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ABSTRACT

This Congressional hearing included presentations from several Title I educators and administrators who provided information on what Title I really looks like at the local level and what special challenges they face. Statements were made by a Florida elementary school principal, a Pennsylvania school superintendent, the Coordinator for Title I Migrant Education and Special Education Programs, the President-elect of the National Alliance of Black School Educators, and the Chief of the Child Development and Behavior Branch, National Institute of Child Health and Human Development. Nine appendices present the opening statement of the Honorable Bill Goodling, Congressional Representative from Pennsylvania; written statements by the presenters; and two reports: "Reform and Results: An Analysis of Title I in the Broward County Public Schools" and "The Role of Instruction in Learning To Read: Preventing Reading Failure in At-Risk Children, September 16, 1997." (SM)

TITLE I: WHAT'S HAPPENING AT THE SCHOOL DISTRICT AND SCHOOL BUILDING LEVEL

HEARING

BEFORE THE

COMMITTEE ON EDUCATION AND THE WORKFORCE HOUSE OF REPRESENTATIVES

ONE HUNDRED SIXTH CONGRESS

FIRST SESSION

HEARING HELD IN WASHINGTON, DC
JULY 27, 1999

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Committee on Education and the Workforce
Hearing on "Title I: What's Happening At The School District and School Building Level"
2175 Rayburn House Office Building
Washington, D.C.
Tuesday, July 27, 1999

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The committee met at 1:32 p.m. in Room 2175 of the Rayburn House Office Building, the Honorable William H. Goodling, Chairman of the Committee, presiding.

Present: Representatives Goodling, Petri, Barrett, McKeon, Castle, Talent, Norwood, Hilleary, Ehlers, Tancredo, Fletcher, DeMint, Isakson, Clay, Kildee, Martinez, Owens, Payne, Andrews, Roemer, Woolsey, Romero-Barcelo, Fattah, McCarthy, Kind, Sanchez, Kucinich and Holt.

Staff present: Linda Castleman, Education Office Manager, Pamela Davidson, Legislative Assistant, Vic Klatt, Education Policy Coordinator, Sally Lovejoy, Senior Education Policy Advisor, Michael Reynard, Media Assistant, Bob Sweet, Professional Staff Member, Kent Talbert, Professional Staff Member, Kevin Talley, Staff Director, Christine Wolfe, Professional Staff Member, Gail Weiss, Minority Staff Director, Cedric Hendricks, Minority Deputy Counsel, June Harris, Minority Education Coordinator, Cheryl Johnson, Minority Legislative Associate, Alex Nock, Minority Legislative Associate, and Maryellen Ardouny, Minority Legislative Associate.

[1:32 p.m.]

Chairman Goodling. The Committee will come to order.

Good afternoon. Our hearing today is another step forward in the authorization process for the Elementary and Secondary Education Act. This is our fifth Title I hearing.

Today, we will hear from several Title I educators who will help us understand what Title I really looks like at the local level, and what some of the special challenges are that they face. We will hear from a principal of a schoolwide program in an elementary school in Florida. We will also hear from administrators of rural and urban school districts and from a researcher at the National Institute of Child Health & Human Development.

In just a few moments, I will proceed with a more detailed introduction of each of the distinguished witnesses.

As with the bipartisan Teacher Empowerment Act, which passed the House last week, we will continue to focus upon the principles of quality, accountability, and local decision-making, as we move ahead with the authorization of Title I and the remaining programs in the Elementary and Secondary Education Act.

As most here know, Title I is the largest K through 12 program of the federal government, funded at about $8 billion per year. While money is allocated on the basis of poverty, services are provided to educationally disadvantaged or low achieving

students.

Too often, we fail to emphasize that Title I is designed to serve low achieving students, regardless of whether they are in low or high poverty districts. For over 30 years, Title I has been with us in one form or another, and over that time, we have invested about $120 billion in the program. Yet, for all those years, the federal studies and reports that keep coming back tell us that we may not have made very much progress in closing the achievement gap. If that were the private sector, some would say, we'd have been out of business several years ago.

So we will be taking a close look at how to ensure that Title I is actually helping close the achievement gap. There are many other key issues that we will be considering. Those issues are, will states meet the 2000-2001 school year deadline for having their assessments in place? Are Title I teachers aides a wise use of taxpayers' dollars. I'm told that about 20 to 25 percent of the total Title I money spending each year goes to pay for teachers' aides and about equal numbers of teacher aides and teachers are hired with Title I funding.

Should teacher aides be even allowed to instruct students?

Should all Title I programs be school-wide projects where schools can combine federal funds to serve the whole school, or is there still a role for the Target Assistance program?

Are public school officials providing meaningful consultation to private school officials? Should Title I benefits be portable?

Should we move toward more achievement-based accountability, as many states and school districts have already begun to do?

Should we eliminate many of the burdensome compliance-based requirements, as the Inspector General has suggested?

How are the uses of third party contractors working in Title I? Are Title I parents becoming more involved in their children's education?

I look forward to exploring these and other key issues with our witnesses.

At this time, I would call on Mr. Clay.

See Appendix A for the Opening Statement of the Honorable Bill Goodling

Mr. Clay. Mr. Chairman, I'm pleased to join you today at this hearing.

Title I is one of the most important federal education programs aimed at narrowing the achievement gap that affects disadvantaged students.

The recent national assessment of Title I fosters increased educational achievement for all children and states, and have led the charge in implementing high academic standards and aligned assessments. Five out of six states showed improvement in math achievement, and four in reading. Nine out of 13 urban school districts showed substantial increases in

either math or reading achievement.

Most importantly, Mr. Chairman, the national assessment indicates that when fully implemented, systemic reform is closing the achievement gap between disadvantaged students and their non-disadvantaged peers.

There are additional improvements that can be made to Title I. We need increased accountability of our federal education programs to ensure quality educational opportunities for all children.

Every child has a right to receive the individualized attention necessary to learn well, supported by highly qualified teachers that know the subject he or she is teaching.

We should maintain the poverty eligibility threshold for schoolwide programs to ensure the neediest students are served first. And we should also maintain the current targeting in the Title I format. This reauthorization provides us a good opportunity to strengthen the quality of our educational system.

Mr. Chairman, I hope and I know that we can work in a bipartisan way to improve this important program.

I yield back the balance of my time.

Chairman Goodling. I'll introduce our witnesses as they come to the table.

Dr. Shirley Lorenzo is the Principal of Rawlings Elementary School in Pinellas Park, Florida. The school utilizes a schoolwide approach under Title I, and has also implemented total quality management principles at the school. Dr. Lorenzo was a teacher for 20 years prior to becoming a principal and has served as a text writer and text reader for the State of Florida. Rawlings Elementary was the first school in the state to receive the Governor's Sterling Award For Quality, and has received several other awards and honors.

We'd like to especially thank Dr. Lorenzo for taking time away from her vacation in Tennessee to be here today.

Dr. Jane Karper is the Superintendent of the Troy Area School District, a rural school district in Troy, Pennsylvania. She also serves as an adjunct professor at Wilkes University in Wilkes Barre, Pennsylvania. Prior to becoming superintendent, she served as a teacher, principal, and supervisor for elementary education.

Ms. Vera Ginn is the Coordinator for Title I Migrant Education and Special Programs for the Broward County Public Schools in Ft. Lauderdale, Florida. She has served with the Broward County public schools for 25 years, and has taught at the elementary, middle school, and college levels, and has a background in reading education.

I'm going to call on Mr. Clay to introduce our next panelist.

Mr. Clay. Thank you, Mr. Chairman.

Mr. Chairman, Dr. Lois Harrison-Jones is President-elect of the National Alliance of Black School Educators, NABSE, an organization composed of over 6,500 members. NABSE's membership consists of school superintendents, education administrators, principals, teachers, counselors, and other education personnel. It is dedicated to improving the educational accomplishment of all students and especially African-American students. Dr. Harrison-Jones is a veteran educator with work experience in three states at virtually every level of education.

She has been Superintendent of Schools in Boston, Massachusetts and Richmond, as well as Deputy Superintendent in Dallas, Texas. She is widely recognized for her leadership skills and accomplishments. Her administrative assignments have included responsibility for school staff and operations, curriculum and instruction, federal programs, bilingual education and special education.

She's currently an education and management consultant, community activist and advisor to state and local boards. Dr. Harrison-Jones is active in terms of policy advocacy to ensure that equal opportunities are provided in high quality schools for all children in reaching their optimum academic potential.

Thank you.

Chairman Goodling. Vera, I'll try this again. It says G is pronounced as the G in gun. I wasn't supposed to say gun. Put the emphasis on the G, I'm told.

So, Ms. Vera Ginn.

Ms. Ginn: Thank you.

Chairman Goodling. Dr. Reid Lyon is a research psychologist and the chief of the Child Development and Behavioral Branch of the National Institute of Child Health and Human Development at the National Institutes of Health in Bethesda, Maryland. He has authored, co-authored and edited numerous journal articles, books, and book chapters addressing learning differences and disabilities in children.

The light system you see before you is to try to hold you as close to five minutes as you summarize, so that the Members have time to ask questions. When the light is green, it's go, and when the light is yellow, it's slow down, and when the light is red, stop, please finish up your statement as soon as you can. Thank you.

We will start with Dr. Lorenzo.

STATEMENT OF DR. SHIRLEY LORENZO, PRINCIPAL, RAWLINGS ELEMENTARY SCHOOL, PINELLAS PARK, FLORIDA

Dr. Lorenzo. I would like to thank you, as Honorable Representatives, for inviting me to speak to you about a subject I hold very dear and that is public education and Title I funding.

I am Shirley Lorenzo and I represent Pinellas County, Florida, more specifically, the Marjorie Kinnan Rawlings Elementary School.

I come to speak to you as a Principal of Rawlings, which is a Urban Title I school with 59 percent of our students on free and reduced lunch in a school that has a 35 percent mobility rate. We have 843 students with 100 of our student body in special education programs, but more importantly, we are a school that is making a difference in the every day lives of children and their families.

Six years ago, when our school was opened, it was clear that boys and girls in the community were coming to school with greater and greater needs. Reading, writing, and math scores indicated that children entering the school had serious deficits in academic achievement, and if left alone on the same path it was predictable that just the newness of the school with all its prettiness probably would not make a big difference to these children.

Hence, Marjorie Kinnan Rawlings was created, using new concepts and new processes to solve growing problems. Rawlings has enjoyed success, and we feel that as a school, it's attributable to four factors. The first has been a systemwide commitment to using the Malcolm Baldridge criteria to improve the school organizational patterns. With this commitment to quality came continual improvement.

Decisions based on data and organizational core values that quickly drive improvement change closely aligned with organizational systems thinking is the second factor which has been a commitment to shared leadership and a school culture which truly values human life and their interactions, child to adult, adult to adult, and child to child. This shared leadership infused in a system invigorates and excites the school as a total learning community. Each person, including children, are viewed as leaders, responsible for their own learning, and each is also responsible to help everyone in the community succeed.

The third factor that has been so important to sustained school improvement has been the stability and flexibility of funding from sources such as Title I moneys, state school improvement moneys, and state and federal technology funds. These funds have allowed innovative change that would not have been possible otherwise. These funds have allowed moneys to support collaborative meetings, training, research, and searches for best practice.

Finally, it is the schoolwide concept that has given the school community real input and power into the decision-making process. This discretionary power enables a school to make school-based decisions rather than relying solely on county, state or federal ideas or directives for school change.

The schoolwide concept allows a unique opportunity for school-based research, data gathering and decision-making about programs and practices that are good for students in their own school. It is very exciting and empowering to work in a system that has a culture and a climate that values school educators, parents and community members working together to make improvements for their school and for their children with unique needs. This is the type of change that creates exciting, sustained growth. It is this discretionary power over important funds that have allowed us to make these wise, school-based decisions.

When Marjorie Kinnan Rawlings began, it embarked on a serious mission to help every child achieve their potential in basic academic areas. Each teacher, support staff member, custodian, administrator, parent, and child recognized the seriousness of this mission. Together, they concentrated on reading, writing, and math, and joined with one mind and purpose to get the job done. The use of Malcolm Baldridge criteria and quality core values, which bring a systems approach to what we do was used by Rawlings from its inception.

For years, businesses have used these criteria effectively to bring about organizational change, and now several states, including Florida, have developed a self-assessment process based on the Malcolm Baldridge criteria.

Schools can apply for what's known as the Sterling award of Florida, but writing a self-examination document, allowing outside examiners to come to the school site for verification, and finally having a juried recognition system, determining if the organization, in this case a school, chose the type of success that is exemplary for that organization.

I'm proud to say our school underwent this self-examination process in 1998, and was awarded a site visit and awarded recognition as the first school in the State of Florida to win the Sterling Award in the field of education. We are proud of the accomplishments that we've made in six years, and for the successes of our children that they have achieved.

Statistically, our disadvantaged children should not be showing the gains they are exhibiting. Let me share some of the data with you that I'm talking about, and I know you have the graphs before you.

The first graph shows a comparison of district, state, and school average scores, and a gap analysis of the school's growth over a six-year period on a criterion reference state exam. Our writing scores exceed both district and state averages. Following along in the next graph, you will note a positive trend, again for math and reading, over a six-year period.

We continue to show positive, sustained growth, even though our economic deprivation factor continues to increase each year and the mobility of our population increases.

As our school is worked with quality systems aligning every process to our mission and goals, we've worked as a full staff in making sure that our Title I dollars are spent effectively. Decisions are made with full staff and community input. Everyone knows why we are spending the money we decided to spend. Everyone feels real ownership and accountability for the use of the funds, and what is not working. For example, we made a schoolwide decision, based on data and research, to put in a massive schoolwide tutoring program for helping children acquire mass skills by utilizing every available person on a specific day of the week to teach math for a year, in addition to a child's regular math instruction.

After a year's work, we had positive results, and after analyzing the data, decided to put in a similar program for reading. After carefully analyzing the data at the end of the year, we realized reading takes greater skill and finesses to teach, more than math skills.

Not just anyone can teach reading. We've adjusted our research and training reading and intensified our approach using skilled classroom teachers with our most struggling students. Research, by Richard Allington and others suggest that often struggling students are left to volunteers for remedial work, or teacher aides or paraprofessionals.

Our research now indicates that with more intensive work by highly trained teachers, children make greater gains, and the use of Title I funds can be more wisely spent.

We now employ two extra teachers to reduce class size and to help intensify our approach to reading. We also employ five paraprofessionals with two years of college skills. They are trained to assist in specific classrooms, giving more teachers a chance to work with small groups, especially in lower grades. All of these schoolwide decisions are made with full staff knowledge and input.

When we have success, we celebrate schoolwide, and when our gains are not what we would like, we analyze and problem-solve schoolwide.

What a contrast to the days of Chapter I, when funds were expended to help only a few specific children. It was rare for a staff to be involved in making decisions that affected their children. Training for Chapter 1 staff was parallel but separate. Services were also parallel to the classroom but separate.

The Chapter 1 program, while well-intentioned, was an isolated pull out program which had wonderful goals and dreams for children, but often ended up labeling and stigmatizing children while trying to service them. Children were pulled away from the continuity of the school day, isolated from the main stream, and remediated. They were problems to fix.

The schoolwide concept, instead, encompasses all children, utilizes and aligns all resources, and empowers the school to make the best decisions for all concerned. In summary, it does isolate, it includes, and so schoolwide decisions, though challenging, are certainly, in my opinion, the best way to go.

See Appendix B for the Written Statement of Dr. Shirley Lorenzo

Chairman Goodling. Dr. Karper?

STATEMENT OF DR. JANE H. KARPER, SUPERINTENDENT, TROY AREA SCHOOL DISTRICT, TROY, PENNSYLVANIA

Dr. Karper. Mr. Chairman and Committee members, my name is Jane Karper and I'm the Superintendent of Schools in Troy, Pennsylvania. Troy is in the center of the State, up in the North on the New York Border.

I will make brief comments based on my written testimony to you, those areas I feel most powerful about.

Troy is small, very rural, and poor. Our industry of lumber and farming is leaving us. Our residents must travel to New York and neighboring districts to find work. Our total school budget is $14 million. We receive $414,000 in Title I basic grant money. We serve 203 children in our program.

Once upon a time, Title I was K through 6 reading and math. But as the cost of administrating the program goes up, our delivery opportunities go down. Until now, we only serve K through 4 in reading alone.

We use some of the best strategies. We have a targeted assistance program. We use small group instruction. We use tutoring of all kinds. We use in-class, co-teaching, and we use pullout programs.

We use a process called the instructional support team that was a Pennsylvania initiative that targeted children at risk. The last program we just initiated is called reading recovery and it targets those little guys and girls in first grade who are struggling with the reading process. We have two of our four reading teachers trained, but we need the other two trained, and the cost of training is extremely expensive. Therefore, at this time, our budget cannot handle it.

We see successes with our Title I children. We see that between their pre-test in the Fall and their post-test in the Spring, significant gains in the area of reading. We also see that our Pennsylvania statewide assessment program our test scores are on the increase there.

We have fewer children being identified for special education. Of the numbers of children in this targeted group, fewer children are being retained every year and the number continues to go down for that. We don't have private schools within our boundaries, and our school district takes in 275 square miles. We do have a few students who attend a parochial school and we serve any Title I children there through an inter-district agreement.

I always have ideas and I would like to share my recommendations with this Committee on ways to fine tune a program that has an ambitious goal.

These are: Early childhood intervention is where I feel Title I should start to focus. Let's get the little guys and gals early and establish a firm basis upon which to build learning instead of remediating. I would extend that further to literacy development. Now we're trying to fix something we could prevent in the beginning.

We should work toward more parental involvement, and finally, as a superintendent, I'm going to talk about funding.

I feel that if funding for math and reading would be increased, in our poorest districts, the students would be helped. In my district alone, our free and reduced lunch percentages go from 37 to 55.

We, as the state gives us increasingly less money to run our district, and I'm talking about the percentage of our total budget, our people, our residents have to carry more of the burden for providing education to our children.

We are a poor area. Work is hard to find. I feel that if Title I funding were increased, we wouldn't have to cut programs in Troy and we would be able to hire more teachers, to have our teacher-student ratio become within the national standards for that.

I feel that Troy cannot afford to have many administrators in charge of programming so my elementary principal coordinates the Title I programs. She also has four elementary buildings, 800 students, and 89 staff members to supervise. We use our intermediate unit, if at all possible, and there's another recommendation. Perhaps the legislation should be rewritten to include the intermediate unit that is the education service agency.

When preparing for reauthorization, there were forums held, and Mr. Goodling, I believe one of those took place in New Oxford, Pennsylvania, and I want to highlight two of the outcomes.

One is, we don't have a national program of Title I, we have 50 Title I programs and each state lends its special blend to that. We also, in the area of targeted assistance programs, which I have in my district, need to have more flexibility in the paperwork.

Finally, as I conclude, I would offer my support for the Rural Small Schools Education Initiative which was recently introduced in the Senate, and will soon be introduced to this Committee with jurisdiction to this Committee.

So, Mr. Chairman, and the members of the Committee, these suggestions for change were conceived with a great deal of input by educational leaders across the nation. I would be happy to answer questions later, and I thank all of you for this opportunity today.

See Appendix C for the Written Statement of Dr. Jane Karper

Chairman Goodling. Ms. Ginn.

STATEMENT OF MS. VERA GINN, COORDINATOR FOR TITLE I MIGRANT EDUCATION AND SPECIAL PROGRAMS, BROWARD COUNTY PUBLIC SCHOOLS, FORT LAUDERDALE, FLORIDA

Ms. Ginn. Good afternoon.

My name is Vera Ginn. I'm the coordinator of Title I Migrant and Special Programs in Broward County, Florida. Thank you so much for the opportunity to testify before this Committee today regarding Title I of the Elementary and Secondary Education Act.

Mr. Chairman, I would like to focus my brief remarks this afternoon on discussing the Title I program in our district and the effectiveness of that program since the 1994 Reauthorization. Broward County Public Schools is the fifth largest and one of the fastest growing districts in the nation.

It is comprised of a student body from 164 countries, speaking 54 languages. We enroll approximately 6,000 to 7,000 new students annually. Broward County adds annually more new students than 90 percent of the nation's schools districts individually enroll.

Approximately 230,000 students of which 49,000 were Title I, that's a percentage of about 21 percent, of the 187 elementary, middle and high schools in the district, 76 of those schools were Title I funded, 41 percent.

In addition, we serve 13 non-public schools, seven institutions for neglected and delinquent, I'm sorry, 7 institutions for delinquent and 13 institutions for neglected. I am pleased to report to you today that the Title I program in Broward County is working. Title I funds help improve teaching and learning for almost 50,000 students in 76 Title I schoolwide projects.

The standards based reform implementation has brought about improved student achievement among students in our highest poverty schools and among low performing students. Let me share with you one example.

During the 1994-95 school year, the Florida State Department of Education, using the Stanford Achievement Test, along with other state assessments, classified 25 Title I funded schools as critically low performing schools. The following year, 1995-1996, 12 schools were classified as critically low performing. In the third year, 1996-97, two schools remained on the critically low performing list. In 1997-98, there were no schools listed as low performing.

In only three years, Broward County was able to reduce the number of schools on the state's critically low-performing list from 25 to 0. I am also pleased to report that interventions are working in Broward County. External support is provided to 14 schools by developers from Co-NECT, Modern Red Schoolhouse, and Roots and Wings.

However, the most successful reform model today is the one that is attributed to getting those 25 schools off the critically low list. It is a homegrown model developed in Broward County known as the Alliance of Quality Schools Program. The program targets reading, writing, mathematics, and social behavior, and aims to help teachers improve education through in-class coaching.

Mr. Chairman, I would like to introduce into the record, at this time, this Title I report which provides additional data on the results of Title I in Broward County. It is important to note that Broward County was at the forefront of standards-based reform. The district was first in the state to develop an accountability policy that was adopted by the school board in March of 1995.

The State of Florida has since developed a rigorous accountability system that holds all schools, including Title I schools, accountable for making continuous and substantial gains in student performance. Given the challenges facing an urban school district the size of Broward County, more and more of our students are meeting or exceeding our expectations.

Despite the progress that our district has made, substantial gaps remain between students and high poverty schools and their peers and low poverty schools. Although great strides have been made since Congress enacted the Improving Americas Schools Act of 1994,

our work is still in progress.

Title I is greatly needed to help close that achievement gap between high and low poverty schools, and between minority and non-minority students.

Our most fragile population, our poorest, the most disadvantaged children is at great risk of educational failure. Therefore, I submit to this Committee these recommendations for your consideration, as you approach the Reauthorization of Title I of the Elementary and Secondary Education Act.

First, maintain the focus on raising academic standards for all children. Retain the current Title I requirements that states and local school districts establish content standards, students performance standards, and assessments aligned to high academic standards by the time line 2000-2001.

Secondly, strengthen local accountability, require districts to disaggregate data by subgroups, ethnicity, gender, race, English proficiency standards, migrant status, economic status, and students with disabilities. Disseminate that information to the public. Also, establish appropriate interventions to improve the achievement of identified underperforming subgroups. Allow district support teams, rather than state-selected support teams to identify and provide assistance to low performing schools that have not improved over a two-year period.

Thirdly, increase emphasis on highly-qualified instructional staff. Allow Title I funds to be used to upgrade certification and subject matter for teachers paid with Title I funds. Require that paraprofessionals paid through Title I funds, except for those with second language skills, be on a teaching career ladder before assuming instructional responsibilities.

Four, continue schoolwide efforts to improve education in high poverty schools. Retain that 50 percent current threshold for Title I. This provision gives high poverty schools the flexibility to use funds to improve the instructional program of the entire school. Encourage parent/family involvement.

I urge members of this Committee to consider that while performance by Title I students has improved, and progress has been steady, the focus for the upcoming reauthorization should be on seeking ways to accelerate this progress, rather than pursuing a different course of action.

I support the work of this Committee and I am grateful for the opportunity you have given me to share my views with you this afternoon. I would be pleased to answer your questions.

See Appendix D for the Written Statement of Ms. Vera Ginn

See Appendix E for the Report, Reform and Results: An Analysis of Title I in the Broward County Public Schools

Chairman Goodling. Thank you.

Dr. Harrison Jones.

STATEMENT OF DR. LOIS HARRISON-JONES, PRESIDENT-ELECT, NATIONAL ALLIANCE OF BLACK SCHOOL EDUCATORS, DALLAS, TEXAS

Dr. Harrison-Jones. Mr. Chairman and other members of the Education and Work Force Committee, I thank you for the opportunity to address you this afternoon.

I'm Lois Harrison-Jones, product of the Pennsylvania and Virginia Schools, a retired superintendent from two school districts. I'm here today, however, in the capacity of the in-coming presidency of the National Alliance of Black School Educators. As was stated by Mr. Clay, a 6,500 approximate membership spanning the entire United States and abroad.

We have a singular purpose in NABSE and that is to advocate for those programs and services, those conditions, those palaces that impact the quality of education for all students, but especially students of African dissent.

NABSE was very focal on its position during the 1994 Reauthorization of Title I, and we appreciate the attention that you gave to our concerns and recommendations at that time. So we are encouraged to come again, and to share with you our thoughts.

It's been only 35 years, which is rather brief for some of us, that the Congress and the Administration had the wisdom to make substantial new investments in the education of disadvantaged children, with the expectation that more effective strategies could be developed over time.

Now although Head Start and Title I are [and as they were] technically racially and ethnically neutral, many educators and policymakers at the time undoubtedly recognized that these programs would be of disproportionate value to African-American, Hispanic, and Native American children and youth, because higher percentages of these youngsters are growing up in poverty.

Ladies and gentlemen, that remains true today. In fact, states with the highest percentages of African-Americans in schools is where we tend to find the highest levels of poverty. At the core of NABSE's recommendations for the Reauthorization of Title I, is the notion that parity and equity in student achievement and excellence in educational attainment for all citizens is first, dependent on the equitable targeting of federal dollars based on need.

Secondly, a substantial investment in other education-related relevant resources. The reality is that a significant number of children of African dissent are truly resigned to our inner cities, but not exclusively. Of the current 300 or so African-American superintendents in the country, two-thirds had either poor rural or newly resegregated what we called suburban rings. The references to places such as Charles City, Virginia, Chelsea, Massachusetts, Wilma Hutchins, Texas, and et cetera. So we're speaking of where poverty exists.

I'd like to read verbatim just a portion of what was stated in the 1965 Title I Act.

In recognition of the special educational needs of low-income families and the impact that concentrations of low-income families have on the ability of local educational agencies to support adequate educational programs, the Congress hereby declares it to be the policy of the United States to provide financial assistance to local educational agencies serving areas with concentrations of children from low-income families to expand and improve their educational programs by various means [including preschool programs] which contribute particularly to meeting the special educational needs of educationally deprived children.

In essence, it purports that Title I was designed to compensate for, or to overcome the disadvantages caused by poverty. NABSE recommends the inclusion of the 1965 legislative language as it was, one that we believe truly exemplifies what Title I was and should continue to be about.

We applaud the efforts of Congress and the Administration to look at research as a lever for policy and legislation, but we would request that you review it all in a bipartisan way and look at the widespread research and reports that cut across all policies and philosophical perspectives. We believe that the elimination of the educational achievement gaps between America's poor children and its other children is as significant as some of our other priorities, whether they are smart bombs, stealth fighters, worldwide military bases, et cetera.

I'd like to, in a very abbreviated form, share with you five specific recommendations from NABSE for your consideration.

First, we recommend the targeting of Title I funds to the poorest children in the poorest schools in the poorest school districts.

Secondly, we believe that the current 50 percent poverty population threshold for Title I funding does not adequately guarantee that all poor children will be sufficiently impacted in a school or a school district. We strongly recommend that legislation move the threshold for schoolwide programs to schools with children with at least 60 percent poverty rate by the year 2000, and to 75 percent in subsequent years, reauthorization years.

Third, NABSE membership does support high standards for all students. The membership also supports a commitment to standards-based reform and a federal role in its implementation.

Fourth, Title I has been treated as a funding stream, but we believe it's much more than that. There must be language that is not punitive but resolves not to fund classrooms where failing teachers continue to reside. In order for America's poor children to meet high standards, it's going to be important that they have the quality of instructional staff to make it happen.

Finally, we need no other studies to inform us that family and parent input are critical educational-relevant resources. Sufficient studies exist to give us that information.

So it's more than just talking about that. We're suggesting that in order to facilitate that whole process, that family training centers be established that would be designed to assist parents who are truly concerned, or whether they represent a concern or not, but to show them the extent to which and the value added to their involvement in their children's education.

In the interest of time, I will close now, and thank you again for your attention. I'll be happy to respond to your questions.

Appendix F for the Written Statement of Dr. Lois Harrison-Jones

Chairman Goodling. Dr. Lyon.

STATEMENT OF DR. G. REID LYON, CHIEF, CHILD DEVELOPMENT AND BEHAVIOR BRANCH, NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT, NATIONAL INSTITUTES OF HEALTH

Dr. Lyon. Mr. Chairman and members of the Committee, my name is Reid Lyon, and I'm with the National Institutes of Health, the National Institute of Child Health and Human Development. I am honored to appear before you today on a matter of critical educational and public health importance, that being the ability of our children to learn to read.

Mr. Chairman, there is no doubt that children most at risk for reading failure are those who enter school with limited exposure to language and literacy interactions from birth to their entry into school.

Kids raised in poverty, youngsters with limited language proficiency in the English language, are clearly predisposed to reading failure. Unfortunately, there is literally an epidemic of reading difficulties among economically and socially disadvantaged children in this country.

It is typically these disadvantaged children who are eligible for and receive instructional assistance from programs possible through Title I. However, despite the existence of these programs, the proliferation of reading failure among disadvantaged children remains, in the main, unabated.

Why does this unfortunate trend continue, particularly when many reading programs used with children eligible for Title I services are described as employing research-based instructional approaches? More specifically, given that the term research- based implies that the reading programs have been objectively evaluated to determine for which children the programs are most beneficial, why do so many disadvantaged children continue to founder in reading?

One major reason is that the term ``research-based'' currently means many things to many people, with significant variations in the scientific quality of the research described by the use of that term. For example, some instructional reading programs touted as research-

based, are frankly based upon mediocre or substantially flawed studies, while other programs are based on studies that meet rigorous scientific criteria. The problem is that many in the field of education unfortunately do not recognize this difference.

To date, adherence to scientific quality has not been a strong guiding force in selecting and implementing instructional reading programs and approaches for children receiving Title services. What does research-based mean?

One example of an appropriate use of the term can be derived from several common sense questions a parent may ask, when attempting to determine if a particular reading approach is beneficial for their children. A first question might be. Has this approach or program been used successfully before with children who are similar to mine in language development, in reading development, in socioeconomic status, and in classrooms and with teachers similar to those my children have. Likewise, who are the children that did not benefit from these programs and why?

Another question might be, what do we mean by success? Did reading achievement scores improve? Were children's interest and motivation for reading heightened? Were teachers enthusiastic about the reading approach?

Another question might be do the measures or observations of these different aspects of success provide reliable findings across observers in settings? Or how many times has this approach or program been evaluated or studied with similar groups of children with similar findings obtained?

An additional question might be, were the research studies upon which our instructional approaches that are used in Title I programs reviewed and published in strong, quality-based scientific outlets?

Ultimately, high scientific quality research on instructional reading and math programs must combine research strategies that are experimentally responsible, that test specific, well-defined ideas that yield data that are reliable, and that are described sufficiently in clear terms to permit replication with research methods that provide a qualitative albeit review of the complexity and the process involved as teachers impart knowledge to children.

Mr. Chairman, as you well know, two large-scale NICHD studies of early reading intervention with disadvantaged children are of particular importance to this hearing. These studies are currently being conducted in Houston, Texas and, with your help, in Washington, D.C.

Currently, there are a total of 1,553 grade one and grade two children participating in these studies, and the D.C. Early Initiative Project, 12 schools are participating, and within these schools, youngsters from 80 kindergarten, first and second grade Title I classrooms are participating in the project. Approximately 98 percent of these children are African-American; over 75 percent are eligible for free and reduced lunch.

Data describing the effects of these different reading intervention studies on Title I children in both Houston and D.C. are in various stages of publication. I would like to enter into the record, the first review of the Houston data which is now in published form,

if I could do that, please, sir.

See Appendix G for "The Role of Instruction in Learning to Read: Preventing Reading Failure in At-Risk Children, September 16, 1997."

A preliminary analysis of the Stanford 9 Test Data in the Washington, D.C. project has now been completed and has been presented to the NICHD for review and the staff of your Committee.

The trends in the preliminary D.C. data converge strongly with the published data obtained at the Houston site, and indicate an average gain of 26 percentile points in reading over a one-year period. Clearly, the research indicates that early instructional intervention makes a difference for the development and outcomes of reading skills.

However, the results also show that not all instructional approaches have the same impact. Specifically, children who received direct and systematic instruction in phoneme awareness, the alphabetic principle in phonics within the context of a comprehensive reading program improved in their word reading skills and comprehension skills faster by far than children not involved in such systematic, intensive and direct efforts.

You had asked me to come to this Committee and provide recommendations based upon this research. We, at the NIH, feel, as do many others, that an important use of research evidence is to inform educators, parents, scientists, and policymakers so that the decisions that they make will ultimately lead to improvements in student achievement.

Several recommendations stem from this research. Our longitudinal studies tell us that for scientifically-based reading programs to have any lasting effect, they must be initiated before the third grade, and preferably in kindergarten children at risk for reading failure in the beginning stages of kindergarten, or if not before. Beyond the age of 9, the chances that a student with reading difficulties will catch up is indeed minimal. We must also raise the quality and rigor of all education-based research. It will be important to ensure that all federally supported research adhere to high standards of research quality, and we must encourage privately-funded agencies to do the same.

The federal support for the Interagency Education Research Initiative is a substantial step in this direction. Likewise, the Reading Excellence Act, legislated by Congress, represents a major step forward in specifying the types of quality of educational research that must be in place in order to make appropriate decisions when selecting reading programs and approaches for Title I use.

We must increase the scale of rigorous educational research. We must continually synthesize the results of that research. And very importantly, we must continue to strive to improve the quality and relevance of training teachers at the pre-service and in-service levels. No matter how powerful our research findings might ultimately be, the impact of those research investments will be minimal if teachers, professors, in particular, and policymakers do not speak the same language about what constitutes trustworthy, quality research, and how that information can be implemented in the complex world of classrooms.

See Appendix H for the Written Statement of Dr. Reid Lyon

Chairman Goodling. I'd like to thank all of the panel members. The panel before is like the panel up here. We all have different solutions to the problems, but I think both down there and up here our hope is that we will help all children improve academically so no child is left behind.

I have a couple of quick questions for the panel.

Dr. Harrison-Jones, you basically said quality education for all students, and I put that with Ms. Ginn who also was striving to do the same.

What I would ask, Ms. Ginn, is how did you get from 25 to 0 in three years? You must have done miracles, with the teachers, first of all, and the parents, I would assume. Otherwise, I wouldn't know how you would accomplish that in such a short amount of time.

Ms. Ginn. Mr. Chairman, you are absolutely correct. We did it through an intervention based upon the district level going into those schools, providing intensive assistance and support.

We asked for parental involvement. We asked for all of the experts who had knowledge about reading, math, to go in and we worked relentlessly until those schools had made the gains that were necessary. We did all of that from within.

Chairman Goodling. We need to send that model all over the country.

Dr. Lorenzo, you indicated 35 percent mobility rate. Are they mobility within the district, or most of them outside moving from district to district?

Dr. Lorenzo. It's really both.

Chairman Goodling. I guess you're a county system?

Dr. Lorenzo. Yes, we're a county system. So many people come from all over to live in Florida. So you have some of that.

You also have, because of low income housing, people getting work, and then moving to a better neighborhood, and then losing that job. That's very common in Florida. A lot of trades people will come and they will find work, and they're doing fine, and then they go out of that job, and then they move to lower rent housing. So they move around a lot, from school to school, and from Florida.

Chairman Goodling. I wanted to also say to Ms. Ginn that I've always had great sympathy for the superintendent of Dade County Schools, but I guess maybe I should have equal sympathy for Broward County because I always wondered how a superintendent, waking up in the morning to find out they had 100, or 200, or 300 new students this morning, what in the world do you do with them. So I'll also say my prayers for the superintendent in Broward County also.

Dr. Karper, you indicated, if I did my math correctly, you get about $1100 per student for your Title I students. What is your per-pupil expenditure overall for students in your

district?

Dr. Karper. It is approximately $7,500 per student in the regular education program.

Chairman Goodling. $7,500?

Dr. Karper. Yes.

Chairman Goodling. What is your percent for the general distribution of state funds?

Dr. Karper. That is for the state funds, for our general budget it is $7,500 per student. State funds this year, we got $255,000 so it's slightly higher.

Chairman Goodling. Dr. Lyon when will the, particularly the D.C. study be far enough along to give us some answers on how we can help create what the former Speaker used to say every time he'd see me, he'd say, I want D.C. schools to be the model for the country. When will you give us all the information that will help us do that?

Dr. Lyon. We're entering the third year of a five-year longitudinal instructional study in D.C. that has identified the number of children I indicated at-risk in Kindergarten. Those children are then assigned to different teaching conditions to better understand which instructional approaches are most beneficial for which kids at which stages of reading development. The data that are in now, that were presented to you by Dr. Moats, show clear convergence with the Houston study now in its sixth year.

So the data are reliable, the data are replicable, the data are compelling. What it says to us is that whatever reading program that is used, it must address a number of reading components, and it must do it in a particular kind of way.

So I think you have the information now to begin to make instructional decisions at fairly large scale.

Chairman Goodling. I wanted to say to Dr. Harrison-Jones, we try to target the House side, we have a little difficulty when it gets to the Senate side. Something happens to the targeting that we do on the House side, so I can give you someone's name over there that you might want to speak to when we get over there. The last time we targeted pretty well on the House side, but it didn't happen on the other side.

Mr. Clay is saying, well, you're trying to eliminate the targeting, so we'll turn the microphone over to him.

Mr. Clay. Yes. I'm a little confused about what we targeted recently.

Chairman Goodling. In the last reauthorization, we heavily targeted, and when it went to conference, one gentleman seemed to think that we shouldn't be targeting, we should be...

