion data from standardized assessments to curriculum and instruction, early identification and interventions with children at-risk for reading failure, increased expectations for teacher knowledge, and very importantly ongoing teacher support and teacher training. It would have been informative to obtain a better understanding of how State and local policies are informed by institutes of higher education in the state and whether teachers feel well prepared to teach reading during their undergraduate and graduate tenure, but that is a question for another day.

EXPLORING HIGH AND IMPROVING READING ACHIEVEMENT IN CONNECTICUT

David Grissmer
RAND

States are taking diverse paths to improve their education systems. This diversity among states - always one of the great strengths of our system of government - can have a high payoff if we can identify the most successful initiatives. These initiatives can then be successfully adapted to other states. The National Education Goals Panel (NEGP) has taken the lead in the effort to identify which states are making large gains in student achievement and trying to identify the likely causes.

An earlier NEGP report [Grissmer 1998] identified Texas and North Carolina as states making rapid gains in achievement as measured by the National Assessment of Educational Progress (NAEP) tests. The achievement gains were very large - about 10-15 percentile points over 6 years. A subsequent case study was able to eliminate any major resource increases or changing class sizes or teacher characteristics as likely causes. The case study identified a common set of reform policies centered around a system of aligned standards, assessments and some measures of accountability as the most plausible cause. The evidence was based primarily on the similarity of the structure and timing of the reform initiatives in both states as well as the absence of other explanations. However, no information was collected from educators about the impact of the reforms.

The data from Texas and North Carolina also showed that both minority and non-minority students made significant gains, and that minority students made larger gains than non-minority students in Texas. However, the average scores for students in these states placed them near or somewhat below the national average compared to students elsewhere in the nation. So it was unclear whether the gains were also being made by the higher scoring students.

The current study of Connecticut score gains provides additional support for the plausible explanation offered for Texas and North Carolina gains. It also offers much new, more detailed evidence from educators about the effectiveness of these reform initiatives. Finally, and perhaps most importantly, it provides evidence that gains are possible and occurring among higher scoring students.

As in Texas and North Carolina, the gains registered on NAEP scores were also recorded on the Connecticut state tests. Although the latest Connecticut state tests were designed to be similar to the NAEP tests, it is important to verify that gains are occurring on both tests. It is possible occasionally on the NAEP tests due to its limited sample size to register large gains that do not reflect actual achievement gains for students. The Connecticut state tests are given to all students at several grade levels, and thus cannot reflect the occasional chance sampling errors. However, the design and implementation of some state tests have identified flaws that make their trends unreliable. So the NAEP tests offers an important cross-check on the reliability of state testing.

Since the average scores of Connecticut students have been consistently near the top of NAEP scores nationally, their students include a significant percentage who score near the top of national score distribution. However, Connecticut also has a significant percentage of students who score well below average students nationally. Connecticut has a refined methodology that separates their schools into 9 SES groupings. The gains in reading in Connecticut occurred at all SES levels as measured by their summary index. Although the summary index weights gains made by higher scoring students were more than gains made by lower scoring students, the evidence still shows gains at all SES levels.

Gains for higher scoring students are important since the trends in national test scores measured since 1971 show that higher scoring students made little, if any, gains in scores, while every other group made significant gains. Thus the policies that were responsible for gains of lower scoring students appear not to have impacted higher scoring students. This case study suggests that policies responsible for gains in Connecticut affected higher and lower scoring students. This finding - if verified by further research - is very important. It may provide evidence that establishing and placing emphasis on "mastery" levels may impact the scores of higher ability students.

This case study depended mainly on interviews with school district personnel who were asked to identify the reasons for the gains. The system of standards, assessment and accountability was most frequently identified as the cause of score gains. The educators thought that the skills assessed on the state tests were important and that the tests gave meaningful annual feedback to teachers, principals and district superintendent on progress toward teaching these skills. This feedback from educators provides important support for the earlier results from Texas and North Carolina that these reform initiatives are important elements in raising test scores.

The second factor mentioned in the gains is the increased allocation of resources to underachieving school districts. The evidence from research nationally is now indicating that additional resources make the most difference for minority and disadvantaged students. Verification of this effectiveness from school district personnel who actually utilize these resources provides support for this hypothesis. However, this report also provides evidence that district personnel and policymakers judge that more resources can be used effectively in these districts. Connecticut has implemented many new programs in the last 2-3 years directed toward raising achievement even more in these districts.

The findings from Connecticut appear to offer much additional support for the conclusions of the earlier case study, and also agree with the direction of research nationally. One caution is needed with respect to the case studies completed to date. Case studies are an important first step in identifying successful policies. However, analysis of the patterns across all states are eventually needed to determine if the policies hypothesized to work in one state are also working across all states with similar policies. The effectiveness of policies can change across states due to the changing context. Connecticut is the highest spending state in the nation with the highest paid teachers. Policies that work in Connecticut may need to be redesigned to be effective in other states. Identifying the patterns across all states can provide the most compelling evidence for the effects of reform.

EXPLORING HIGH AND IMPROVING READING ACHIEVEMENT IN CONNECTICUT: LESSONS IN THE USES OF DATA IN POLICY DESIGN AND CHANGE

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The National Institute for Literacy[1]

The National Education Goals Panel has commissioned this case study of reading achievement in Connecticut, in part, to look "for 'lessons' of public policy that might be applicable to other states."[2] Certainly, Connecticut's status as the top-ranked state in student achievement on the 1998 National Assessment of Educational Progress warrants a closer look at the factors that account for such success. Moreover, the state has proven that its students' achievements are not a temporary phenomenon. The average scale scores of fourth and eighth grade students in Connecticut have been higher than those of other U.S. students since 1992, and Connecticut students, unlike their counterparts in other states, showed steady improvements in achievement from 1994 to 1998.[3] Between 1992 and 1998, the percentage of fourth grade Connecticut students scoring *proficient* has been significantly higher than that of other states.[4]

Connecticut undoubtedly enjoys certain demographic advantages that helped it gain the top ranked position: low percentages of families below the poverty line, high median family income, and high percentages of college-educated parents. These factors, as research has shown, are strongly related to high student achievement. So, at first blush, states that do not enjoy these demographic advantages may dismiss Connecticut's experience as having few, if any, implications for their own efforts. But, as Dr. Baron points out, these demographic factors alone do not explain the growth in student scores in Connecticut.[5] Additional factors, we think, offer the potential for other states to draw from the Connecticut experience, "lessons" that can inform their own efforts to improve student achievement in reading.

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[1] *Andrew Hartman is Executive Director of the National Institute for Literacy (NIFL) and Sandra Baxter is Program Director for the National Reading Excellence Initiative. The National Institute for Literacy (NIFL) was created in 1991 by a bipartisan Congressional coalition in response to the literacy field's request for a federal office focused solely on literacy. Through a variety of capacity building activities, NIFL supports the development of high-quality state, regional, and national literacy services to ensure that all Americans can develop the basic skills necessary for success in the workplace, family and community in the 21st century. NIFL's newest activity is the National Reading Excellence Initiative (NREI), a national reading research dissemination project authorized by the Reading Excellence Act. The NREI's mission is to make scientifically-based reading research more accessible to educators, parents, policymakers, and other interested individuals in support of state and local efforts to ensure that all children learn to read on grade level by the end of third grade. The authors wish to thank NIFL staff members Lynn Reddy, Communications Director, and Susan Green, Learning Disabilities and Communications Specialist, for their contributions to this paper.*

[2] Exploring High and Improving Reading Achievement in Connecticut, Dr. Joan Boykoff Baron, National Education Goals Panel, October 1999, Washington, D.C.

[3] Ibid, Figure 2, Section 1, page 6

[4] Ibid., Figure 3, Section 1, page 7

[5] Ibid, Section 1, pages 10-12.

In particular, we see two important lessons emerging from this particular study of policy. First, Connecticut is collecting and using data on student achievement in a way that is not only informative about the effects of policy, but also helpful to those who must implement the policies - district officials and teachers - and those who should benefit from the policies - students and their parents. Second, the state is actually *using* those data to improve policy and, ultimately, student outcomes.

Connecticut has been willing to do the difficult technical work and take on the often politically sensitive task of reporting data in a way that permits comparisons of key subgroups of the entire student population. This is a risky but essential task for any state trying to use statewide data to drive educational improvement. While aggregated data for all students in a state may demonstrate impressive overall achievements and garner political and community support for existing programs, it can also mask persistent and troubling trends of poor achievement in specific sub-groups of students. Data that are reported by student sub-group highlight such trends and can raise challenging issues about program effectiveness. They also provide information that can guide policy changes that move a state closer to reaching the goals it has set for all - not just some - of its students.

As described in the study, Connecticut developed a sophisticated metric for classifying its school districts by socioeconomic status and needs. The use of this metric led to the creation of nine categories (A-I) of school districts, or Educational Reference Groups (ERGs). (The report includes the Mastery Test Index Scores for each of these groups.[6]) This permitted important comparisons among districts serving vastly different student populations. And it is this critical step that allows assessment of whether or not state policies are having the intended effects on all children.

The Mastery Test Index Scores highlight not just a serious concern for Connecticut, but an intractable national problem in reading achievement: the performance gap between more affluent, non-minority students and minority and poor children. All student groups in Connecticut, including ethnic, racial, and socioeconomic subgroups, outperform their peers in other states. But within the state, students in those subgroups still perform at significantly lower levels than their more affluent, non-minority peers. This is especially true of the school districts serving the most economically disadvantaged students (Group I). Students in the next highest group (Group H) score more than 50% higher than these students, and students in Group A score over 100% higher. As the author says in her conclusions (p. 60) "too many children in the state (46% on the CMT) do not reach the statewide goal."

Connecticut's reporting of disaggregated CMT data, we think, has been essential to setting the stage for the state's success in improving reading achievement. We also think that the policies targeting the states' Priority School Districts - most notably those focusing on opportunities for learning outside the school - will be important factors in improving the poorest children's reading achievement. Those policies recognize the critical role of family and community in student

[6] Ibid, Figure 5, Section 1, page 15

achievement and provide important extended learning opportunities for students whose performance does not meet the standards. Connecticut's Commissioner of Education makes this important point very clear: "In our roles as parents, teachers, educators and community members, we all share responsibility for this endeavor and we must become relentless in the pursuit of each student's literacy." [7]

Connecticut should be applauded for addressing this part of the reading equation in its new Early Reading Success legislation, which requires all school districts to develop "a process for involving parents in addressing the reading problems of their children." [8] At the local level, this kind of activity could include improving the literacy skills of students' parents so that they can provide support for literacy development at home. In this regard, Dr. Baron states: "Perhaps as important as any other activities is the support and encouragement that parents can give to their children by working with them at home."[9] At the same time, research has shown us that parents' educational achievement is an important indicator of how well a child will perform in school, and 16% of Connecticut adults scored at the lowest of five levels of literacy proficiency in the National Adult Literacy Survey.[10] In order to provide their children with meaningful support, parents must have opportunities to increase their own basic skills.

Family literacy is an excellent model for raising parents' literacy levels and involving them in their children's schooling and acquisition of reading. As adult and family literacy expert Thomas Sticht put it:

> *Up to now adult literacy education programs have generally aimed at making adults literate while the business of making the adults' children literate has been left to the formal school system. Under the family literacy concept, however, it is now recognized that, due to the intergenerational transfer of cognitive skills, including language and literacy, an investment in the literacy education of adults provides "double duty dollars."*[11]

Policymakers at all levels of government are finding family literacy programs an attractive investment. In the last decade, the federal government has increased funding for family literacy programs from $14.5 million to $135 million. State legislatures, too, are expanding their support for these programs. Connecticut's newer initiatives expand the number of family resource centers and put in place requirements for home visitations, a strategy often used by family literacy programs.

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[7] Ibid, Appendix B

[8] Ibid, Appendix B

[9] Ibid, Section 3, page 39.