Mr. Clay. In the last few weeks, Mr. Chairman, we've eliminated targeting for all kinds of educational programs.

Chairman Goodling. As I said, down there we have different ideas than we have up here.

Mr. Clay. Ms. Ginn, do you have an opinion of legislation recently adopted by the State of Florida that would provide private school tuition vouchers to pupils attending poor-performing public schools?

Ms. Ginn. Mr. Clay, my opinion on that is that any funds we divert from the public school system would take away from the needs of the public schools.

Mr. Clay. Dr. Lorenzo. Would you like to comment?

Dr. Lorenzo. I agree with her. The thing that I would add is, in Florida at least, the private sector is not held to the same scrutiny as public, and before any funds should be diverted in any way, I think that should happen.

Mr. Clay. Dr. Karper, do you have an opinion?

Dr. Karper. I'm not sure that this has been tested in the courts yet, whether this is even a question we should be addressing. I don't believe the Constitution really gives us the right to give moneys to private education at this time. I think we need to address that situation. But if that would happen, then I would agree with Ms. Ginn. We are taking money that's targeted for our students at the lower socioeconomic level and making that amount an even smaller amount of money by targeting it elsewhere. I truly would ask, do we think that this is going to help our lower performing students? Won't the private schools just raise the bar?

I think it's just a real rich area that I enjoy talking about.

Mr. Clay. Thank you.

Dr. Harrison-Jones, do you have an opinion?

Dr. Harrison-Jones. Yes, I do personally, and it is reflective of the opinion of NABSE. Some of you have received our legislative agenda that we shared with you when we held our policy institute earlier this year, and which one we've taken on the legislative agenda that we have. I'll read verbatim.

> Opposition to any choice or voucher programs that uses public taxpayers for private and parochial school education, even when it is targeted to a select number of poor children.

So we take the position that there's not sufficient funds right now in the coffers of Title I to be able to share it and still concentrate your moneys, as I said earlier, for the poorest children in the poorest schools in the poorest school districts.

Mr. Clay. Dr. Lyon, I know you're in research, but do you have an opinion?

Dr. Lyon. We don't study that particular question, but we do study the issues or the conditions that need to be in place for young children to learn.

Irrespective of vouchers or public education, if we were to place our money in the best bets, that is, if we were to be extremely accountable for purchasing those kinds of approaches and programs that have been vetted scientifically, some of these questions I think would not even be in place.

That is, in many ways, we continue to respond to student failure, and student failure is a function of not making clear to those kids what the critical concepts are they need to learn. Arguments about where that takes place might step aside if all of our children are learning.

Mr. Clay. Thank you. Thank you, Mr. Chairman.

Chairman Goodling. If I understood the Florida program, they can go to another public school. The program is designed if they're in a low-performing school, they can choose to go to another public school, if they wish.

Mr. Barrett.

Mr. Barrett. Thank you, Mr. Chairman.

Dr. Karper, I was particularly interested in your background, a superintendent in a rural district in Troy, Pennsylvania, is it?

Dr. Karper. That is correct.

Mr. Barrett. So your district might be a bit like mine, a rural district, perhaps many of my school districts would be smaller than yours, but I'm particularly interested in the rural perspective that you bring to the panel.

I've heard so often from my administrators, in particular that the money that is made available to our districts is certainly not enough to go around, not enough to make any real impact in terms of their agendas at least. Do you have any particular specific comments or thoughts on the formula for Title I with regard to rural districts?

Dr. Karper. I have not specifically thought of the formula, no. But I'm part of the PARSS suit. I don't know if you understand what that is? It's the Pennsylvania Association of Rural and Small Schools that is looking specifically at the way states fund education, and Pennsylvania in particular. But I think the formula needs to target, as was stated by Dr. Harrison-Jones, that we need to look at the poorest districts with the poorest number of students, and that should drive the formula for our children.

Mr. Bartlett. Just as a general observation, would you think that formula is working in a way, working for small school districts, or?

Dr. Karper. It's working against us at the present time.

Mr. Barrett. Thank you.

I've heard a lot of criticism about over-administration with regard to too many superintendents, too many assistant superintendents, too many principals, too many other

administrative staff. Is this a problem in rural America?

Dr. Karper. No. Not when you consider I have an elementary principal with four elementary buildings, 800 students, 89 staff members, there is 55 miles between schools, is it any wonder that I'm looking for a second elementary principal in a year.

So we are not over-staffed, and each of our principals, building-level principals must take on some federal program, so hers is Title I because the program is concentrated in the K-4 program.

Mr. Bartlett. Well, then the obvious question, do you consider this to be a problem in urban America, your opinion?

Dr. Karper. Well, I wouldn't be able to speak too much to that because I've never really been in one.

Mr. Bartlett. Thank you.

Dr. Lyon, we hear so much about the problems directed at education at the federal level. You've done a considerable amount of research, obviously, from your testimony today. What do you think, and what have you found to be the most important single factor in raising a child's achievement level?

Dr. Lyon. The most important single factor comes from well over 300 studies in 42 different sites with over 34,000 children, and that is the knowledge that that teacher carries with her, as she begins to interact with kids in tough-to-teach complex areas like reading and math.

We have trained our teachers in the past to be, in a sense, method-driven. You'll remember I'm a whole language teacher, I'm a phonics teacher, I'm a reading-recovery teacher, I'm this kind of teacher. Our teachers that can ask themselves not what method do I use, but what does it take to learn how to read? What are the skills, the abilities, the instructional interactions that kids have to have in order to master these kinds of complex tasks?

When they can answer, it takes a, b, c, d and e, then they can go to a wide range of interventions or teaching approaches or materials and pull that together for individual kids. There is no magic bullet. There simply isn't. Kids vary too much among the critical components necessary to learn how to read.

Because of this Committee's dedication to the D.C. project, our ability to provide teacher preparation based upon NICHD and OERI and NSF research has moved a lot of youngsters along in the worst schools in this city where 40 percent of children in some schools and 80 percent of children in other schools were below the tenth percentile, in some schools, all but five percent are now up to the national average.

Mr. Barrett. Can achievement levels be determined by standardized tests? Is this what you use, or do you use other methods?

Dr. Lyon. There are many methods that converge on the student's achievement but the D.C. data, we're recording the Stanford 9 Scores at this time. Much more precise data are

under analysis at this time, and that will be forthcoming.

Mr. Barrett. Thank you very much.

Thank you, Mr. Chairman.

Chairman Goodling. Governor.

Mr. Romero-Barcelo. Thank you, Mr. Chairman.

I want to congratulate you for holding this hearing, that's closely related to Title I and the Elementary and Secondary Education Act. As we know, the last of this program have received a lot of criticism at times since its enactment in 1965.

We know that literally millions of school children from impoverished backgrounds have benefited and are benefiting from Title I. School districts in area poverty, both urban and rural, are desperate for assistance. The funds that come from Title I give them the opportunity to try and provide the type of services and resources which schools in the wealthier parts of our country can provide their students.

The Title I program is extremely important to the people I represent. We have one local education agency for all of Puerto Rico. All of our 1,500 schools qualify for and accept Title I funds. These schools have managed to make some important changes and reforms to improve their quality of education in recent years.

One example of these reforms is a community school, a concept that is very common at home. It's kind of a variation from the charter school which gives parents more input into the decisions the schools make and more control over the programs that affect their children.

Title I funding is partly responsible for making this reform possible. The schools in Puerto Rico have done the most they possibly could with the Title I funds they received, and this includes basic grants to local education agencies, which is the most important source of federal funding for the island schools.

However, there is a provision in the current law that makes Puerto Rico the only state or territory that receives less than the national-per-pupil minimum in Title I funding.

There has never been an official reason given as to why this deficiency is written into the law that determines ESEA funding to the states. But I can assure you that our students have the same needs as students in the other states and territories and the cost of meeting their needs is just as high.

The Department of Education has agreed that the current laws poses an artificial barrier on Puerto Rico's children, and is supporting a provision to remove this constraint in basic grants to LEAs, as well as aid to migrant and neglected and delinquent children. This change we'll be phased in over the five years, starting with fiscal year 2001.

I've been working with the members of this Committee to see that a provision will be included in the Elementary and Secondary Education Act, the bill that this Committee reports to the House, that will change Puerto Rico's Title I status so that we may be

treated the same as the other states.

I wanted to inform the witnesses and the others attending this hearing about this deficiency in the law, and let them know about our efforts to change this. I wanted to point out that I'm sure if we were to ask all the children in all of your schools whether they feel that this is fair and just for the children, the U.S. citizens in Puerto Rico, should be treated differently, I'm sure they would say, no. But somehow or other, we haven't been able to change this policy.

Anyway, I just wanted to let you know so that you can support us in this endeavor.

I wanted to ask a question, I'd like to have your opinion on the bloc grant proposals which would eliminate the requirements for Title I funds to be targeted on disadvantaged students in high poverty schools.

What's your opinion about this proposal, and I would like to start with Dr. Lorenzo.

Dr. Lorenzo. If I'm understanding the question, my position is the 50 percent level has been excellent. Once a school goes over that 50 percent mark, the complexity of that school really changes. You begin to interact with many agencies, whether it be truancy officers, whether it be all kinds of family services, the whole complexity of the school changes. So that 50 percent mark I think is very, very important.

Mr. Romero-Barcelo. It goes beyond that, I think. The proposals have been made, they have proposed that we should have bloc grants and eliminate all requirements in Title I. What is your opinion?

Dr. Lorenzo. No, I would not do that.

Mr. Romero-Barcelo. The next one there, Ms. Karper?

Dr. Karper. I agree with that.

Mr. Romero-Barcelo. Ms. Ginn?

Ms. Ginn. Yes. My opinion is that the most important priority should be with those students in greatest need, the migrant students, the economically and educationally deprived students.

Mr. Romero- Barcelo. So you would oppose those bloc grants that would eliminate all those priorities?

Ms. Ginn. Absolutely.

Mr. Romero-Barcelo. Dr. Harrison-Jones?

Dr. Harrison-Jones. I would as well in that we do not want Title I to become general aid, where it is diluted to the point where you have no ability to determine the extent to which it has made an impact.

As I said originally, Title I, as I understand it, was designed to serve school districts or schools with high concentrations of poverty. The bloc grant provision would not ensure that that would happen.

Mr. Romero-Barcelo. Dr. Lyon?

Dr. Lyon. I worked for another branch of this government and I get into trouble when I answer questions like that.

Mr. Romero-Barcelo. All right, we'll let you go on that.

Thank you very much.

Chairman Goodling. Are you finished, Governor?

Mr. Romero-Barcelo. Yes, I am.

Chairman Goodling. Mr. Isakson.

Mr. Isakson. Thank you, Mr. Chairman.

Dr. Karper, I wanted to ask you a question. I did a little math during your testimony, which I'm better at reading than I am in math, so I want to make sure I'm right. You had stated that 203 students were served by your Title I program, if I'm not mistaken, and that your share of Title I funds I guess in the last year were $414,000?

Dr. Karper. That's correct.

Mr. Isakson. That's $2,039 per student?

Dr. Karper. I don't think that agrees with Mr. Goodling's math. I think maybe the two of you need to talk about that for a minute.

Mr. Isakson. In light of him being the Chairman, I'll defer to his math. But nonetheless the question is still relevant. You then talked about introducing reading recovery and the fact that you had limited your Title I funds to reading. Was there any correlation with the reduced available funds for Title I per student because of the cost of reading recovery?

Was that a part of the reason that you really couldn't focus on math?

Dr. Karper. What happened was that math was eliminated several years before reading recovery came into the picture.

I've enjoyed Dr. Lyon's comments down here, and would just dearly love to talk him about this a little bit more. I know that we took on reading recovery because we felt that that was something that would benefit our children.

I'm not sure that its research base is as good as what I would like to see it. But, no, doing away with math, that was done before we went to reading recovery. We were trying to target the most needy students and give them the best basis. But if you would give me

just a little more time, I'd like to comment on something Dr. Lyon said.

I do think we have some idea of how children should come to school upon which we can base our instruction. We know through brain research that children are born ready to learn, but if they're not given the kind of stimulation in their young years, the windows of learning opportunities in a child's brain, especially the logic brain, the math brain, starts to close at the age of 4.

Now that is a blanket statement. Some children close before that, some close afterwards. We know that children who come to school who've had a good, rich, verbal background, talking to adults in complete sentences, verbal interaction, are better able to start reading. We know that.

We know children who spend time with an adult setting the dinner table have gotten the most basic mouth instruction they can have which is one-to-one correspondence.

So we know that working with the young child gives us a very firm basis upon which to begin whatever reading instruction or math instruction. Because we all know that when a child gets to school, the biggest determiner of a child's success in school is the classroom teacher.

Mr. Isakson. Well, I agree with that answer that Dr. Lyon said, and I agree totally with what you said on the brain research, and not in defense of educators at all, but far too little is written in the press of the fact that from zero to the 48th month, many of the thinking components of the brain, when not stimulated, are not regenerated, and that's why the teacher's knowledge is the most important component. So I concur.

I want to bridge, though, just to commend Dr. Lyon on the statement you started making about research-based teaching, and the paragraph you gave about the use of phonics and the comparison to whole language and reading recovery and everything else.

I want to make sure I heard right what I think you were saying, which was, if you give the teacher the various resources from which to choose, and let them decide what's best for the child, you have far better results than if you try and take one program and make it work for all children. Is that not what you said?

Dr. Lyon. Yes, sir. There is no one program that's equally beneficial for each individual child. The caveat with that is that again the teacher must be prepared to ask themselves the question, every time they see a youngster struggling. What does it take to learn how to read?

As I've testified before your Committee before, we have nice converging evidence on it takes all of these interactions early on, no doubt, because those give rise to the development of the phoneme awareness stuff, phonics, fluency in speed and reading, reading comprehension and so on. If a teacher knows that base knowledge, then they can select a wide variety of examples for kids.

Mr. Isakson. My comment, Mr. Chairman, is that testimony of these two professionals really certifies that in the Teacher Enhancement Act, we did the right thing by focusing on staff development and professional development of teachers, who are often times taught one method at a college and university that's supposed to apply to all, when in fact,

and particularly in reading, the more diverse the background and methodology, the better the results they have.

Thank you, Mr. Chairman. I apologize for my math.

Chairman Goodling. I'm afraid that too many times, they aren't taught any method.

The gentleman from Georgia's math is correct as I divided 203 into 4414, I put down a 2, but when I multiplied 2 x 203, unfortunately when I got 2 3's are six, I carried one, and I'm not sure why I did that.

Dr. Karper. I think you now qualify for Title I math.

[Laughter.]

Chairman Goodling. Therefore 416 would not fit under 414 so I had to go up and eliminate the two and put a one there which gave me a 9 on the next number.

Mr. Fattah.

Mr. Fattah. Thank you, Mr. Chairman.

I want to revisit this issue of dollars in Troy, Pennsylvania, because I think we are all clear that the federal government is just putting a few pennies into every dollar that gets spent on education in this country. What you said earlier is that you, your school district is one of the 200 rural small school districts in Pennsylvania that filed suit, questioning the way the state is handing out the bulk of the education dollars, right?

This suit has been going on for more than a decade now. In fact, there were children that started out in your school district in first grade who are close to finishing now, and it's not been resolved.

Seventy-five-hundred per pupil is the expenditure in Troy and there are school districts in our state where the expenditure is twice as much. So you could have a first grader in one school district where you're spending $14,000 on their first grade education, and in your district, $7,500.

Now it doesn't matter what the Chairman's math is, there's no way that the federal contribution is going to make up for the disparity that exists and accumulates over the 12 years of a K through 12 education. Then when these children get finished, some of them at least want to go on to the state university system, they'll want to take the SATs, they want to go forward, and there's a wonder why, there was a big story in the Philadelphia Enquirer about rural education, about the fact that there were well-deserving students who are not being as prepared as they could be for higher education.

So I guess my point is that one of the things that I'm interested in the Reauthorization process is how we could encourage states, like Pennsylvania, to more fairly respond to their constitutional mandate, which is to provide an equitable public education for all children. You know, we have 501 school districts. In Florida, they have 67. As you heard, in Puerto Rico, they have one, and in Hawaii they have one.

Different states make all of these decisions very differently. But no matter how it's get done, it seems as though poor children are always on the bottom end of the funding formulas at the state level, they drop 97 cent or so out of every dollar that gets spent on education in our country, and then we want to figure out how much we're going to target these federal dollars, which again, no matter how well we do it, I don't believe that it can make up for a classroom differential close to three quarters of a million dollars over the 12 years of the kid's education.

So I really would like to hear you speak about what you think about because a lot of people here think that the state can do no wrong, and that if the federal government would just get out of the way, education would be fine.

We hear that a lot around here, that there shouldn't be a federal welfare education, and that what we need to do, if we want to spend any money, just put it in a bloc grant and give it to the state because they would do the right thing with these dollars.

Since you're suing the state, arguing that they're not doing the right thing, at least by your children, I'd like to hear you put on the record here something that could be useful as we go forward.

Dr. Karper. One of the biggest stumbling blocks, in Jane Karper's opinion, to equitable funding, is that there's too many political avenues involved in that. I know the suit was thrown out at the first level because they said it was not justiciable, but we have reintroduced it and it is now at the Supreme Court of Pennsylvania level.

PARS has come up with a perfectly reasonable way and suggestion of course, we all like it anyway, on how to found education more consistently and fairly, and it's based on a fund that starts everyone at the same level.

Each child gets so much, and then from there, there's another level that kicks in a little bit more, and finally the fourth level is where the local district kicks in to bring forth more of the program that they want for their children. I don't know of anything else to explain to you about that.

Mr. Fattah. No, I think that's very helpful. The State of Pennsylvania's not alone in this?

Dr. Karper. No.

Mr. Fattah. There's some 37 other states in which these lawsuits are taking place, particularly by rural and urban school districts who seem to be the ones bringing forth these cases. You're right, it takes forever because unfortunately the state court systems move pretty slowly.

Dr. Karper. If I could say, I know I'm interrupting you and I'm sorry...

Mr. Fattah. Go ahead.

Dr. Karper. My yellow light's going to turn red any second now. If you would give the money in bloc grants to the state, if you have someone at the head of your state who is interested in other avenues other than public education, you can destroy the public school

system in that state.

I'm redlighted.

Mr. Fattah. Thank you very much.

Let me thank the entire panel for its contribution. Thank you.

Mr. Talent: [Presiding]. I thank the gentleman.

The Chairman has asked me to keep the hearing running during the vote, so what I'm going to do is recognize Mr. Ehlers who is next, and Members may wish to go vote, and I hope they'll be able to come back.

Mr. Ehlers.

Mr. Ehlers. Thank you, Mr. Chairman.

Dr. Lyon, my questions are all for you so everyone else can relax and take a little break and enjoy the session.

First, just a question to clarify something. On the very first page of your written testimony, you comment that learning to read is a formidable challenge for approximately 60 percent of our nation's children. For at least 20 to 30 percent of these children, reading is one of the most difficult tasks they will have to master.

I assume that's 20 to 30 percent of the 60 percent?

Dr. Lyon. Yes, that is correct.

Mr. Ehlers. I just wanted to clarify and make sure I had that statistic right.

Also, then on page 9, you talk about some of the bases of reading difficulties, and it looks from your written testimony as if you're basically saying that the lack of phonological awareness skills is the basic problem that you have to start with?

Dr. Lyon. That's correct.

Mr. Ehlers. Is that generally true? You don't encounter reading problems where that's not a factor?

Dr. Lyon. It's very rare to. Because we study children at every level of reading development, that is, we study youngsters who are at the 99th percentile in reading, we study youngsters who are below the first. We study them from before they enter school. We follow them, in some cases, into their early adult years.

The best predictor of the ability to pull the print off the page quickly and accurately is the ability to understand that the words we hear are composed of sounds, that's that jargony term ``phonological awareness.''

The best predictor of reading comprehension, which is why we teach kids to read, to get to the meaning, is the speed and accuracy by which they do pull those words off the page.

The most robust predictor is phonological awareness but we can add to the predictive power if we look at the kid's ability to rapidly name things that they see and to understand their print awareness, what they understand about the job of reading, whether they hold the book the right way when they come into school, all of the kinds of things that they learn from birth to entry into school.

You know, a lot of people have believed in the past that reading is a natural process. In no way is it a natural process because parents, in many cases, are teaching kids very strongly from birth to entry into school, but unfortunately a lot of kids don't have that in front of them.

Mr. Ehlers. All right. But if phonological awareness is such a key factor, you really ought to be looking at children starting at about age 2 or 3 to identify the ones with the problem, and attempting to correct the problems.

Is that a correct statement?

Dr. Lyon. Absolutely. The tough thing is it's hard to get 2- and 3-year-olds to hang out with you long enough to measure it.

Mr. Ehlers. I understand. You talked a moment ago about predictors.

Dr. Lyon. Yes.

Mr. Ehlers. Are genetic factors part of it?

Dr. Lyon. Yes, sir, for a small percentage of the population. Of those 30 percent of our nation's kids reading poorly, probably five percent of that 20 to 30 percent are showing a strong molecular linkage to the genes that govern the development of this phonological awareness.

Mr. Ehlers. All right, so that would help you...

Dr. Lyon. It does.

Mr. Ehlers: ...very much as an early predictor?

Dr. Lyon. Yes, sir. The imaging studies are as well. We're imaging quite a few children at five years of age now, and that's giving us some more information on our neurologic predictors.

Mr. Ehlers. I'm wondering ways to develop the skills. I assume you're aware of Dr. Tuloths, I'm not sure if I pronounced it correctly, her work.

Dr. Lyon. Yes. Right.

Mr. Ehlers. Was that funded by your organization?

Dr. Lyon. No, that's not funded by us. Her work isn't, but the trials that are testing that along with other approaches are funded by us. But those are independent trials.

Mr. Ehlers. Well, I'm very fascinated by that work, and I think this may be something that would show a lot of promise. Are there are similar ways of developing these phonological skills that show as much promise as her work?

Dr. Lyon. Well, we're looking closely at the effects of the Tallal work on reading. That work has been carried out with oral language, but not necessarily reading. The press has advanced that particular idea.

The best productive thing that we can do for kids phonological awareness is to have parents read to them, sing to them, do nursery rhymes before they come into school.

When they don't do that, the kids typically don't have the phonemic skills and then it is the job of the teacher to understand quite frankly that those have to be taught very directly and systematically, a particular teaching procedure that philosophically is at odds with what many of our teachers have been taught.

Mr. Ehlers. But please know I have a daughter who is a librarian and spends a great deal of time trying to persuade parents to do that before the kids reach school.

Last question. On page 18 and you don't have to look it up, but I notice you have phrases here. "We must raise the quality and rigor of all education-related research." "We need to increase the scale of rigorous educational research," and you also comment about the need to synthesize.

I strongly support your effort to make this research more rigorous. I'm not in this field at all, but I happen to be a research scientist, and I'm dismayed at some of the research I've come across on this area. It's just, it doesn't deserve the name ``research."

Dr. Lyon. That's correct.

Mr. Ehlers. Blessings to you in your efforts to improve that. It's absolutely essential if we're going to learn how to do this right.

Thank you very much.

Dr. Lyon. Thank you.

Mr. Talent. I thank Mr. Ehlers.

We have five minutes remaining in this vote, and since there are no other Committee members here wanting to ask questions, and this is the vote on Most-Favored Nations Status for China, I think I'm going to recess the hearing, which means that we will come back.

So if we could ask the witnesses to indulge the Committee and remain, we'll reconvene.

Oh, Ms. Sanchez, are you prepared to ask questions?

I'm going to have to go vote anyway. So you haven't voted yet, either?

Okay, so we're going to have to recess the hearing, and then we'll come back and resume.

[Recess.]

Chairman Goodling. The Committee will continue.

Oh, the Committee will continue if the witnesses are here.

[Laughter.]

Chairman Goodling. Mr. Andrews, you can start with those Members that are here, and by that time the rest get back, why_

Mr. Andrews. Thank you, Mr. Chairman.

Now that the two most important Members of the Committee are present, at least in my judgment with the exception of Mr. Clay.

Chairman Goodling. The gentleman from New Jersey is recognized.

Mr. Andrews. First of all, let me thank the witnesses for their attendance today, and apologize for not being present personally during the testimony. I've read the testimony. It is very instructive and very helpful, and all of us on the Committee appreciate it.

I wanted to ask the educators on the panel who are responsible for either running a school or running a program within a school district, or that have experience in doing that, the following question.

If we were able to increase the federal funding that your district or schools get by 50 percent, a substantial increase in the amount of federal money flowing in, and we were to give you complete discretion as to how to spend the money, if we were to make this completely within your good judgment as it would best serve the children that you teach, what would you do?

I would ask each of the panelists to answer that question.

Dr. Harrison-Jones. I'm no longer a current superintendent, I'm retired.

Mr. Andrews. But based on your experience.

Dr. Harrison-Jones. All right. If you were going to give it to the school district, is that what I'm hearing you say, not through the state?

Mr. Andrews. Yes.

Dr. Harrison-Jones. Directly to the school district, 50 percent above the current level of funding with discretion. I would say I would think I'd died and gone to Heaven. But in so doing, I would say to you, now that I'm looking at it from another vantage point, that I

would want some restrictions.

I would want, for instance, some outcome-based results to be the basis for my continuing funding stream, for example, and that that outcome would be student performance. That I think you would have to be fiscally accountable to the taxpayers to say that we cannot just give money.

Some of the things that I said earlier, I would want to make sure that a condition of receipt of those funds would be that you would ensure that we had properly-trained teachers who are sensitive to the type of child that they're working with, understand the methodologies that work best for them, that there would be the conditions of parental involvement, knowing that that's a significant factor in the quality of children's learning. That the conditions that undergird optimal teaching conditions are in place.

In other words, I'm not sure that I would simply say, do what you want to do, because you have varying degrees of capability on the part of governance and administration from district to district. But it would be a far cry from where are now.

Mr. Andrews. Assuming those conditions were in place though that you were required to be accountable and required to measure outcomes and required to report on them, within the basis of your experience and the districts you've run, what would you spend the money on?

Dr. Harrison-Jones. I would spend it on primarily, well, if you want to be specific, I would look at the number of children any single teacher would work with. I'd look at class size. I would look at professional development. To what extent are teachers prepared. I'd look at certification, whether or not people are truly certified to teach what they are being asked to teach.

I would look at the conditions under which I can facilitate parent involvement. I would look at a totality of situations that would provide for the optimal conditions for instruction to take place.

Mr. Andrews. Thank you. Is it Dr. or Ms.?

Ms. Ginn. Mrs. Yes. Because I'm not at the level of administration or superintendency, I will just speak from the point of view from where I stand, being close to the schools.

I would say to you that that money would be spent for direct instruction to classrooms. Because Title I is only one-third funded, to have another 50 percent would enable us to meet the needs of far more students when we determined that in Broward County, we have a high immigrant population, a high turnover rate, 6,000 to 7,000 new students every year, it would allow us to meet the needs of far more students.

Mr. Andrews. When you say direct to the classrooms, what does that mean?

Ms. Ginn. That means we would target the money to the classrooms based upon the information that I've already given you in my testimony, to keep the standards high, to make sure we have highly-qualified teachers teaching our students, all of those things in place, as you just mentioned. That money would go to serve those students in greatest

need.

Mr. Andrews. Dr. Karper, what would you do in Troy besides improve the climate so it's not winter all the time? I've been to the area.

Dr. Karper. Well, I would emphasize the smaller number of children per teacher, the more effort the teacher can put into improving the children's learning.

So I would say, after all those other things are in place, more professional development, that we have more teachers so that the class sizes are smaller.

I would like to look at the extended day and the extended year concept. I would like to look at starting a program for four-year-olds that would work in cooperation and conjunction with Head Start. But not have it mandated to the parents who want to keep their youngsters at home.

Mr. Andrews. As a father of a four-year-old, I hardly second your motion.

Oh, me she meant? Well, Roemer, at least I'd pass the admissions test.

[Laughter.]

Mr. Andrews. Dr. Lorenzo, what would your suggestion be?

Dr. Lorenzo. I think first of all, school leadership is critical, so I would hold administrators, as well as teachers, accountable.

The second thing is, if you looked at Rawlings' testimony, I would show you there that we have every Tuesday, our children go home for half a day, because we teach longer on other days, and we have teacher training every single week. It's made a decided difference.

So first of all, I think the school climate and whole student body has to be on one mission and accountable, know what they are there for. Then you train and you train and you train and you train.

I'm right along with the professor that talked about the reading research. I don't care what program it is, if that school climate isn't right, and if those teachers don't know what to do, nothing will happen.

Mr. Andrews. I very much appreciate those clear and comprehensive answers.

I know my time is up, I would just ask if the people would supplement the record in writing, if they could. I'm interested in everyone's thoughts on the optimal size of reading groups for children in the primary grades. Not now because my time is up, but I'd be curious to hear what you think about that.

Thank you, Mr. Chairman.

Chairman Goodling. In transition, the three who are presently involved, do you all have Even Start programs in your district?

Obviously, you don't. Terrible. We'll talk about that afterward.

Mr. Tancredo.

Mr. Tancredo. Thank you, Mr. Chairman.

I was looking quickly through Mr. Lyon's testimony here because I had identified some things in there that really kind of jumped off the page. I think they've been referred to by others.

I can't help, however commenting on the discussion which of course we've heard so many times. I've been around this particular issue of education, quality of education finance for almost 30 years, and we keep hearing something like this all the time.

If you just give us more money, everything will be okay, and I know that I read once, when Christopher Columbus returned, there were still a lot of people who believed that the earth was flat, even though he had somehow, at least to his own satisfaction and that of others, proved that that was not the case.

It took many, many trips before he got at least the majority of the people in Europe to actually believe that the world was round.

I don't know how long it's going to take for us to come to a different conclusion about what actually makes quality education occur, but it is certainly not more money. As we have now attempted in I don't know how many different venues to prove the value of that statement, to prove the truth of that statement.

Kansas City of course jumps to mind, what we did there. But not just that. Every single year, the Department of Education puts out a wall map that shows every state, how they rank against each other in both inputs and outputs. You are never able to draw the conclusion that inputs create outputs in terms of educational attainment.

Dr. Lyon talks about what in fact does make that work, and I saw everybody on the panel agree with him. Everybody shook their heads. I therefore go back then and try to rationalize in my own mind what has to happen in order to get where you are, what you suggest would happen.

In Dr. Karper's district, $7,500 per student, approximately, I'm assuming that does not include the O&M money or the Capital Construction money that's just direct construction money?

What's the average class size in your district?

Dr. Karper. The average class size in our primary grades is between 20 and 23.

Mr. Tancredo. Twenty and 23, what's that $150,000 per class room and approximately a little more at the 23 level. What's the average teacher's salary in your district?

Dr. Karper. Starting teachers' salaries are...

Mr. Tancredo. No, no. Average?

Dr. Karper. It is $44,000.

Mr. Tancredo. Forty-four thousand leaves about $110,000 going to something other than the instruction in that classroom, not including, now remember, we said not including the capital construction costs, going other places.

Do you think that if you agree, as you appear to agree with Dr. Lyon's analysis, that you have at least, well, at an average cost of $40,000, let me back up and say, average cost of $40,000 per teacher, how many of those teachers do you believe to be incompetent?

Dr. Karper. I would not be able to give a percentage on teachers I feel are incompetent.

Mr. Tancredo. Below ten percent?

Dr. Karper. I would say below ten percent.

Mr. Tancredo. Below five percent probably?

Dr. Karper. I would say yes.

Mr. Tancredo. So 95 percent of the teachers there are competent, even being paid an average salary of $40,000 a year, and are capable therefore of doing what needs to be done to meet Dr. Lyon's criteria for improving the quality of education.

So then why aren't they?

Dr. Karper. In our school system, our teachers make on the average of $44,000 plus their benefits, and you can add another $10,000 to that for benefits.

We have total inclusion which means special education children are included totally within the regular education program, and we have a number of severely disabled children within the classrooms, and when you have a class size of 23 students, and of those three are special needs students, you have a lot of individual time of the classroom going to the special needs students.

You have 23 very individual learning styles, and it can be very complicated for a classroom teacher. But we also have our educational institutions that need to be working to give us better products.

Mr. Tancredo. Well, certainly we can agree, I think all of us, and we keep talking about that in this Committee, about what it is that the educational establishment can do to change.

But everything I've heard you say, everything that I've heard everybody say, as a matter of fact, in terms of what can make a real difference here, leads me to believe in fact there are things you can do every single day in your building in whatever role you play in the

process, to bring about the kind of change that Dr. Lyon suggests.

It isn't a factor of money, you know. So therefore we have to look and try to wonder what else is happening here. What is preventing us from getting to that point?

If we pretty much understand what it is we need to do, and we suggest that we have the people on staff who are capable of doing it, you said 95 percent of your staff are competent people, I'm assuming that means they could actually incorporate the learning styles and teaching styles that Dr. Lyon suggested.

Then it seems to me something else is a problem here, and it's more systemic than it is fiscal.

My time is up, I guess.

Chairman Goodling. Congressman Kind.

Mr. Kind. Thank you, Mr. Chairman, and thank you for the hearing. I want to thank the panelists as well. It's been very interesting and I appreciate your patience. Usually when you're about this far down on the Committee platform, you have to wait around a while to ask some questions.

I want to take a different tack of questioning here. There's been a lot of focus, lot of talk about just general teaching methods as it applies to the classroom as a whole, but now there's a lot of data, lot of studies coming back in regards the gender specific teaching challenges that we face.

I don't know how many of you have had the opportunity. I've just finished reading Dr. Pollock's book, Real Boys, recently. I don't know how many of you are acquainted with it or have read through it, but his general theses in the book is that given the current state of American culture and our expectations, that we are failing our boys in particular, doing a very bad job of training, of teaching them, of raising them, and it's because of different expectations and different needs and wants that they have.

That's not to exclude the challenges that young girls have as well. I think, was it Dr. Pfeiffer or Piper in Reviving Aphelia, touched upon that a few years back. So I don't want to exclude that aspect of it. But perhaps I do have a little bit of a bias with a couple little boys myself.

Question I have for you all is, is the information that we're getting back right now in regards to the different needs or the different challenges that boys have compared to girls starting to get integrated in the professional development programs or within teaching programs?

Are the teachers in the classroom more sensitive to these studies that are coming out right now, or hasn't that really affected professional development at all thus far?

Dr. Lyon. Well, I can take a crack at what we know about the different features and gender issues in learning because we certainly study that a lot, not only from a cognitive perspective, but socially and so forth.

We do know, in a counterintuitive way, given everything we've heard over the years, that little boys and little girls are equally at risk for reading failure. What boys bring with difficulties learning to read is a package that's sometimes a bit more active then their female counterparts:

Whenever you couple up difficulties learning an academic skill along with an activity level that may be such that the young fellow is not available to learn, you exacerbate the learning problem.

Many more boys are referred for special education, even though as many females again present with reading difficulties. The reason is, is these referrals, typically to special education where labeling takes place, are on the basis of behavior, not necessarily the academic skills.

Once involved in a track, it is clear to us that that can be demoralizing to young fellows, and unless they begin to learn. Now everything is mitigated by success in learning. So that special education can be effective if in fact the youngster learns what the other children know, and then that child fits in and so forth. But typically that's not the case.

Mr. Kind. Well, Dr. Lyon, that's one of the points that Dr. Pollock made in his book is that there are a lot of, he feels a lot of false diagnoses as far as boys getting in special education with learning disabilities, and it's really just not recognizing some particular sensitivities that that child might have that aren't being addressed within the classroom.

Yet, statistics right now are appalling. I mean the boys are sinking like rocks in regards to academic achievement compared to girls.

Dr. Lyon. But you've got to remember now, when kids enter special education in the biggest category, which is the LD category, they're already 8 to 9 years of age because the criteria necessary to move into that area of special education doesn't really obtain until the kids get older. You take any human being who is failing at anything and place them in an environment where they are visibly different from everybody else, and they're normally sensitive kids, you're going to see other baggage accrue. That certainly is a factor in this.

You know, the thing I think we've been talking about on this panel is, in a sense, a lot of special education has been a sociological sponge that wipes up the spills of general education. If we could get the kids early on, which we demonstrate time and time and time again, learning takes place, self-concept and self-esteem move along side.

If learning doesn't take place early on, we tend to lose the kids. No human being likes to sit around in a situation where they are bereft of the skills that other kids have and succeed with.

Mr. Kind. I'm not claiming that this is just the responsibility of the teaching profession. Certainly there's a lot of education that we parents need to do in this regard as well.

Dr. Harrison-Jones, did you have something to add?

Dr. Harrison-Jones. Yes. Not to disagree with what Dr. Lyon's saying, but to add to it. Just look at this panel. We're a female-dominated institution unfortunately, and we do

need to do something that will make the profession more attractive and where we can increase our holding power of our male teachers.

There are incentives in place that rob the classroom of our male teachers. It's administration within the system, it is private enterprise.

So the struggle really is to attract to the teaching profession more males, more fathers involved in the education of their children, just more general male concern and action and activity, as it relates to education.

I would say that we've also been accused of saying that actually we ignore the girls. That because of the demands that many times boys make upon the teacher for attention, there's research that shows that the boys are most likely to be called upon, that boys are most likely to be rewarded for positive behavior or rewarded for academic achievement than girls.

So you have peaks, if you look at it, there are grade levels where boys do exceed; at the middle school level and particular content areas where you find your mathematics interest, and again aptitudes seem to converge, and you'll find a spurt out ahead of the girls.

So it is something that we do need to look at, but I want to say that we need to look at it in terms of with whom people identify. You tend to identify with people like yourself, and until our boys see more men in our classrooms, particularly our elementary classrooms.

There have been incentives by school districts. Many years ago, Kansas City had an incentive that whereby they provided graduate school education at their expense for any men who were willing to major in reading instruction.

So they spread those few males over their elementary classrooms, and they taught only reading. Many of us disagreed with departmentalization at that early age, but the results were very, very impressive. Just the fact that the boys saw that real men did read, because they had not seen that before. All of their teachers had been females.

Mr. Kind. I'm just concerned that there really has been a vacuum in regards to research-based teaching methodology in regards to general application as opposed to gender-based or gender-specific type of application.