[10] The State of Literacy in America: Estimates at the Local, State, and National Levels, National Institute for Literacy, 1998.

[11] "Adult Education for Family Literacy," ADULT LEARNING, November/December 1995, Volume 7, Number 2.

It is still too soon to tell whether Connecticut's newer policies will be effective in narrowing the performance gap between the wealthiest and poorest students, an achievement that has eluded the nation at large. This persistent gap demonstrates how much more work remains to be done. But other states could learn from Connecticut's example of setting explicit standards for performance and conducting thoughtful data collection and assessment. Finally, other states might consider making policy choices similar to those Connecticut has made, in the hopes that these policies will ultimately help all children – irrespective of socioeconomic status – perform to the best of their abilities.

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APPENDICES

Appendix A: Individuals Interviewed in Preparing This Report

Appendix B: State-Level Policies Enacted Between 1996-1999

Appendix C: A Sample 'Degrees of Reading Power' Test Passage for Grade 4

Appendix D: Sample Parent Report for 'Degrees of Reading Power' Test with Recommended Books and Activities

Appendix E: Knowledge and Skills for Teaching Reading: A Core Curriculum for Teacher Candidates

Appendix A

Individuals Interviewed in Preparing This Report*

Connecticut State Legislature

Deputy Majority Leader, House of Representatives and Member of Education Committee	Denise W. Merrill
Counsel for the House Democrats	Edmund Schmidt

Connecticut State Department of Education

Commissioner's Office	Theodore S. Sergi, Commissioner
Bureau of Urban and Priority School Districts	Pam Kennedy
Bureau of Curriculum and Teacher Standards	Kate England Catherine Fisk Christine Sullivan
Bureau of Research, Evaluation and Student Assessment	Douglas A. Rindone, Chief Peter Behuniak, Director Mohamed Dirir Ellen Forte-Fast Susan Kennedy Steve Martin Peter Prowda
Former CSDE Employees	Karen Costello, now in Madison P.S. Larry Shaefer, now in Milford P.S.

Connecticut School Districts with Greatest Growth in Reading

Branford Public Schools	John Hennelly, Curric Dir. Linda Chipkin, Sliney & Murphy Schs
Colchester Public Schools	Dorothy Rose (former teacher)

*The author is grateful to the individuals on this list who gave generously of their time to discuss their work related to teaching children to read, to provide statistical data, and/or to review one or more drafts of this report. I would like especially to acknowledge the help of Denise W. Merrill and Ed Schmidt for providing insight into the long standing commitment of the Connecticut State Legislature to the improvement of early literacy; Peter Prowda for making available data from the Connecticut State Department of Education; and Nancy Eberhardt, Linda Chipkin, Ann Fowler and Susan Brady for sharing their deep understanding of the complex process of teaching reading.

Greenwich Public Schools	Delbert Eberhardt, Coord. Res.& Eval Nancy Eberhardt, Special Ed Coord. Faye Gage, L.A. Coordinator Carol A. Sarabun, Prin. Hamilton Ave.Sch. Connee Sepe, Prin., New Lebanon Sch Robert Grabnick, Teacher, Hamilton Ave. Sarah Roberts, Teacher, Hamilton Ave. Candace Robinson, Teacher, New Lebanon
Groton Public Schools	George Reilly, Former Supt. Kathleen Halligan, Dir. Curr. & Eval. Judy Ebbinghaus, Teacher
Middletown Public Schools	Carol Parmelee-Blancata, Assoc. Supt. Donald Busca, L.A. Specialist
Monroe Public Schools	Maureen McLaughlin Scott, L.A. Coord.
New Britain Public Schools	James Rhinesmith, Supt. Evelyn Colon-LaFontaine, Coord., L.A.
Norwalk Public Schools	Roz McCarthy, Sch. Bd. Member Mary Alice Fitzgerald, Coord, L.A.
Region 14 Public Schools (Towns of Bethlehem and Woodbury)	Mary Henderson, Former Dir. of Curr.
Waterford Public Schools	David Title, Asst. Supt. Nancy Souza, L.A. Coord.

Others Interviewed

Ansonia Public Schools	Suzanne Murphy
Region 15 Public Schools (Middlebury and Southbury)	K. Michael Hibbard
Ledyard Public Schools	Jean Fugate
Touchstone Applied Science Associates, Inc.	Steven Ivens, Vice President Carol Morrison, Scoring Services
Central Connecticut State University	David Monty
University of Connecticut	Miriam Cherkes-Julkowski

Individuals Affiliated with Haskins Laboratories

University of Rhode Island	Susan Brady
Wesleyan University	Ann Fowler
University of Connecticut	Leonard Katz
University of Connecticut	Alvin Liberman
College of New Rochelle	Hyla Rubin
University of Connecticut	Donald Shankweiler

Appendix B

State-Level Policies Enacted Between 1996-1999

Since 1996, the Connecticut General Assembly, the State Board of Education, and the Governor passed six new initiatives directed toward the improvement of reading in Connecticut. These recent initiatives are too new to have caused Connecticut's improvement between 1992 and 1998, but they build upon that improvement. These efforts document the reciprocity between good practice and good policy. Many of the practices that find themselves in the new policies were already occurring in the most improved districts. With these initiatives, policymakers are attempting to make them more widespread. For the past several years, there has been strong bipartisan support in Connecticut for relentlessly pursuing a strong reading agenda for all children and intensifying efforts to reduce the achievement gap between the large cities and the rest of the state's communities. This consistency of political leadership among the Governor, the Commissioner of Education, and the Legislature have resulted in a coherent set of policies that can be reinforced at different levels of government.

State Board of Education Policies

Comments of Commissioner of Education, Theodore S. Sergi, indicate his serious commitment and those of both the State Board of Education and the State Department of Education (CSDE) to helping all children become better readers. As one sign of this commitment, several years ago Dr. Sergi initiated partnerships between the CSDE and the State's five largest cities to enable their respective reading and mathematics consultants to work together to develop and initiate improvement strategies.