Hopefully, I mean, you're out there in the field and in the trenches and you're seeing this and encountering it, so hopefully we can get some feedback from you on how we can restructure some of these professional development programs.

Dr. Harrison-Jones. In addition, we're looking very closely at instructional materials and the extent to which textbooks and other materials have the kinds of content that would be appealing and that would be of interest to boys, as opposed to girls. And we're getting a lot better in that regard, but there's a lot more work to be done.

Chairman Goodling. I've been trying to recruit the professional athletes to help us along that line because they have a golden opportunity to do it. In fact, they could finance the

preparation.

[Laughter.]

Chairman Goodling. Mr. Kildee.

Mr. Kildee. Thank you very much, Mr. Chairman.

Perhaps the Troops to Teachers program would help some here too on this, that this Committee's been discussing.

My question really was asked initially by my colleague, Governor Romero-Barcelo, but I'd like to expatiate upon that a bit.

Under the Title I statute, a school needs 50 percent poverty in the school to have a schoolwide program. Under Ed-Flex, theoretically, you could have one student and have a schoolwide project.

In my State of Michigan, under Ed-Flex, and they've been under it a number of years, has chosen the figure 35 percent, and you have to have that before you can have a schoolwide program.

Do you have any idea what percentage below which we should not drop to have a schoolwide program, where you could have at least an efficient program.

I don't mean a specific number, but if you could just discuss that with me because I ask it because, when we did Ed-Flex, I initially had an amendment in that bill saying that bill would sunset when we reauthorized ESEA because I thought we might want to revisit several things including this percentage of when you could have a schoolwide program.

Any comment on how far we should go down diluting that before we might run into some danger? I don't need a specific, but I just want to discuss it in some general terms.

I'll start with you, Dr. Lorenzo.

Dr. Lorenzo. Again, I would say the 50 percent is an excellent level at which to stop. At that level, it's been my experience, in two different schools, being a principal, that things change. That when you get over 50 percent of the families at that line, that factor, that things begin to change in that school.

The resources needed by that school begin to change. The amount of work that has to be done with individual children coming in is different.

Mr. Kildee. Okay, why don't we just go down the line there, and if you have any comments.

Dr. Karper. I really don't have much experience with a schoolwide program, just the targeted assistance programs, so I will pass.

Mr. Kildee. Okay.

Yes, Ms. Ginn?

Ms. Ginn: I would agree with Dr. Lorenzo because we have the population of students who are in the schoolwide schools and those non-targeted groups of students are also there. So it's questionable in my mind if we want to dilute it further by going below the 50th percentile.

Mr. Kildee. Yes?

Dr. Harrison-Jones. My organization takes a very strong position that we not go below the 50th. In fact, we are recommending that you increase it to 60 percent by year 2000. That you look seriously at moving it up in subsequent reauthorization years.

Mr. Kildee. Dr. Lyon, do you want to comment on that?

Dr. Lyon. No.

Mr. Kildee. Well, in other words, most of you would concur that the Committee is moving in the wrong direction, then under Ed-Flex, where we're saying you can drop below the 50 percent.

Dr. Harrison-Jones. We are taking the position that Title I is needed in targeted areas of poverty, and that that percentage represents the degree of poverty. Therefore, moving it down would just dilute the ability to determine the extent to which you were doing anything significant for the children who are in the greatest of need.

Mr. Kildee. We put a great deal of emphasis upon standards assessment now, and one of the things we put in standards assessment I think, when I was chairman of the subcommittee was that we had to have what we call a very fancy term, disaggregated data.

I strongly believe that we need to make it clear that the results of Title I assessments should be disaggregated as to race, ethnic background, limited English proficiency, disability, economic status.

Do you have any comments on disaggregated data and the importance of it?

Dr. Lorenzo. I feel really strongly about it. So strongly in fact, as an individual school, we have in process data three times a year, and we disaggregate for every area. We want to know, when children come in to us, very quickly how they're doing, because that's the only way that you can change that instruction.

If you wait until May to tweak that instruction based on standardized tests, nothing's going to happen, it's too late. So I would accept it at the national level, the state level, the local level, and the classroom level.

Mr. Kildee. Very good.

Yes, ma'am.

Dr. Karper. I agree as well because only by disaggregating the data can you determine which students are not making progress.

Ms. Ginn: I support that. We need to know where the greatest impact is being made so that we'll know what kind of changes, and if changes should be made in what we're doing.

Mr. Kildee. Dr. Lyon.

Dr. Lyon. That is the ultimate question. Which instructional approaches or combinations therein are most beneficial for which children at which stages of reading development.

Mr. Kildee. I thank the panel very much, and I want to thank you, Mr. Chairman, for assembling such a good panel. This is a very good hearing. Thank you very much.

Chairman Goodling. Congressman Scott.

Mr. Scott. Thank you, Mr. Chairman.

I'd like to welcome Dr. Harrison- Jones who is, as her statement shows, a retired superintendent in Richmond public schools. I apologize for not being here to hear your statement, but we're having a markup in Judiciary Committee and it's somewhat contentious, and we're voting about every five minutes, so I haven't been able to be here.

But I would like you to just make a statement, Dr. Harrison-Jones. We have, as Mr. Kildee has indicated, we may be going in the wrong direction by going towards bloc grants rather than targeting the money where it's actually needed.

Now, I take the view that if we trusted the local school divisions to spend money on poor students, we would need Title I to begin with. Why is it important to target money to low- income students, and does the targeting of money make any difference?

Dr. Harrison-Jones. The answer to why are we doing it is because there isn't sufficient funds. There are not sufficient funds without it. I won't say we distrust district/state officials but my experience has been that the money doesn't always get to where it's needed; that's to the school district, to the school, and actually to the classroom.

Your second?

Mr. Scott. Well, does it make a difference, once you've spent the money?

Dr. Harrison-Jones. Everything that's been said today, the research that Dr. Lyon has shared with us, the experience that these three, the persons representing school districts shared, all of these things cost money.

We can say that money does not make a difference but you cannot have staff development, you cannot reduce class size, you cannot have the support personnel.

Now we might say there are teachers. Teachers are very important, but teachers can't function in isolation. There are other instructional supports that must be in place to make

sure that the optimum learning conditions take place. So money somehow has to be a factor in all that we say that we want to do to make a difference for children. Those children who come to school with the greatest needs are those children who demand the greatest resources. We compare with the then and now.

Even at the advent of Title I in 1965, most of us know that at that time, that predated the period of deinstitutionalization. Many of those children that we serve now were types of children who were institutions at that time.

So the schools have assumed the responsibility of that heretofore hospitals and other institutions had assumed. So the cost has continued to increase, and we make no attempt to ignore that fact, nor do we make apologies for the fact that in trying to meet the needs of students, that you will have increased costs of funding those needs.

Mr. Scott. Now you've been superintendent in Richmond and in Boston, both of which have some very high-income areas, and some very low-income areas.

What kinds of things can you do in the low-income areas that you couldn't do without Title I money?

Dr. Harrison-Jones. Well, we could not deal with the size of the class. We could not provide for the special kinds of staff development that's needed. As you know, in Richmond, we would have not been able to bring in the parents of the children to work in capacities, such as teacher aides.

We know again that the research suggests that when parents are involved with their children's education, whether it's coming to school, working with the teacher, or whether it's pouring juice, that that has a positive impact upon the quality of education of that particular parent's child.

So improving the socioeconomic status of parents, that was not the original intent, but it was a sidebar effect. Paying for that, those were the things that we could do differently.

Prior to that time, those conditions didn't exist. You had 30 children or more in a classroom. We were able to target children younger and younger. We were able to make sure that those children did have the instructional materials, the out-of-school experiences and all of those activities that children of more, of higher socioeconomic means had automatically.

Mr. Scott. Thank you.

Dr. Lyon, in about a minute-and-a-half that I have left, can you tell me what we need to do to make sure that children can read by the third grade?

Dr. Lyon. There are several levels involved.

The first thing we have to think honestly about is the degree of preparation our teachers are receiving in their training programs. It is not the teachers' fault that they come into the classroom, presented with a wide range of capabilities among their kids, and not have the flexibility that's based upon being trained well to address those individual differences.

That's a long-term solution.

What we have to be able to do now is bolster the training programs in schools in service-wise, so that our teachers are not just by lip service receiving training, which frankly most of them do. They receive training, but a lot of it is not informed by the research, a lot of it is too short in tenure, a lot of it is not relevant to exactly what they are faced with.

We have a tremendous demand issue here for teachers on the line but the supply side is extraordinarily weak. How we get by that is for, I think, the administrators and the leaders at school levels themselves to clearly understand what the research says.

That has to be quality research. It can no longer be philosophically driven because we're wasting so much time bringing certain ideas and philosophies to training environments in schools that simply are not robust, are not valid, and could do more harm than good.

So we've got to be selective on the types of information our teachers are learning. That's got to be vetted scientifically.

At the same time, we've got to somehow have the courage to begin to change colleges of education so they do their training not only at the university but in the schools in which the teachers are expected to carry out the complexity of their task.

Mr. Scott. Thank you.

Thank you, Mr. Chairman.

Chairman Goodling. I too want to thank the panel. It's very helpful as we go through this process.

You heard a lot about bloc granting Title I. They must have some special program they're going to spring on me, because I haven't heard anything about bloc granting Title I. But I'll be anxious to look at it whenever they offer it.

Mr. Kildee. Don't hold your breath, Mr. Chairman.

[Laughter.]

Chairman Goodling. I mentioned Even Start, and I want to encourage you, I don't know in the rural districts how easy that would be to bring about, but certainly in your growing and larger districts, all the research would indicate that it has been very, very effective where it is run properly.

The difference between Even Start and Head Start to begin with was that Even Start concentrated on quality, and Head Start concentrated on quantity. Of course, Even Start concentrated on family literacy, whereas Head Start did not.

Now they do because it's all, the model has grown right, but there are grants available, and I certainly, it's three- and four-year-olds, and it's not easy because you have to involve the parent improving their literacy skills and their parenting skills, and that's the tough part. It's also one of the most important.

So I would just encourage you to see whether you can't get some grants because they are available, and hopefully we're going to get more money for the program this year, it's my farewell hurrah song so they've got to come forth with money.

[Laughter.]

Chairman Goodling. So I would encourage you to really look into that. I think it'll be very helpful to get those.

For 20 years I sat here and kept saying, if we don't get children reading ready, and if we don't help their parents become the child's first and most important teacher, we're not going to make the grade.

But it's been slow in evolving, but we're getting there. I would just encourage Ms. Ginn to be very careful of the gentleman sitting behind you.

[Laughter.]

Chairman Goodling. Again, thank you very much. Appreciate you taking the time to come and share your knowledge with us. Thank you.

[Whereupon, at 3:42 p.m., the Committee was adjourned.]

APPENDIX A -- THE OPENING STATEMENT OF THE HONORABLE BILL GOODLING, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF PENNSYLVANIA

Statement of the Honorable Bill Goodling (R-PA)
Chairman, Committee on Education and the Workforce
House of Representatives

Hearing on the Title I at the School District and School Building Levels
July 17, 1999
1:30 p.m.
Room 2175 Rayburn

Good afternoon. Our hearing today is another step forward in the authorization process for the Elementary and Secondary Education Act (ESEA). This is our fifth Title I hearing.

Today we will hear from several Title I educators who will help us understand what Title I really looks like at the local level, and what some of the special challenges are that they face. We will hear from a principal of a schoolwide program in an elementary school in Florida. We will also hear from administrators of rural and urban school districts, and we will hear from a researcher at the National Institutes of Child Health and Human

Development. In just a few moments I will proceed with a more detailed introduction of each of these distinguished witnesses.

As with the bipartisan Teacher Empowerment Act which passed the House last week, we will continue to focus upon the principles of quality, accountability and local decision-making as we move ahead with the authorization of Title I and the remaining programs in the Elementary and Secondary Education Act.

As most here know, Title I is the largest K-12 program of the Federal government and funded at about $8 billion per year. While money is allocated on the basis of poverty, services are provided to educationally disadvantaged or low achieving students. Too often we fail to emphasize that Title I is designed to serve low achieving students, regardless of whether they are in low or high poverty districts.

For over 30 years, Title I has been with us in one form or another and over that time we have invested about $120 billion in the program. Yet, for all those years, the

Federal studies and reports that keep coming back tell us that we've made little or no progress in closing the achievement gap. If that were the private sector, we'd have been out of business several years ago. So we will be taking a close look at how to ensure that Title I is actually helping close the achievement gap.

There are many other key issues that we will be considering. Those issues are:

- Will states meet the 2000-2001 school year deadline for having their assessments in place?
- Are Title I teachers' aides a wise use of taxpayer dollars? I am told that about 20-25% of total Title I spending each year goes to pay for teachers' aides and about equal numbers of teachers' aides and teachers are hired with Title I funds.
- Should teachers' aides even be allowed to instruct students?
- Should all Title I programs be schoolwide projects where schools can combine Federal funds to serve

the whole school, or is there still a role for the targeted assistance programs?

- Are public school officials providing "meaningful consultation" to private school officials?
- Should Title I benefits be portable?
- Should we move toward more achievement-based accountability as many states and school districts have already begun to do?
- Should we eliminate many of the burdensome compliance-based requirements as the Inspector General has suggested?
- How are the use of third party contractors working in Title I?
- Are Title I parents becoming more involved in their children's education?

I look forward to exploring these and other key issues with our witnesses.

At this time, I would yield to the ranking member for any statement he may have.

APPENDIX B -- THE WRITTEN STATEMENT OF DR. SHIRLEY LORENZO, PRINCIPAL, RAWLINGS ELEMENTARY SCHOOL, PINELLAS PARK, FLORIDA

Presentation for The Education and the Work Force Committee

By Dr. Shirley L. Lorenzo

July 27, 1999

I would like to thank you as Honorable Representatives for inviting me to speak to you about a subject I hold dear - public education and Title 1 funding. My name is Shirley Lorenzo and I represent Pinellas County, Florida, more specifically Marjorie Kinnan Rawlings Elementary School. I come to speak to you as the principal of Rawlings, an urban Title 1 school with 59 percent of our students on free and reduced lunch and a school that has a 35 % mobility rate. We have 843 students with 100 of our student body in special education programs. But more importantly we are a school that is making a difference in the everyday lives of children and their families.

Six years ago, when our school was opened it was clear that boys and girls in the community were coming to school with greater and greater needs. Reading, writing, and math scores indicated that children entering the school had serious deficits in academic achievement and if left alone on the same path, it was predictable that just the newness of this school with all it's prettiness probably would not make a big difference to these children. Hence Marjorie Kinnan Rawlings was created utilizing new concepts and processes to solve growing problems.

Rawlings has enjoyed success and we feel as a school that it is attributable to four factors. The first has been a system wide commitment to using Malcolm Baldridge criteria to improve the school organizationally. With this commitment to quality came continual

improvement, decisions based on data, and organizational core values that quickly drives improvement change. Closely aligned with organizational systems thinking is the second factor which has been a commitment to shared leadership and a school culture which truly values human life and their interactions, child to adult, adult to adult or child to child. This shared leadership infused in a system invigorates and excites the school as a total learning community. Each person, including children are viewed as leaders, responsible for their own learning and each is also responsible to help everyone in the community succeed.

The third factor that has been so important to sustained school improvement has been the stability and flexibility of funding from sources such as Title 1 monies, state school improvement monies, and state and federal technology funds. These funds have allowed innovative change that would not have been possible otherwise. These funds have allowed monies to support collaborative meetings, training, research, and searches for best practices.

Finally, it is the "schoolwide" concept that has given the school community real input and power into the decision making process. This discretionary power enables a school to make school based decisions rather than relying solely on county, state or federal ideas or directives for school change. The schoolwide concept allows a unique opportunity for school based research, data gathering and decision making about programs and practices that are good for students in their own school. It is very exciting and empowering to work in a system that has a culture and a climate that values school educators, parents and community members working together to make improvements for their school and

for their children with unique needs. This is the type of change that creates exciting sustained growth. It is this discretionary power over important funds that has allowed us to make wise school based decisions.

When Rawlings began it embarked on a serious mission to help every child achieve to their potential in basic academic areas. Each teacher, support staff member, custodian, administrator, parent and child recognized the seriousness of this mission. Together they concentrated on reading, writing and math and joined with one mind and purpose to get the job done.

The use of Malcolm Baldridge criteria and quality core values which bring a systems approach to what we do was used by Rawlings from it's inception.. For years, businesses have used these criteria effectively to bring about organizational change and now several states, including Florida, have developed a self assessment process based on the Malcolm Baldridge criteria. Schools can apply for what's known as the Sterling award of Florida by writing a self examination document, allowing outside examiners to come to the school site for verification, and finally having a juried recognition system determining if the organization, in this case a school, shows the type of success that is exemplary for that organization. I am proud to say our school underwent this self examination process in 1998, was awarded a site visit and awarded recognition as the first school in the state of Florida to win the Sterling award in the field of education. We are proud of the accomplishments that we have made in six years and for the successes our children have achieved. Statistically our disadvantaged population

should not be showing the gains they are exhibiting. Let me share some of the data with you that I'm talking about. (See graphs) The first graph shows a comparison of district, state, and school average scores and a gap analysis of the school's growth over a 6 year period on a criterion referenced state exam. Our writing scores exceed both our district and state averages. Following along in the next graphs you will note a positive trend again for math and reading over a 6 year period. We continue to show positive sustained growth even though our economic deprivation factor continues to increase each year and the mobility of our population increases.

As our school has worked with quality systems, aligning every process to our mission and goals, we have worked as a full staff in making sure that our Title our dollars are spent effectively. Decisions are made with full staff and community input. Everyone knows why we are spending the money we decide to apend. Everyone feels real ownership and accountability for the use of the funds and looks hungrily at data to reflect what is working and what is not working. For example, we made a schoolwide decision based on data and research to put in a massive school wide tutoring program for helping children acquire math skills by utilizing every available person on a specific day of the week to teach math for a year in addition to a child's regular math instruction. After a year's work we had positive results and after analyzing the data, decided to put in a similar program for reading. After carefully analyzing the data at the end of the year we realized reading takes greater skill and finesse to teach than math computation skills. Not just anyone can teach reading. We have adjusted our research and training in reading and intensified our approach using skilled classroom teachers with our

most struggling students. Research by Richard Allington and others suggest that often struggling students are left to volunteers for remedial work or teacher aides or paraprofessionals. Our research now indicates that with more intensive work by highly trained teachers, children make greater gains and the use of Title 1 funds can be more wisely spent. We now employ two extra teachers to reduce class size and to help intensify our approach to reading. We also employ 5 paraprofessionals with 2 years of college skill. They are trained to assist in specific classrooms giving more teachers a chance to work with small groups especially in lower grades. All of these "schoolwide" decisions are made with full staff knowledge and input. When we have success we celebrate "schoolwide" and when our gains are not what we would like, we analyze and problem solve "schoolwide".

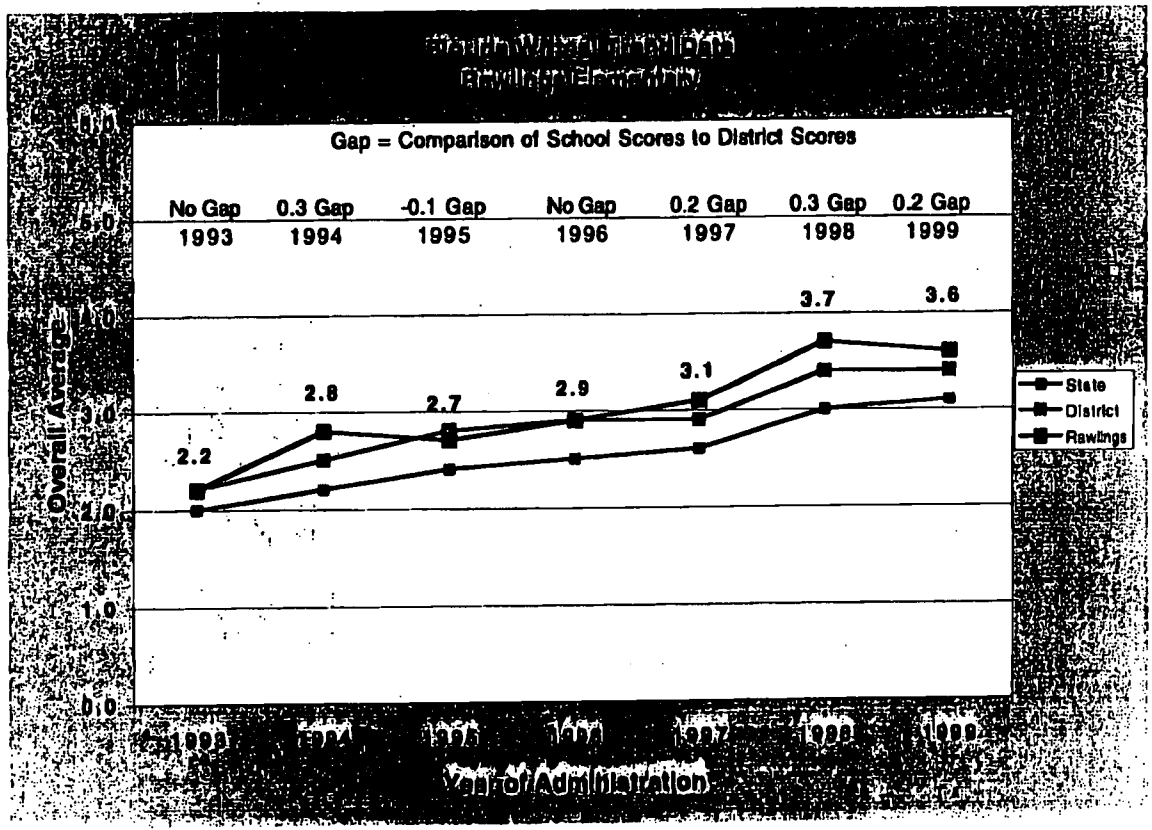
What a contrast to the days of "Chapter 1" when funds were expended to help only a few specific children. It was rare for the staff to be involved in making decisions that affected their children. Training for the Chapter 1 staff was parallel but separate. Services were also parallel to the classroom but separate. The Chapter 1 program, while well intentioned, was an isolated pull out program which had wonderful goals and dreams for children but often ended up labeling and stigmatizing children while trying to service them. Children were pulled away from the continuity of the school day, isolated from the mainstream, and remediated. They were problems to fix.

The schoolwide concept instead encompasses all children, utilizes and aligns all resources, and empowers a school to make the best decisions for all concerned. It models inclusion, not exclusion, it creates

collaboration not isolation. It bonds community and parents with a school in the creative decision making process. It has allowed extra funding greatly needed by a school with a challenging population.

As a school passes the 50 % Federal Economic Level, more factors for being disadvantaged emerge. Diminished resources for families often creates a need for the school to help families as they struggle. Because of this added need for resources and help the complexity of the school begins to change. Parental involvement often becomes decidedly reduced, challenges of uncleanliness, hunger, and disease become apparent. Involvement with family services, law officials, court systems, and truancy problems become increasingly common place. Resources that a traditional school has, quickly dwindles and is severely stretched as the poverty index climbs. As a school has more students in poverty situations than not, the difficulty of delivering these services and resources to families and children quickly escalates. Dropping funding to lower and lower levels to partially service all schools or even more schools falling just below the poverty line would dilute the services so vitally needed by the schools with the highest risk. Funding, as currently existing, has allowed schools with the greatest need to make a real difference and has fairly distributed funds on factors that have been researched and documented.

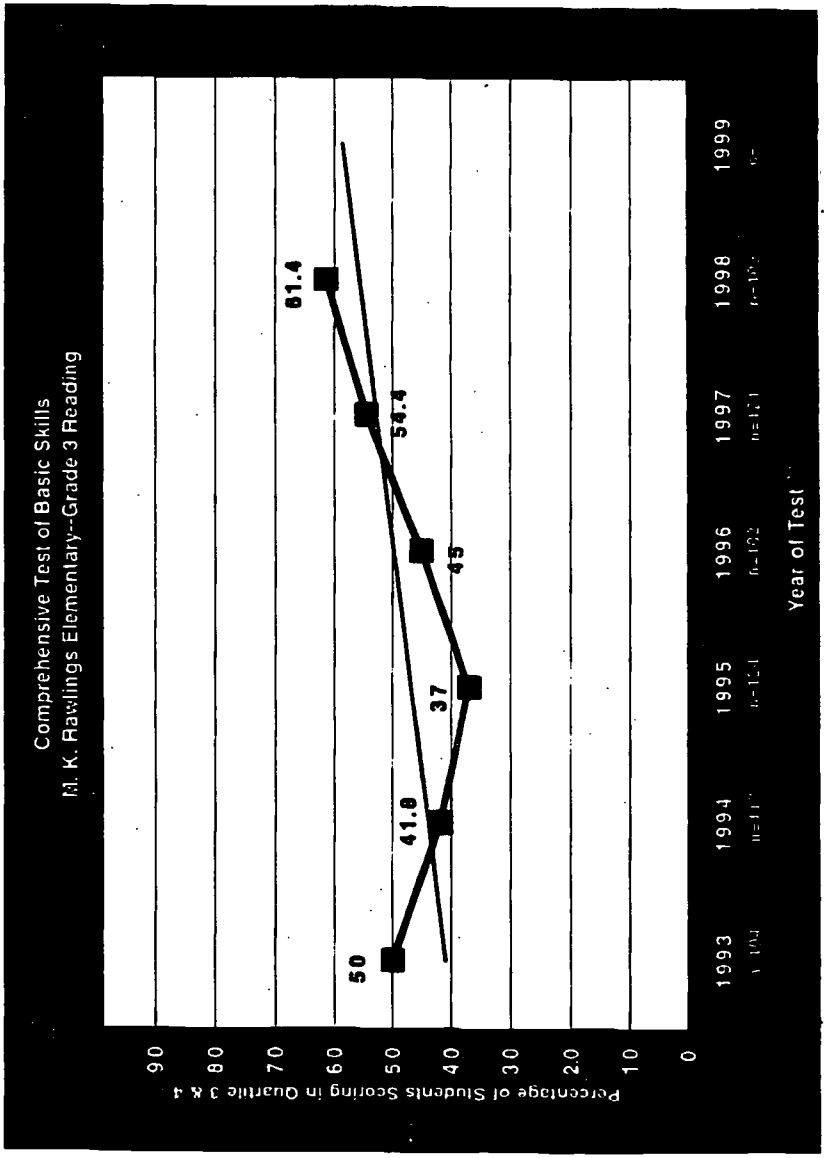
As a last note, schoolwide funding, quality systems,and shared leadership have allowed and encouraged a school like mine to focus their energies for the good of all children. We have created a writing demonstration school with our funds that collaboratively teaches all teachers in the county best writing practices and techniques. We open

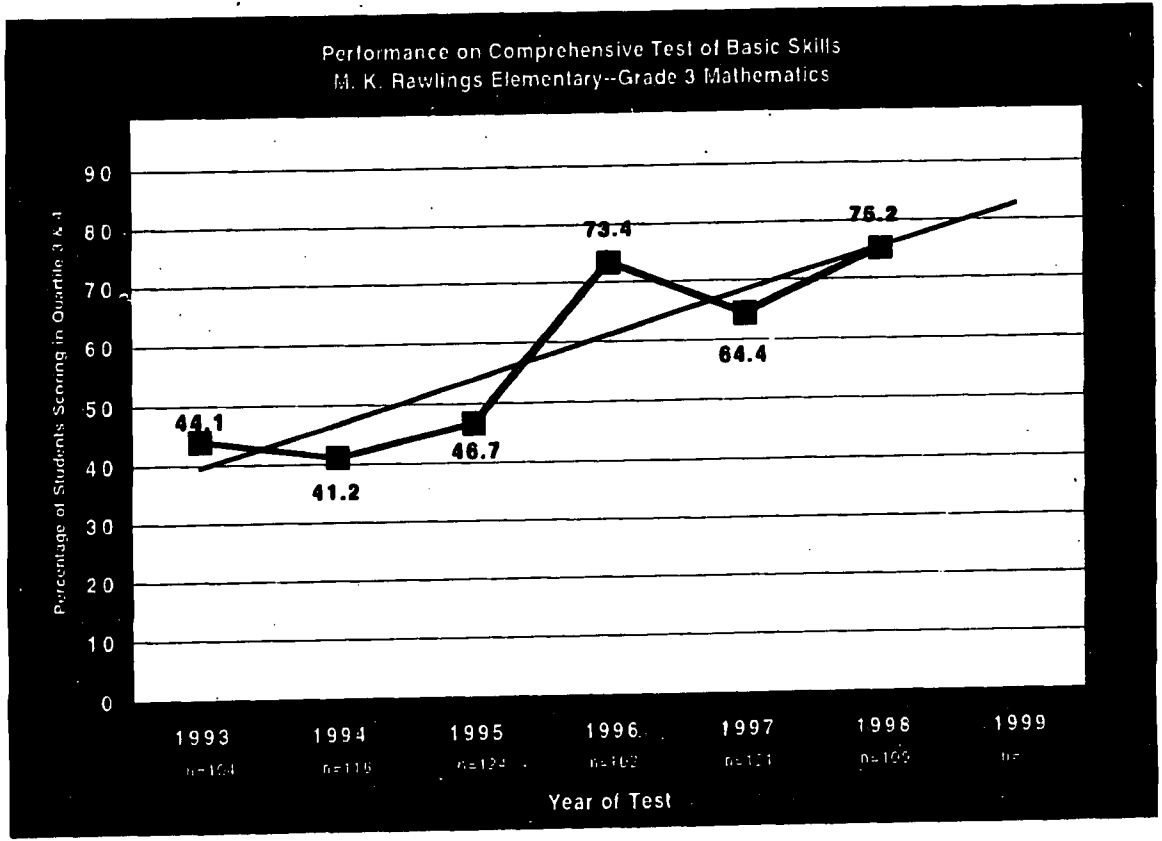

Gap = Comparison of School Scores to District Scores
No Gap
0.3 Gap
-0.1 Gap
No Gap
0.2 Gap
0.3 Gap
0.2 Gap
1993
1994
1995
1996
1997
1998
1999
2.2
2.8
2.7
2.9
3.1
3.7
3.6
State
District
Rawlings
Overall Average
Year of Administration

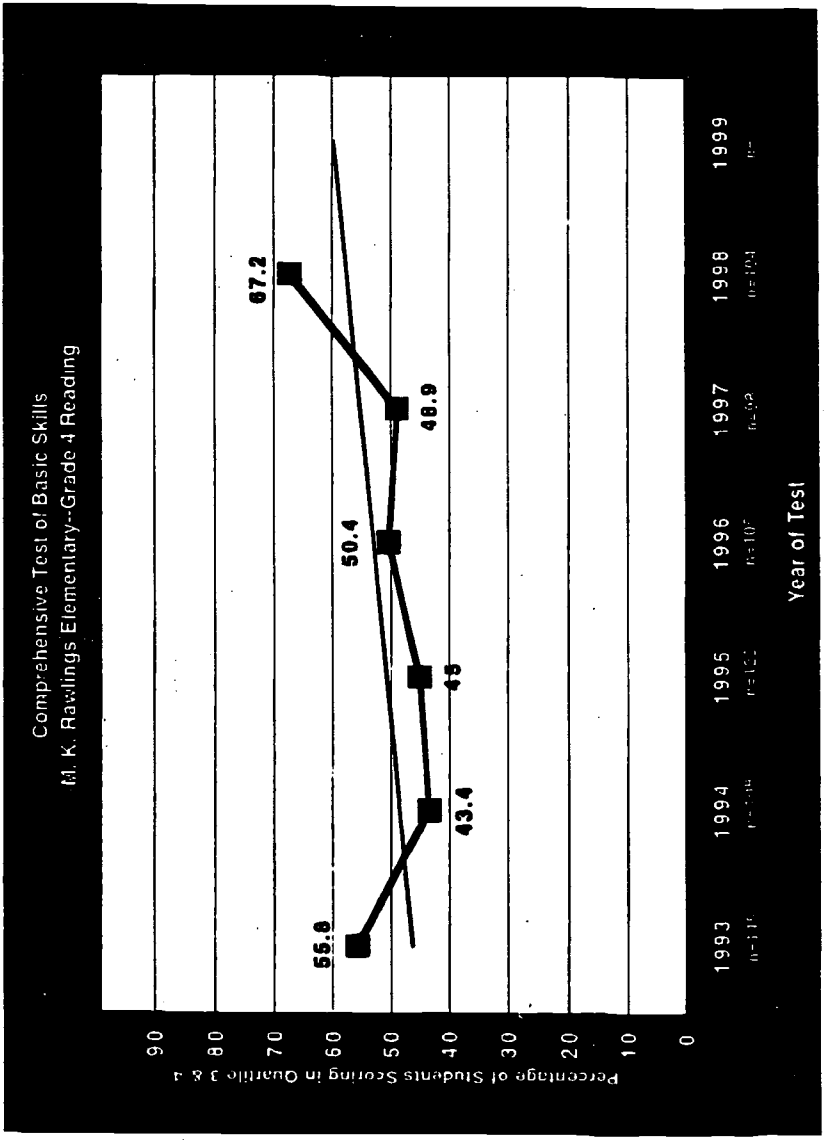
5/21/99

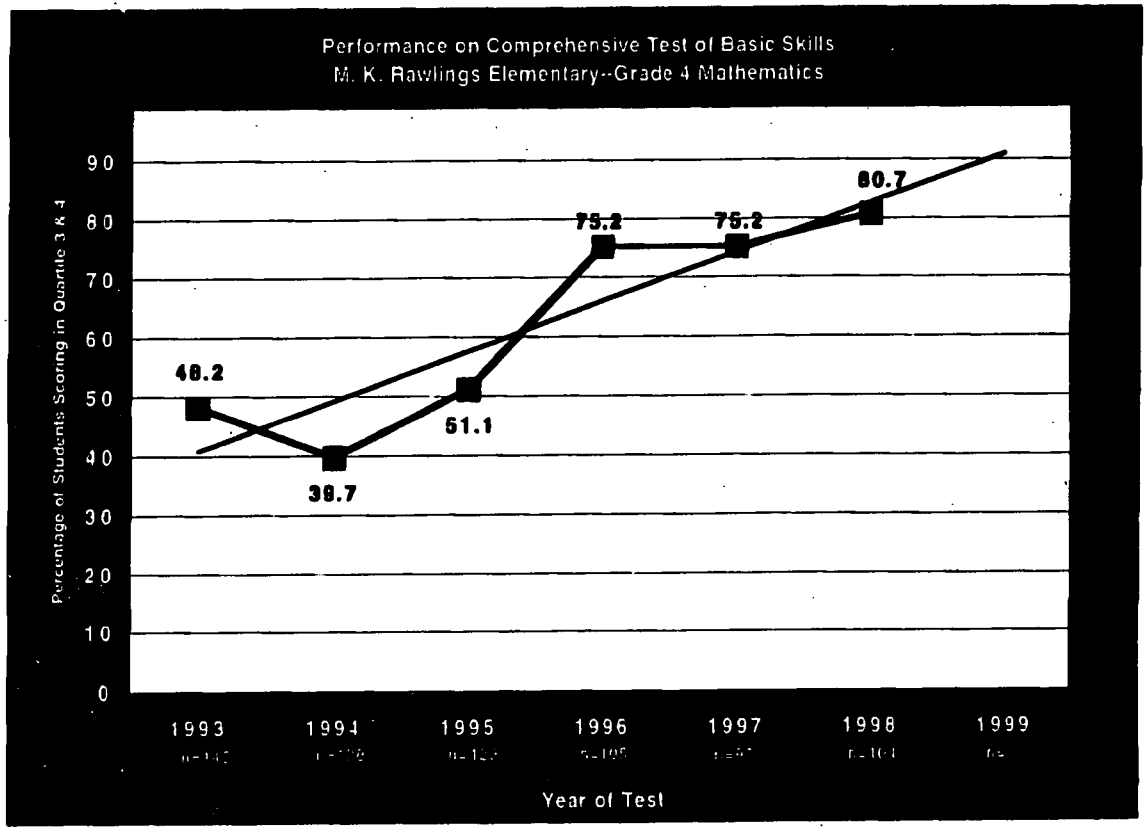
our school every Thursday for other teachers to come and learn, and as we teach we learn ourselves. We have also created a professional development site partnered with the University of South Florida to train interns and to embrace and develop young talent in a school that values children and celebrates their successes. This past year we had 25 interns. We have partnered with our community to change the school day. We have extended each day four days a week to gain training time for our staff. Each week on Tuesdays our children leave us mid day so that we can professionally come together to learn about improving our quality systems and the best practices of reading, writing and math. We have developed our own after school tutoring program. As a school community we have agreed that our children should wear uniforms. We enlist the help of our moms, dads, and grandparents to help our children read in a specialized after school reading research project called "Rawlings Reads'. We are presently investigating an extended school year, and continue to research and train on current best practice.