> *(Our mission) must begin with a strong emphasis on early reading proficiency. We must focus on having all children reading well and by the end of first grade. We must read to children, help them to understand reading strategies and help them to enjoy reading.*
>
> Theodore S. Sergi, Commissioner of Education, February 3, 1999
> *Press Release on Release of 1998 CMT Scores*, p.7

> *In our roles as parents, teachers, educators and community members, we all share responsibility for this endeavor and we must become more relentless in the pursuit of each student's literacy. By varying and individualizing our reading instruction in a child's preschool and early school years we will ensure that each child becomes a confident, competent reader who reads for learning and pleasure.*
>
> Theodore S. Sergi, Commissioner of Education, October, 1998
> *Improving Reading Competency For Students in the Primary Grades, p.1*

The State Board's 1999 Guidelines for Identifying Children with Learning Disabilities

According to several educators in the most improved Connecticut districts, the most instructionally relevant and potentially far-reaching action taken by the State Board of Education this past year to improve early literacy may be the development of new *Guidelines for Identifying Children with Learning Disabilities* (1999). The Guidelines are likely to have an important impact because "approximately 80 percent of students identified as having a learning disability have reading problems" (Lyon, 1996). Two excerpts from the new Guidelines are provided.

> *"For a student to be identified as having a learning disability in reading, the Planning and Placement Team must be able to document that the child received appropriate classroom instruction, and intensive small group or individual instruction in his/her specific area of difficulty, and did not respond to the interventions provided. Documentation of continuous assessment, instructional interventions and progress must be provided to assist teams in evaluating whether lack of education is a factor." (p.20)*

Excerpts from the Worksheet for the Identification of a Learning Disability

In addition to Small group Instruction by the General Education Teacher for a minimum or four days per week, the student has received small group or individual instruction based on assessed strengths and needs, for a minimum of four days per week, and under the direction of a person knowledgeable in reading instruction, (documentation indicating frequency, duration and type of instruction must be attached).

If decoding skills are weak, child has been provided with:

____ Explicit small group phonemic awareness instruction
____ Explicit small group or individualized multisensory code-based instruction
____ Explicit synthetic phonics instruction (part-to-whole)
____ Explicit analytic phonics instruct (whole-to-part)
____ Small group or individualized literature-based instruction that includes semantic and syntactic cues
____ Fluency practice provided daily in decodable texts, as well as in rich and interesting texts at student's independent reading level
____ Daily opportunities to write, utilizing skills emphasized in lesson
____ If comprehension skills are weak, child has been provided with:
____ Authentic and interesting texts for instruction
____ Explicit small group or individualized instruction in active reading and comprehension strategies, which include semantic, graphophonic and syntactic cue systems
____ Vocabulary building
____ Daily opportunities to write, using higher-order thinking skills

\The State Legislature

The Legislature has passed four recent initiatives to foster early literacy.[12]

School Readiness/Preschool Grants

There is considerable research about the importance of developing children's motivation to read and foundations for reading (especially phonemic awareness) at a young age. By 1990, Connecticut already had the highest percentage of students enrolled in public and private preschool education with 70.2% of its 4-year-olds in preschool. This far exceeded the U.S. average of 57.1%.[13] In 1997, the average percentage of kindergartners with a preschool experience had increased by 6 percent.

Two years ago, to further increase the percentage of students in a quality preschool experience, the Connecticut General Assembly adopted the School Readiness Act (1997). The first two years of the program entailed building the School Readiness Councils, assessing need, and funding 4,000-5,000 School Readiness slots.

Early Reading Success Grants

The following statements from Moira K. Lyons (D), Majority Leader of the State House of Representatives help to establish the motivation and context of this legislation.

> *"The Early Reading Success" legislation is a logical follow-up to last year's School Readiness legislation. Both focus on early child development. A child who has had a quality School Readiness experience and who loves reading has a passport to a successful life... This bill seeks to address the 45% of our young children who are not reading at grade level by the fourth grade. The legislation creates a comprehensive early intervention literacy strategy targeting at-risk children in kindergarten through third grade."*
> *School Readiness Update, Vol. 1, No. 3,* July 1998

Early School Success

The General Assembly emphasized the early school years and particularly the importance of reading by requiring each school district in the state to develop and implement a three-year plan to improve

[12] The summaries of the legislation were provided by the Office of Legislative Research, a non-partisan agency.

[13] However, 8 countries have higher percentages than Connecticut: (Belgium, 99.4%; Czech, 80,5%; France, 100%; Hungary, 88.4%; Netherlands, 98.3%; New Zealand, 94.6 % and Spain, 93.5%; *Education in States and Nations*, Table 9b).

the reading skills of students in the early grades and to provide in-service training for elementary school teachers in how to teach reading.[14] The act establishes state grants to help the 14 largest and most economically and educationally needy school districts ("priority districts") as well as economically and educationally needy elementary schools in other districts ("priority schools") to: (1) improve the reading skills of younger students, (2) reduce class sizes in the early grades, and (3) establish full-day kindergarten programs. In general, an eligible district must use at least 50% of its grant for intensive early reading intervention programs. Eligible school districts also receive an additional 5% state reimbursement for construction projects related to establishing all-day kindergarten programs or reducing class sizes in the early grades.

The new act also establishes grants to help priority districts buy books for school libraries and make improvements to school buildings, requires new and already certified elementary teachers to be trained in how to teach reading, establishes two pilot early childhood education programs, and requires the education commissioner to do a long-range study of the effects of the early reading programs on participating children.

A State-Wide Early Reading Success Institute

Building on the early reading success grant program adopted in 1998, the General Assembly is requiring the Connecticut State Department of Education (CSDE) to establish a State-Wide Early Reading Success Institute for educators to begin operating in the 2000-01 school year. The institute's program must be based on (1) the results of a special panel's review of research on how people learn to read and what teachers need to know and do to teach reading effectively and (2) an assessment by each priority district of what it needs for its students to achieve reading success. The research review panel consists of elementary school teachers, school administrators, national reading research experts, and experts in early childhood education and higher education who know about reading research. Both the review and assessments must be done by July 1, 2000.