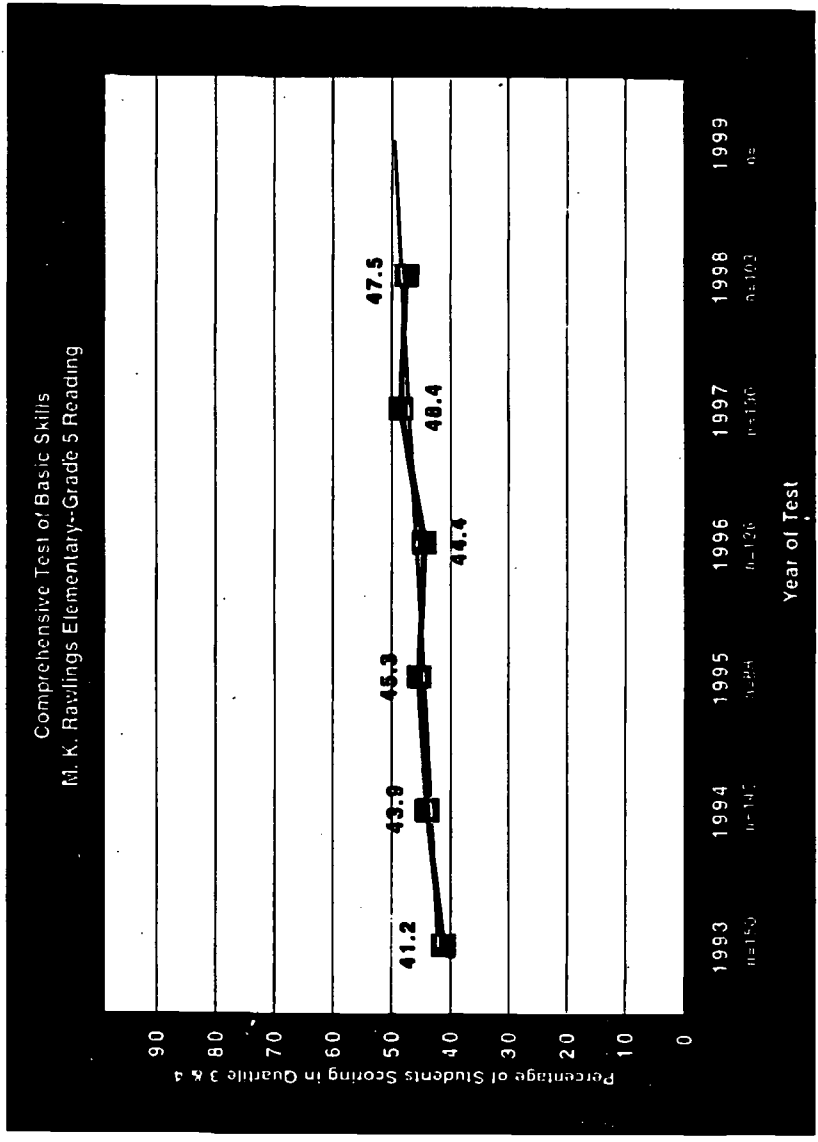
Most of this would not have been possible without Title 1 resources. You have given us the means to meet children's needs and to change a child's life positively for the future. Our children and my staff thank you!

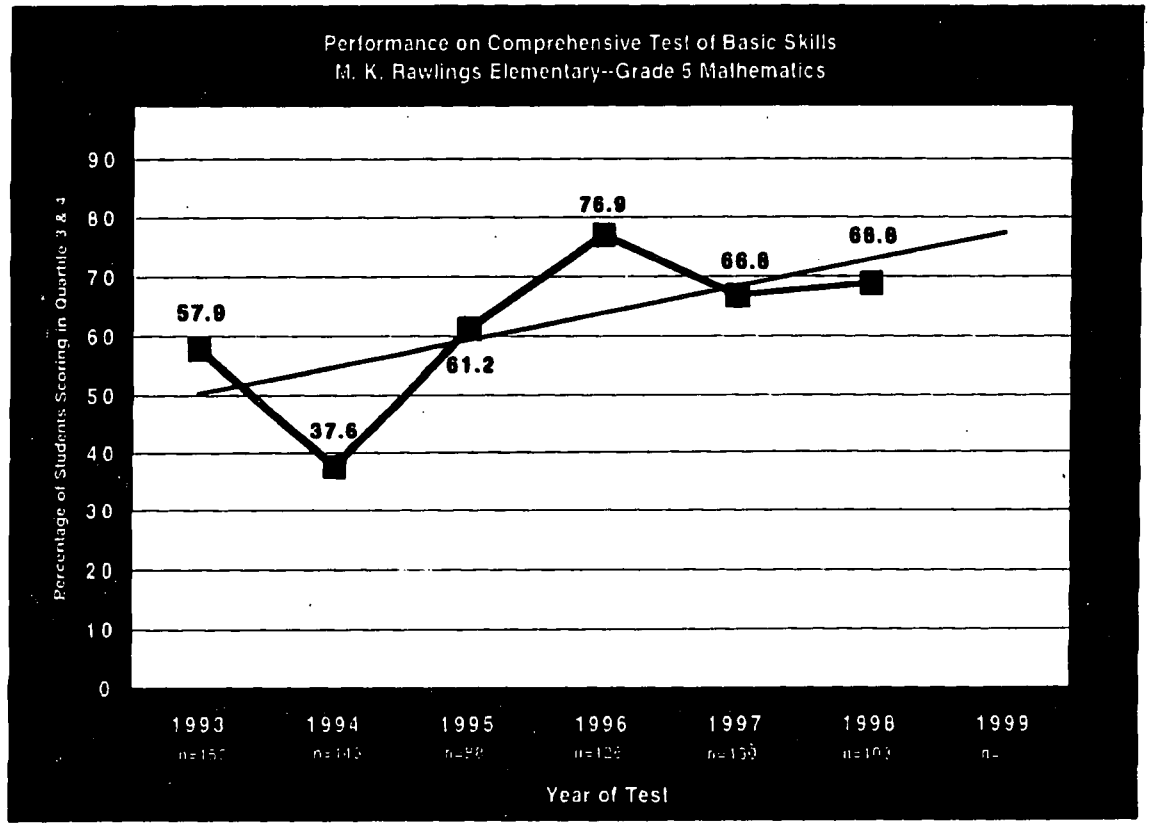

Comprehensive Test of Basic Skills
M. K. Rawlings Elementary--Grade 3 Reading
Percentage of Students Scoring in Quartile 3 & 4
0
10
20
30
40
50
60
70
80
90
1993
1994
1995
1996
1997
1998
1999
Year of Test
50
41.8
37
45
54.4
61.4


Performance on Comprehensive Test of Basic Skills
M. K. Rawlings Elementary--Grade 3 Mathematics
Percentage of Students Scoring in Quartile 3 & 4
90
80
70
60
50
40
30
20
10
0
44.1
41.2
46.7
73.4
64.4
75.2
1993
1994
1995
1996
1997
1998
1999
Year of Test


Comprehensive Test of Basic Skills
M. K. Rawlings Elementary--Grade 4 Reading
Percentage of Students Scoring in Quartile 3 & 4
90
80
70
60
50
40
30
20
10
0
1993
1994
1995
1996
1997
1998
1999
Year of Test
55.8
43.4
45
50.4
67.2
48.9


Performance on Comprehensive Test of Basic Skills
M. K. Rawlings Elementary--Grade 4 Mathematics
Percentage of Students Scoring in Quartile 3 & 4
90
80
70
60
50
40
30
20
10
0
48.2
38.7
51.1
75.2
75.2
80.7
1993
1994
1995
1996
1997
1998
1999
Year of Test


Comprehensive Test of Basic Skills
M. K. Rawlings Elementary--Grade 5 Reading
Percentage of Students Scoring in Quartile 3 & 4
90
80
70
60
50
40
30
20
10
0
41.2
43.9
45.3
44.4
48.4
47.5
1993
1994
1995
1996
1997
1998
1999
Year of Test


Performance on Comprehensive Test of Basic Skills
M. K. Rawlings Elementary--Grade 5 Mathematics
Percentage of Students Scoring in Quartile 3 & 4
90
80
70
60
50
40
30
20
10
0
57.9
37.6
61.2
76.9
66.6
68.8
1993
1994
1995
1996
1997
1998
1999
Year of Test

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DISSERTATION: MENTORING AS A STRATEGY TO HELP AT-RISK CHILDREN
M. ED., WAYNE STATE UNIVERSITY, DETROIT, MICHIGAN
B. A., ADRIAN COLLEGE, ADRIAN, MICHIGAN

TRAINING:
TOTAL QUALITY MANAGEMENT, PINELLAS EXAMINER/CONSULTANT
HABITS OF HIGHLY EFFECTIVE PEOPLE, STEPHEN COVEY
FACILITATIVE LEADERSHIP
INTERACTION MANAGEMENT
TEAM BUILDING
PEER COACHING
MULTIAGE GROUPING
COOPERATIVE LEARNING
TARGETED ASSESSOR TRAINING
SAC, PARENT, AND COMMUNITY INVOLVEMENT TRAINING
EARLY CHILDHOOD TRAINING
SCHOOL IMPROVEMENT TRAINING

EXPERIENCE:
PRINCIPALSHIP (9 YRS.) CURRENT POSITION, ELEMENTARY
RAWLINGS ELEMENTARY, PINELLAS COUNTY
ADJUNCT PROFESSOR, NOVA UNIVERSITY (3) NATIONAL LEWIS (1)
TEACHER (20) BOTH ELEMENTARY AND MIDDLE SCHOOL
TEST WRITER FOR THE STATE OF FLORIDA, TEXT REVIEWER (3)

SCHOOL HONORS AND ACTIVITIES:
GOVERNOR'S STERLING AWARD (1998)
SUPERINTENDENT'S QUALITY CHALLENGE AWARD (1995-96)
FASA LITTLE RED SCHOOLHOUSE AWARD FOR INNOVATIVE PROGRAMS (1998)
FIVE STAR STATE AWARD FOR COMMUNITY INVOLVEMENT ('96)
RED CROSS AWARD FOR SCHOOL PARTICIPATION (1991)
CITY OF ST. PETERSBURG BEAUTIFICATION GRANT (1994)
NET DAY TECHNOLOGY PARTICIPANT (1998)
TEACHER MINI GRANTS FROM THE PINELLAS ED. FOUNDATION

PERSONAL AFFILIATIONS AND HONORS:
DELTA KAPPA GAMMA, RECIPIENT OF STATE SCHOLARSHIP ('87)
RECIPIENT OF INTERNATIONAL WOMEN'S EDUCATION SCHOLARSHIP ('90)
PHI DELTA KAPPA
FASA, RECIPIENT OF LITTLE RED SCHOOLHOUSE AWARD ('96)
PINELLAS COUNTY ASSOCIATION OF ADMINISTRATORS
ELEMENTARY PRINCIPAL'S ASSOCIATION
PTA
FLORIDA SCIENCE TEACHER ASSOC., STATE MIDDLE SCHOOL REP. ('80-'83)
OUTSTANDING WOMAN'S LEADERSHIP AWARD, DELTA KAPPA GAMMA ('85)

E-MAIL ADDRESS: shirlito @aol.com

Committee on Education and the Workforce

Witness Disclosure Requirement – "Truth in Testimony"
Required by House Rule XI, Clause 2(g)

Your Name:

	Yes	No
1. Are you testifying on behalf of a Federal, State, or Local Governmental entity?	✓	
2. Are you testifying on behalf of an entity other than a Government entity?		✓

3. Please list any federal grants or contracts (including subgrants or subcontracts) which you have received since October 1, 1997:

NONE

4. Other than yourself, please list what entity or entities you are representing:

PINELLAS COUNTY School Systems

5. If your answer to question number 2 is yes, please list any offices or elected positions held or briefly describe your representational capacity with the entities disclosed in question number 4:

	Yes	No
6. If your answer to question number 2 is yes, do any of the entities disclosed in question number 4 have parent organizations, subsidiaries, or partnerships to the entities for whom you are not representing?		

7. If the answer to question number 2 is yes, please list any federal grants or contracts (including subgrants or subcontracts) which were received by the entities listed under question 4 since October 1, 1997, including the source and amount of each grant or contract:

Signature: Shirley D. Parsons Date: July 21, 1999

Please attach this sheet to your written testimony

Marjorie Kinnan Rawlings Elementary School

PAST

Rawlings Elementary was opened in the fall of 1992 as an innovative developmental writing demonstration school. The school is named after Marjorie Kinnan Rawlings, Florida's Pulitzer-Prize winning author of the *Yearling*. The name was selected to reflect the school's vision that writing is a tool that enhances all learning.

PRESENT

Rawlings Elementary functions as a research and development site for Pinellas County Schools and as a training center for other teachers. Over 2000 educators have visited Rawlings to observe in classrooms, participate in workshops, and collaborate with other educators.

Rawlings Elementary is committed to maintaining a high-performing work force focused on improving student achievement. To help facilitate this goal, the students attend a half day of school on Tuesdays and attend school for an extended time on the other four school days. This organization allows the staff to spend time on Tuesday afternoons studying, researching, and designing innovative teaching techniques. To assure the continued professional growth of our staff, we have developed partnerships with the Quality Academy of Pinellas County Schools, the Curriculum and Instruction Division of Pinellas County Schools, the University of South Florida, and the Poynter Institute for Media Services.

1998 RECIPIENT
GOVERNOR'S STERLING AWARD FOR QUALITY

FUTURE

Rawlings Elementary is also committed to utilizing quality management principles in achieving its goal of highest student achievement in reading, writing, and mathematics/problem solving. An integrated management system helps the staff align goals, resources, and priorities. The Baldridge/Sterling architecture and the philosophy of Dr. W. Edwards Deming serve as guiding forces in organizing the school and its way of work.

MISSION

The mission of Marjorie Kinnan Rawlings Elementary School is to improve student achievement and thereby prepare students for continued learning in middle and high school. The Rawlings' learning community will accomplish this mission by developing and implementing world class learning systems. Alignment will be monitored by continual application of quality principles and responsiveness to customer expectations.

VISION

The vision of Marjorie Kinnan Rawlings Elementary School is to provide a learning environment where intrinsically motivated students meet and exceed world class standards for academic achievement and excellence.

CORE VALUES

Rawlings embraces eight core values as listed below:

Nurturing

We create a safe, secure, and nurturing learning environment which encourages children to become responsible and self-reliant.

Writing

We believe writing, as a way of thinking, is at the heart of our teaching in all subject areas.

Uncompromising

We set high, uncompromising expectations for our students and ourselves.

Customer Focus

We recognize the need to establish and maintain a strong customer focus that includes students, parents, and the community.

Outreach

The MKR staff expect to serve as facilitators and instructors to provide professional education to teachers throughout our district through visits to our classrooms and outreach workshops.

Effective Partnerships

We believe that effective partnerships can occur when communication is delivered in a timely manner based on trust, confidence and sensitivity to the needs of all.

Quality Learning Processes

We provide a variety of schoolwide experiences based on quality learning processes, with clearly communicated expectations, criteria, and measurable results.

Continuous Improvement

We believe long-term success requires a never ending journey of continuous improvement.

FOCUS ON RESULTS

Marjorie Kinnan Rawlings aligns its organizational focus with the strategic directions developed by the Pinellas County School District. These directions, called "KIDS" or Key Improvement Drivers, are listed below:

Highest Student Achievement represents the academic results or primary "product" we identify for improvement. MKR utilizes student test scores as baseline measurements for monitoring and improving student achievement. Test data include annual state assessment data, district assessments, and in-process data gathered systematically throughout the year.

Test results are a key driver in improving student achievement and a key driver in meeting our customer requirements.

Safe Learning Environment relates to the importance of providing an environment free of fear for staff and students. We recognize that high student achievement results are fostered by a safe environment.

Integrated Management System describes the Pinellas County School District's use of the Baldrige/Sterling criteria to align all the units of the district into a common, organized effort. Under this model, the district's goals become the requirement of each school's system, the goals of the school become the requirement of the classroom's system, and the classroom becomes the requirement of the student's system.

A High-Performing Workforce is required to support highest student achievement. MKR offers varied training opportunities for its employees. MKR is resolute in training its employees, as is evidenced by weekly training seminars. In addition, MKR's commitment is also demonstrated by the number of MKR staff who are called upon to conduct training in the innovative techniques created at the school.

Partnerships highlight the recognition that student achievement will only occur when all units of Marjorie Kinnan Rawlings and its community are aligned. MKR reaches out to the community and to other units within the district to create a cohesive educational experience.

The progress of each "Key Improvement Driver" is tracked periodically at all levels of the organization along with the annual review and assessment of performance results by the Administrative Team. The tracking process considers rates of improvement relative to competitors and is used by staff members to correct deficiencies and align work plans to goals.

In 1998, Marjorie Kinnan Rawlings was the first school in the state of Florida to be awarded the Governor's Sterling Award. As the first elementary school to receive this award, we recognize and embrace our responsibility to share our knowledge of quality principles with others as they relate to educational systems. We are also committed to continually improve as educators so that we can enhance the lives of our students.

FOR MORE INFORMATION CONTACT:

Quality Academy
Pinellas County School Administration Building
301-4th Street SW
Largo, FL 33770

P.O. Box 2942,
Largo, FL 33779-2942

Telephone: (813) 588-6530

Shirley Lorenzo, Principal
Marjorie Kinnan Rawlings Elementary
6505-68th Street North
Pinellas Park, FL 33781

Telephone: (813) 547-7828
Fax: (813) 547-7777

APPENDIX C -- THE WRITTEN STATEMENT OF DR. JANE H. KARPER, SUPERINTENDENT, TROY AREA SCHOOL DISTRICT, TROY PENNSYLVANIA

American Association of School Administrators

Statement of

Dr. Jane H. Karper

Superintendent

Troy Area School District

Troy, Pennsylvania

Given on Behalf of The

American Association of School Administrators

Before The

Committee on Education and The Workforce

The Honorable William F. Goodling, Chairman

U. S. House of Representatives

July 27, 1999

1801 North Moore Street ▲ Arlington, Virginia 22209-1813 ▲ 703.528.0700 ▲ Fax 703.841.1543 ▲ http://www.aasa.org

Mr. Chairman and Members of the Committee, my name is Dr. Jane Karper and I am superintendent of the Troy Area School District in Troy, Pennsylvania. Perhaps you've never heard of our community. Troy is a small rural community with large Victorian homes lining the main streets. Lumber and the profits made from harvesting trees and from wood-products production provided the main income for our population in years gone by. Now, since lumber is no longer in as great a demand, Troy finds it is a declining community. Our school district takes in 275 square miles and is one of the largest geographically in Pennsylvania. Our district's population is around 10,000 residents and is beginning to stabilize after several years of decline. To find employment, our citizens travel to Corning and Elmira, New York and neighboring Pennsylvania communities.

In Troy, our total educational budget for the 1999-2000 school year is $13,985,009. This past year we received $414,063 in Title I basic grants. With these funds we were able to serve 203 students in kindergarten through 4th grade, but for reading instruction only. As the cost of providing Title I services have increased we had to eliminate math remediation because we could not afford to provide both. Therefore, we have a targeted-assistance program in grades K-4 but we are primarily channeling our efforts toward the early grades. To improve the results for our Title I students, we use small-group instruction and a process called Instructional Support Team. The Instructional Support Team is a concept mandated by the state of Pennsylvania approximately 10 years ago. It uses a team approach in helping children with academic concerns to be successful by identifying the problem areas and then developing strategies to build success. We did this to prevent placement of students in special education unless absolutely necessary. Unfortunately, as with many other "good" ideas, it proved to be expensive, so the state funding was cut and the program is no longer being

incorporated across the state. In Troy we have maintained the concept and have combined the ideas with Title I in our attempt to help more children. We also use peer and adult tutoring, pre- and post-testing, adapted materials and instruction delivery. Reading Recovery, an intensive approach to teaching reading to 1st grade students, was introduced a year ago in two of the four elementary schools to address the needs of the most at-risk 1st graders. Because we have only had this program a year, we do not have any figures on the its effectiveness. However, the two teachers involved feel the techniques are beneficial to the children and the majority of their youngsters were on grade level by the end of the school year. We would like to extend the program to the other elementary schools but the training is very expensive and we do not have the money in the budget to finance it at this time.

We know our students are succeeding because we have had fewer placements in special education from targeted students. Our annual budget for district-wide special education services is $1,238,819 and the cost can run as high as $41,000 for the education of just one student. However, the average expenditures for special needs students run from $8,703 to $11,604. According to our school psychologist, since Title I has kept as many as 10-15 students a year out of the special education program, the district has benefited from Title I services. Also, we have fewer referral to the Instructional Support Team and retention rates in these grades have dropped. In tracking the retention rates over the last couple of years, the number of children retained have dropped on the average of 5-6 students a year. The scores on the California Achievement Tests in grades 3 and 4 along with the results of the PSSA, the Pennsylvania System of School Assessment, have improved. Also, the results from the pre- and post-tests given by Title I staff show achievement gains from the beginning of the year to the end.

As with many rural communities, we do not have any private schools within our school district, but some of our students attend a parochial school in a neighboring district and they are eligible for Title I services. These services are addressed through an inter-district agreement with the neighboring school district.

If I could suggestion a few changes to make in the current Title I program, I would propose the following:

- *Early Childhood Intervention*: Title I focus should be on early childhood/intervention. Title I, in its revised form, could coordinate and cooperate with the Head Start program. With a new Title I Program for Four-Year-Olds, starting services at the age of 4 could target the children the Head Start program cannot serve. This program could offer extended day and extended school year components for these children. If this change were made, I feel we would see a definite improvement in reading and math in our schools.

- *Literacy Development*: Also, I would like to see a shift from "remediation" to "literacy development." Could Title I find a way to reward school districts for "creative" use of Title I funding and resources?

- *Parental Involvement*: In addition, I would like to improve or change the way we approach parental involvement by finding a way to bring parents in during the school day or extending the program into the summer months when parents might have more freedom in their schedules to become involved.

- *Funding*: The final area I would recommend for improvement would be in the area of funding. Title I serves the poorest students in our districts. In Troy, the percent of children on free and reduced lunch range from 37 percent to 55 percent with an overall poverty level of 35 percent. As the state reduces funding to education, the local tax effort must increase taxes to make up the difference. In small rural areas where employment opportunities are extremely limited, the citizens cannot afford to pay increasingly higher taxes; therefore we must cut programs or not hire additional teachers to improve the quality of our academic delivery. Our class sizes range from an average of 20-23 in the primary grades to over 30 in most of the middle school and high school classrooms. As class sizes increase, teacher effectiveness drops. Therefore, if the federal government would increase funding for Title I services for our children, everyone in the district would benefit.

Beyond these changes, I would maintain the mission of Title I which is to help support our lower socioeconomic students in their academic pursuits in order for them to be successful, productive learners. (But I would change lower socioeconomic to "ALL" students.)

In a district the size of Troy, we do not have the luxury of having a person whose sole responsibility is to oversee federal programs. We rotate these responsibilities between our building administrators. Currently our elementary principal has the responsibility of filing all the paperwork and administering the program. In addition, she has four elementary schools with close to 800 students and 89 staff members to coordinate. When Mrs. Sullivan heads out to visit all of her buildings, she travels 55 miles. Is it any wonder that we can't keep

elementary principals? We can't hire an additional principal or assistant principal; it is too expensive, so we will continue the disruption of losing a principal every year or so.

When we need additional help with testing and instructional strategies we turn to the BlaST (Bradford, Lycoming and Sullivan, Tioga Counties) Intermediate Unit for assistance. In Pennsylvania, an Intermediate Unit is an educational service agency that provides assistance to districts in the areas of special education, instructional strategies and technology. The intermediate unit staff members can, if time permits, supply the needed assistance to local school districts. These units are another way for rural, small districts to better serve our students and parents and stretch our buck a bit further. I would suggest rewriting federal legislation so that educational service agencies, intermediate units, BOCES, whichever name you know them by, would be eligible for Title I and all of the IASA funds and have maximum flexibility in using these funds.

If the Intermediate Units were eligible for additional Title I and other IASA funds, they could help broaden the support they provide districts concerning professional development for Title I teachers and aides. If we continue to use aides, they need extensive training to be effective. My personal preference would be to hire additional Title I teachers as opposed to aides, because teachers can be more effective than aides. In Troy we are fortunate to have several certified teachers as Title I aides because this is an avenue to a permanent teaching position. This also means that they spend a year or two as an aide, then leave for a full-time position and we are left to train another aide. But I realize we are lucky to have certified teachers as aides, and I know in many rural schools districts they are not so fortunate. How aides are certified is a state issue, not a federal one.

To prepare for the reauthorization of Title I, AASA conducted a series of five forums on Title I around the nation over the past nine months. Mr. Chairman, one of those forums took place in your congressional district in Oxford, Pennsylvania and involved some 500 teachers, administrators and parents. These outcomes have heen shared with Memhers of Congress and their staff. To reiterate, the major conclusions of the Oxford conference were:

1. There is no single national program at work; instead, there are 50 separate and distinct programs hased on the decisions each state makes when implementing federal laws.
2. Overall, Title I practitioners agree that program assessments have had an positive impact schoolwide in-class support for instruction is working; the program's increased flexihility is improved, and in school-wide programs children are not "labeled."
3. The program should continue to focus on communicating with parents of Title I students.
4. Title I resources should he driven to schools based on the greatest need.
5. Title I funding for hiring more reading and math specialists should be increased.
6. For targeted assistance programs in small school districts, greater flexihility is needed because the paperwork is too much for small staffs with small programs. The additional flexihility in the 1994 reauthorization helped schoolwide programs, but not small schools.

Drawing on information gathered at these forums and through AASA's Federal Policy and Legislation Committee, I recommend the following changes he made in Title I during this reauthorization. To improve the emphasis of hest practices in Title I, Congress could:

1. Establish clear and local expectations for student achievement that meet or exceed state standards. The notion of expectations is important, hecause it is parent, teacher and student expectations that promote high achievement, not standards. The standards

provide a target and a basis for judgment, but expectations define what teachers, parents and students work with on a daily basis.

2. Encourage decisions on curriculum, instruction and materials that are based on student results on state and local tests.
3. Encourage instructional strategies with a firm base in research and a proven track record of success.
4. Encourage the hiring of certified teachers and paraprofessionals. However, this should not be mandated at the federal level.
5. Maintain the current provisions regarding school participation in the program, including reporting of student achievement.

Congress could promote program accountability and responsibility through the following recommendations.

1. Make instruction and professional development a site-based responsibility.
2. Encourage programs to provide parents with clear learning expectations and regular feedback on their child's progress.
3. Encourage the use of student results as the primary tool for evaluating teachers, principals and central administration involved with Title I.

Congress could promote parental understanding of expectations and progress with these changes:

1. Encourage family involvement for improved student achievement.
2. Encourage two-way communication about expectations and progress.
3. Require "plain language" when reporting of test results.

4. Revise the parent compact to avoid insults or condescension and unnecessary bureaucracy.

Before I conclude, I would like to add my support the Rural, Small Schools Education Initiative recently introduced in the Senate. It is my understanding the Initiative will soon be introduced in this body with jurisdiction in this committee. The Rural Initiative augments funds from four IASA formula programs (Eisenhower, Safe and Drug Free Schools, Class Size Reduction, and Title VI) with funds from competitive grant programs in the IASA to transform funding streams for rural and small school districts that are too small to make much difference into a larger vehicle for schoolwide improvement. I urge this committee to consider helping small, rural school districts improve educational opportunities for students through targeted purposes, high accountability and with targeted resources.

Mr. Chairman, the suggestions for changes in the Title I program were conceived with a great deal of input from education leaders across the nation. If I can answer any questions about our recommendations or about my school district, I will be happy to do so.
Thank you for this opportunity.

Jane H. Karper, D.Ed.
300 High Street
Troy PA 16947
570/297-4652 (home)
570/297-2750 (work)
jhkarper@epix.net

GRADUATE EDUCATION:

Institution	Dates of Attendance	Degree Granted	Date Degree Granted
The Pennsylvania State University University Park PA	1983 – 1987	D.Ed. Educational Administration	May 1987

Title of Thesis:

"Interest Groups and Educational Policy-Making in Pennsylvania: Developments in the 1980's."

Shippensburg University Shippensburg PA	1975 – 1981	M.Ed. Early Childhood	May 1981

UNDERGRADUATE EDUCATION:

University of Maine Orono ME	1969 – 1970	B. S. Elementary Education	August 1970
Towson State College Baltimore MD	1967 – 1968	None	None
Hagerstown Jr. College Hagerstown MD	1964 – 1967	A.A.	August 1967

CERTIFICATES HELD:

Instructional II	Early Childhood Elementary
Administrative II	Elementary Principal

Assistant Superintendent's Letter of Eligibility

Superintendent's Letter of Eligibility

TEACHING AND ADMINISTRATIVE EXPERIENCE

Troy Area School District Troy PA	Feb. 1997 – Present	Superintendent
Wilkes University Wilkes Barre PA 187766-0001	1998 – Present	Adjunct Professor
Mount Union Area School District Mount Union PA	Aug. 1991 – Feb. 1997	Supervisor of Elementary Education
Derry Township School District Hershey PA	1988 – Aug. 1991	Intermediate Principal 3 – 5 Federal Programs Coordinator Coordinator of Achievement and Testing
	1987 – 1988	Elementary Principal K – 4
State College Area School District	1986 – 1987	Administrative Intern in the area of Curriculum and Staff Development
PA State University Regional Computer Resource Center University Park PA	1986 – 1987	Teacher Associate
Chambersburg Area School District Chambersburg PA	1982 – 1985	Elementary Teaching Principal (Head Teacher) Duffield Elementary School
	1973 – 1982	Elementary Teacher Grades 4 and Kindergarten
S.A.D. #34 and 38 Carmel ME	1969 – 1973	Elementary Teacher Grades 3; 3 and 4; 4
Carroll County Board of Education Westminster MD	1967 – 1969	Elementary Teacher Grade 4

PROFESSIONAL AFFILIATIONS AND ACTIVITITES:

Treasurer for Pennsylvania Association of Elementary School Principals	Oct. 1993 – Oct. 1997
Article Entitled: "The Effectiveness of Team Accelerated Instruction on High Achievers in Mathematics." Journal of Instructional Psychology	March 1993
Presented a paper entitled: "A Comparison of Team Accelerated Instruction with Traditional Instruction in Mathematics: at the American Educational Research Association conference (AERA) in Chicago	February 1988
Article entitled: "Interest Groups and the Changing Environment of State Educational Policymaking: Developments in Pennsylvania" published in the February 1988 issue of Educational Administration Quarterly	April 1987
Coordinated activities for the Pennsylvania State University Alumni Fellow, Secretary of Education for Pennsylvania – Dr. Margaret Smith	1986
President of the Educational Administration Graduate Student Association, Pennsylvania State University	1985 - 1986

MEMBERSHIPS:

Partners in Family and Community Development - Chairman, Board of Directors

Association for Supervision and Curriculum Development (ASCD)

Pennsylvania Association for Supervision and Curriculum Development (PASCD)

Pennsylvania Association of School Administrators (PASA) – Board of Governors

American Association of School Administrators (AASA)

Pennsylvania Association of Rural and Small Schools (PARSS) – Board of Directors

Northern Tier Superintendents

References available upon request.

MEMORANDUM

July 26, 1999

To: **The Honorable William F. Goodling, Chairman**
Committee on Education and the Workforce

Fr: **Paul Houston, Executive Director**
American Association of School Administrators

Re: **Disclosure of Federal grants to AASA**

Following is a list of grants or cooperative agreements that the American Association of School Administrators has received from the federal government over the past 12 months.

Agency: Center for Disease Control
Amount: $478,602

Agency: Environmental Protection Agency
Amount: $193,177

Agency: Corporation for National Services
Amount: $501,403

Agency: Corporation for National Services
Amount: $195,540

APPENDIX D -- THE WRITTEN STATEMENT OF MS. VERA GINN, COORDINATOR FOR TITLE I MIGRANT EDUCATION AND SPECIAL PROGRAMS, BROWARD COUNTY PUBLIC SCHOOLS, FORT LAUDERDALE, FLORIDA

Testimony

on

Title I of the Elementary and Secondary Education Act

before the

Committee on Education and the Workforce
United States House of Representatives

presented by

Vera W. Ginn, Coordinator
Title I, Migrant and Special Programs

School Board of Broward County, Florida

July 27,1999
Washington, D.C.

(89)

The 1994 Reauthorization allowed districts to refocus funding from targeted assistance (identifying specific low-income students) programs to funding high poverty schoolwide projects. As a result of changing the eligibility criteria of schools designated as schoolwide, the number of such schools in Broward County tripled. The schoolwide schools increased from twenty-four in 1994-95 to seventy-six in 1998-99. Schools with 50% or more of the student population receiving free or reduced price meals are eligible for schoolwide project status.

The number of students receiving Title I services in Broward County increased from 33,762 in 1994-95 to 49,188 in 1998-99. The change reflects the refocus of Title I funds to schools with at least 50% of the student population from low-income families.

I am pleased to report that the Title I Program in Broward County, Florida is working. Title I funds help improve teaching and learning for almost 50,000 students in seventy-six schoolwide project schools. The standards-based reform implementation has brought about improved student achievement among students in our highest poverty schools and among low-performing students, who are the primary recipients of Title I services.

Let me share with you an example. During the 1994-95 school year, the Florida State Department of Education, using Stanford Achievement Test scores and other state assessment, classified twenty-five Title I funded schools as critically low performing schools. The following year 1995-96, twelve of the schools were classified as critically low performing schools. The third year, 1996-97, two schools remained critically low performing schools. By the 1997-98 school year, no school was classified as a critically low performing school. In only three years Broward County was able to reduce the number of schools on the state's critically low performing list from 25 to zero.

I am also pleased to report that interventions are working in Broward County. External support is provided to fourteen Title I schools by developers of the following whole school reform models: Co-NECT, Modern Red Schoolhouse and Roots and Wings. However, the most successful reform model used to date is the one attributed to getting the twenty-five critically low performing schools off the state's list, the district's homegrown Alliance of Quality Schools program. The program targets reading, writing, mathematics and social behaviors and aims to help teachers improve instruction through in-class "coaching." The Alliance of Quality Schools program is partially supported by Title I funds and serves 40 of the 76 schools.

Furthermore, I am pleased to report that the Title I program in our District is working because:

- it is well coordinated with other programs, such as Homeless Education, Dropout Prevention, English for Speakers of Other Languages, Exceptional Student Education and Adult & Community Education.

- technology is supported as a tool to help raise achievement levels in the classroom using Accelerated Reader, Computer Curriculum

Testimony of Ms. Vera Ginn

Testimony
on
Title I of the Elementary and Secondary Education Act
before the
Committee on Education and the Workforce
United States House of Representatives
presented by
Vera W. Ginn, Coordinator
Title I, Migrant and Special Programs
School Board of Broward County, Florida

July 27,1999
Washington, D.C.

Good afternoon, my name is Vera Ginn. I am the Coordinator of Title I, Migrant and Special Programs for the School Board of Broward County, Florida. Thank you for the opportunity to testify before this Committee regarding Title I of the Elementary and Secondary Education Act.

Mr. Chairman, I would like to focus my brief remarks this afternoon on discussing the Title I Program in my district and the most notable changes and effectiveness of the program since the 1994 Reauthorization.

Broward County Pubic Schools is the fifth largest and one of the fastest growing districts in the nation. The District is comprised of a unique urban/suburban mix of students with a diverse multicultural/multi-ethnic student body from 164 countries, speaking fifty-four languages. The District is in a period of unprecedented growth as approximately six to seven thousand new students are enrolled every year. Broward County annually adds more new students than 90% of the nation's schools districts individually enroll.

Approximately 229,598 students were enrolled during the 1998-99 school year, of which 49,188 (21%) were served by Title I. Approximately one-third of our students receive free and reduced-price meals. Of the 187 elementary, middle and high schools in the District, seventy-six (41%) were Title I funded. In addition, thirteen nonpublic schools were served, seven institutions for delinquent youth and thirteen institutions for neglected youth.

The purpose of Title I in Broward County is to enable schools to provide opportunities for children served to acquire the knowledge and skills contained in the Sunshine State Standards which all students are expected to master. Each Title I funded school selects/designs its own objectives, programs, and strategies for implementation of the School Improvement Plan.

An annual School Eligibility Survey is conducted to determine the number and percentage of students who receive free or reduced price meals in each school in the district. Schools are ranked from the greatest to the least percentage of free or reduced price lunch recipients. Schools in greatest need are funded in descending order, until all funds are exhausted. A tiered funding level is used to establish the per pupil allocation for each school according the school's ranking.

Corporation (CCC) Labs, Jostens Learning Labs, Creative Education Institute Learning Technologies and more.

extended learning time (before/after and Saturday school academic, tutorial and enrichment programs) is encouraged and in effect at a majority of the Title I funded schools.

high quality professional development is offered to principals, teachers, paraprofessionals and support staff through a designated early release provided one day each month. Teachers and paraprofessional receive an hourly stipend to attend workshops after school and on Saturday.

every school has developed a school-parent compact in an effort to bring the school and the parents together to promote ongoing communication. A comprehensive district-wide parental involvement program focuses on community outreach and training. Parents in every Title I funded school have been offered MegaSkills training.

It is important to note that Broward County was at the forefront of standards-based reform. The District was first in the state to develop an Accountability Policy, which was adopted by the School Board in March 1995. The state began developing the Sunshine State Standards in 1993 and they were adopted by the State Board of Education in May 1996. Broward County Public Schools has provided support and assistance to schools through the Alliance of Quality Schools and the identification of critical content (what students should know and be able to do) and essential teacher knowledge (content and strategies) in the subject areas that reflect the Sunshine State Standards.

The State of Florida has developed a rigorous accountability system that holds all schools, including Title I schools, accountable for making continuous and substantial gains in student performance. On June 24, 1999 the Florida Department of Education released its 1999 School Accountability Report. The standards for school performance have been raised as a result of the adoption of the A+ plan and the new accountability system. The most recent release of the School Accountability Report on the status of Broward County schools' performance indicates that District schools are addressing the challenge. This is because of Broward County's five-year focus on student learning for all.

Given the challenges facing an urban school district the size of Broward County, more and more of our students are meeting or exceeding our expectations. The continued focus is the academic progress of every student. Despite the progress that our District has made, a substantial achievement gap remains between students in the highest poverty schools and their peers in low-poverty schools. Although great strides have been made since Congress enacted the Improving America's Schools Act of 1994, our work is still in progress. We need to improve faster. We are not satisfied with where we are. Title I is greatly needed to help close the achievement gap between high and low-poverty schools and between minority and non-minority students. Our most fragile population—our poorest and most disadvantaged children—is at great risk of educational

failure.

Therefore, I submit to this Committee the following recommendations for consideration as you approach the Reauthorization of Title I of the Elementary and Secondary Education Act.

1. Maintain the focus on raising academic standards for all children.

   Retain the current Title I requirements that states and local school districts establish content standards, student performance standards and assessments aligned to high academic standards by 2000-2001.

   Ensure that schools and teachers bring high standards into every classroom and help every child achieve, not just some, but all.

2. Strengthen local accountability.

   Require districts to: (1) disaggregate Title I achievement data by major subgroups of students (i.e. gender, race, ethnicity, English proficiency status, migrant status, economic status, and students with disabilities) and disseminate the results to the public; and (2) make appropriate interventions to improve the achievement of identified underperforming subgroups.

   Allow district support teams, rather than state selected support teams, to identify and provide assistance to low-performing schools that have not improved over a two-year period.

3. Increase emphasis on highly qualified instructional staff.

   Allow Title I funds to be used to upgrade certification and subject matter credentialing of teachers paid with Title I funds or in Title I schoolwide programs, and other incentives/activities to encourage the best teachers to teach in Title I schools.

   Require that paraprofessionals paid through Title I funds (except those in with second language skills) be on a teaching career ladder before assuming instructional responsibilities.

   Provide all students with qualified teachers who use proven instructional practices tied to challenging state and local standards.

1-843 00 - 4

4. Continue schoolwide efforts to improve education in high-poverty schools.

Retain the current 50% poverty threshold for Title I schoolwide eligibility. This provision gives high-poverty schools the flexibility to use Title I funds to improve the instructional program of the entire school.

Allow districts to incorporate schoolwide program plans with existing school improvement plans to create one document.

Ensure that schoolwide reforms funded with Title I dollars do not diminish existing resources.

Maintain the provision for monitoring the use of Title I funds in schoolwide project schools to ensure that they do not become supplantive.

5. Strengthen opportunities for extended learning time to enable students to meet high academic standards.

Encourage districts to provide extended learning time in Title I schools and spur its use for intervention and tutorial as well as acceleration and enrichment in Title I Schoolwide programs.

6. Encourage parent/family involvement in education to promote student learning.

Retain the current Title I requirements for parental involvement under Section 1118. Research has documented that when parents are actively involved in their children's education they achieve more in school and in life. When schools and families work together on behalf of children, the final outcome is improved grades and healthy attitudes toward learning.

I urge members of this Committee to consider that while performance by Title I students has improved and progress has been steady, the focus for the upcoming reauthorization should be on seeking ways to accelerate this progress rather than pursuing a different course of action.

I support the work of this Committee and I am grateful for the opportunity you have given to share my views with you this afternoon. I would be pleased to answer your questions.

APPENDIX E -- THE REPORT, REFORM AND RESULTS: AN ANALYSIS OF TITLE I IN THE BROWARD COUNTY PUBLIC SCHOOLS

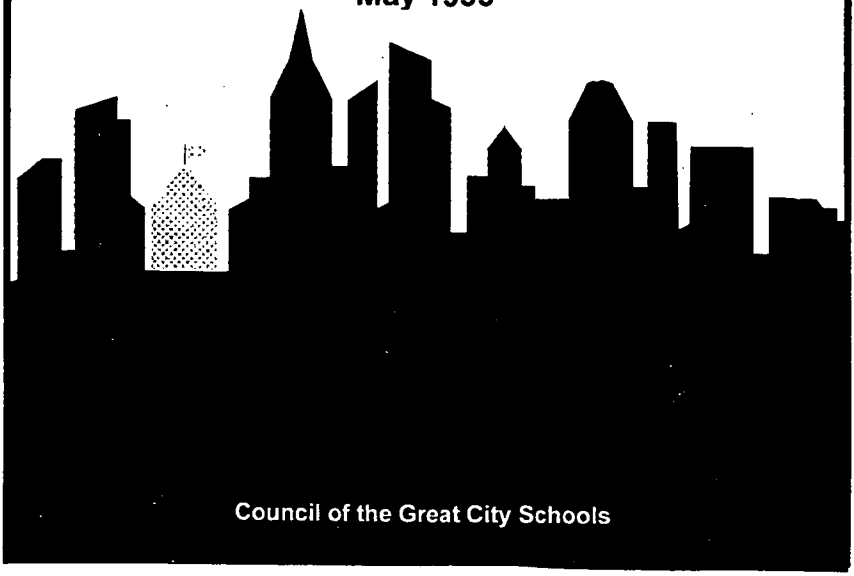
REFORM AND RESULTS:

An Analysis of Title I in the Broward County Public Schools

(Utilizing the Council of the Great City Schools' Report Methodology)

1994-95 to 1997-98

May 1999



Council of the Great City Schools

(97)

Council of the Great City Schools

REFORM AND RESULTS:
An Analysis of Title I in the Great City Schools
1994-95 to 1997-98

EXECUTIVE SUMMARY

Introduction

In 1994, the Reauthorization of the Elementary and Secondary Education Act of 1965 (ESEA) introduced significant changes to Title I aimed at shifting the focus towards higher academic achievement. The most notable changes included redirecting funding from individual students to include all students in the poorest schools, and lowering the qualifying criteria for schoolwide funding. These changes were designed to facilitate a higher degree of effectiveness for concentrating Title I resources on student achievement.

In preparation for the upcoming 1999 Reauthorization of ESEA, the Council of the Great City Schools has sought to evaluate these changes and the impact on the effectiveness of Title I programs. This report presents the survey results of 34 urban school districts of the Great City Schools member system. The report seeks to supplement recent assessments of Title I with additional information on the effects of the last reauthorization on urban schools, Title I program operations, and performance. This survey of urban school districts asked questions related to: program participation, instruction, schoolwide projects, parent involvement, and student achievement, among other features.

Purpose of the Report

According to the Council, their study intends to provide a progress report on key program features and on urban achievement at the participating school districts. The study is not intended as a comprehensive evaluation of Title I nor does it examine every aspect of the program in urban schools.

Results of the survey are outlined in the report according to the following topics: number of Title I schools and students, criteria for selecting schools, private schools, content and performance standards, successful program strategies, use of funds, special needs, reform models, state interventions, achievement scores, school improvement, testing accommodations, recognizing progress, site-based management, and parent and community involvement.

This executive summary highlights the most relevant findings as they pertain to academic achievement in urban school districts, and more specifically in Broward County Public Schools. While the Council of the Great City Schools study is not comprehensive, the test data collected does represent roughly 2.5 million Title I children or approximately 23% of the nation's Title I students (Council of the Great City Schools, 1999).

Academic Achievement Scores

To evaluate the impact on academic achievement, the Council surveyed and collected test data from 24 urban school districts, including Broward County, for the school years 1994-95, 1996-97, and 1997-98. The Council's survey included the examination of test score trends for two-year and three-year periods for Title I students in grades 4 and 8 who took a norm-referenced assessment test. Test scores were analyzed by determining the percentage of Title I students who scored at or above a specified percentile in both reading and mathematics.

The analysis identifies the percent of students scoring at or above the 25th percentile and the percent of Title I students who scored at or above the 50th percentile for both grade 4 and grade 8.

Broward County submitted test score data for the norm-referenced Stanford Achievement Test, Eighth Edition. A total of 13 urban school districts, including Broward County, provided norm-referenced test data for the three-year periods of 1994-95, 1996-97, and 1997-98. The remaining 11 urban school districts provided norm-referenced test data for only a two-year period or criteria-based test data for two- or three-year periods.

Achievement Scores Results

The results reported in the Council of the Great City Schools study provide an indication that urban school districts are making progress towards raising Title I student achievement. Equally important, *the percentage of Broward County Title I students achieving at or above the 25th and 50th percentiles in both reading and mathematics is consistently, and often significantly, higher than the average percent reported for all urban school districts surveyed.*

- Twenty-one of the 24 (87.5%) urban school districts who provided detailed achievement data for their Title I students reported increases in Reading test scores.

- Twenty urban school districts (83.3%) reported increases in their Mathematics test scores.

- **Broward County's 1997-98 percentage of Title I students scoring at or above the 25th percentile in Reading reached 63.9% for grade 4 and 62% for grade 8, outperforming the averages for all urban districts reported of 56.3% and 57.6%, respectively.** (See Figure 1).

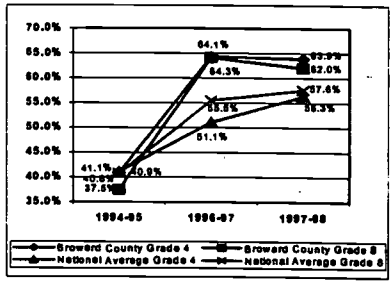


Figure 1. Percent of Urban Title I Students Scoring at or above the 25th Percentile in Reading for years 1994-95, 1996-97, and 1997-98.

- **Broward County's 1997-98 percentage of Title I students scoring at or above the 50th percentile in Reading reached 32.9% for grade 4 and 36.2% for grade 8, outperforming the averages for all urban districts reported of 26.3% and 23.1%, respectively.** (See Figure 2).

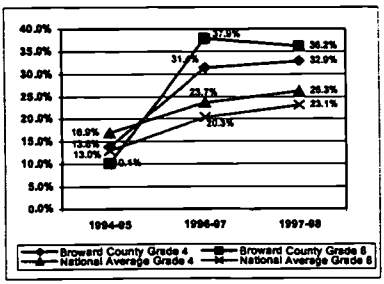


Figure 2. Percent of Urban Title I Students Scoring at or above the 50th Percentile in Reading for years 1994-95, 1996-97, and 1997-98.

- **Broward County's 1997-98 percentage of Title I students scoring at or above the 25th percentile in Mathematics reached 71.4% for grade 4 and 64.5% for grade 8, outperforming the averages for all urban districts reported of 58.5% and 54.4%, respectively.** (See Figure 3).

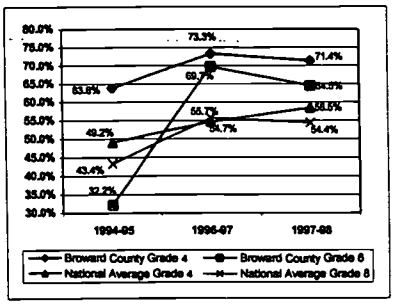


Figure 3. Percent of Urban Title I Students Scoring at or above the 25th Percentile in Mathematics for years 1994-95, 1996-97, and 1997-98.

- **Broward County's 1997-98 percentage of Title I students scoring at or above the 50th percentile in Mathematics reached 42.4% for grade 4 and 41.6% for grade 8, outperforming the averages for all urban districts reported of 30.3% and 22.3%, respectively.** (See Figure 4).

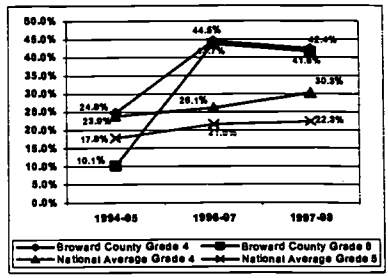


Figure 4. Percent of Urban Title I Students Scoring at or above the 50th Percentile in Mathematics for years 1994-95, 1996-97, and 1997-98.

Title I Participation

The Reauthorization of ESEA in 1994 refocused Title I support from schoolwide and targeted assistance (identifying specific low-income students) programs to funding on a schoolwide basis. As a result of changing the eligibility criteria of schools designated as schoolwide, the number of such schools more than doubled. The number of schools served by Title I in Broward County on a schoolwide basis increased from 24 in 1994-95 to 72 in 1997-98 as shown in Table 1 below. This parallels the national trend, which reported a 144% increase from 976 to 2,379 schools served by Title I on a schoolwide basis in 1994-95 and 1997-98, respectively. Conversely, no schools in Broward County continued to receive Title I funding for targeted assistance programs after 1995-96.

Table 1

Number and Percentage Change of Urban Schools Served by Title I on a Schoolwide Basis, 1994-95 to 1997-98.

	1994-95	1997-98	% Change
Broward County[1]	24	72	200%
Council Total	976	2379	144%

[1] The number of schoolwide and targeted assistance schools reported for Broward in the Council's study did not accurately reflect the funding breakdown for 1994-95 and 1997-98.

Many urban districts are adding students to the Title I rosters, as evidenced by 51% of students being served for all districts surveyed for 1997-98 up from 30.7% for 1994-95. The number of students qualifying for Title I in Broward County also increased from 23,762 in 1994-95 to 66,424 in 1997-98. This represents 16.9% of Broward County students served by Title I in 1994-95 and 30.3% of Broward County students served in 1997-98. The change reflects the refocus of Title I funds to schools with at least 50% of the student population from low-income families, and a 10% student population increase from 1994-95 to 1997-98.

Additional Findings

- *The percentage of urban school districts using both free or reduced-priced lunch to determine school eligibility for Title I services increased from 58.6% in 1994-95 to 65.5% in 1997-98.* This change brought more stability in individual school participation. Prior to the 1994 Reauthorization, Title I funds were allocated on the basis of test scores causing more disruption of services as schools moved in and out of participation. **Since 1995-96, Broward also moved to using free or reduced priced lunch for Title I school eligibility and has seen more stability in schools receiving funding because of the establishment of this criteria.**

- *There was an increase in the number of private school students (from 75,321 in 1994-95 to 86,014 in 1997-98) and the number of private schools (from 838 in 1994-95 to 896 in 1997-98) receiving Title I services from urban public schools.* **During this same period, the number of private school students served in Broward decreased from 278 to 231 while the number of schools decreased from 14 to 11 schools. These changes were a result of the new criteria for fund allocation, based on number of students at poverty level. After the reauthorization, some private schools did not qualify to receive services because they had no students at the poverty level.**

- *Most urban school districts have a set of academic and performance standards for Title I students in reading and mathematics at all grade spans as required by the 1994 Reauthorization of ESEA.* **Broward County has also identified content and academic performance indicators in Reading, Mathematics, and Writing at every grade level. The district has also held their Title I students to the same high standards established for all students.**

- *When asked to identify the five most successful strategies for raising student achievement, urban districts cited the following strategies*: reducing class size (65.6%), using research-based reform models and better school improvement planning (50.0%), increasing teacher professional development (46.9%), greater parental involvement, as well as more extensive after-school programs (43.8%), more challenging academic

standards (34.4%), and schoolwide programming (25%); other strategies cited were state interventions and summer school programs (12.5%) and only a few (3.1%) cited the use of external consultants, peer tutoring, block scheduling, or professional development for principals as the most successful strategies for boosting Title I student achievement. **All of these strategies are currently being utilized in Broward County to improve Title I student performance.**

- *Urban school districts reported that Title I funds were used for particular kinds of programs for enhancing student performance*, such as to provide professional development and new technology (100%), to support after-school activities (96.8%), to support family literacy and summer school programs (90.3%), to support before-school activities, (83.9%), and to support preschool programs (67.7%). **Broward County also uses Title I funds for supporting the above programs for improving student achievement.**

- *Urban school districts have used the new flexibility to provide an array of extra services to LEP students*; the most common services include using language appropriate instructional materials for Title I non-English speaking students (81.3%), requiring English instruction for Title I non-English speaking students (78.1%), improving test taking skills of Title I non-English speaking students (65.6%), providing summer school programs (62.5%) and providing native language content instruction (59.4%) for Title I non-English speaking students. **Broward County also utilizes these services to educate Title I students with limited English proficiency.**

- *Urban school districts reported using the following pre-packaged school reform models to boost achievement of students*: "Reading Recovery" (78.1%), "Success for All" (62.5%), "Accelerated Schools" (46.9%), "Comer Schools" or "Roots and Wings" (28.1%), and "Coalition of Essential Schools" (25%). **Broward County utilizes some of the reform models listed above as well as others such as "Co-NECT", "Modern Red Schoolhouse", "Paideia", "Atlas", "Expeditionary Learning", "Audrey Cohen College", and the "Alliance of Quality Schools" to improve Title I student achievement.**

- *The number of urban Title I schools designated for "school improvement" declined from 478 in 1994-95 to 403 in 1997-98 (-15.7%).* **Twenty-five Title I schools in Broward County identified as "critically low performing" in 1994-95 came off the list by 1997-98.**

- *Urban school districts reported the use of the following special testing accommodations for Title I students with disabilities*: using large print or Braille (90.6%), using small group sessions in testing (81.3%), providing assistance in test directions (but not test items) (75%), one-on-one testing (71.9%), using sign-language translators (68.8%), allowing students to use magnifying instruments (65.6%), providing additional testing time (62.5%), using scribes or computers (62.5%), and use of a tape recorded version of the test (37.5%). **Broward makes use of all these testing accommodations for Title I students with disabilities.**

- *When testing Title I LEP (Limited English Proficient) students, urban school districts reported using the following special testing accommodations:* using small group sessions in testing (56.3%), providing assistance in test directions (but not test items) (34.4%), testing in the native languages (31.3%), translating directions in native languages (28.1%), providing additional testing time (18.8%), administered bilingual dual versions (18.8%) and use of bilingual dictionaries (6.3%). **Broward County utilizes all of the above testing accommodations exclusive of testing in the native language and administering bilingual dual test versions.**

- *Urban school districts reported increasing rates of parental participation from 1994-95 to 1997-98.* This increase was evidenced in the following areas: schoolwide planning (90.6%), use of family resource centers (84.4%), involvement in family literacy programs (81.3%), mentoring (78.1%), professional development (75%), classroom activities (68.8%), tutoring (65.6%), involvement in school budget development (62.5%), involvement in personnel selection (56.3%), and involvement in school curriculum development (46.9%). **Broward reported an increase in Title I parent involvement in all the above mentioned areas.**

Conclusion

Broward County has had a consistent increase in the percentage of students performing at or above the 25th and 50th percentiles in Reading and Mathematics, higher than the average of all districts surveyed. Broward County's SAT8 scores for grades 4 and 8 also indicate student performance in Mathematics to be stronger than Reading relative to the reported student performance of other urban school districts.

Overall, the report concludes that improved performance and steady progress has been made by Title I students in urban school districts since the Reauthorization of ESEA in 1994. Thus, it recommends that "acknowledging progress while finding ways to accelerate it ought to be the direction of the coming Title I reauthorization rather than pursuing a different track."

The report also concludes that schoolwide reforms are making a difference in student performance. However, it cautions policymakers in "how they implement this approach with Title I funding so that resources are not diluted."

The report also calls for a more complete evaluation of the program for the next period using a national assessment system. The Council warns that under the current system of 50 state assessments it is difficult to determine how Title I is performing at the national level.

While Broward County is in a good position relative to other urban school districts as reported by the Council of the Great City Schools, continuing academic progress for Title I students nationally and in Broward County remains a priority.

References

Council of the Great City Schools. (March, 1999). *Reform and Results: An Analysis of Title I in the Great City Schools 1994-95 to 1997-98.* Washington, D.C.

APPENDIX F -- THE WRITTEN STATEMENT OF DR. LOIS HARRISON-JONES, PRESIDENT-ELECT, NATIONAL ALLIANCE OF BLACK SCHOOL EDUCATORS, DALLAS, TEXAS

Statement of

Dr. Lois Harrison-Jones

Retired School Superintendent

Boston Massachusetts

Richmond, Virginia

And President-Elect

National Alliance of Black School Educators

Given on Behalf of The

National Alliance of Black School Educators

Before The

Committee on Education and The Workforce

The Honorable William F. Goodling, Chairman

U. S. House of Representatives

July 27, 1999

(107)

It has been only 35 years, since the Congress and the Johnson Administration moved to establish Head Start and Title I to help eliminate the large educational gaps that had long persisted among students from different socioeconomic levels in our society. The notion was bold and courageous because, at that time, no country in the world was in possession of proven strategies for quickly closing such gaps. Indeed, here in the United States, educators and policymakers did not yet have good national data on the extent of the academic achievement differences among groups. However, the data that were available suggested that disadvantaged students from all racial and ethnic groups were experiencing much less academic success than they should or could. Congress and the president had the wisdom to make substantial new investments in the education of disadvantaged children, with the expectation that more effective strategies could be developed over time.

Although Head Start and Title I were (and are) technically racially and ethnically neutral, many educators and policymakers at the time undoubtedly recognized that these programs would be of disproportionate value to African American, Hispanic and Native American children and youth, because much higher percentages of these youngsters were growing up in poverty than was the case for Whites. That, ladies and gentlemen, remains true today. In fact, states with the highest percentage of African Americans in schools is also where we find the highest levels of poverty.

At the core of NABSE's recommendations for the reauthorization of Title I of the Elementary and Secondary Education Act (ESEA) is the notion that parity and equity in student achievement, and excellence in educational attainment for all citizens is first, dependent on the equitable targeting of federal dollars based on need and second, a substantial investment in other education-relevant resources[1] that positively affect the educational experience of students. The popular press and much of the country's polity equate poor Black and Latino students only with urban communities. The reality is that a significant number of African-American children attend schools in very poor rural communities. Of the current 300 African-American Superintendents in the country, two-thirds head either poor rural or newly re-segregated school districts in suburban rings. Though we believe our recommendations will benefit every student in America, we speak specifically to the needs of poor students of African descent who reside in rural and inner-city America or in the recently re-segregated suburban rings of America's metropolises.

The stated purpose of the 1965 Title I Act included the following:

> *In recognition of the special educational needs of low-income families and the impact that concentrations of low-income families have on the ability of local educational agencies to support adequate educational programs, the Congress hereby declares it to be the policy of the United States to provide financial assistance to local educational agencies serving areas with concentrations of children from low-income families to expand and improve their educational programs by various means (including preschool programs) which contribute particularly to meeting the special educational needs of educationally deprived children.*

In short, Title I was designed to compensate for or overcome the disadvantages in children's economic status, and learning associated with home, school, or community experience.

We recommend the inclusion of the above language as one of the stated purposes of the Title I Act, coupled with a call for high challenging academic standards that focus on the achievement for students and accountability at the state and local level for results.

We applaud the efforts of the Congress and the Administration to look at research as a lever for policy and legislation. But we would request that you review all of it, in a bi-partisan way, not just at the research that supports a particular perspective. We ask you also to look at the widespread research and reports that cut across all policies and philosophical perspectives from James Coleman[2] in 1966 to L. Scott Miller in 1995 that purport: in order for the poor, the disadvantaged and/or the under-served in our society to achieve robust educational advancement at both individual and group levels there must be a long term opportunity structure in place; a structure that assures that educationally-relevant resources are part of the federal construct.

We believe that the elimination of the educational achievement gaps between America's poor children and its other children is as significant to national defense as "Smart bombs, stealth fighters, and worldwide military bases.

First, we unequivocally recommend that the financial capital that the federal government makes available for the reauthorization of Title I be targeted to the poorest children in the poorest schools in the poorest school districts.

Secondly, there is broad support among NABSE members for the comprehensive use of federal resources so that the resource provides significant input on achievement. We, however, believe that the current 50% poverty population threshold for Title I funding does not adequately guarantee that all poor children's' education will be sufficiently impacted in a school or school district. We further believe that too many schoolwide programs that simply became general aid dilute the purpose of Title I as a funding stream for the neediest and most disadvantaged. Therefore, we strongly recommend that the legislation move the threshold for schoolwide programs to schools with children with at least a 60% poverty rate in 2000 and 75% in subsequent reauthorizations to assure greater accountability of the use of the funds.

Third, NABSE membership does support high standards for all students. The membership also supports a commitment to standards-based reform and a federal role in its implementation. In order to determine efficacy of the federal impact, NABSE, recommends that new language on accountability and assessment be carefully reviewed: Data reporting, data collection, and data analysis must be disaggregated by sub-groups (e.g., race, income, English language proficiency, etc.). If Congress and/or the States attach high stake consequences to assessment for schools and/or school districts, then Congress and States must be sure that they have provided a vehicle for assigning education-relevant resources, education-relevant strategies, education-relevant safety nets and techniques to schools and school districts for addressing high stake issues.

Fourth, though Title I has been treated as a funding stream, it is much more. There must be language that is not punitive, but resolves not to fund classrooms where failing

teachers continue to reside. The provisions in the current law require that, schoolwide, there be good teachers, effective strategies, and most importantly, timely and effective individual assistance for students struggling to meet standards. These provisions must be enforced and strengthened. There are a large and growing number of national studies, observations and reports which reveal that the least qualified, the most under-qualified and the least competent teachers are most often assigned to classrooms comprised of the most academically needy, the poorest achieving and the traditionally under-served student populations. The latest study by the University of Texas researcher, Edward Fuller, underscores the impact of teacher certification on student achievement. The preliminary findings show that the percentage of certified teachers in a school is associated with higher levels of student achievement and greater gains in achievement for poor students.[3]

In order for America's poor children to meet challenging standards and to close the achievement gap among them and middle class and wealthy students, they must have extensive access to adults who are competent in subject matter, employ multiple instructional strategies, who know or understand the diverse population they serve, and who serve as advocates for their students' right to grow, to learn and to be academically successful. Our membership supports measures designed to assure that both highly qualified teachers are in America's classrooms of the poor and that measurable improvement in student achievement be a factor in the performance assessment of those teachers.

Finally, we need no other studies to inform us that parents and family input are critical education-relevant resources. Sufficient studies exist which provide us with this knowledge. It is NABSE's view that it is in the interest of national defense for the federal government to assist localities in increasing the opportunities and level of critical parent input that continues to be illusive for the parents of poor children.

The requirements of the 1994 legislation must be enforced with: a) accompanying language for a better dissemination construct to inform parents as to the basic requirements and benefits of parent involvement; b) appropriate technical assistance strategies to implement parent involvement requirements currently in the law; and c) appropriate measures that require that states provide guidance and direction to local districts as to the importance of complying with parent involvement requirements.

It is not enough to talk about parent involvement. In order to really level the playing field at the parent level, we believe that poor parents must have access to the same awareness, insights and understanding as their middle class cohorts. To that end, we advocate Title I parent programs to support independent, locally based and culturally relevant family training centers that partner with local school districts to help poor parents identify, analyze and value the processes of education in support of their children receiving a high quality education.

Our position on Title I is consistent with the legislative agenda that we have set for FY 2000. It is included in the appendices of the testimony.

ENDNOTES

(1) Miller, L. Scott, An American Imperative: Accelerating Minority Educational Advancement. Yale University Press. 1995

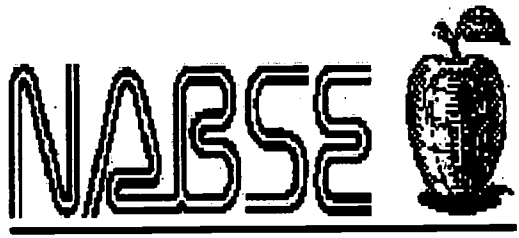
We adhere to the theoretical framework on education-relevance resources as explained by L. Scott Miller:

> *Education-relevant resources encompass the idea that the amount of educational resources varies from school to school across the country, and the amount of resources available from students' families varies even more. So, even a school with excellent resources may not be able to fully help some students. Education-relevant resources include:*
>
> - *Human capital (the acquired knowledge, skills, and experience that a person has accumulated in his/her lifetime that can be a benefit to others through education);*
> - *Social capital (the relationships ad personal bonds that people share in addition to the networks, groups and communities that grow out of these relationships);*
> - *Health capital (amount of access that a student has to quality health treatment, and the health conditions in which the student lives);*
> - *Financial capital (the income and savings of the family of the student); and*
> - *Polity capital (how much society is committed to educating the student).*

(2) Coleman et. al., James S., Equality of Educational Opportunity, Washington D.C., Office of Education. 1966

(3) Austin American Statesman Newspaper, April 11, 1999.

APPENDIX



LEGISLATIVE AGENDA

1999

National Alliance of Black School Educators
2816 Georgia Avenue, N.W., Washington, DC 20001
Phone: (202) 483-1549 (800) 221-2654 Fax: (202) 483-8323

The National Alliance of Black School Educators (NABSE), a non-profit organization with more than 6,000 members, is the nation=s largest network of African American educators. NABSE is dedicated to improving the educational accomplishments of African-American youth.

To realize the full importance of NABSE=s mission, one need only consider the following statistics: *Nearly 53 percent of African-Americans are under 30, nearly 40 percent are under 20, and 10 percent are under 5.* These age groups span the educational spectrum from pre-school to doctoral programs. As long as African-American participation in education falls below that of the general population, it places the future of this community and the fabric of our nation at risk.

In an era driven by language of accountability, standards, and choice, and an era marred by inequities in students= opportunity to learn and to achieve, the words of Thomas Jefferson take an added meaning for those who advocate for African-American children. Jefferson is reported to have stated A We should build an aristocracy of achievement based on a democracy of opportunity.≅

LEGISLATIVE AGENDA

X An advocacy role for poor children, poor schools, poor districts in the steps leading toward the reauthorization of Title I of the Elementary and Secondary Act.

X Support for federal legislation that assists schools and school districts to modernize their school buildings.

X Support for Public Charter Schools within the construct of local governance.

X Support for the reauthorization of OERI and greater involvement of federal dollars in research and development activities on problems affecting America=s poorest public schools; in particular those who are impacted the greatest by concentrated poverty.

X Support for technology initiatives that Ascale up≅ access for African-American youth.

X Support for federal legislative language that maintains the state=s Astatutory and constitutional≅ role of responsibility for its citizens= education at the local level.

X Opposition to any choice or voucher programs that uses public taxpayers dollars for private and parochial school education, even when it is targeted to a select number of poor children.

X Opposition to any legislative language that puts the federal government in the role of monitoring social promotion or retention activities of local school districts.

X Opposition to block grants which abandon specific purpose of federal programs such as Title IV of the Civil Rights Act, Title I of ESEA and which undermine equitable distribution of funds and eliminate state accountability for the use of funds.

For issue briefs on each agenda item, contact LaRuth Gray, Governmental Relations Chair at New York University, 82 Washington Square, East, Rm. 72, New York, NY 10003. Phone (212) 998-5137 Fax (212) 995-4199 Email: **(laruth.gray@nyu.edu)** or visit NABSE=s web site at **www.nabse@nabse.org**

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Committee on Education and the Workforce

Witness Disclosure Requirement - "Truth in Testimony"
Required by House Rule XI, Clause 2(g)

Your Name:

1. Are you testifying on behalf of a Federal, State, or Local Governmental entity?	Yes	(No)
2. Are you testifying on behalf of an entity other than a Government entity?	(Yes)	No

3. Please list any federal grants or contracts (including subgrants or subcontracts) which you have received since October 1, 1997:

NONE

4. Other than yourself, please list what entity or entities you are representing:

NABSE

5. If your answer to question number 2 is yes, please list any offices or elected positions held or briefly describe your representational capacity with the entities disclosed in question number 4:

Former Chair of the Superintendents Commission
President-elect

6. If your answer to question number 2 is yes, do any of the entities disclosed in question number 4 have parent organizations, subsidiaries, or partnerships to the entities for whom you are not representing?	Yes	(No)

7. If the answer to question number 2 is yes, please list any federal grants or contracts (including subgrants or subcontracts) which were received by the entities listed under question 4 since October 1, 1997, including the source and amount of each grant or contract:

Source:	Amount:	Reference #
Department of Education	$1.1 million	R-215U80003
National Science Foundation	$124,495	ESR-9819546

Signature: Lorna Harrison-Jones Date: 7/29/99

Please attach this sheet to your written testimony

PERSONAL INFORMATION: Please provide the committee with a copy of your resume (or a curriculum vitae) or just answer the following questions:

A. Please list any employment, occupation, or work related experiences, and education or training which relate to your qualifications to testify on or knowledge of the subject matter of the hearing:

N/A

B. Please provide any other information you wish to convey to the Committee which might aid the members of the Committee to understand better the context of your testimony:

N/A

Please attach to your written testimony

Lois Harrison-Jones, Ed.D.

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Dr. Lois Harrison-Jones is an experienced visionary educator with extensive management expertise. She widely recognized for her leadership skills and accomplishments. As a promoter and facilitator of systemic change, she has an impressive record of producing long-term educational gains. Dr. Harrison-Jones is the incoming president of the National Alliance of Black School Educators, a 6,500 plus member non-profit organization dedicated to raising the achievement level of all students and especially students of African descent. Dr. Harrison-Jones is a veteran educator with work experience in three states and at virtually every level of education. She has been superintendent of schools in Boston, Massachusetts and Richmond, Virginia as well as deputy superintendent in Dallas, Texas. While in Boston, she was also an associate professor at the Harvard Graduate School of Education and an adjunct faculty member at the University of Massachusetts. More recently, she served as the manager of the Wilmer-Hutchins School District in Texas - a district that had been taken over by the state due to poor student achievement and administrative mismanagement.

All of Dr. Harrison-Jones' administrative assignments have included line responsibility for school staff and operations, curriculum and instruction, federal programs, bilingual education and special education. She is currently an education and management consultant, community activist, and advisor to state and local boards of education. She is extremely active in terms of policy advocacy to ensure that opportunities are provided to facilitate high standards and quality in schools.

Dr. Harrison-Jones' educational background includes a bachelor's degree in Education from Virginia State University, a master's degree in Reading and Psychology from Temple University, a doctorate in Educational Administration from Virginia Tech and two honorary doctorates (one is from Mt. Ida College in Newton, MA and the other is from the New England School of Law).

What's Best for Our Children?

The Reauthorization of Title I of the Elementary and Secondary Education Act

National Alliance of Black School Educators
April, 1999

Guiding Principles

on the

Reauthorization of ESEA

Title I

It is neither by accident nor by sins of omission that poor children of African descent have not had the same education-relevant resources that other groups have had due to the historical context and construct of our society's relationship with its African-American citizens. Yet, it is in the national interest to increase markedly the education-relevant resources and the financial capital available to poor children of African descent, poor schools, and poor school districts. It is precisely for this reason that the federal government must play a strong supplemental role. Research[1] shows that the level of educational attainment is heavily dependent on the quality of the education-relevant[2] opportunities over a long period of time.

At the core of NABSE's recommendations for the reauthorization of Title I of the Elementary and Secondary Education Act (ESEA) is the notion that parity and equity in student achievement, and excellence in educational attainment for all citizens is dependent on the equitable targeting of federal dollars based on need and a substantial investment in other education-relevant resources that positively affect the educational experience of students. The popular press and much of the country's polity equate poor Black and Latino students only with urban communities. The reality is that a significant number of African-American children attend school in very poor rural communities. Of the current 200+ African-American Superintendents in the country, 96 head either poor rural or newly re-segregated school districts in suburban rings.[3] Though we believe our recommendations will benefit every student in America, we

speak specifically to the needs of poor students of African descent who reside in rural and inner-city America or in the recently re-segregated suburban rings of America's metropolis.[4]

ON THE TARGETING OF RESOURCES

The stated purpose of the 1965 Title I Act included the following:

> *In recognition of the special educational needs of low-income families and the impact that concentrations of low-income families have on the ability of local educational agencies to support adequate educational programs, the Congress hereby declares it to be the policy of the United States to provide financial assistance to local educational agencies serving areas with concentrations of children from low-income families to expand and improve their educational programs by various means (including preschool programs) which contribute particularly to meeting the special educational needs of educationally deprived children.*

In short, Title I was designed to compensate for or overcome the disadvantages in learning associated with home, school, or community experience.

We recommend the inclusion of the above language as one of the stated purposes of the Title I Act, coupled with a call for high challenging academic standards that focus on achievement for students and accountability at the state and local level for results.

NABSE does not see Title I as a failure. In fact gains, particularly by poor African American students, can be directly attributed to federal support in those poor districts. The U.S. Department Of Education in *Promising Results, Continuing Challenges: The Final Report of the National Assessment of Title I*, reported the following:

> Since 1992, reading performance on NAEP (the National Assessment of Educational Progress) improved for 9-year-olds in the highest-poverty public schools (those with 75 percent or more low-income children) regaining ground lost in the late 80's. Also, the lowest-achieving 4th graders showed fairly substantial gains between 1994-98 on NAEP.

> Since reauthorization, math achievement on NAEP has improved for 9-year-olds, especially among students in the highest-poverty public schools. The lowest performing 4th graders - those most typically targeted for Title I services - also showed substantial improvements in math.

But what we do see, as a failure, is the lack of *national resolve* to provide those financial and education-relevant resources needed to provide a high quality education for those children trapped in poverty. We continue to witness vigorous attacks on large-scale quantifiable efforts that are mounted in order to close the gap between majority students and poor African American students. In spite of the Congress' and the administration's efforts to make improvements in the Title I reauthorization of 1994, there remain vagaries in the formula and in the school wide legislation that do not fully fund all schools of the poor in the country.

We have found broad support among NABSE members for the comprehensive use of federal resources so that maximum impact is achieved. While we agree that the model of "pull out" programs of the seventies did not yield the success expected; we believe that the current 50% poverty population threshold for Title 1 funding does not adequately guarantee that all poor childrens' education will be sufficiently impacted. We believe that the purpose of Title I as a funding stream for the neediest and most disadvantaged is diluted by too many schoolwide programs. Therefore, we strongly recommend that the legislation move the threshold for schoolwide programs to 60% poverty in 2000 and 75% in subsequent reauthorizations. Further the Title I formula should be modified so that each and every needy child in the country receives the necessary funding support.

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ON ACCOUNTABILITY AND OUTCOMES

NABSE membership supports high standards for all students. The membership also supports a commitment to standards-based reform and a federal role in its implementation. In order to determine if the federal impact is significant, NABSE recommends that new language on accountability and assessment be carefully reviewed: Data reporting, data collection, and data analysis must be disaggregated by sub-groups (e.g., race, income, English language proficiency, etc.). If Congress and/or the States attach high stake consequences to assessment for schools and school Districts, then Congress and States must be sure that they have provided a vehicle for assigning education-relevant resources, education-relevant strategies, education-relevant safety nets and techniques to schools and school districts for addressing high stake issues.

NABSE urges that adoption of strong accountability systems including high content standards for all students, and assessments aligned to the standards. Standards for student performance must be part of a comprehensive approach to educational reform and achievement for all students by states and localities. Use of state and local accountability systems to measure gains in student achievement are only productive to the extent that they are imbedded in a comprehensive approach to reform.

ON STATE FUNDING AND RESPONSIBILITY

NABSE endorses federal funding support to STATE EDUCATION AGENCIES, the *constitutional and statutory authority*, for all elementary and secondary education in each state, for the purpose of assuring that the major program provisions of Title I are implemented in each locality in a manner that assures equitable distribution of education-relevant resources to the poorest students and to marginalized schools in the respective locality.

NABSE, however, opposes *any* and *all* language that allows waivers which deny poor students comparable access to education-relevant resources, which do not provide for appropriate and cooperative oversight, and which do not provide appropriate safeguards by the states and the United States Department of Education.