By January 1, 2001, each priority school district must adopt a three-year in-service reading instruction training plan for at least 70% of its K-3 teachers and all of its school librarians and elementary school principals. The plan must coincide with the instructional model developed by the

[14] To help districts develop plans that serve as road maps for effective instruction, during the 1998-98 school year, consultants in the CSDE have developed material, workshops, and academies to disseminate research about reading and successful literacy-building practices (e.g. *Improving Reading Competency For Students in the Primary Grades*). In addition, they have worked closely with dozens of school districts to provide feedback to early drafts of their plans. Furthermore, the Department is tailoring its requirement for 90 Continuing Education Units that all teachers must take every five years to renew their certification to require that elementary school teachers spend fifteen of those hours in the area of teaching literacy.

Institute. Districts can use money from their state early reading grants to pay for the training. The Institute is also funded from the early reading success grant appropriation.

Educational Accountability and Summer School Grants

This act requires various measures to identify and help failing schools and students.

By October 1, 1999, the education commissioner must compile a list of elementary and middle schools that need improvement, based on mastery test scores. School boards with listed schools must develop and implement school improvement plans for them. If the schools fail to progress after two years, boards must, with the commissioner's approval, take one or more specific actions to close or revamp them, transfer their employees, or allow students to attend other public schools in the district.

As part of an emphasis on educational accountability, a new law requires priority school districts, starting in the 2000-01 school year, to give additional instruction, such as after-school, school vacation, or weekend programs, to students who do not meet the remedial standard on the 4th grade mastery test. Starting in the 2001-02 school year, the requirement expands to include students who do not meet the standard on the 6th grade test. These students must go to summer school in the summer following the test unless their school principal, acting on their teacher's recommendation, exempts them. If they are offered the opportunity to go to summer school and fail do so, they cannot be promoted to the next grade.

To support the new summer school requirement for 4th and 6th grade priority district students who fail the mastery test, the General Assembly established a new state summer school grant program for priority districts, starting in FY 2000-01.

All local school boards must review and revise their promotion policies by July 1, 2000 to make sure they foster student achievement, reduce social promotion, and help failing students.

Expanding Family Resource Centers

The law requires the State Department of Education, in conjunction with the Department of Social Services, to coordinate a family resource center program to provide child care, remedial education, literacy services, and supportive service. It requires that family resource centers be associated with public schools and serve recipients of Aid to Families with Dependent Children and others who need services.

The centers must provide (1) all-day child care for children aged three or over who are not in school; (2) before and after-school care (and all day during holidays and vacations) for children up

to age 12; (3) support services to parents of newborns, including education in parenting skills if necessary; (4) support and educational services to parents whose children require child care services, if parents want to get a high school diploma or its equivalent; (5) day care training for other day care providers and referral services for other child care needs; and (6) family training for expectant parents and parents of children under age three.

The family training must include information and advice on development of language, cognitive, social, and motor skills; routine visits to each family's home; group meetings at the resource center for neighborhood parents of young children; and a reference center for parents whose children need special assistance or services.

The centers must recruit parents to participate. They must also provide teenage pregnancy prevention services that emphasize responsible decision making and communication skills.

The law authorizes the education commissioner to give grants to municipalities, school boards, and child care providers to administer the centers. The commissioner must determine how to select programs to receive grants. The center must employ a program administrator with two years' experience in child care or early childhood education and a master's degree in child development or early childhood education.

The legislature is expanding its funding of Family Resource Centers. During the 1998-99 school year, $6 million supported 60 Family Resource Centers at $100,000 per center, serving an estimated 15,000 families. A requirement for home visits to families with infants and toddlers was added. Therefore, over the next two years, 20 new centers will be added along with an increase of $50,000 per center.

The Governor

Governor Rowland's Summer Reading Challenge

A recent statement by Governor John G. Rowland (R) shows his commitment to improve early reading success:

> *"Success in reading at an early age means a greater chance for success in other subjects and in later life. Connecticut's emphasis on early reading is paying off*

and I predict in coming years we will see that emphasis lead to better scores in math, writing, and other subjects. In fact, we're already seeing some signs of improvement in other subject areas."

Governor John G. Rowland (9/9/99)

Governor John G. Rowland initiated the Governor's Summer Reading Challenge in June 1996, inviting all of Connecticut's students in both public and nonpublic schools to read as many books as possible during the summer months. In its third summer (1998), nearly 129,000 students from 593 public and nonpublic schools (about half of the State's schools) met the Governor's challenge, reading more than 1.1 million books during the summer - an average of almost 9 books per students.

Source: *Connecticut Reads – The Governor's Summer Reading Challenge 1998 Results*

Grade 4

Long ago, cities had walls around them. The walls were strong. They were thick. They were high. The walls protected the cities. The walls had tall towers. They had big gates too. People went in and out through the gates. That is how they ___1___ the city. That is also how they left it.

People came to the city. They came to sell things. They came from far away. Some people rode to the city. Others had to ___2___. They came all the way to the city on foot. When they got there, they were not able to go right in. First, they had to stop at the gates.

There were guards at the gates. The guards had work to do. They had two ___3___. First, they had to check each person's things. Then they had to collect a tax from each one. Everyone had to ___4___. That is how the city earned money.

Often there were long lines at the gates. People had to wait. They waited for hours. To pass the time, they talked. They slept. They did not trade while they waited. They kept their goods. They sold them in the city. In time, this changed. People began to sell a few things outside the gates. The trade grew. The market spread. Many customers came to buy. There was a lot of ___5___. Soon there were stores by each gate.

Bit by bit, a city took shape outside the wall. People lived there. They worked there. But they were afraid. They had no wall to protect them. They did not feel ___6___. An enemy could attack them. Up went a new wall.

The old wall was not needed now. The rooms in its towers were empty. But they did not stay that way for long. A tower seemed like a good place to live. Many people needed ___7___. So they moved in. They had a new use for the old wall.