A theme that ran through all of the conversations across the membership of NABSE is the reality that under the current waiver/flexible provisions there are 50 separate state programs. Under the current system of theme flexibility, there is a complete lack of enforcement of the basic frameworking laws, thus most provisions are considered voluntary. At the state level, a commitment to high standards and a commitment to providing the essential technical assistance, and the needed state match, is absent. We believe it is so because the Congress and the administration, and mandates through the sin of omission, do not see to it that states honor the cause of the purpose of Title I funding. We further believe that the recently enacted "Super Ed Flex" must sunset upon the reauthorization of Title I of ESEA.

ON ACCOUNTABILITY AT THE CLASSROOM LEVEL

Though Title I has been treated as a funding stream, it is much more. There must be language that is not punitive, but addresses a resolve to not fund classrooms where failing teachers continue to reside. The provisions in the current law require that schoolwide schools have good teachers, effective strategies, and most importantly, timely and effective individual assistance for students struggling to meet standards. These provisions must be enforced and strengthened.

There are a significant number of national studies, observations and reports that tell us the least qualified, the under-qualified and the least competent teachers are most often assigned to classrooms comprised of the most academically needy, the poorest achieving and the traditionally underserved student populations.

In order for America's poor children to meet challenging standards and close the achievement gap among them and middle class, and wealthy students, they must have extensive access to adults who are competent in subject matter, employ multiple instructional strategies, who know or understand the diverse population they serve, and who serve as advocates for their students' right to grow, to learn and to be academically successful. Our membership supports measures designed to assure that both highly qualified teachers are in America's classrooms of the poor and that an assessment of the performance of those teachers in those classrooms be measured by the improvement in student achievement.

ON USE OF FUNDS FOR SCHOOLWIDES

A reexamination of all of the language in section 1114 as it relates to schoolwides is necessary.

Many of our members reported that the 1994 schoolwide provision translated into general aid for the school, or as one Superintendent remarked, "It's a fancy block grant to the local school building with no or little built-in accountability measures." A common theme emerged from our committee's responses, that there is not enough accountability to ensure that the students who need the most assistance are adequately served; that, in fact, "comprehensiveness by decree" has been at the expense of needy children in all too many cases. The threshold for schoolwides must be returned to 75% poverty student population, as was originally intended for the 1994 legislation.

ON PARENT INVOLVEMENT

There must be a commitment to continue to support parent involvement by federal supplemented programs so that school districts can involve parents more effectively.

The 1994 legislation provided a strong template for assuring expanded opportunities for parent-school collaborations. However, observations, findings by parent advocates, and reports show that, in Title I settings, partnerships with parents and the school community are not happening on a large scale.

The requirements of the 1994 legislation should remain strong; accompanying legislative language should target a better dissemination construct so that parents are aware of the basic requirements of parent involvement; appropriate technical assistance strategies for implementing parent involvement requirements currently in the law, and appropriate measures that assure that states provide guidance and direction to local districts as to the importance of complying with parent involvement requirements.

Finally, we need no other studies to inform us that parents and family inputs are critical education-relevant resources. It is our view that it is in the interest of national defense for the federal government to assist localities in increasing the opportunities and level of critical parent input that continues to be illusive for the parents of poor children. To that end, we advocate a federal grant to support independent, locally based and culturally relevant family training centers that partner with local school districts to help parents identify, analyze and value the processes of education so that their children receive a high quality education.

ON COMPREHENSIVE SCHOOL REFORM

Federal support for technical assistance to schools and school districts must be included in the new reauthorization in order to provide the expertise needed to enable children in poor districts to meet academic standards. We continue to support the Department of Education's construct of a "seamless web" of technical assistance providers.

ENDNOTES

(1) An American Imperative: Accelerating Minority Educational Advancement. Yale University Press. 1995

(2) We adhere to the theoretical framework on education-relevance as explained by L. Scott Miller:

> *Education-relevant resources encompass the idea that the amount of educational resources vary from school to school across the country, and the amount of resources available from students' families varies even more. So, even a school with excellent resources may not be able to fully help some students. Education-relevant resources include:*
>
> - *Human capital (the acquired knowledge, skills, and experience that a person has accumulated in his/her lifetime that can be a benefit to others through education);*
> - *Social capital (the relationships ad personal bonds that people share in addition to the networks, groups and communities that grow out of these relationships);*
> - *Health capital (amount of access that a student has to quality health treatment, and the health conditions in which the student lives);*
> - *Financial capital (the income and savings of the family of the student); and*
> - *Polity capital (how much society is committed to educating the student.*

(3) The phenomenon of suburban rings move from resegregation to isolation characterized by deteriorated infrastructures, lack of community building constructs, and are identified as low-wealth, high-poverty districts. One might carefully read the Wall Street Staff Writer, Alex Kotlowitz's work, The Other Side of the River, where the twin towns of Benton Harbor, Michigan and St. Joseph, Michigan mirror each other in fundamentally different ways across the river.

(4) Examples of resegregating suburban rings include: University City, MO; neighborhoods of Dekalb County, GA; Mt. Vernon, NY; Plainfield, NJ; Uniondale, Long Island, NY; Orange, NJ; Oak Park, MI; Bloomfeld, CT; and West Hartford, CT.

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APPENDIX G -- REPORT: "THE ROLE OF INSTRUCTION IN LEARNING TO READ: PREVENTING READING FAILURE IN AT-RISK CHILDREN, SEPTEMBER 16, 1997."

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The Role of Instruction in Learning to Read: Preventing Reading Failure in At-Risk Children

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First and 2nd graders (N = 285) receiving Title 1 services received 1 of 3 kinds of classroom reading programs: direct instruction in letter–sound correspondences practiced in decodable text (direct code); less direct instruction in systematic sound–spelling patterns embedded in connected text (embedded code); and implicit instruction in the alphabetic code while reading connected text (implicit code). Children receiving direct code instruction improved in word reading at a faster rate and had higher word-recognition skills than those receiving implicit code instruction. Effects of instructional group on word recognition were moderated by initial levels of phonological processing and were most apparent in children with poorer initial phonological processing skills. Group differences in reading comprehension paralleled those for word recognition but were less robust. Groups did not differ in spelling achievement or in vocabulary growth. Results show advantages for reading instructional programs that emphasize explicit instruction in the alphabetic principle for at-risk children.

Learning to speak one's native language is a natural process in that explicit teaching is not required. Reading, in contrast, has been called an "unnatural act" (Gough & Hillinger, 1980) to emphasize the fact that one's writing system relates to speech in an arbitrary way and, therefore, has to be taught (Liberman, Shankweiler, & Liberman, 1989). What needs to be taught is the alphabetic principle: that letters in a word relate to speech in a conventional and intentional way. For many children, insight into this principle will develop through informal instruction at home and nondirective activities at school. However, as many as one in five children have difficulty learning to read (Lyon, 1995; Shaywitz, Fletcher, & Shaywitz, 1994). There may always be a small percentage of children who are at risk of reading failure for a variety of cognitive, linguistic, or social–emotional factors. However, in urban settings, there are entire schools in which reading failure is the norm, in part because of lack of home preparation in understanding the alphabetic principle (Adams, 1990) and also because of inadequate instruction in the classroom (Slavin, Karweit, & Wasik, 1994). The importance of learning to read in the early grades is clearly illustrated in a longitudinal study that addressed long-term development of reading skills from kindergarten to Grade 9 (Francis, Shaywitz, Stuebing, Shaywitz, & Fletcher, 1996). This study showed that, on average, children who were poor readers in Grade 3 did not "catch up" to their peers in their reading skills; the growth of reading skills fit a deficit, not a lag, model. Moreover, 74% of children who were poor readers in Grade 3 were poor readers in Grade 9.

In the last two decades, a scientific body of evidence has accumulated pointing to a phonological processing deficit as the core cause of poor reading (Fletcher et al., 1994; Foorman, Francis, Fletcher, & Lynn, 1996; Liberman et al., 1989; Stanovich & Siegel, 1994; Wagner, Torgesen, & Rashotte, 1994). Burgeoning evidence exists that deficits in this area can be ameliorated through appropriate training, particularly with younger children in kindergarten through Grade 2 (Ball & Blachman, 1991; Bradley & Bryant, 1983; Foorman, Francis, Shaywitz, Shaywitz, & Fletcher, 1997a; Torgesen, 1997; Vellutino et al., 1996) or as early as preschool (Byrne & Fielding-Barnsley, 1991, 1993, 1995). Ball and Blachman (1991) and Foorman et al. (1997a) supplemented kindergarten programs for children at risk for

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reading problems with activities and tasks involving phonological awareness skills. Both studies showed clearly that the supplementation of standard kindergarten curriculums with activities involving phonological awareness skills resulted in growth in phonological awareness skills relative to children who received the standard curriculum without phonological awareness skills. The studies also showed that these gains continued and were also manifested in areas involving word reading in the first and second grades (see Foorman, Francis, Beeler, Winikates, & Fletcher, 1997).

Vellutino et al. (1996) provided either one or two semesters (depending on progress) of 30 min daily, one-on-one tutoring to poor readers in Grade 1. The tutoring in letter identification, phoneme awareness, word-reading skills, and practice in connected text helped the majority of these children become average readers. Torgesen (1997) found that 20 min a day for 80 hr of one-on-one tutoring in phonological decoding strategies (with or without training in articulatory gestures) and practice in reading and writing enabled approximately 75% of first graders who had been in the bottom 10th percentile in phonological skills in kindergarten to move to national averages in timed and untimed decoding. Similar results were achieved with older, severely disabled readers (age 10 years on average); however, the one-on-one tutoring was much more intensive—2 hr daily for 80 hr—and decoding accuracy but not speed reached national averages. Olson, Wise, Ring, and Johnson (1997) had similar results with third to sixth graders below the 10th percentile in word recognition who were tutored individually in phonological decoding strategies (with or without training in articulatory gestures).

The efficacy of the interventions in these studies, which emphasized tutorial interventions, is interesting in relation to older studies that also focus on early intervention. In summarizing these programs, Slavin and his colleagues (Slavin, Karweit, & Madden, 1989; Slavin et al., 1994) noted that the most widely used supplementary-remedial programs, diagnostic-prescriptive pullout programs provided under Title 1 programs for economically disadvantaged children, showed little evidence of effectiveness unless they involved one-on-one tutoring. Moreover, the attempt to mainstream at-risk children by having Title 1 or special education aides work in the regular classroom has been no more effective than the pullout model (Archambault, 1989; Puma, Jones, Rock, & Fernandez, 1993).

In contrast, kindergarten or first-grade prevention programs and classroom change models have proved effective. The only prevention programs for which data are available on long-term effects of intensive reading instruction in the early grades are Reading Recovery (Pinnell, Lyons, DeFord, Bryk, & Seltzer, 1994; Shanahan & Barr, 1995) and Success for All (Slavin, Madden, Dolan & Wasik, 1996). In evaluations of Reading Recovery, first graders tutored daily for 30 min by a trained Reading Recovery tutor exceeded matched control children's reading performance with an effect size of .87. This effect size fell to .45 and .29 one and two years later, respectively, without additional intervention. More recent analysis of the effects of Reading Recovery continue to show large effect sizes that diminish over time. Reading Recovery can more quickly recover children to middle reading group levels if it is modified to include direct instruction in the alphabetic code (Iverson & Tunmer, 1993), and other programs may provide equally large effects without the tutorial component (Shanahan & Barr, 1995).

Classroom change models are based on the assumption that the best way to minimize the need for remedial services is to provide the best possible classroom instruction in the first place. A more traditional kind of classroom change model is what Slavin et al. (1989) referred to as "continuous progress models." Students in these classrooms proceed at their own pace through a sequence of well-defined instructional objectives. They are taught in small groups on the basis of skill level and are frequently assessed and regrouped on the basis of these assessments. The best known of these programs is DISTAR (Engelmann & Bruner, 1995; now SRA Reading Mastery), a highly structured and scripted program that has produced positive results in many large-scale studies (see Aukerman, 1984; Shanahan & Barr, 1995).

Although programs such as Reading Recovery, SRA Reading Mastery, and Success for All show good efficacy, they have not attempted to isolate the components of effective reading instruction. Current research suggests that a necessary skill to be mastered in learning to read in the early grades is decoding. Decoding typically refers to the application of the letter–sound correspondences taught in phonics. Although decoding is more accurately described as deciphering the printed word, and phonic rules may simply play an attentional role in the weightings of connections between orthographic and phonological units (Adams, 1990; Foorman, 1994), decoding accuracy is the single best predictor of reading comprehension (Stanovich, 1990; Vellutino, 1991). Thus, an instructional focus on developing decoding skills early in school is consistent with the relationship of decoding skills and comprehension, especially for children whose only chance to learn to read is in school. An important question is how explicit decoding instruction needs to be, whether highly explicit through decontextualized letter–sound correspondence rules practiced in controlled vocabulary text or implicit through incidental learning gained by feedback on reading literature. "The Great Debate" over code-emphasis versus meaning-emphasis approaches to reading captures the extremes of this continuum of explicitness (Chall, 1983; Foorman, 1995a, 1995b). However, there is the middle ground of embedded-phonics approaches in which instruction in letter–sounds and spelling patterns is contextualized within literature selections.

In the present article, we investigated questions involving the degree of explicitness in alphabetic code instruction and effects of phonological processing on growth in word reading in children at risk for reading failure traditionally served in Title 1 programs. In a large sample of children receiving Title 1 services, we hypothesized that children who received explicit instruction in the alphabetic principle with an emphasis on letter–sound correspondences would show greater growth over 1 school year of classroom instruction relative to children receiving less explicit instruction focusing on spelling patterns or children receiving

nplicit instruction in the alphabetic principle. We also ypothesized that this growth in reading skills would be moderated by initial phonological processing skills.

Method

Participants

Participants were 285 of the 375 children in first and second grades eligible for services under Title 1 funding in an urban district with 19 elementary schools. The 90 children were excluded from the present analyses because they had been placed on a wait list and never did receive Title 1 services during the study. Thus, analyses are restricted to those eligible students who actually received tutoring during the year.

Title 1 refers to federal funding provided for economically disadvantaged children with low achievement. Economic disadvantage is usually defined in terms of the percentage of children participating in the federal lunch program, as it was in this study. Low achievement was defined by school district officials as scores on the district's emergent literacy survey in the bottom quartile in first- and second-grade classrooms at each Title 1 school. Hence, although all children in the lowest quartile received the classroom interventions, the present sample represented the lowest 18% because of lack of funds for tutoring.

The participating children attended 8 of the 10 Title 1-eligible elementary schools in this district. (The Title 1 program was in its 2nd year of implementation in the district.) The percentage participation in the federal lunch program ranged from 32.3% to 71.4% at the 8 schools. Thus, the participating children were only .hose 3 to 8 children in each regular education classroom who were served through Title 1 in the participating schools. The non-Title 1 children in the classrooms were not participants in the study, at the request of district officials; however, they received the same classroom curricula as the participating children.

School participation was determined by the willingness of the principal and teachers to participate. The design called for some schools to have only one instructional approach and for others to have two approaches in an attempt to control for school effects. The design is described in Table 1, which provides information on the number of classrooms per grade receiving each of the four curricula. No second-grade classrooms are listed for Schools 4 and 5 because Title 1 funds were available only to serve first graders. Also, it is important to note that the school selected by district officials to be the unseen comparison had the largest total enrollment, the largest percentage of children participating in the federal lunch program (71.4%), and the lowest achievement scores on the statewide test in Grade 3. To deal with what was widely perceived as a "tough" school, district officials placed a well-respected principal and Title 1 teachers at the school; nonetheless, the school was not regarded as a desirable teaching assignment by classroom teachers.

The ethnic composition of the sample was as follows: 60% African American, 20% Hispanic, and 20% White. The ethnic composition of the district at large was approximately 20% Asian, 26% African American, 23% Hispanic, and 31% White. Sixty-one percent of the sample was male. Instructional groups did not differ in age, gender, or ethnicity.

Instructional Methods

During the 90-min daily language arts period, the children were instructed in one of three classroom reading methods, all of which existed within a literature-rich environment in the classroom: direct instruction in letter–sound correspondences practiced in decodable text (direct code [DC]); less direct instruction in systematic spelling patterns (onset rimes) embedded in connected text (embedded code [EC]); and indirect, incidental instruction in the alphabetic code embedded in connected text (implicit code [IC]). The IC condition was either the district standard curriculum (IC-S) or a research implementation developed to ensure comparability of training across instructional approaches (IC-R). Each condition was directed by an advanced graduate student who had been a teacher and who had expertise in professional development, and did not include the authors of this study.

Table 1
Study Design and School Characteristics

School	Enrollment	Federal lunch program (%)	Grade	No. classrooms	Curriculum
1	1,208	71.4	1	5	IC-S
			2	5	IC-S
2	1,009	49.5	1	6	IC-R
			2	4	IC-R
3	1,232	64.2	1	6	EC
			2	6	IC-R
4	908	43.2	1	3	DC
5	887	41.8	1	2	DC
6	1,137	39.9	1	2	IC-R
			1	2	DC
			2	2	DC
			2	2	IC-R
			2	3	IC-S
7	853	64.5	1	2	EC
			1	2	DC
			2	2	EC
			2	2	DC
8	839	32.3	1	3	IC-R
			1	3	EC
			2	2	IC-R
			2	1	EC

Note. IC-S = implicit code-standard; IC-R = implicit code-research; EC = embedded code; DC = direct code.

In DC the emphasis was on a balance of phonemic awareness, phonics (with blending as the key strategy), and literature activities, using Open Court Reading's (1995) *Collections for Young Scholars.* Phonemic awareness activities dominate the first 30 lessons of Open Court. The 42 phonic rules are introduced in Lessons 11 through 100, using sound–spelling cards, alliterative stories, and controlled vocabulary text that practice the rule just taught. At the same time decodable texts are used, a parallel strand of Big Book reading occurs so that skills in oral language comprehension and love of story can be developed. Spelling dictation exercises move students from phonetic spellings toward conventional spelling based on phonics knowledge and spelling conventions. Writing workshop activities and anthologies of fiction, nonfiction, and poetry are introduced by mid Grade 1.

In EC the emphasis was on phonemic awareness and spelling patterns in predictable books, using an adaptation of Hiebert, Colt, Catto, and Gary's (1992) program. Teachers providing EC instruction used a common list of sequenced spelling patterns and a guide prepared by participating teachers that listed library books that contained the spelling patterns (see Appendix A for the list of spelling patterns). Whole-class activities such as shared writing, shared reading, choral or echo reading, and guided reading

provided the context for EC instruction. In addition to a general emphasis on a variety of comprehension strategies, EC teachers used the following format in providing strategic guidance about patterns of words: Initially, the teacher would frame a word containing the target spelling pattern during a literacy activity (e.g., *bat*). By deleting the initial phoneme (e.g., *b*), the pattern would be extracted from the word (e.g., *at*). By substituting alternative beginning sounds, students could extend the pattern to new words (e.g., *mat, cat, hat*). Then students were to identify the target pattern as they encountered it in additional shared and independent reading and writing activities. Finally, patterns were reviewed in the context of reading and writing activities and were incorporated into spelling lists. When the children were working in small groups, they were able to practice these "make-and-break" activities with magnetic letters and acetate boards, always writing down their constructed words and reading their written constructions back to the teacher.

At the time of this study, the staff development in this school district emphasized an IC approach to reading instruction. Central to this IC approach was the emphasis on a print-rich environment with the following characteristics: teacher as facilitator rather than director of learning; children's construction of meaning as central; the integration of reading, spelling, and writing into literary activities that provide a context for phonics; emphasis on classroom interaction and on respone to literature; learning centers; and assessment based on portfolios rather than norm-referenced tests (see Routman, 1991; Weaver, 1994). The 19 teachers who participated in the research version of IC worked with the project director—an experienced doctoral-level teacher-trainer who espoused whole-lanaguage methods—to define the whole-language philosophy behind their approach:

> Whole language is a child centered philosophy of learning and instruction, the implementation of which results in a risk-free, supportive, language-rich environment. This environment is ever-changing; changing to meet the needs of all participants, teachers and students alike. Within this whole language philosophy, students are given a wide variety of opportunities to read, write, learn, and construct meaning within a meaningful context. In this interactive, student-friendly learning atmosphere, learning is not only active and meaningful, but also fun, with the ultimate goal being to instill the desire for life-long learning.

Because of the IC belief in children as readers and writers, even at this "emergent" phase of first and second grades, the emphasis was on learning to foster a competence rather than on learning to perform a skill (see, e.g., Dahl & Freppon, 1995). The use of predictable books and emphasis on writing in this IC approach appear similar to those in the EC approach described previously. However, in the EC approach, the teachers used a systematic list of spelling patterns to teach an analogy strategy for decoding words. In the IC approach, in contrast, the teacher used shared- and guided-reading activities to draw children's attention to specific words or word forms, letters, sounds, patterns, meanings, making predictions, listening for rhymes, and exploring the use of strategies, grammar, language use, spellings, or key ideas in the text. Thus, the opportunity to learn the alphabetic code was incidental to the act of making meaning from print.

In this study, there were 19 IC-R teachers, 20 EC teachers, 14 DC teachers, and 13 IC-S teachers, all of whom volunteered to participate. The IC-S teachers delivered the district's standard instructional method and were trained and supervised by district personnel. Teachers delivering IC-R, EC, and DC were trained during 1 week of summer in-service (30 hr) followed by retraining and demonstration lessons 1 month into the school year. Training was conducted by members of the research staff, all of whom had previous elementary school teaching experience and were strong proponents of the approach for which they were responsible. During summer in-service, the staff members provided background for the research, discussed instructional strategies relevant to their approach, and worked with teachers to develop a monitoring checklist of the components of the curriculum being implemented. To ensure adequacy of monitoring and control of time on task, all primary reading instruction occurred in 30-min blocks as part of the 90-min language arts block mandated by the state. Because DC used basal materials that were new to the teachers, a representative from the publisher spent 1 day orienting the teachers to the materials. The EC materials were also new, but the project director for this component had considerable experience with onset-rime approaches. During the school year, the research staff visited each teacher's classroom every other week or more frequently, if necessary, to monitor implementation of instruction and to provide feedback on the quality of implementation. Instructional supervisors from the district were available at each school to help teachers with basic issues of classroom management, a resource that was called on infrequently. Research staff members met with the teachers of a particular grade level at each school during their planning time to discuss instructional issues. Finally, to share instructional strategies across sites, teachers implementing a common program in different schools came together after school three times during the school year.

In addition to these 66 classroom teachers, 28 Title 1 teachers delivered one-to-one or small-group tutorials with 3 to 5 students for 30 min each day. In these tutorials, the instructional method either matched that of the classroom or was the district's standard tutorial based on Clay's (1991) method. Because the standard tutorial was an IC approach, there was no mismatch condition for children in the IC-S and IC-R groups.

Measures and Procedures

Teacher compliance and attitudes. During summer training, the teachers in each instructional group and the research staff developed a list of instructional components to be used for bimonthly monitoring of instruction (see Appendix B for the list of each instructional group). The teachers agreed that the monitoring would take place during the 30-min section of the 90-min language arts block, when the focus would be on the reading lesson (which addressed at least the first four components of each instructional approach listed in Appendix B). Occasional visits were made during other times in the language arts block to see how writing and spelling activities progressed and, in the case of the IC-R group, were integrated with reading.

In addition to the checklist used for monitoring, lesson plans were copied, kept, and reviewed as part of compliance. For the monitoring checklist, independent raters were used, with extremely high interrater reliability ($\geq .80$ for all raters). At the end of the year, we asked the teachers to respond to five questions about their instructional program (see Appendix C for the actual questions). Using a scale ranging from 1 (*definitely yes*) to 5 (*definitely no*), teachers responded to the first four questions asking whether they would recommend the continued use of this approach to instruction. The fifth question asked about the match between the instructional approach delivered and the teacher's beliefs about how to teach children to read; response options ranged from *an exact match* to *not similar at all.*

Measures given to estimate growth. Changes in vocabulary, phonological processing, and word-reading skills were assessed four times during the year, in October, December, February, and April. To assess growth in receptive vocabulary, we administered

the Peabody Picture Vocabulary Test-Revised (PPVT-R; Dunn & Dunn, 1981) four times a year. Both forms (L and M) were used and were alternated in two different sequences. To assess changes in reading skills over the course of the intervention, we asked the children individually to read 50 words aloud that were presented one at a time on 4 × 6-in. cards. The words were matched for frequency of occurrence (Carroll, Davies, & Richman, 1971), were representative of a diversity of linguistic features, and spanned first- through third-grade level of difficulty. Scores were based on the number of words read aloud correctly out of 50. Reliability for the word list was excellent (internal consistency estimate of .9). Concurrent and predictive validities for the word list were also high, as evidenced by correlations exceeding .8 with the Letter Word and Word Attack subtests of the Woodcock-Johnson Psychoeducational Battery-Revised (WJ-R; Woodcock & Johnson, 1989) collected at the end of the year in our normative sample (Foorman et al., 1996).

Phonological processing was measured by the synthesis and analysis tests in the Torgesen-Wagner battery (Wagner, Torgesen, & Rashotte, 1994; see also Foorman et al., 1996, 1997b). The synthesis tests consisted of blending onset rime (*m-ouse*), blending phonemes in real words (*f-a-t*), and blending phonemes in nonwords (*m-i-b*). The analysis tests consisted of (a) first sound comparison (in which children were asked to point to the one picture of three that started with the same sound as a target picture); (b) elision (dropping the initial, final, or middle sound of a spoken word); (c) sound categorization (naming the nonrhyming word from a set of four spoken words); and (d) segmentation of a spoken word into phonemes. Each test consisted of demonstration items and 15 test items. In this report we used estimated factor scores that ranged continuously from 0 to 4. Factor score weights were derived from data on a large normative sample from the same school district (Foorman et al., 1996).

End-of-year achievement and intellectual tests. At the end of the year, we individually administered the Wechsler Intelligence Scale for Children-Revised (Wechsler, 1974) and standardized reading and spelling tests. For the reading tests, we used the WJ-R (Woodcock & Johnson, 1989) to measure decoding (using the Letter–Word Identification and Word Attack subtests) and reading comprehension (using the Passage Comprehension subtest). We used the Formal Reading Inventory (FRI; Wiederholt, 1986) to measure comprehension of narrative and expository text. For spelling we used the Spelling Dictation subtest from the Kaufman Test of Educational Achievement (KTEA; Kaufman & Kaufman, 1985). We did not administer a standardized reading test at the beginning of the year because tests such as the WJ-R lack a sufficient number of items to discriminate initial reading levels for beginning readers and are not adequately sensitive to change over short time intervals.

Attitude–experience. In addition to these measures of growth in cognitive skills, academic outcomes, and intellectual abilities, we also collected school attendance data and measures of self-esteem, reading attitudes and experience, behavior, and environmental information in the spring. We assessed self-esteem with a pictorial version of Harter's (1982) Perceived Competence Scale (Harter & Pike, 1984). The five domains of self-esteem assessed were scholastic competence, athletic competence, social acceptance, physical appearance, and behavior or conduct. Children's attitude toward reading was assessed with 11 questions about the extent to which the child enjoyed reading (drawn from the work of Juel, 1988) and 8 questions about whether the child engaged in a variety of literacy experiences. Both the Harter scales and this reading attitude–experience measure use a structure alternative format to minimize the likelihood of the child making the socially desirable response. For each item, children first decide whether the statement is true or not true about themselves and then decide whether the statement is sort of true or very true. For example, the first item on the reading attitudes measure is "This child [pointing to figure on examiner's left] likes people to read to him/her. This child [pointing to figure on examiner's right] doesn't like people to read to him/her. Which child is most like you? [Child chooses.] Is this child a lot like you or just sort of like you?" Orientation of positive and negative stems of questions and accompanying stick figures varies randomly across items. Items on both the Harter and the reading attitude measures are scored from 1 to 4.

Teacher evaluations. The Multigrade Inventory for Teachers (MIT; Agronin, Holahan, Shaywitz, & Shaywitz, 1992) provided a mechanism for the child's classroom teacher to record observations on a rating scale that includes precise descriptions of a full range of behavioral styles reflecting the child's processing capabilities, adaptability, behavior, language, fine motor, and academic proficiency. At the same time, the teacher is able to provide an overall impression of that child's academic strengths and weaknesses and also indicate concerns. The MIT includes 60 items coded by the teacher on a scale ranging from 0 (*never*) to 4 (*often*). There are six scales: Academic, Activity, Language, Dexterity, Behavior, and Attention.

The teacher also completed an end-of-year evaluation, recording the results of pupil placement team meetings and indicating any special services received by the child, recommendations for the next class placement, and recommendations for special services. Grades, absences, tardiness, and results of hearing and visual screening were also recorded. The teacher identified children thought to have emotional, behavioral, or family problems.

Analysis

We used individual growth curves methodology to analyze changes in phonological processing, word reading, and vocabulary. These methods permit the estimation of (a) the mean rate of change and an estimate of the extent to which the individual's growth differs from this mean rate, and (b) correlates of change, which in this investigation focused on effects resulting from the four instructional groups but also included covariates of verbal IQ, age, and ethnicity. In the analysis of growth in word reading, we also examined the effects of initial level of phonological processing as a correlate of growth and a moderator of instructional effects. Individual growth parameters and correlates of change were estimated using Hierarchical Linear Models-3 (HLM-3; Bryk & Raudenbush, 1987, 1992; see Francis, Fletcher, Stuebing, Davidson, & Thompson, 1991; Francis et al., 1996; Rogosa, Brandt, & Zimowski, 1982, for information on the application of individual growth models in psychology and education). In addition to time being nested within individuals, students were nested within teacher, providing for a three-level model (time, student, teacher). Although teachers are also nested within school, there was an insufficient number of schools to model school-level variability, so this factor was ignored in the analyses.

In analyzing instructional effects, we were first interested in knowing whether IC-R (representing research-trained and monitored instruction) differed from the district's standard (representing district-trained and supervised instruction), tested at $p < .05$. Then, to control for Type I error, we conducted Bonferroni-adjusted pairwise comparisons among the three experimental approaches to instruction with an alpha level of .0167 (or .05/3). In modeling academic outcomes, we have ignored differences between IC-S and DC and between IC-S and EC, because these curricula differ from IC-S both in the explicitness of code instruction and in the training of teachers to deliver the instruction. Comparison of IC-S to IC-R provides information about the importance of the teacher-training

component of the study, whereas comparisons among IC-R, DC, and EC provide the critical information about instructional differences controlling for teacher training. In modeling changes over time, we centered age around the last occasion of measurement for each child so that the intercept represented *expected* performance in April. Because we expected older children to outperform younger children, age differences between children at the final assessment were measured as deviations from mean age and were used to predict expected performance and change in performance.

To characterize the pattern of change over time, we fit models to determine (a) whether growth was linear or curvilinear and (b) which of the growth parameters varied across children. This process involved fitting at least the following models: (a) straight line growth with random intercepts and fixed slopes; (b) straight line growth with random intercepts and slopes; (c) curvilinear growth with random intercepts and fixed slopes and quadratic terms; (d) curvilinear growth with random intercepts and slopes and fixed quadratic terms; and (e) curvilinear growth with random intercepts, slopes, and quadratic terms. In all models, errors are assumed to be independently and normally distributed with equal variance over time. A fixed parameter has a value that does not vary across participants, whereas a random parameter has a value that differs across participants. If the mean value for a parameter was not different from zero, and there was no evidence that the parameter differed across participants, then the parameter was dropped from the model. Growth curve analyses for reading, vocabulary, and phonological processing showed that change could be best modeled with linear and quadratic effects and random slopes and intercepts.

Results

Tutoring Effects

We examined the size of the tutoring unit (one-to-one or small group, i.e., 3–5 students with one teacher) and the nature of the content of the tutorial (whether it matched or did not match classroom instruction). The mismatch condition was available only for the two code-emphasis groups because the district's standard tutorial—Reading Empowerment, based on Clay's (1991) method—was matched with the IC approach. Unfortunately, it was impossible to retain the initial assignment to ratios of one-to-one or one-to-many because the teachers needed to rearrange groupings to deal with behavioral and learning problems. Thus, we calculated the average number of days a student was in a 1:1 or 1:many ratio condition. This variable did not significantly predict reading growth or outcomes. There was also no significant effect of matched or mismatched tutorial content. Because of the lack of tutoring effects, tutoring was ignored in subsequent analyses.

Compliance and Attitudes

Compliance data consisted of each teacher's total percentage of compliance in delivering the instructional practices appropriate to her instructional group, as determined from the research staff's monitoring data. Among the 53 classroom teachers monitored (excluding the 13 IC-S teachers, who were not monitored), compliance was generally very high, a median of 80%, with a significant negative skew to the distribution of scores. Four teachers had 0% compliance: 2 were in IC-R, 1 in DC, and 1 in EC. In all four cases, the teachers were teaching reading but were not using the research approach for which they had been trained. The DC and EC teachers were doing the district standard IC-S, as they had been doing for years. The two IC-R teachers were decontextualizing phonics and spelling instruction with work sheets they had purchased. Attempts to retrain and redirect these four teachers met with repeated resistance. We retained these teachers and their students' data in our analyses because they are representative of the range of teaching behaviors encountered in a study of this sort. In short, compliance of 49 of 53 classroom teachers was excellent.

In addition to high compliance with instructional practice, teachers also had positive atttitudes toward their instructional method. The distribution of responses for the teacher attitude data for 48 of the 53 research-trained teachers are presented in Table 2 (2 DC, 2 EC, and 1 IC-R teachers did not return the survey). Analysis of variance (ANOVA) using the Kruskal-Wallis test showed significant instructional group differences on the following two questions: "If you were responsible for curriculum decisions in your district, would you recommend that resources (materials, staff development, etc.) be provided for this instructional approach in the future?", $F(2, 44) = 3.58$, $p = .036$; and "Would you recommend the instructional approach you are using to a colleague?", $F(2, 44) = 5.23$, $p = 009$. Pairwise contrasts

Table 2
Frequency Distributions for Teacher Attitude Survey Data (%)

Question	Frequency distributions: Definitely yes 1	Endorse 2	3	4	Definitely no 5
1. Recommend to district					
DC	64	36	—	—	—
EC	22	50	17	11	—
IC-R	44	39	17	—	—
2. Recommend to colleague					
DC	73	27	—	—	—
EC	22	50	11	17	—
IC-R	28	50	17	—	—
3. Recommend for all children					
DC	55	27	18	—	—
EC	28	39	17	11	6
IC-R	33	39	28	—	—
4. Recommend for special needs					
DC	45	27	27	—	—
EC	50	28	11	11	—
IC-R	17	44	28	11	—

	Exactly match	Very similar	Somewhat similar	Not similar at all
5. Matches my beliefs				
DC	9	82	9	0
EC	—	61	39	0
IC-R	22	50	28	0

Note. DC = direct code; EC = embedded code; IC-R = implicit code-research.

revealed that DC teachers were more likely than EC teachers to recommend their instruction to the district, $F(1, 44) = 6.95, p < .012$. Additionally, DC teachers were more likely than either EC or IC-R teachers to recommend their instruction to a colleague, $F(1, 44) = 9.71, p < .003$ and $F(1, 44) = 6.80, p = .012$, respectively. Teachers in the DC, EC, and IC-R groups did not differ in their attitude about recommending their approaches for all children or for children with special needs or in the degree to which the instruction they delivered matched their beliefs about how to teach children to read.

Analyses of Baseline Differences in October

Means and standard deviations for phonological processing and word-reading scores at each wave of data collection are presented in Tables 3 and 4, respectively, for each instructional group according to grade. Correlations between phonological analysis and synthesis factors were greater than .9 at each of the four time points. Therefore, we have elected to present only the results for phonological analysis here (subsequently to be referred to as phonological processing). ANOVA on October baseline scores in word reading and in phonological processing (with age as a covariate) showed no significant differences between instructional groups, $F(3, 272) = .33, p = .81$, for word reading; and $F(3, 271) = 1.87, p = .14$, for phonological processing.

Growth Curve Analyses

The second graders had minimal reading skills, necessitating the use of first-grade instructional materials with them. Because all children were receiving the same grade-level curriculum, analyses were conducted with age rather than grade as a factor. Exploratory analyses showed that there was no remaining variability in outcomes resulting from grade once age effects were controlled.

Growth curve analyses were conducted using a three-level model: time within child within classroom. All growth curve analyses were conducted using HLM-3 software (Bryk & Raudenbush, 1992). HLM-3 reports tests of fixed effects using a t statistic and p value derived from the unit normal distribution. As a measure of the effect of the instructional group variable, we report ΔR^2, which is the proportion of true, between-teacher variance (Level 3) in a growth parameter that is accounted for by the instructional group variable after controlling for all covariates (Bryk & Raudenbush, 1987; Francis et al., 1991). This measure indicates how much of the true, between-teacher variance in slopes and intercepts is uniquely attributable to the instructional methods employed by the teachers. In addition, Cohen's standardized effect size, f (Maxwell & Delaney, 1990), was computed for curriculum effects as follows. For overall effects of the instructional group variable, we computed the effect (α_j) for each group, where α_j is the difference between the mean value of a parameter (e.g., slope or intercept) in that instructional group and the overall grand mean value for that parameter, taking into account all covariates. The average squared effect was then expressed relative to the HLM-3 estimated error variability in that parameter. This estimate is not printed directly by HLM-3 but can be computed from HLM-3's estimate of the reliability of the parameter and of the systematic variance in the parameter. To estimate the error variance in the instructional group mean growth parameters, we calculated $[(1 - R)T]/R$, where R is the estimated reliability of the random parameter and T is the estimated systematic variability in the parameter. These two estimates were taken from the growth curve models that included all covariates but did not include the instructional group variable. The square root of this ratio (average squared effect/error variance) gives the standardized effect size, f. Effect sizes are also reported for differences in growth parameters between specific curricula. These were computed by taking the mean parameter difference between the two curricula and dividing by the square root of the error variability, as just described. Effect sizes for end-of-year outcomes were derived from SAS PROC MIXED (SAS Institute, 1997) two-level random-effects models using a similar approach. However, in these cases, error variability was estimated as the residual variance in an unconditional model divided by the average sample size per classroom.

Table 3
Factor Score Means, Standard Deviations, and Sample Sizes for Phonological Processing at Each Wave of Data Collection

Instructional group	October			December			February			April		
	M	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*
Direct code												
Grade 1	0.68	0.54	44	1.34	0.69	42	1.87	0.74	39	2.16	0.83	41
Grade 2	1.74	0.80	14	2.06	0.47	14	2.25	0.69	14	2.51	0.60	14
Embedded code												
Grade 1	0.37	0.36	49	0.72	0.60	46	1.07	0.69	41	1.59	0.77	39
Grade 2	1.38	0.74	36	1.61	0.62	35	1.89	0.71	29	2.18	0.71	28
Implicit code-research												
Grade 1	0.51	0.55	57	0.93	0.74	57	1.23	0.87	55	1.53	0.88	53
Grade 2	1.58	0.62	28	1.89	0.72	28	2.17	0.79	27	2.21	0.73	25
Implicit code-standard												
Grade 1	0.43	0.50	24	0.90	0.84	24	1.02	0.75	23	1.22	0.86	23
Grade 2	1.48	0.70	24	1.76	0.79	24	1.72	0.63	23	1.90	0.64	22

Table 4
Raw Score Means, Standard Deviation, and Sample Sizes for Word Reading at Each Wave of Data Collection

Instructional group	October			December			February			April		
	M	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*
Direct code												
Grade 1	0.20	0.51	44	2.17	2.95	42	6.44	7.13	39	12.68	10.21	41
Grade 2	5.73	6.66	15	8.57	7.69	14	12.71	9.60	14	19.43	10.03	14
Embedded code												
Grade 1	0.18	0.88	49	0.72	1.61	46	1.90	2.77	41	5.00	8.15	39
Grade 2	4.75	4.92	36	7.46	6.77	35	12.86	11.04	29	18.29	12.02	28
Implicit code-research												
Grade 1	0.07	0.32	57	0.57	1.20	58	1.20	2.30	55	5.23	7.20	53
Grade 2	5.12	5.24	28	7.96	6.97	28	10.93	9.83	38	16.16	14.32	25
Implicit code-standard												
Grade 1	0.13	0.61	24	0.21	1.02	24	0.57	1.59	23	1.91	2.81	23
Grade 2	3.17	4.90	24	5.36	7.31	24	9.13	7.87	23	14.27	9.35	22

Analysis of growth in phonological processing. In the analysis of phonological processing, there were significant differences between ethnic groups and individual differences in age and verbal IQ. African American children had significantly lower expected scores in April than the sample average ($t = 2.90$, $p = .004$) but did not differ in slope or in the quadratic trend ($p > .05$). Age at the final assessment was a significant predictor of expected score in April ($t = 4.75$, $p < .001$) and slope ($t = 3.01$, $p = .003$). This means that older children had higher April scores but improved at a slower rate compared with younger children. Verbal IQ was a significant predictor of expected score in April, slope, and the quadratic effect ($t = 6.86$, $p < .001$; $t = 2.81$, $p = .005$; and $t = 4.05$, $p < .001$, respectively). Thus, higher IQ children tended to have higher phonological processing scores in April, but their rate of learning tended to taper off in the latter part of the school year.

There were significant differences in growth in phonological processing among the four instructional groups, controlling for ethnicity and for individual differences in age and verbal IQ. The overall effect of instructional group was large on both intercepts ($\Delta R^2 = .88$, $f = 0.69$) and slopes ($\Delta R^2 = .86$, $f = 1.13$). More specifically, children receiving DC had significantly higher scores in April than EC students ($t = 2.99$, $p < .003$, $f = 1.06$), and students receiving IC-R ($t = 4.58$, $p < .001$, $f = 1.61$). Instructional groups differed significantly in their learning curves. These differences are shown in Figure 1 both for raw scores in the top panel (i.e., observed data) and predicted scores in the bottom panel (i.e., estimates based on the fitted growth model). As is apparent from the predicted scores (panel b), the rate of change in phonological processing scores for the EC group differed significantly from that of the IC-R group and DC groups ($t = 3.35$, $p = .001$, $f = 2.64$, and $t = 1.99$, $p = .045$, $f = 1.06$, respectively), although the EC–DC difference is not significant at the Bonferroni-adjusted critical value. In general, the EC group was characterized by a relatively constant rate of change, whereas the IC-R group showed a slowing of growth at the end of the year.

Analysis of growth in word reading. Growth in word reading was best described by a quadratic model. In the conditional models, there were no significant effects of ethnicity ($p > .05$), and the effects of age and verbal IQ were similar to those found for phonological processing. Specifically, age at last assessment was a significant predictor of expected performance in April (i.e., the intercept) ($t = 4.41$, $p < .001$) and the rate of change (i.e., slope; $t = 2.49$, $p = .013$). Verbal IQ was also a significant predictor of intercept and slope ($t = 3.70$, $p < .001$ and $t = 4.15$, $p < .001$).

Differences between the IC-R and IC-S groups on April performance ($p > .05$, $f = 0.16$) and growth in word reading ($p > .05$, $f = 0.01$) were neither statistically nor practically significant. However, there were clear differences among the instructional groups (overall $\Delta R^2 = .35$, $f = 0.46$ for intercepts and $\Delta R^2 = .54$, $f = 0.24$ for slopes). Controlling for individual differences in age and verbal IQ as well as for ethnicity, DC children improved in word reading at a faster rate than IC-R children ($t = 2.80$, $p = .006$, $f = 0.58$) and EC children ($t = 2.25$, $p = .024$, $f = 0.46$), although the DC–EC difference is not significant at the Bonferroni-adjusted criterion. Relative to the DC group, the IC-R group's rate of improvement in April was 10.7 fewer words per year on the 50-word list, whereas the EC group's rate of improvement was 8.6 fewer words per year. The shape of the growth curves depicted in Figure 2 indicates a pattern of increasing differences over time, and is evidenced by the higher rate of change in April for the DC group. DC children also had higher expected word-reading scores (mean intercept) in April than IC-R children ($t = 2.26$, $p = .024$, $f = 1.03$), although this difference is slightly above the Bonferroni-adjusted level of alpha (i.e., .024 vs. .0167). This was a 5.1-word difference between the DC and IC-R groups in April. These differences are shown in the raw and predicted scores plotted in Figure 2.

To further examine possible group differences in word reading at the end of the school year, a two-level random-effects model was run on April word-reading scores using

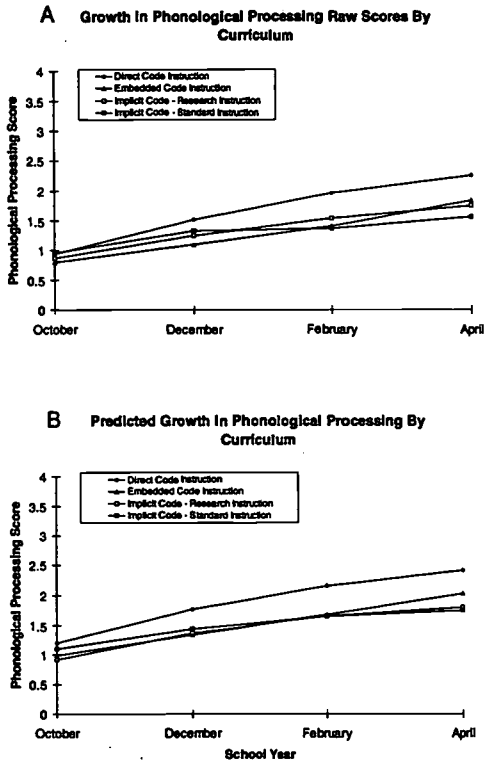

Figure 1. Growth in phonological processing raw scores by curriculum (panel a) and predicted growth in phonological processing by curriculum (panel b).

HLM-2 (Bryk & Raudenbush, 1992). We included covariates of age, verbal IQ, ethnicity, and October word-reading scores. This analysis revealed that the DC group outperformed the IC-R group, $F(1, 165) = 10.06$, $p = .002$, $f = 1.53$, as well as the EC group, $F(1, 165) = 5.34$, $p = .022$, $f = 1.12$, with no differences between the IC-R and EC groups ($p = .37$, $f = 0.41$).

The practical significance of the slope and intercept differences is clearly apparent when examining individual cases. A relatively large percentage of children in the IC-R, IC-S, and EC curricula did not exhibit growth. As can be seen in the frequency distributions of growth estimates in word reading shown in Figure 3, approximately 46% of the IC-R children, 44% of the EC children, and 38% of the IC-S children learned at a rate of 2.5 words or less per school year on the 50-word list compared with only 16% in the DC group. For DC children, growth in word reading does not have a large positive skew, indicating small amounts of growth characteristic of the other instructional groups.

To evaluate these patterns further, we used logistic regression to calculate the probability of a child having a predicted word-reading score in April greater than one,

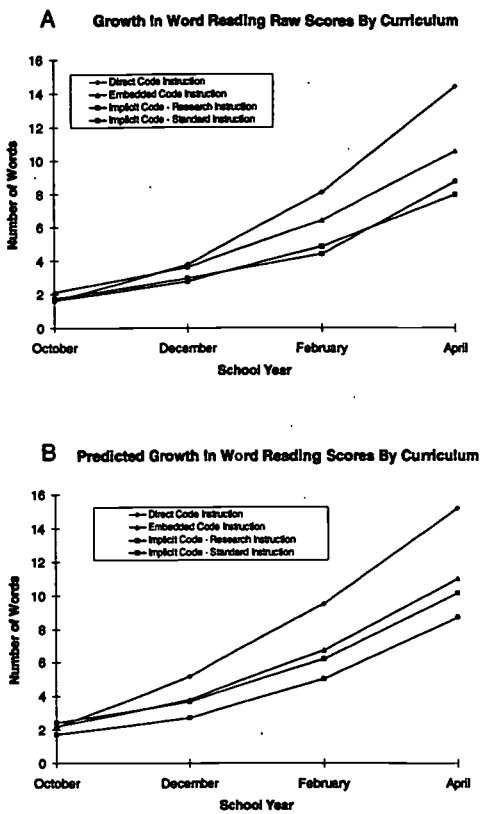

Figure 2. Growth in word reading raw scores by curriculum (panel a) and predicted growth in word-reading scores by curriculum (panel b).

given that in October they read zero words. Included in the analysis were covariates of age and ethnicity. The results showed that DC children were 3.6 times more likely to be reading more than one word at the end of the year than IC-R children, $\chi^2(1, N = 182) = 6.48, p = .011$ (95% confidence interval [CI] = 1.34, 9.49), and 5.2 times more likely than EC children, $\chi^2(1, N = 182) = 10.79, p = .001$ (95% CI = 1.94, 13.80). If the criterion was two words read accurately at the end of the year, then DC children were 5.6 times more likely to be reading at that level than IC-R children, $\chi^2(1, N = 182) = 12.74, p < .001$ (95% CI = 2.17, 14.33), and 5.2 times more likely than EC children, $\chi^2(1, N = 182) = 11.60, p = .0007$ (95% CI = 2.014, 13.45).

To evaluate the possible role of initial status in phonological processing in growth in word reading, October scores in phonological processing were included in a three-level analysis of word reading using HLM-3. Controlling for effects resulting from ethnicity, the phonological covariate

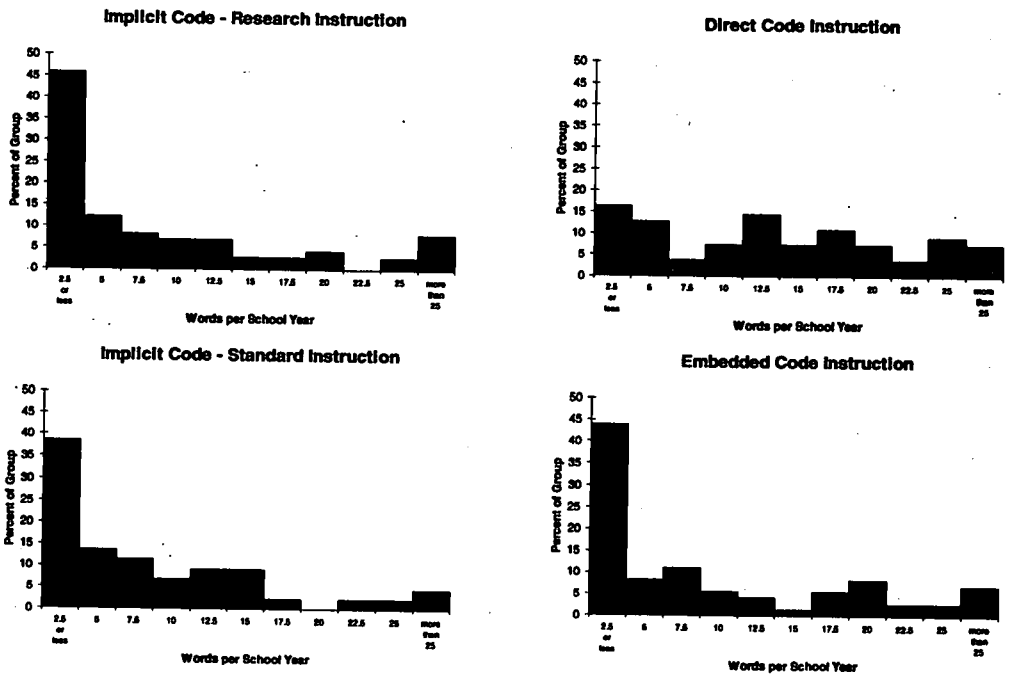

Figure 3. Frequency distributions of predicted growth in word reading.

significantly predicted rate of growth as well as April scores in word reading ($t = 6.41$ and 8.54, respectively, $p < .001$).

The effects of initial phonological processing differed across instructional groups. Nevertheless, instructional group differences were similar to the model of word reading without the phonological covariate. IC-R and IC-S groups did not differ in slope or intercept ($p > .05$, $f = 0.40$ for intercepts, $f = 0.09$ for slopes); however, there were differences among the three experimental groups. With respect to the intercept, DC children continued to have significantly higher expected scores in April than the IC-R children ($t = 2.38$, $p = .017$, $f = 0.92$). With respect to slope, DC children continued to improve in word-reading skills at a faster rate than the IC-R children ($t = 2.93$, $p = .004$, $f = 0.54$), whereas the difference between DC and EC, which was previously not significant at the Bonferroni-adjusted criterion, now failed to reach significance at conventional levels ($t = 1.13$, $p = .261$, $f = 0.33$).

The differential effect of initial phonological skill on individual differences in growth of word reading is depicted in Figure 4, in which individual October scores in phonological processing are plotted separately for each group against predicted growth estimates in word reading. Generally, higher initial scores in phonological processing coincide with higher growth in word reading, and this pattern holds for all groups. More importantly, Figure 4 shows that children who start the year with the lowest levels of phonological processing skill exhibit the lowest growth in word reading in all groups except the DC group. Indeed, some children who start the year with low phonological scores still manage to exhibit considerable growth in reading words. These children were largely in the DC instructional group, as evidenced by the vertical spread in the data points in the left side of the panel for DC and the lack of spread in the left side of the remaining three panels. The lines in the panels depict the least squares regression line relating reading growth to initial phonological processing. Although the overall test of slope differences among instructional groups was statistically significant, $\chi^2(3, N = 252) = 7.90$, $p = .048$, none of the pairwise comparisons met the Bonferroni-adjusted critical value. Nevertheless, the generally flatter line for the DC group is precisely what one would expect if phonological processing is a determinant of growth in word reading and DC is effective in improving phonological processing. We would expect *initial* phonological processing to be less related to outcome in DC because more explicit instruction in the alphabetic code is more effective in developing phonological processing skill in all children, which thereby minimizes the importance of the level of this skill that children bring to the classroom in the fall.

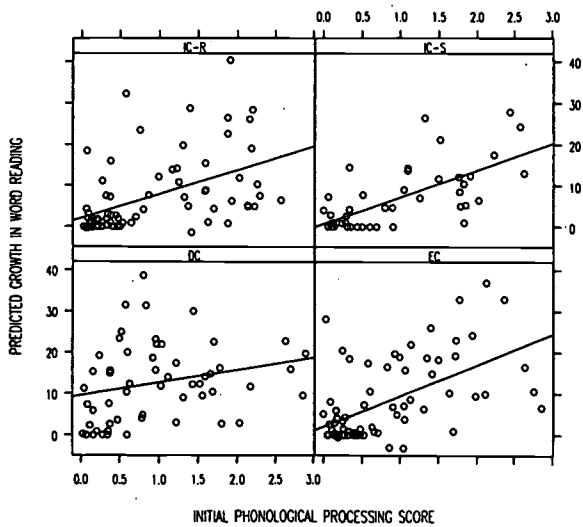

Figure 4. Plots of individual growth estimates in word reading by initial phonological processing scores and instructional group.

Analysis of growth in vocabulary. In the analysis of growth in vocabulary using the PPVT-R, there was no evidence for quadratic change. Rather, growth was linear ($t = 11.22$, $p < .001$). In addition, there were significant effects of age ($t = 8.13$, $p < .001$) on expected vocabulary in April, and Hispanic children had lower expected vocabulary scores in April compared with the sample average ($t = 4.86$, $p < .001$). Most important, there were no effects as a result of instructional group (overall effect size $f = 0.16$, $\Delta R^2 = .01$). Thus, IC-R, IC-S, EC, and DC children all developed to the same level and at the same rate in vocabulary (i.e., about 6.5 items on the PPVT-R per school year), which shows that the effect of DC on cognitive skills was specific to reading and did not reflect a generic effect of intervention. This growth in vocabulary is depicted in Figure 5 in terms of raw (panel a) and predicted (panel b) scores.

End-of-Year Achievement

Standard score means and standard deviations for the May achievement tests of reading and spelling are provided in Table 5 for each instructional group. The WJ-R Basic

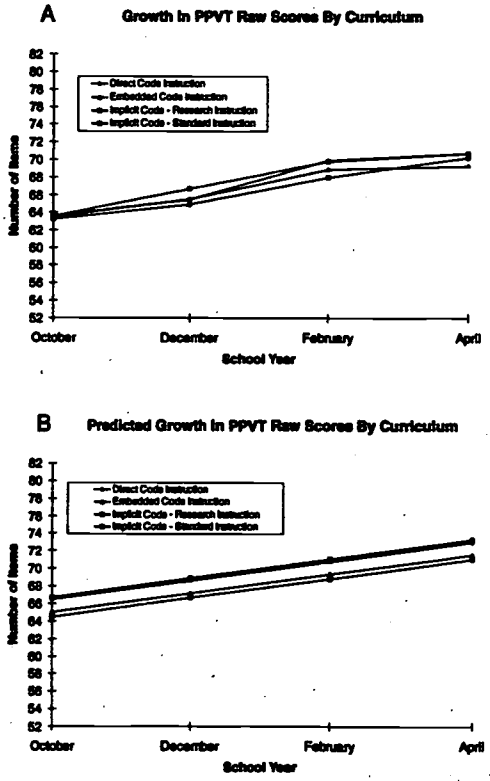

Figure 5. Growth in Peabody Picture Vocabulary Test—Revised (PPVT-R) raw scores by curriculum (panel a) and predicted growth in PPVT-R scores by curriculum (panel b).

Table 5
Standard Score Means, Standard Deviation, and Sample Sizes on May Achievement Tests of Reading and Spelling for Four Instructional Groups

Instructional group	WJ-R Reading: Basic	WJ-R Reading: Passage comprehension	KTEA spelling	FRI comprehension
Direct code				
M	96.1	96.7	85.7	81.8
SD	14.6	15.9	12.2	9.4
n	58	58	58	50
Embedded code				
M	88.6	91.4	82.0	80.8
SD	11.2	12.7	8.2	8.3
n	82	82	82	62
Implicit code-research				
M	89.6	92.0	81.6	81.5
SD	12.7	14.8	9.1	8.7
n	78	78	77	61
Implicit code-standard				
M	84.5	89.0	81.7	83.1
SD	9.7	12.1	7.6	6.9
n	45	45	45	34

Note. WJ-R = Woodcock-Johnson Psychoeducational Battery-Revised (Woodcock & Johnson, 1989); KTEA = Kaufman Test of Educational Achievement (Kaufman & Kaufman, 1985); FRI = Formal Reading Inventory (Wiederholt, 1986). The FRI was not administered to children who scored less than 5 points on the WJ-R Passage Comprehension.

Reading cluster is the average of the Letter–Word Identification and Word Attack (pseudoword) subtests and represents a measure of decoding. Passage Comprehension is a cloze test at the sentence level, and the FRI is a multiple-choice test based on silent narrative and expository text reading. On the basis of our previous research (Foorman et al., 1996), we did not administer the FRI to children who scored less than 5 raw score points on the WJ-R Passage Comprehension to avoid frustrating the children on the more difficult FRI.

A two-level hierarchical linear models approach using SAS PROC MIXED (SAS Institute, 1997), nesting student within teacher, was utilized to investigate instructional group differences in the May achievement scores. Significant effects of instructional group were followed up with the three post hoc contrasts of interest, using Bonferroni corrections to control the alpha level at $p < .0167$. Significant instructional group effects were found for the WJ-R Basic Reading cluster, $F(3, 197) = 6.03$, $p = .008$, $f = 0.67$, $\Delta R^2 = .48$ and the WJ-R Passage Comprehension subtest, $F(3, 197) = 2.75$, $p = .044$, $f = 0.40$, $\Delta R^2 = .64$. Post hoc tests of the instructional effect revealed that the DC group had higher mean decoding scores than either the EC group, $F(1, 197) = 9.41$, $p = .003$, $f = 1.17$, or the IC-R group, $F(1, 197) = 7.00$, $p = .009$, $f = 1.22$, respectively. Likewise, the DC group had higher mean Passage Comprehension scores than the EC group, $F(1, 197) = 4.76$, $p = .030$, $f = 0.72$, but this difference was not significant at the Bonferroni-adjusted criterion. The difference between the DC and IC-R groups was not significant, $F(1, 197) = 3.68$, $p = .056$, $f = 0.76$. Although these differences on Passage Comprehension did not meet critical alpha values, the direction of the differences is clear and the magnitude of the effects is large by typical standards. There were no instructional group differences on the KTEA Spelling or on the FRI ($p > .05$, overall $fs = 0.38$ and 0.20, $\Delta R^2 = .22$ and undefined, respectively). The FRI was too difficult for these children, as is apparent from the low means of Table 6 and the fact that a sizable number of children in each group (i.e., 14% of DC and about 24% of the other groups) were not administered the FRI because they did not meet the criterion of scoring at least 5 raw score points on the WJ-R Passage Comprehension.

We used logistic regression to calculate the probability of a child having a May WJ-R decoding score below the 25th percentile, a usual diagnostic criteria for a reading disability (Fletcher et al., 1994). IC-S and IC-R children did not differ from each other. However, IC-R children were 2.4 times as likely as DC children to score below the 25th percentile, $\chi^2(1, N = 262) = 5.21$, $p = .02$ (95% CI = 1.3, 4.1), and EC children were 3.1 times as likely as DC children to score below the 25th percentile, $\chi^2(1, N = 262) = 10.09$, $p = .002$ (95% CI = 1.5, 6.4).

Analyses of Attendance, Perceived Self-Competence, Attitudes, Behavior, and Environmental Variables

Instructional groups did not differ in school attendance, in perceived self-competence on the Harter scales, or in teacher identification of emotional, behavioral, or family problems on the end-of-year evaluation. However, instructional groups significantly differed in reading attitudes (but not experience), $F(3, 257) = 4.29$, $p = .006$. The IC-R group had more positive attitudes toward reading than the DC group, $F(1, 257) = 6.29$, $p = .013$, and the IC-S group, $F(1, 257) = 11.12$, $p = .001$. Questions related to the degree to which the child likes people to read to him or her, likes or does not like to read books by him or herself, thinks learning to read is hard or easy, likes or does not like school, likes or does not like to watch television, and has a parent, grandparent, guardian, or sibling who likes or does not like to read.

Means and standard deviations are provided in Table 6 for the six scales of the MIT. ANOVAs on the six scales revealed instructional group differences on all scales but the Attention scale. Using Bonferroni adjustment for alpha (.05/6 scales = .0083), pairwise post hoc contrasts revealed the IC-S group to be significantly different from the other groups. With respect to the activity scale, the IC-S group had significantly higher activity ratings (e.g., out of chair, restless, distractible) than the IC-R group, $F(1, 271) = 8.81$, $p = .003$, and the DC group, $F(1, 271) = 7.95$, $p = .005$. The IC-S group had significantly poorer Adaptability scores (e.g., gets upset and cannot tolerate changes, transition problems, long time to settle down) compared with the IC-R group, $F(1, 271) = 14.05$, $p = .0002$, and the EC group, $F(1, 271) = 8.66$, $p = .004$. The IC-S group also had significantly poorer Social scores (e.g., calls out in class, easily frustrated) relative to the IC-R group, $F(1, 271) = 11.08$, $p < .001$. On the Academic scale, the IC-S group had significantly lower academic ratings relative to the EC group, $F(1,$

Table 6
Means, Standard Deviations, and p Values for the Six Scales of the Multi-Grade Inventory for Teachers for Four Instructional Groups

	Direct code			Embedded code			Implicit code-research			Implicit code-standard			
Scales	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*	*p*
Academic	3.26	0.41	60	3.11	0.41	86	3.26	0.42	85	3.39	0.33	47	.002
Activity	2.96	1.51	60	3.14	1.48	86	2.97	1.47	85	3.77	1.42	47	.020
Adaptability	2.89	0.77	60	2.82	0.93	86	2.70	0.80	85	3.28	0.89	47	.003
Attention	3.58	0.85	60	3.59	0.79	86	3.38	0.84	85	3.65	0.77	47	.189
Language	2.86	0.78	60	2.85	0.72	86	2.68	0.67	85	3.09	0.56	47	.020
Social	3.27	0.47	60	3.25	0.54	86	3.14	0.59	85	3.47	0.56	47	.010

271) = 14.49, $p = .0002$. With respect to the Language scale, the IC-S group had significantly more problems (e.g., trouble expressing thought, difficult to understand) compared with the IC-R group, $F(1, 271) = 10.43$, $p < .001$, respectively. Thus, the IC-S teachers perceived that their students had significantly more behavioral and academic problems compared with the IC-R, DC, and EC teachers.

Discussion

The results of this research clearly indicate that early instructional intervention makes a difference for the development and outcomes of reading skills in first- and second-grade children at risk for reading failure. However, the results also demonstrate that not all instructional approaches have the same impact. Children who were directly instructed in the alphabetic principle improved in word-reading skill at a significantly faster rate than children indirectly instructed in the alphabetic principle through exposure to literature. Furthermore, 46% of the children in the IC research group and 44% of the EC group exhibited no demonstrable growth in word reading compared with only 16% in the DC group.

These performance differences were due to instruction, not to behavioral or affective differences among these groups. The only differences on the behavioral measures involved the IC-S condition, not a surprising finding given that the vast majority of IC-S children came from one school described as "tough." Because this school was the "unseen control," we did not monitor classroom reading instruction and, therefore, cannot determine the extent to which these perceived behavioral and academic problems may have been a consequence of poor classroom instruction. There were no behavioral differences among the three research conditions. Similarly, although outcomes varied across classrooms, measured characteristics of the teachers did not relate significantly to outcome. Generally, teachers' attitude toward and compliance with instructional practices were very good across instructional groups, and the amount of time devoted to reading and language arts instruction was comparable.

Children in all instructional groups with higher initial status in phonological processing skills in October exhibited growth in word-reading skills. However, children in the DC group who had low initial status in phonological processing skills also appeared to show more growth in word-reading skills than children with low phonological processing scores in the other instructional groups. Hence, the fact that the DC approach used in this study included explicit instruction in phonemic awareness appeared to facilitate word-reading development for children who started the year with low scores in this crucial precursor skill to reading. This shows not only that problems with phonological processing are related to poor reading skills in these culturally and linguistically diverse children, but that greater changes in phonological processing skills and word-reading ability occurred when these children were provided a curriculum that included explicit instruction in the alphabetic principle. The finding that phonological processing moderated growth in word reading suggests that the changes were due to the nature of the instruction and not to the greater scripting of the DC approach. Nevertheless, future studies should compare the DC program used in this study with other DC programs that vary in the degree of scriptedness to evaluate this possibility. Also, the onset-rime component of the EC intervention was scripted in the sense that spelling patterns were systematically presented. Hence, it is not surprising that performance of the EC group tended to fall between that of the DC and IC groups.

Instructional group differences in end-of-year achievement after the first year were clearly apparent: The direct instruction group approached national average on decoding (43rd percentile) and passage comprehension (45th percentile) compared with the IC-R group's means of 29th percentile and 35th percentile, respectively. (EC group means were 27th percentile and 33rd percentile, respectively). Although the differences in decoding skills were robust, mean differences on the Passage Comprehension test did not meet the critical value of alpha adopted for this study. However, our approach was designed to minimize Type I errors and was conservative. The mean differences on this measure of reading comprehension were large; effect sizes were also large, favoring the DC group. Furthermore, logistic regression revealed that children in the IC-R and EC groups were much more likely to score below the 25th percentile on the standardized decoding test than children in the DC instruction group. Scores below the 25th percentile are often used to indicate reading disability on the basis of traditional diagnostic criteria (Fletcher et al., 1994).

In this study, there were no effects of student–teacher ratio

or nature of content in the tutoring component. However, the student–teacher ratio was not a constant 1:1 or small group variable because of teachers' need to reconstitute groups to adjust for behavioral or learning differences. Therefore, we do not see our results as inconsistent with the research supporting the benefits of one-on-one tutoring (e.g., Wasik & Slavin, 1993). Future research should continue to study the benefits of having tutorial content match or not match classroom instruction. Having the content of tutorial match the curriculum facilitates communication between classroom teacher and tutor and ensures continuity of treatment for the child (see Slavin et al., 1996). However, many tutoring programs are springing up around the United States in response to the America Reads challenge, and these programs entail training that is divorced from classroom instruction. Disconnected instructional programs have been shown to be ineffective for high-risk students (Allington, 1991).

As with any other intervention study, longer term follow-up with these children is clearly indicated to assess whether the gains in decoding skills continue to accelerate in DC instruction and whether there are longer term effects in other aspects of the reading process. For example, in spite of differences in decoding skills, the IC group had more positive attitudes toward reading, a finding consistent with other research (e.g., Stahl, McKenna, & Pagnucco, 1994). It is possible that these positive attitudes toward reading, although not associated with higher reading performance in beginning reading, may sustain motivation to improve reading skill as the student matures. Another interesting question is whether the sequence of instructional method makes a difference in growth and outcomes in reading. For example, do children who receive explicit instruction in the alphabetic principle in Grade 1 and subsequent implicit instruction show greater gains than children who continue in explicit instruction? Similarly, can direct instruction in alphabetic and orthographic rules in Grade 2 ameliorate the lack of growth in reading experienced in Grade 1 by children who received either of the IC approaches? The effects of EC instruction may require a longer period of time for benefits to be realized. The large individual differences in the EC group support findings from previous research (e.g., Ehri & Robbins, 1992; Foorman, 1995a) that some decoding skill is needed before known orthographic rimes are spontaneously used to read unknown words by analogy. At the same time, it may take more time for children to use the spelling patterns taught in the EC program. Hence, DC instruction may be more efficient and lead to more rapid initial rates of growth, but it is possible that the effects of an EC approach are cumulative so that longer term outcomes are not different. The critical issue is the extent to which the earlier development of decoding skills achieved with explicit instruction is associated with improvement in reading comprehension and spelling, which remains an open issue.

The positive effects of DC instruction did not generalize to all academic areas. Instructional groups did not differ in spelling achievement, and the average spelling scores were not impressive. The measure of text reading had a floor effect. Subsequent assessments will, it is hoped, show greater transfer of word-reading skills to the text reading in measures such as the FRI as well as measures such as the WJ-R Passage Comprehension. Finally, 90 children who were eligible for Title 1 and who received the classroom intervention were not included in these analyses because they did not receive tutorial services. These children were better readers than the children in these analyses at baseline. Analyses that included these 90 children did not alter the pattern of results.

It is also important to keep in mind that the classroom curricula used in this study took place in a print-rich environment with a significant literature base. Instructional programs that provided only phonological awareness or phonics lessons were not used because it was not likely that such training would generalize to actual reading and spelling skills. In the DC condition, as in other intervention studies with demonstrable efficacy with poor readers (Torgesen, 1997; Vellutino et al., 1996), explicit instruction in the alphabetic principle was separated from the literature component, but both components were provided. The opportunity to apply what is learned in this component is most likely critical for ensuring that the instruction generalizes.

The results of this study underscore the value of research informed by contemporary hypotheses regarding the interconnection between language and reading. Previous research has demonstrated the effectiveness of direct instruction in the alphabetic principle with beginning readers from middle-class schools (Foorman, 1995a, 1995b; Foorman, Francis, Novy, & Liberman, 1991; Vellutino et al., 1996) as well as with disabled readers (Torgesen, 1997; Vellutino et al., 1996). Although the effects of tutorial interventions in this study were overshadowed by the strong effects of classroom instruction, other research with severely disabled readers indicates the merits of intensive one-to-one intervention with students (Torgesen, 1997; Vellutino et al., 1996). Future studies should also evaluate entire classrooms, not just Title 1 children, and compare the DC program in this study with other curricula providing DC. Depending on the results, it may well be possible to prevent reading failure for large numbers of children if beginning instruction explicitly teaches the alphabetic principle.

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Appendix A

Spelling Patterns for Embedded Code Instruction (Sequenced From Left to Right)

Sequence for Grade 1					Sequence for Grade 2				
_at	_ad	_en	_am	_ap	_ath	_uff	_oss	_ess	_all
_on	_op	_ot	_og	_id	_ill	_ell	_ax	_act	_alt
_ig	_it	_in	_up	_un	_and	_amp	_ant	_est	_anch
_ug	_ut	_ud	_et	_ed	_ang	_ank	_ask	_atch	_ox
_en	_ep	_go, no	_ain	_aint	_oft	_ond	_ong	_onk	_ook
_ait	_ay	_ame	_ake	_ade	_oot	_oom	_ood	_oon	_ix
_ate	_ale	_ave	_ane	_ace	_ift	_ink	_int	_ilt	_ilk
_me	_my	_ee	_eed	_earn	_ist	_isp	_ing	_irst	_itch
_ean	_ease	_ect	_ea	_ead	_ump	_ust	_unt	_ulp	_unch
_eal	_eel	_een	_eep	_eat	_ung	_unk	_ept	_end	_elt
_each	_ail	_ite	_ile	_ine	_ench	_est	_elp	_eft	_elf
_ive	_ice	_ime	_ike	_ide	_ent	_oil	_eive	_ief	_ar
_ome	_oke	_ose	_ope	_igh	_arm	_arn	_orm	_orn	_ern
_ight	_ind	_old	_ue	_oa	_ir	_ird	_urn		
_oad	_oat	_ie	_ow	_own					

Appendix B

Instructional Components Used as Criteria for Compliance

Direct code components	
1. Phonemic awareness	5. Writing
2. Use of anthology	6. Spelling dictation
3. Phonics, phonics review	7. Workshop
4. Guided and independent exploration	8. Use of workbook materials
Embedded code components	
1. Make-and-break activities	5. Writing (shared, independent)
2. Reading (shared, choral-echo, guided, readers' circle, independent)	6. Morning message, daily edit
3. Strategy instruction	7 Running record
4. Frame target word, extend pattern, review phonemic awareness	8. Home reading
Implicit code components	
1. Shared reading	5. Writing workshop, process
2. Guided reading	6. Integrated curriculum
3. Responses to and extensions of literature	7. Print-rich environment
4. Phonics instruction in context	8. Spelling instruction, workshop based on strategies and meaningful context

Appendix C

Teacher Attitude Survey

1. If you were responsible for curriculum decisions in your district, would you recommend that resources (materials, staff development, etc.) be provided for this intervention in the future?
2. Would you recommend the intervention you are using to a colleague?
3. Would you recommend the intervention for use with all age-appropriate children?
4. Would you recommend the intervention for children with special needs?
5. How close is the match between the intervention you are delivering and your own beliefs about how to teach children to read?
   a. An exact match. This is the way I already teach.
   b. Very similar. I agree with most aspects of the intervention.
   c. Somewhat similar. I agree with some aspects of the intervention.
   d. Not similar at all. My beliefs about the teaching of reading are contradictory to those of the intervention.

Note. Responses to the first four questions were based on a scale ranging from 1 (*definitely yes*) to 5 (*definitely no*).

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APPENDIX H – THE WRITTEN STATEMENT OF DR. REID LYON, NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT AT THE NATIONAL INSTITUTES OF HEALTH, BETHESDA, MARYLAND

STATEMENT OF DR. G. REID LYON
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NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT
NATIONAL INSTITUTES OF HEALTH

COMMITTEE ON EDUCATION AND THE WORKFORCE
U.S. HOUSE OF REPRESENTATIVES

HEARING ON TITLE I (Education of the Disadvantaged)
OF THE ELEMENTARY AND SECONDARY EDUCATION ACT

July 27, 1999
2175 Rayburn House Office Building
Washington, DC

(157)

61-843 00 - 6

Mr. Chairman and Members of the Committee,

I am Dr. Reid Lyon, Chief of the Child Development and Behavior Branch of the National Institute of Child Health and Human Development (NICHD) at the National Institutes of Health (NIH). I am honored to appear before you today on a matter of critical educational and public health importance, namely the ability to learn to read and succeed academically in today's schools and society. While Title I of the Elementary and Secondary Education Act addresses instruction in both reading and mathematics, today I will focus primarily on what we have learned about reading development, reading difficulties, and reading instruction. My emphasis on reading is predicated on the substantial knowledge and experience that NICHD and others have obtained about the critical need for the best scientific research to inform our attempts to develop optimal literacy skills in our children.

What's the Problem?

Our NICHD reading research programs, which, to date, have studied over 34,000 children and adults, as well as the results of other reading research supported by the Office of Educational Research and Improvement (OERI) of the Department of Education and the National Science Foundation (NSF), have taught us that learning to read is a formidable challenge for approximately 60% of our nation's children. For at least 20% to 30% of these children, reading is one of the most difficult tasks that they will have to master throughout their educational careers. This is indeed unfortunate. Why? Because learning to read serves as the major avenue to learning about our and others' cultures, societies, and history, not to mention language arts, science, mathematics, and the other content subjects that must be mastered in school.