1 a) ruled b) named c) entered d) burned e) divided

2 a) share b) write c) hide d) walk e) obey

3 a) horses b) flags c) jobs d) keys e) uniforms

4 a) return b) pay c) wash d) explain e) finish

5 a) rain b) clothing c) music d) disease e) business

6 a) clean b) poor c) safe d) sick e) hungry

7 a) wagons b) guns c) doctors d) food e) homes

(**Go to the Next Page**)

Appendix D

Sample Parent Report for Degrees of Reading Power Test with Recommended Books and Activities

Central School District

S. T. Admitte
Superintendent

June 1999

To the Parents or Guardians of Vincent Rodgrigues:

On April 14, 1999, students in grades three through seven took the Degrees of Reading Power ® (DRP) test. This test is the same reading test we administered in the fall in grades three, five, and seven and as part of the Connecticut Mastery Test in grades four, six, and eight. The test is designed to measure reading comprehension or how well your child understands what he or she reads. The score is reported in DRP units.

The DRP unit score identifies the most difficult reading materials that your child can read and understand. The scores are reported at the Instructional Level, which is the point at which students correctly answer seventy percent of the questions they are asked about a selection they have read.

Students in grades two and three typically show rapid growth within a school year - as much as ten DRP points. Growth from grades four through eight averages about four DRP units per year.

Our reading goal for grade four is 55. Vincent's DRP unit score is listed below:

DRP Unit Score for Instructional Level: 53

The following score shows how your child performed on the test compared with a National Percentile Rank. Percentiles range from 1 to 99+ with 50 being average. For example, a score of 65 would mean your child answered more questions correctly than sixty-five percent of the students in the same grade at the same time of year.
Vincent's National Percentile Rank is listed below:

National Percentile Rank: 52

Tests are estimates of a student's performance on a particular day with a particular set of written material. There are factors, however, that can cause a child's test score to not be a true representation of his or her usual classroom performance. Therefore, we recommend that you compare your child's test scores with other information you may have about his or her ability to perform school tasks.

If you wish additional information about Vincent's performance on this test or in the classroom, please contact your child's school.

Student: Vincent Rodgrigues

In April of 1999, Vincent took a Degrees of Reading Power (DRP) test. This test measures your child's ability to comprehend the surface meaning of text while it is being read. This Parent Report, which is based on Vincent's current performance on the DRP, suggests the kinds of things you can do to assist in your child's literacy development.

Books to Try Now. The following books are among those your child should enjoy reading on his or her own. Most of them are widely available in bookstores, libraries, discount stores, and over the internet. Many are published in both hardback and paperback form. It is hoped that one of these books will be so appealing that your child will want to read it again, or read other books by the same author. Your child's teacher or the children's librarian at the school or public library can also help you find books to interest your child.

A Gift for Mama, Esther Hautzig.
Sara lives in Poland. More than anything, she wants to buy her mother the black satin slippers for Mother's Day. But she doesn't have any money.

Bunnicula, Deborah and James Howe.
After the Monroes bring home a little rabbit they've found, strange things begin to happen. Chester the cat thinks it must be a vampire bunny.

I Left My Sneakers in Dimension X, Bruce Coville.
At the beginning of summer vacation, Rod and his bratty cousin Elspeth are kidnapped by an alien monster named Smorkus Flinders.

Charlotte's Web, E.B. White.
Fern, a little girl who can talk to animals, loves her pig, Wilbur. And Wilbur loves Charlotte, a beautiful gray spider who teaches him many lessons.

Encyclopedia Brown Lends a Hand, Donald J. Sobol.
Encyclopedia Brown is a 10-year-old detective. He tackles the case of the runaway elephant. The reader gets a chance to solve the case too.

The Children of Green Knowe, L.M. Boston.
A small boy called Tolly comes to stay with his great-grandmother at Green Knowe. Three children in a painting appear to him as ghostly playmates.

Misty of Chincoteague, Marguerite Henry.
Paul and his sister, Maureen, live on the island of Chincoteague, Virginia. They help capture two wild ponies and try taming the colt, Misty.

How a Book Is Made, Aliki.
A book is made by many people. The author, illustrator, editor, designer, and typesetter all work on it. Finally, the book is ready to be printed.

Books to Try Later. Your child may want to try the following books in the next few months.

Blizzard (Colorado, 1886), Kathleen Duey.
Maggie lives on a remote ranch in the Rocky Mountains. When her city cousin from St. Louis comes to visit, the two find themselves lost and alone in a raging blizzard.

Dear Mr. Henshaw, Beverly Cleary.
Leigh, age 10, writes letters to his favorite author, Mr. Henshaw. He tells about his problems with his parents' divorce and being the new boy in school.

The Great Brain, John D. Fitzgerald.
J.D. recalls the wheelings and dealings of his older brother, Tom, age 10. Nicknamed The Great Brain, Tom's schemes keep the Utah village in an uproar.

Who Is Carrie?, James and Christopher Collier.
Carrie is a black slave in George Washington's New York home. Trying to help her friend Dan, she discovers the truth about her own past.

The Borrowers, Mary Norton.
The Borrowers are tiny people who live beneath the kitchen floor of an English country house. One day a young boy discovers them.

The Secret Garden, Frances Hodgson Burnett.
Colin, spoiled and sickly, tries to regain his father's love. He and his orphan cousin work on his dead mother's secret garden, now sadly overgrown.

Come Back, Salmon, Molly Cone.
The kids at Jackson Elementary School in Everett, Washington, adopt Pigeon Creek, a nearby polluted stream. They clean up the garbage, raise and release salmon, and watch in wonder as the stream comes back to life.

There are many other things you can do to stimulate your child's interest in reading. Specific activities are recommended on the following page.

Reading Aloud. Reading aloud benefits both the audience and the reader. Use modern technology to vary your reading-aloud sessions.

- Try books on tape. Many books are now available on audio cassette. Look for ways to include them in your activities. Going on a car trip? Child sick in bed? Tape-recorded books can help pass the time.

- Here's another way to use the tape recorder: Encourage your child to practice reading a story, then make an audio tape of it. Put the cassette in the family tape library to enjoy later. Or give the audio tape as a gift to a friend or relative.

Reading to Do. It is important to encourage your child to view reading as an instrumental activity, a means to an end, as well as a leisure activity. To do this, engage your child in a project that requires reading to achieve its goal.

- Children are enthusiastic collectors, and collecting is an excellent reading-to-do activity. Look for kits and books for your child on collecting rocks, insects, or shells. Encourage your child to learn all about the topic. One of the best ways to do this is to be an appreciative audience. Admire the latest bug, lump of quartz, or starfish. Help your child add to and display his or her collection. Displaying a collection, in particular, can involve the child in writing and categorizing activities.

- Encourage your child to make a simple dish on his or her own from a recipe or from package instructions. Write out instructions for your child, if necessary. Resist the temptation to "do it for" your child. Going from written instructions to finished product may mean that your child makes mistakes on occasion.

- Look for board games that focus on words, such as Scrabble™ and Boggle™. Your child may be motivated to learn more new words to increase his or her chances of winning. Make these games a regular part of your family entertainment.

- Children love secrets. Look for kits and books on secret codes and secret writing, sign languages, and signals. These materials not only provide opportunities for reading to do, they may also increase your child's knowledge and appreciation of language.

0:10:01 PRA

Talking about Reading. To develop children's ability to remember, reason with, and evaluate information, encourage them to respond to their reading in a variety of ways. Take advantage of informal situations and settings -- riding in the car or doing chores -- to talk to your child about books.

- Ask your child to tell you a story that he or she has read. Listen carefully, but keep your comments low-key. Do not criticize your child's version of the story or point out mistakes. Encourage your child with questions such as "And then what happened?" Similarly, ask your child to tell you about a nonfiction book or article that he or she has read. Nonfiction materials are often sequenced differently than fiction. Follow the same guidelines, but tailor your questions to the topic. "What else did they tell about the rain forest?" If your child is often asked to remember and retell what was read, his or her reports should increase in accuracy, coherency, and detail.

- Ask your child for an opinion about something that was read: Did you like this book? What did you like or dislike about it? What was your favorite part or character? What was interesting about this subject? Was the author clear? Encourage your child to give reasons for his or her opinions.

- Ask your child to interpret something that was read: Why did this character act this way? What was the most important thing you learned about whales? Remember that you are asking your child to tell you what he or she thinks. You should not have an answer in mind ahead of time. Don't turn the conversation into a test. Talking to you gives your child the opportunity to explore and clarify his or her own thinking.

- Talk to your child about his or her reading preferences. Does your child enjoy mysteries? Adventures? Stories set in the past or present? Has your child been exposed to high-quality nonfiction as well as fiction? Talking to children about what they like to read helps them to make more satisfying reading choices.

Other Activities. There are many ways to encourage your child's literacy development. Look into the youth groups in your community such as the Scouts or 4-H Clubs. These groups include reading and writing in many of their activities.

Appendix E

Knowledge and Skills for Teaching Reading: A Core Curriculum for Teacher Candidates

Source: ***Teaching Reading Is Rocket Science, What Expert Teachers of Reading Should Know and Be Able to Do*, Appendix A, American Federation of Teachers**

Part I. The Psychology of Reading and Reading Development

Cognitive Characteristics of Proficient Reading

1. Language proficiencies of good readers.
2. Eye movements and text scanning.
3. Active construction of meaning.
4. Flexibility and self-monitoring.

B. Cognitive Characteristics of Poor Reading

1. Variable language difficulties of poor readers.
2. Phonological processing, reading speed, and comprehension – their manifestations and interrelationships.
3. Non-linguistic factors in reading difficulty.
4. Alternative hypotheses about reading difficulty, supported and unsupported.

C. Environmental and Physiological Factors in Reading Development

1. Socioeconomic and environmental factors in reading.
2. Neurological studies of good and poor reading.
3. Familial factors in dyslexia.

D. The Development of Reading, Writing, and Spelling

1. Emergent literacy.
2. Early alphabetic reading and writing.
3. Later alphabetic reading and writing.
4. Orthographic knowledge at the within-word level.
5. Orthographic knowledge at the syllable juncture level.
6. Orthographic knowledge at the morphemic, derivational level.
7. The role of fluency in reading development.
8. The relationships between phonology, decoding, fluency, and comprehension.

Part II. Knowledge of Language Structure and Its Application

A. Phonetics

1. Classes of consonant and vowel speech sounds (phonemes) and the inventory of the phonemes in English.
2. Similarities and differences among groups of phonemes, by place and manner of articulation.
3. Differences between the inventory of speech sounds (40-44) and the inventory of letters (26); how letters are used to represent speech sounds.
4. The basis for speech sound confusions that affect reading and spelling.

B. Phonology

1. Components of phonological processing (articulation, pronunciation, phoneme awareness, word memory and word retrieval).
2. Phoneme awareness:
   a. Why it is difficult.
   b. How it supports learning an alphabetic writing system.
   c. How it develops.
3. Dialect and other language differences.

C. Morphology

1. Definition and identification of morphemes (the smallest units of meaning).
2. Grammatical endings (inflections) and prefixes, suffixes, and roots (derivational morphemes).
3. How English spelling represents morphemes.
4. The network of word relationships.

D. Orthography

1. Predictability and pattern in English spelling.
2. Historical roots and layers of orthographic representation.
3. Major spellings for each of the consonant and vowel phonemes of English.
4. Spelling conventions for syllable types.
5. Sequence of orthographic knowledge development.

E. Semantics

1. Depth, breadth, and specificity in knowledge of meaning.
2. Definition, connotation, denotation, semantic overlap.
3. Idiomatic and figurative language.
4. How new words are created.
5. Ways of knowing a word: antonyms, synonyms, analogies, associative linkages, classes, properties and examples of concepts.

F. Syntax and Text Structure

1. Basic phrase structure.
2. Four types of sentences.
3. Sentence manipulations: expansion, rearrangement, paraphrase, negation, formation of interrogative and imperative.
4. Visual and diagrammatic ways to represent sentence structure.
5. Genres and their distinguishing features.
6. Reference and cohesive devices in text.
7. Graphic and three-dimensional representation of paragraph and text structure.

Part III. Practical Skills of Instruction in a Comprehensive Reading Program

A. Consensus Findings of Research

1. Recognize and implement components of successful, valid early intervention programs.
2. Cite and support components of validated remedial and tutorial programs.
3. Refer to validated components of middle school reading programs in designing instruction.
4. Employ proven principles of teaching reading in the content areas.

B. Concepts of Print, Letter Recognition, Phoneme Awareness

1. Select programs and lessons appropriate for students' instructional levels.
2. Give corrective feedback and design lessons based on students' needs, including their phonological and orthographic development.
3. Teach phonological and letter identification skills explicitly, sequentially, and systematically.
4. Link phonological skill development to reading, writing, and meaningful use of language.

C. Decoding, Word Attack

1. Use active, constructive approaches to teach word concepts.
2. Select programs and lessons appropriate for students' instructional levels.
3. Give corrective feedback and design lessons based on students' needs, including their phonological and orthographic development.
4. Teach decoding skills explicitly, sequentially, and systematically: sound-symbol association; sound-by-sound blending; reading onsets, rimes, syllables, morphemes; sight word recognition.
5. Select and use decodable text for reading practice in the early stages.
6. Link practice in word attack to reading, writing, and meaningful use of language.

D. Spelling

1. Match spelling instruction to students' developmental levels of word knowledge.
2. Follow a scope and sequence based on language organization and how students learn it.
3. Use multisensory techniques for sight word learning.
4. Teach active discovery of generalizations, rules, and patterns.
5. Practice spelling in writing and proofreading.

E. Fluency

1. Use repeated readings, alternate and choral reading, and self-timing strategies to provide practice.
2. Identify reading materials for students' independent reading levels.
3. Promote daily reading of varied text, in school and outside of school.

F. Vocabulary Development

1. Teach words together that are related in structure and/or meaning.
2. Select and/or design word study for intermediate and high school students organized around common morphological roots and derived word forms.
3. Teach word meanings before, during, and after reading.
4. Use context clues, semantic mapping and comparison, analogies, synonyms, antonyms, visual imagery, and other associations to teach meaning.

G. Reading Comprehension

1. Model "think aloud" strategies during reading.
2. Vary questions and ask open-ended questions that promote discussion.
3. Emphasize key strategies including questioning, predicting, summarizing, clarifying, and associating the unknown with what is known.
4. Use graphic or three-dimensional modeling of text structure.
5. Model and encourage flexible use of strategies, including self-monitoring.

H. Composition

1. Create a community of authors in the classroom.
2. Create frequent opportunities for writing meaningful assignments beyond journal writing.
3. Directly teach handwriting, spelling, punctuation and grammar in systematic increments to promote automatic transcription skills.
4. Directly teach composition strategies through modeling and shared authorship.
5. Guide children through the stages of the writing process; publish and display children's completed work.

Part IV. Assessment of Classroom Reading and Writing Skills

1. Understand validity, reliability, and normative comparisons in test design and selection.
2. Identify varied purposes and forms of assessment (e.g., group comparison, measurement of progress, program evaluation, informing classroom instruction, individual diagnostic assessment).
3. Interpret grade equivalents, percentile ranks, normal curve equivalents, and standard scores.
4. Administer several kinds of valid instruments:
    a. graded word lists for word recognition,
    b. phoneme awareness and phonic word attack inventories,
    c. a qualitative spelling inventory,
    d. measures of fluency and accuracy of oral and silent reading,
    e. a structured writing sample, and
    f. inventories of graded paragraphs for comprehension.
5. Interpret student responses in comparison to benchmark cognitive and linguistic skills appropriate for age and grade.
6. Use information for instructional planning and classroom grouping.
   Use several kinds of assessment to measure change over time.

EXPLORING HIGH AND IMPROVING *READING* ACHIEVEMENT IN CONNECTICUT

EXECUTIVE SUMMARY

Connecticut Reading Achievement: ***(Section 1, pp. 5-20)***

- On 1998 NAEP, Connecticut reading achievement is the highest and, since 1992, the most improved in the country. White, Black and Hispanic students in Connecticut each perform better than their counterparts in other states.

- On Connecticut's state test, CMT, there is a significant gap in reading between poor districts and rich, but scores for all socioeconomic groups have improved from 1993 to 1998. Districts with the highest improvement include districts that are rich and poor, rural and urban, and are spread across the state.

- Connecticut's wealth and high parental education are associated with its high student reading performance, but do not account for improvement between 1992 and 1998. These demographic variables did not change during this period. Instead, state education policies and local policies and practices are associated with the state's continuing improvement.

State Education Policies and Practices: ***(Section 2, pp. 21-34)***

- Educators in the communities that have made the most improvement on the state test (CMT) report they were helped by 3 state policies:

    - Detailed information on student performance is provided to districts, schools, teachers, parents and newspapers, and is used by principals and teachers to monitor performance and help improve instruction;
    - Additional resources are provided to the State's neediest districts (i.e., poorest and lowest achieving); and
    - An infrastructure is in place to encourage quality teaching, including high salaries, continued professional development, and support and assessment of beginning teachers.

Local District Policies and Practices: ***(Section 3, pp. 35-59)***

- Local organizational policies among the ten districts making the greatest progress in reading include: special analyses of CMT results, linking school improvement plans and teacher evaluations to student reading achievement, providing extra time for reading, and making available professional development opportunities for administrators and teachers to learn the skills required to improve students' reading.

- Classroom teaching approaches used in the most improved districts include instruction in phonemic awareness, the use of different kinds of reading materials for varying instructional needs, a balance of word attack skills and comprehension, the reciprocal reinforcement of

reading, writing, and spelling, continual assessment, the early identification of students with delayed reading skills and the provision of intensive interventions for these children by the end of first grade.

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