When children do not learn to read, their general knowledge, spelling and writing abilities, mathematics skills, and oral language abilities suffer in kind. Within this context, reading skills

serve as *THE* major foundational academic ability for all school-based learning. Without the ability to read, the opportunities for academic and occupational success are limited indeed. Moreover, because of its importance, difficulty in learning to read crushes the excitement and love for learning with which most children enter school. It is embarrassing and frequently devastating to read poorly in front of peers and to demonstrate this weakness on a daily basis. It is clear from our NICHD-supported longitudinal studies that follow children from kindergarten into young adulthood that youngsters who read with difficulty are significantly and rapidly affected by such failure. By the end of the first grade we begin to notice decreases in self-esteem, self-concept, and the motivation to learn to read. As we follow the children through elementary and middle school grades, these problems compound, and, in many cases, our children are unable to learn about the wonders of literature, science, mathematics, and social studies because they cannot read grade-level textbooks. By high school, the potential of these students for entering college has decreased substantially, with increasingly fewer occupational and vocational opportunities available to them. These students tell us that they hate to read because it is such hard work and they feel stupid. As one adolescent in one of our longitudinal studies remarked recently, "I would rather have a root canal than read." In short, if we do not teach our children to read, they simply cannot take part in our country's democratic process; their gifts typically go unnoticed; and they are literally disenfranchised from contributing their fullest to their lives and to society. The psychological, social, and economic consequences of reading failure are legion, and it is for this reason that the NICHD considers reading failure to reflect not only a critical educational issue, but a significant public health problem as well.

The Importance of Research-Based Instructional Approaches to Title I Programs

The Children - There is no doubt that children most at risk for reading failure are those who enter school with limited exposure to oral language and literacy interactions from birth. These children often have little prior understanding of concepts related to phonemic sensitivity, letter

knowledge, print awareness, the purposes for reading, and general verbal concepts, including vocabulary. Children raised in poverty, youngsters with limited proficiency in the English language, children with speech, language, and hearing impairments, and children whose parents have limited reading skills or practices are clearly predisposed to reading failure. In short, there is an epidemic of reading difficulties among economically and socially disadvantaged children in the United States. It is typically these children who are eligible for and receive instructional assistance from programs made possible through Title I of the Elementary and Secondary Education Act. Despite the existence of educational programs supported through Title I funding, the proliferation of reading failure among disadvantaged children continues, in the main, unabated. Why does this unfortunate trend continue, particularly when many reading programs used with children eligible for Title I services are described as employing "research-based" instructional approaches? More specifically, given that the term "research-based" implies that the reading programs or approaches have been objectively evaluated to determine for which children the programs are most appropriate, why do so many disadvantaged children continue to founder in reading? One major reason is that the term "research-based" currently means many things to many people, with significant variations in the scientific quality of the research described by the use of the term. For example, some instructional reading programs touted as "research-based" may be based upon mediocre and substantially flawed scientific studies, while other instructional programs are based on studies that meet rigorous scientific criteria for research quality. The problem is that many in the field of education do not recognize the difference. To date, adherence to scientific quality and criteria has not been a strong guiding force in selecting and implementing instructional reading programs and approaches for children eligible for Title I services.

What Does "Research-Based" Mean? What Should It Mean?

One example of an appropriate use of the term "research-based" can be derived from several

common-sense questions a parent may ask when attempting to determine if a particular instructional reading approach or program in use in a classroom is appropriate for his or her child. One general question might be, "has this approach or program been used successfully before with children who are similar to mine in language development, reading development, and socioeconomic status, and in classrooms and with teachers that are similar to my child's?" Likewise, "who are the children who did not benefit from the approach or program, and why did they not respond favorably?" A second question might be, "what are the measures of "success?" Did reading achievement scores improve? Were there improvements in motivation and self-concept? What about teacher enthusiasm?" A third question might be, "do the measures or observations of these different aspects of "success" produce reliable or consistent findings across observers and settings?" A fourth question might be "how many times has this approach or program been evaluated or studied and similar results obtained?" An additional question might be "were the research studies, upon which the instructional approach or program is based, published in a respectable peer-reviewed scientific journal?"

Common-sense questions like these reflect the scientific essence of the term "research-based." Specifically, research-based means the instructional approach or program has been developed on the basis of peer-reviewed research that has been conducted with well-defined samples of children similar to those for whom the program will be implemented (representativeness); the data obtained are consistent across measures and observers (reliability); and, the research has been replicated with independent samples (replicability). In order for a consumer to determine whether the research basis for an instructional approach or program is representative, reliable, and replicable, the published research study(ies) must describe in sufficient detail the characteristics of the children under study, the characteristics and training of the teachers, the classroom settings, the teacher-student interactions, the specific components of the instructional program, and the research design to permit further independent replication and appropriate implementation of the approach or program.

Too often, discussions among researchers about the term "research-based" tend to pit those who conduct quantitative research with those who employ qualitative methods in attempting to understand the effects of instructional programs. This type of polarization, similar to debates about "whole-language versus phonics" approaches to reading instruction, is clearly not productive and confuses parents, teachers, and other consumers about the appropriate use of research in guiding instructional practices. Ultimately, high quality scientific research on instructional reading (and math) programs must combine research strategies that are experimentally responsible, test specific well defined ideas, yield data that are reliable, and are described sufficiently to permit replication, with research methods that provide a qualitative, albeit reliable view of the complexity and the process involved in imparting reading concepts to children of varying abilities in classroom settings. The question is *NOT* whether quantitative, hypothesis-driven research methods are more powerful than descriptive methodologies embodied in ethnographic studies, case histories, or classroom observation studies. The question which must guide us in establishing a genuine research basis for instruction with children eligible for Title I services is *WHICH COMBINATIONS OF RESEARCH METHODS AND APPROACHES ARE MOST APPROPRIATE FOR WHICH SPECIFIC RESEARCH QUESTIONS.* Likewise, questions about instructional decisions that reflect an either-or phonics/whole language program choice must be replaced by questions that embrace the complexity of reading instruction. As I have testified earlier before this Committee, this question should be, *FOR WHICH CHILDREN, ARE WHICH READING INSTRUCTIONAL APPROACHES/METHODS MOST BENEFICIAL AT WHICH STAGES OF READING DEVELOPMENT IN WHICH CLASSROOM SETTINGS.*

Status of Scientifically Derived Research Knowledge Relevant to Reading Development, Reading Difficulties, and Reading Instruction

Reading Development - Our NICHD-supported reading research program consisting of 42 sites in North America, Europe and Asia, as well as research studies from other programs supported

by OERI and the NSF, continue to obtain data that converge on the following findings. Good readers have an early introduction to the importance and meaning of the written word. Early in their school careers they are phonemically aware, understand that the alphabet represents the sounds of speech, and can apply this knowledge accurately to the development and use of phonics skills when reading new and less familiar words. They subsequently become increasingly fluent and can automatically recognize printed words. Given the ability to rapidly and automatically decode and recognize words, good readers bring strong vocabularies and good syntactic and grammatical skills to the reading comprehension process, and actively relate what is being read to their own background knowledge via a variety of strategies.

It is also clear from the NICHD, OERI. And NSF research that learning to read is a relatively lengthy process that begins very early in development and clearly before children enter formal schooling. Children who receive stimulating literacy experiences from birth onward appear to have an edge when it comes to vocabulary development, an understanding of the goals of reading, and an awareness of print and literacy concepts. Children who are read to frequently at very young ages become exposed in interesting and exciting ways to the sounds of our language, to the concept of rhyming and alliteration, and to other word and language play that serves to provide the foundation for the development of phoneme awareness. As children are exposed to literacy activities at young ages, they begin to recognize and discriminate letters. Without a doubt, children who have learned to recognize and print most letters as preschoolers will have less to learn upon school entry. The learning of letter names is also important because the names of many letters contain the sounds they most often represent, thus orienting youngsters early to the alphabetic principle--a principle that explains how sounds of speech become associated with the letters of the alphabet. Ultimately, children's ability to understand what they are reading is inextricably linked to their background knowledge. Very young children who are provided opportunities to learn, think, and talk about new areas of knowledge will gain much from the reading process. With understanding comes the clear desire to read more and to read frequently.

ensuring that reading practice takes place. Unfortunately, few children who are eligible for Title I services come to school and to the reading task with these advantages.

Reading difficulties - NICHD-supported research conducted over the past 35 years has been able to identify and replicate findings which point to a number of factors that can hinder reading development among children irrespective of their socioeconomic level and ethnicity. These factors include deficits in phoneme awareness and the development of the alphabetic principle, deficits in acquiring reading comprehension strategies and applying them to the reading of text, the development and maintenance of motivation to learn to read, and the inadequate preparation of teachers.

DEFICITS IN PHONEME AWARENESS AND THE DEVELOPMENT OF THE ALPHABETIC PRINCIPLE - In essence, children who have difficulties learning to read can be readily observed. The signs of such difficulty are a labored approach to decoding or "sounding" unknown or unfamiliar words and repeated misidentification of known words. Reading is hesitant and characterized by frequent starts and stops and multiple mispronunciations. If asked about the meaning of what has been read, the child frequently has little to say. Not because he or she is not smart enough; in fact, many youngsters who have difficulty learning to read are bright and motivated to learn to read, at least initially. Their poor comprehension occurs because they take far too long to read the words, leaving little energy for remembering and understanding what they have read. Unfortunately, there is no way to bypass this decoding and word recognition stage of reading. Using context to figure out the pronunciation of unknown words cannot appreciably offset a deficiency in these skills. In essence, while one learns to read for the fundamental purpose of deriving meaning from print, the key to comprehension starts with the immediate and accurate reading of words. In fact, difficulties in decoding and word recognition are at the core of most reading difficulties, and this is definitely the case for most children served in Title I programs. To be sure, there are some children who can read words accurately and

quickly yet do have difficulties comprehending, but they constitute a small portion of those with reading problems.

If the ability to gain meaning from print is dependent upon fast, accurate, and automatic decoding and word recognition, what factors hinder the acquisition of these basic reading skills? As mentioned above, young children who have a limited exposure to both oral language and print before they enter school are at-risk for reading failure. However, many children with robust oral language experience, average to above intelligence and frequent interactions with books since infancy may also show surprising difficulties learning to read. Why?

In contrast to good readers who understand that segmented units of speech can be linked to letters and letter patterns, poor readers have substantial difficulty in developing this "alphabetic principle." The culprit appears to be a deficit in phoneme awareness--the understanding that words are made up of sound segments called phonemes. Difficulties in developing phoneme awareness can have genetic and neurobiological origins or can be attributable to a lack of exposure to language patterns and usage during the preschool years. The end result is the same, however. Children who lack phoneme awareness have difficulties linking speech sounds to letters, leading to limitations in the development of decoding and word recognition skills, resulting in extremely slow reading. As mentioned, this inaccurate and labored access to print renders comprehension very difficult. The NICHD has supported several studies of children specifically enrolled in Title I reading programs. These studies have found that for those children who are deficient in phonological awareness skills, their improvement in reading is linked directly to instructional methods that include explicit teaching of these skills as part of a comprehensive reading program.

DEFICITS IN ACQUIRING READING COMPREHENSION STRATEGIES - Some children encounter obstacles in learning to read because they do not derive meaning from the material that

they read. In the higher grades, higher order comprehension skills become paramount for learning. Reading comprehension places significant demands on language comprehension and general verbal abilities. Constraints in these areas will typically limit comprehension. In a more specific vein, deficits in reading comprehension are related to: (1) slow and inaccurate decoding and word recognition (as previously discussed); (2) inadequate understanding of the words used in the text; (3) inadequate background knowledge about the domains represented in the text: (4) a lack of familiarity with the semantic and syntactic structures that can help to predict the relationships between words; (5) a lack of knowledge about different writing conventions that are used to achieve different purposes via text (humor, explanation, dialogue, etc.); (6) insufficient verbal reasoning ability which enables the reader to "read between the lines," and (7) the inability to remember verbal information.

If children are not provided early and consistent experiences that are explicitly designed to foster decoding and word recognition skills, vocabulary development, background knowledge, the ability to detect and comprehend relationships among verbal concepts, and the ability to actively employ strategies to ensure understanding and retention of material, reading failure will occur. This is the case even if children have well developed word recognition abilities. Unfortunately, our current understanding of how to develop many of these critical language and reasoning capabilities related to reading comprehension is not as well developed as the information related to phoneme awareness, phonics, and reading fluency. We have not yet obtained clear answers with respect to why some children have a difficult time learning vocabulary and how to improve vocabulary skills. Our knowledge about the causes and consequences of deficits in syntactical development is sparse. A good deal of excellent research has been conducted on the application of reading comprehension strategies, but our knowledge of how to help children use these strategies in an independent manner and across contexts is just emerging.

THE DEVELOPMENT AND MAINTENANCE OF MOTIVATION TO LEARN TO READ - A major factor that limits the amount of improvement that a child may make in reading is related to the motivation to continue the learning process. Very little is known with respect to the exact timing and course of motivational problems in the learning to read process, but it is clear that difficulties learning to read are very demoralizing to children. In the primary grades, reading activities constitute the major portion of academic activities undertaken in classrooms, and children who struggle with reading are quickly noticed by peers and teachers. Although most children enter formal schooling with positive attitudes and expectations for success, those who encounter difficulties learning to read frequently attempt to avoid engaging in reading behavior as early as the middle of the first grade year. It is known that successful reading development is predicated on practice with reading, and obviously the less a child practices, the less developed the various reading skills will become. To counter these highly predictable declines in the motivation to learn to read, prevention and early intervention programs are critical.

INADEQUATE PREPARATION OF TEACHERS - As evidence mounts that reading difficulties originate in large part from difficulties in developing phoneme awareness, phonics, reading fluency, and reading comprehension strategies, the need for informed instruction for the millions of children with insufficient reading skills is an increasingly urgent problem. Unfortunately, several recent studies and surveys of teacher knowledge about reading development and difficulties indicate that many teachers are underprepared to teach reading. Most teachers receive insufficient instruction in reading development and disorders during undergraduate, or even graduate, studies, with the average teacher completing only one to two reading courses. Surveys of teachers taking these courses indicate consistently that they have not observed professors demonstrate instructional reading methods with children, that course work is frequently superficial and unrelated to teaching practice, and that the supervision of student teaching and practicum experiences is fragmentary and inconsistent. At present, motivated teachers are often left on their own to obtain specific skills in teaching phonemic awareness,

phonics, reading fluency, and comprehension by seeking out workshops or specialized instructional manuals. This point is repeated consistently by district superintendents and reading specialists at the local level.

Clearly teachers who instruct youngsters with reading difficulties must be well versed in understanding the conditions that must be present for children to develop robust reading skills, and must be thoroughly trained to assess and identify problem readers at early ages. Unfortunately, many teachers and administrators have been caught between conflicting schools of thought about how to teach reading and how to help students who are not progressing easily. In reading education, teachers are frequently presented with a "one size fits all" philosophy that emphasizes either a "whole language" or "phonics" orientation to instruction. No doubt, this parochial type of preparation places many children at continued risk for reading failure since it is well established that no reading program should be without all the major components of reading instruction (phoneme awareness, phonics, fluency, reading comprehension, and substantial opportunities to read and write). The critical question that our teachers must learn to ask is which children need what, how should it be taught, for how long, and in what type of setting. The issue is not phonics or whole language, but how components of reading instruction are integrated into a comprehensive approach that varies with the individual child. For example, a child who enters school with strong word recognition skills will not require extensive instruction in phonemic awareness and phonics. This child should have the opportunity to engage in wide reading and writing activities to foster fluency and comprehension. Conversely, a child unable to recognize words accurately will require explicit and systematic instruction in phoneme awareness and word recognition in addition to opportunities to read and write. Importantly, the program must be comprehensive enough to be responsive to children with different literacy needs, thus allowing the teacher the opportunity to respond with a different instructional emphasis on specific reading skills.

It is hard to find disagreement in the educational community that the direction and fabric of teacher education programs in language arts and reading is in need of change. However, bringing about such change will be difficult. In addition, if teacher preparation in the area of language and reading is expected to become more thoughtful and systematic, change in how teaching competencies and certification requirements are developed and implemented is a must. Currently, in many states, the certification offices within state departments of education do not maintain formal and collaborative relationships with academic departments within colleges of education. Thus, the requirements that a student may be expected to satisfy for a college degree may bear little relationship to the requirements for a teaching certificate. More alarming is the fact that both university and typical state department of education requirements for the teaching of reading may not reflect, in any way, the type and depth of knowledge that teachers must have to ensure literacy for all. The current attempts by a growing number of states to either create or upgrade standards for teacher and instructional accountability are a very positive step in the right direction.

Reading instruction - Currently, NICHD-supported early reading instruction/early intervention studies are being conducted at 11 sites in North America. These studies involve the participation of 7,669 children and 1,012 teachers in 985 classrooms at 266 schools. These studies are typically longitudinal in nature and are designed to assess and intervene with those children identified in kindergarten and first grade to be at-risk for reading failure. NICHD-supported studies over the past 35 years have enabled us to develop reliable and valid early identification and assessment methods for this purpose.

As you know Mr. Chairman, several of these studies involve the participation of children attending urban schools and who are eligible for Title 1 funding. In the main, the children come from economically disadvantaged homes, participate in the Federal lunch program, and score in the bottom quartile (below the 25th percentile) in emergent and early reading skills. As

mentioned, these youngsters who are at risk for reading failure are identified in kindergarten and first grade, receive reading instruction through one of several reading approaches and programs, and are studied for a five year period to address the question: *FOR WHICH CHILDREN ARE WHICH INSTRUCTIONAL READING APPROACHES/PROGRAMS MOST BENEFICIAL AT WHICH STAGES OF READING DEVELOPMENT AND IN WHICH CLASSROOM ENVIRONMENTS.*

Two such studies of early reading intervention with disadvantaged children that are of particular relevance to this hearing on Title I are currently being conducted in Houston, Texas, and locally in Washington, D.C. The Houston study is now in its sixth year while the D.C. study is entering its third year. Currently, there are a total of 1,553 grade 1 and grade 2 children participating in the two sites. In the D.C. Early Interventions Project, 12 schools are participating, with nine schools serving as experimental sites and three schools serving as comparison sites. Within these schools, children from 80 kindergarten, first and second grade classes are participating in the project. Approximately 98% of the youngsters are African American with an equal number of boys and girls. All schools involved in these studies are Title I eligible, with over 75% of the enrolled students eligible for the Federal lunch program. These longitudinal studies are designed to identify the specific instructional components within different reading programs that are most beneficial to at-risk children at specific stages of reading development. In line with our research findings that converge on the necessity of developing phonemic awareness, phonics, fluency, and reading comprehension skills to become a skilled reader, these studies seek to understand how best to teach these skills. For example, a critical question being addressed is the extent to which instruction in these skills needs to be highly systematic and explicit through decontextualized letter-sound correspondence rules with textual reading practice in controlled vocabulary material or whether the instruction is more beneficial if presented implicitly through incidental learning gained by feedback on reading authentic literature. These are relative instructional emphases occurring in the context of a comprehensive approach to reading instruction.

The design and conduct of these studies in classroom settings in public schools is a complex enterprise requiring substantial teacher training, monitoring of the instructional protocols to ensure that the interventions are being carried out correctly, and extensive data collection and analysis. Data describing the effects of different reading intervention components and programs on the reading development of Title I children in Houston were published in a prestigious peer-reviewed journal in 1998 and I request that this article on the study be made part of the hearing record along with my testimony. A preliminary analysis of the Stanford 9 test results for each participating school has now been completed for the D.C. study and has been presented to the NICHD for review and to staff of this Committee. The trends in the preliminary D.C. data converge strongly with the published data obtained at the Houston site. Specially, the research indicates that early instructional intervention makes a difference for the development and outcomes of reading skills in kindergarten, first, and second grade Title I children at-risk for reading failure. However, the results also show that not all instructional approaches have the same impact. Specifically, children who received direct and systematic instruction in phoneme awareness, the alphabetic principle and phonics, within the context of a comprehensive reading program, improved in their word-reading skills at a significantly faster rate than children instructed via less systematic and explicit approaches to teaching the alphabetic principle. As with any intervention study, these investigations are designed to follow the children over time to determine if the gains achieved persist, and contribute to the development of sustained reading fluency and comprehension.

It should be pointed out that these studies are part of a long-term research investment made by the NICHD to first study the reading process in normal skilled readers, identify critical elements necessary for efficient reading, identify the developmental course of those elements or components, develop reliable and valid measurement methods and instruments to map development over time and to predict future reading behavior, apply these predictive instruments to identify children at risk for reading failure, and determine which instructional approaches are

most effective with at-risk children at different stages in their development of reading skills. To be maximally informative, this type of research program must utilize multidisciplinary talents, study reading development and response to instruction over time in a longitudinal manner, and adhere to standards of scientific quality. Given that this is the case, we can now move to the second and third questions that the Committee asked me to address in my testimony.

What is the Value of Focusing Title I Services and Interventions During the Elementary School Grades?

NICHD-supported longitudinal studies that have been ongoing since 1983 clearly indicate that children who are at risk for reading failure must receive early, intensive, and systematic reading instruction prior to the third grade if long term success is to be expected. At least 75% of children who do not receive such instruction continue to have significant difficulties learning to read into their early adult years. Our NICHD-supported studies underway in Florida indicate that older elementary and middle-grade children can improve their reading skills to a significant extent, but the degree of instructional intensity and duration is massively greater than that required during kindergarten, and first and second grades. As noted in the above, it is not only the timing of the instructional intervention that is critical, but the nature of the instructional components and how they are taught as well. Specifically, early intervention that includes explicit instruction in phoneme awareness, phonics skills, and reading comprehension strategies within a literature-rich context appears to be critical to fluent word and text reading and comprehension.

Are There Any Recommendations That Can Be Derived From the NICHD Reading Research Program That the Committee Might Consider as it Prepares to Authorize Title I?

We feel, as do many others, that an important use of research evidence is to inform educators,

parents, scientists, and policy makers so that the decisions that they make will ultimately lead to improvements in student achievement. Making research evidence relevant to policy and practice requires accountability for student learning, accountability for quality teaching, local capacity for research-based decision making, and a continually growing knowledge base that is accessible, trustworthy, and practical. Without accountability for student learning and teacher quality, there is typically only superficial interest in using scientific research to guide instruction. Moreover, once motivated through accountability, teachers, parents, schools, and States must have access to research evidence and be able to implement it appropriately.

For the field of education to be a profession in the fullest sense of the term, it must develop and embrace a trustworthy, reliable base of knowledge from which States, schools and individual teachers can draw specific information when making instructional decisions. Other professions have well-established procedures for evaluating research on various approaches and for agreeing how these findings will be used to help guide professional practice. The recently published report from the National Research Council on "Preventing Reading Difficulties in Young Children" is a first step in this direction. Through the leadership of the U.S. Congress, the National Reading Panel was recently established and is now in the process of identifying scientific standards that can be applied to educational research and instructional programs, approaches and methods to determine the scientific quality of these products. But we must ensure that we develop vehicles to make solid trustworthy scientific research information available to teachers in an accessible and practical manner. Specifically, all consumers of research information need to know and trust information that identifies which instructional approaches and programs work and for whom. This information must also be provided to policymakers and the public to engender respect and trust in the educational enterprise. Here are some suggested specific steps to accomplish these goals:

1. We must raise the quality and rigor of all education-related research. It will be important to ensure that all Federally-supported research adhere to high standards of research quality and we must encourage privately funded research initiatives to embrace these standards as well. The Federal support for the Interagency Educational Research Initiative (IERI) is a significant step in this direction. The IERI is a collaborative initiative among the NSF, the OERI, and the NICHD to stimulate and support multidisciplinary research on issues relevant to the instructional process. Likewise, the Reading Excellence Act legislated by Congress represents a major step forward in specifying the types and quality of educational research that need to be in place in order to make research-based decisions when selecting reading approaches and programs.

2. We need to increase the scale of rigorous educational research. As mentioned earlier, the NSF, OERI, and NICHD Interagency Educational Research Initiative collaboration is designed to stimulate, develop, and manage large-scale research on the core topics of reading, mathematics, science, and technology. These collaborations are critically important in the development of consistent quality research standards across Federal agencies and the constituencies that they represent.

3. We must continually synthesize research of high quality that is relevant to instructional practices with children at risk-for academic failure. The key to developing a solid research base that will ultimately inform practice is to demonstrate how research findings converge on a particular instructional practice or principle. The tendency in education to shift capriciously from one instructional "magic bullet" to another is clearly influenced by the field's inability to develop sustained, serious

research efforts capable of establishing convergence and ensuring replication of findings. The National Reading Panel, which is a collaborative effort by NICHD and the Department of Education, is a critical step in this process of establishing clear quality standards for research and evaluating existing studies with respect to these criteria. I would like to offer the recent preliminary report of the National Reading Panel for inclusion in the hearing record.

4. We need to develop a targeted realistic research agenda that is solidly based on the synthesis of the research mentioned above. We must clearly understand what we know, what we do not know, and develop comprehensive and continually refined research initiatives designed to close these gaps.

5. We must strive to improve the quality of consumer information. This might entail a process whereby all Federal agencies adhere to a set of quality research standards for information and materials that are disseminated. Consumers must know and understand the strengths and weaknesses of a given instructional approach, method, or material and must clearly understand the limitations of the research that supports a particular educational product.

6. We must continue to increase the demand for research-based effective practices and to instill a stronger demand for these practices in all Federal program funding. The funds currently available through the Reading Excellence Act point in the direction of research-based practice more clearly than any Federal legislation to date. This is clearly a critical and important step to ensuring that educational practices are based

upon well-defined research foundations.

7. We must continue to strive to improve the quality and relevance of training teachers at the preservice and inservice levels. No matter how powerful our research findings might ultimately be, the impact of those research investments will be minimal if researchers, professors, teachers, and policy makers do not speak the same language about what constitutes trustworthy quality research and how that information can be implemented in the complex world of classrooms. It is critically important that professional development activities and programs align specifically with ongoing major efforts to employ scientifically research-based practices to enhance student achievement. Our NICHD-supported early intervention studies have taught us that very few practicing teachers are aware of research-based best instructional practices. As such, we must consider developing comprehensive school-based training programs that are coherent, easily accessible, and meaningful to teachers.

It is important to re-emphasize the need to develop systematic and sustained research efforts to better understand how reliable, valid, and trustworthy research findings can be most optimally translated to practice in classroom settings. While teacher preparation represents a major area of concern in this regard, even the most highly trained teachers will have difficulty implementing solid research findings if they are poorly presented and explained, impractical, or put in place without helping teachers understand and apply the most effective implementation strategies.

I am pleased to note that the Administration's Education Excellence for All Children Act proposes changes in Title I that reflect areas I have identified as being important. These would build on the recommendations of the National Research Council's reading report by: (1) encouraging school districts to use diagnostic assessments in the first grade to ensure early identification and intervention for students with reading difficulties; and (2) promoting the use of

research-based approaches throughout Title I and the entire Elementary and Secondary Education Act. The Administration's proposal would also strengthen teacher quality by: (1) requiring all newly hired Title I teachers to be certified in the area they teach; (2) raising the minimum educational requirements for paraprofessionals working with students in classrooms; and (3) proposing a ten percent set aside for professional development. I would note also that while the principles of scientifically-based research may not neatly apply to all disciplines quite as well as reading, we should press, nonetheless, for a solid research base in other areas, including such fields as math, science, and the use of technology in the classroom.

If you will permit me, Mr. Chairman, I'd like to inform the Committee about a joint effort between NICHD and OERI to develop a research program that is designed to stimulate systematic, programmatic multidisciplinary research to increase our understanding of the specific cognitive, sociocultural, and instructional factors, and the complex interactions among these factors, that promote or impede the acquisition of English reading and writing abilities for children whose first language is Spanish. Given that children with limited proficiency in the English language are significantly at risk for reading failure, high quality research initiatives must be developed in this area. Just last week our two agencies issued a joint Request For Applications for research proposals in this area, and between us have committed nine million dollars annually for the next five years to fund this important research.

Mr. Chairman and Members of the Committee, I thank you for the opportunity to testify this afternoon. The questions you have posed are of extreme importance and I hope that the information I have presented will be of assistance to you in the decisions you must ultimately make regarding this important Federal program. I will be pleased to respond to any questions you may have.

BIOGRAPHICAL SKETCH

G. Reid Lyon, Ph.D.
Chief, Child Development and Behavior Branch
The National Institute of Child Health and Human Development
The National Institutes of Health

Dr. Lyon is a research psychologist and the Chief of the Child Development and Behavior Branch within the National Institute of Child Health and Human Development at the NIH. Within this context he is responsible for the direction, development and management of research programs in reading development and disorders, learning disabilities, language disorders and disorders of attention, cognitive, social, and affective development, and cognitive neuroscience. Prior to joining the NIH on a full-time basis in 1991, Dr. Lyon served as an associate professor of neurology at the University of Vermont from 1983 until 1991. He has also served on the faculties of Northwestern University (Evanston, IL) and the University of Alabama - Birmingham. Dr. Lyon received his doctorate with concentrations in neuropsychology and special education from the University of New Mexico in 1978. He completed his internship in developmental neuropsychology at the University of New Mexico Medical Center and served as a research neuropsychologist and professor at the University of Alabama and Northwestern University. He has also taught children with learning disabilities in the public schools and has served as a third grade classroom teacher.

Dr. Lyon has authored, co-authored and edited over 85 journal articles, books, and book chapters addressing learning differences and disabilities in children. His six most recent edited books are Better Understanding Learning Disabilities, Frames of Reference for the Assessment of Learning Disabilities, Attention, Memory and Executive Function, Neuroimaging: A Window on the Neurological Foundations of Learning and Behavior, Developmental Neuroimaging: Mapping the Development of Brain and Behavior, and The Pre-Frontal Cortex: Evolution, Biology, and Behavior. He has served or is presently serving on the editorial boards for Reading and Writing: An Interdisciplinary Journal, The Journal of Learning Disabilities, The Clinical Neuropsychologist, Learning Disabilities Quarterly, Learning Disabilities Research and Practice, the Journal of Consulting and Clinical Psychology. Learning and Individual Differences, Developmental Neuropsychology and the Journal of Experimental and Clinical Neuropsychology.

Dr. Lyon is a member of the American Psychological Association, a fellow of the International Academy for Research in Learning Disabilities, the International Neuropsychological Society, and the Council for Exceptional Children. He is also responsible for translating NIH scientific discoveries relevant to the health and education of children to the White House, the United States Congress, and other governmental agencies.

The National Reading Panel
PROGRESS REPORT

February 22, 1999

Members of the National Reading Panel

Donald N. Langenberg, Ph.D. *(Chair)*
Gloria Correro, Ed.D.
Linnea Ehri, Ph.D.
Gwenette Ferguson, M.Ed.
Norma Garza, C.P.A.
Michael Kamil, Ph.D.
Cora Bagley Marrett, Ph.D.
S. J. Samuels, Ed.D.
Timothy Shanahan, Ph.D.
Sally Shaywitz, M.D.
Thomas Trabasso, Ph.D.
Joanna Williams, Ph.D.
Dale Willows, Ph.D.
Joanne Yatvin, Ph.D.

Staff of the National Reading Panel

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Mary E. McCarthy, Ph.D., *Senior Staff Psychologist*
Vinita Chhabra, M.Ed., *Research Scientist*
Judy Rothenberg, *Secretary*

Jamie Nusbacher (IQ Solutions, Inc.), *Meeting Manager*
Patrick Riccards (The Widmeyer-Baker Group, Inc.), *Consultant*

February 22, 1999

Duane Alexander, M.D.
Director
National Institute of Child Health and
Human Development
Bethesda, Maryland 20892

Dear Dr. Alexander:

On behalf of the members of the National Reading Panel, I submit herewith a progress report on the work of the Panel to date. I think you will find that we have made substantial progress, despite the daunting nature of the task which the Congress has given us. I am pleased and, I must confess, a little surprised. I am confident that the Panel is well on the way to producing a final report that will be both responsive to our charge and an important contribution to the national effort to improve the reading performance of America's children.

Sincerely yours,

Donald N. Langenberg, Ph.D.
Chair

Attachment

cc: Members of the Panel

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Section 1: Background

Introduction

Evidence has been accumulating for a number of years that many of America's school children are not mastering essential reading skills. In 1996, the National Assessment of Educational Progress (NAEP), a national test that follows student learning, showed that 36 percent of nine-year-olds failed to reach the level of "partially developed skills and understanding" and seven percent could not accomplish simple reading tasks. Among 17-year-olds, only 29 percent were able to understand complex information and only six percent reached the highest level of understanding.

Two years earlier, the same national test showed that 42 percent of fourth graders read below basic levels. Further, these problems persisted even in upper grades: 31 percent of eighth graders and 30 percent of 12th graders read below the basic levels.

Even more disturbing, the 1994 NAEP results suggested that reading problems affect students in virtually every social, cultural, and ethnic group. According to the results, 29 percent of whites, 69 percent of African-Americans, 64 percent of Hispanics, 22 percent of Asian-Americans and 52 percent of American Indians read below basic levels in the fourth grade. And the same test showed that 32 percent of fourth graders who could not read basic material were sons and daughters of college graduates (Campbell, Jay, et al., *NAEP 1994 Reading Report Card for the Nation and the States: Findings from the National Assessment of Educational Progress and Trial State Assessment).*

Overall, national longitudinal studies show that more than 17.5 percent of the nation's school children — about 10 million children — will encounter reading problems in the crucial first three years of their schooling. (cite pending)

The Importance of Early Intervention

Unfortunately, for many of the children experiencing reading problems, these issues will persist throughout their schooling. Approximately 75 percent of the students identified with reading problems in the third grade are still reading disabled in the ninth grade (Shaywitz et al. 1992, *Journal of Educational Psychology;* Francis et al. 1996, *Journal of Educational Psychology*).

These findings suggest that early intervention is critical for problem readers. Those who fall behind in the first three years of their schooling may never become fluent readers. A strong body of research suggests they will continue to fall behind as they move further into their schooling. Because their frustrations build, they are more likely to drop out of school and less likely to find rewarding employment ("Reading: The First Chapter in Education," U.S. Department of Education's *Learning to Read, Reading to Learn* campaign).

Societal Costs

To be sure, reading problems cause incalculable suffering for the individual. But they also have a tremendous impact on society as a whole. According to statistics regularly used by the National Right to Read Foundation:

- 85 percent of delinquent children and 75 percent of adult prison inmates are illiterate;
- 90 million adults are, at best, functionally literate;
- The cost to taxpayers of adult illiteracy is $224 billion a year in welfare payments, crime, job incompetence, lost taxes, and remedial education; and
- U.S. companies lose nearly $40 billion annually because of illiteracy.

These dismal statistics are causing a rising tide of concern among educators and the public. Nearly 70 percent of teachers surveyed in 1994 said reading was the most important skill for children to learn, according to a poll by Peter D. Hart Research Associates for the American Federation of Teachers and the Chrysler Corporation. Parents also understand the importance of teaching reading to their children. A 1996 survey by the National Association of State Boards of Education and Scholastic Inc. found that 93 percent of parents said reading was critically important to their child's future success.

How Much Do Children Read?

Pollster Hart showed that students do not place the same value on reading skills as do their parents or teachers. Only 34 percent ranked reading skills as most important. They ranked reading third behind math and computers. Hart's 1993 poll of students also showed dramatic declines in student reading activity from ages nine to 17.

NAEP's 1994 results similarly showed declining interest in reading among students as they grow older. Twenty-five percent of 13-year-olds and 22 percent of 17-year-olds reported reading five pages or less per day in school and for homework combined. Equally disturbing, the amount they read for fun diminishes, as they grow older. NAEP found that 54 percent of nine-year-olds said they read for fun every day. Among 13-year-olds, only 32 percent said they read for fun. Still fewer 17-year-olds, 23 percent, read for fun every day.

The Reading Wars

The inability of the nation's schools thus far to improve the reading performance of students has fueled a long debate about the superiority of phonics instruction or whole language reading instruction. In general, phonics instruction emphasizes the process of decoding letter symbols and the relationship between sounds in spoken words and their

printed forms. Whole language instruction, on the other hand, puts the greatest emphasis on meaning as determined through letter sounds, grammatical construction, and context and stresses the importance of writing, surrounding children with good literature and generally creating a rich literate environment for students. Proponents of whole language typically encourage students to keep logs, to read along with the teacher, or to write stories about topics of personal interest.

Educator Horace Mann raged against phonics instruction in the 19th century, calling the letters of the alphabet "bloodless, ghostly apparitions." In the late 1930s, Scott Foresman introduced its popular "Dick and Jane" readers that taught children to read by memorizing the look of certain words, rather than the sounds of letters.

In 1955 Rudolf Flesch, author of *Why Johnny Can't Read*, attacked Scott Foresman's so-called look-say instruction, arguing that it threw 3,500 years of civilization "out the window." The pendulum took a decisive swing back to phonics instruction in 1995 when California passed its "ABC" laws requiring instruction to include explicit phonics and spelling skills. Having used the whole language approach since 1987, California made the switch back to phonics after it dropped into a tie for the lowest fourth-grade student reading scores in the 1994 NAEP test. Two other states, Ohio and North Carolina, quickly followed California's example, passing laws encouraging phonics-based instruction.

Reading Research

The reading wars have at once eroded the public's confidence in the education system, while forcing educators to forge paths of their own. Some educators have dug in, clinging to the dogma of one camp or another, while others have tried to blend the strengths of both approaches.

Nevertheless, advances in research are beginning to provide hope that educators may soon be guided by scientifically sound information. A growing number of works, for example, are now suggesting that students need to master phonics skills in order to read well. Among them are *Learning to Read* by Jeanne Chall and *Beginning to Read: Thinking and Learning about Print* by Marilyn Adams. As Adams, a senior scientist at Bolt Beranek and Newman Inc., writes, "(It) has been proven beyond any shade of doubt that skillful readers process virtually each and every word and letter of text as they read. This is extremely counter-intuitive. For sure, skillful readers neither look nor feel as if that's what they do. But that's because they do it so quickly and effortlessly."

More recently, the National Academy of Sciences' National Research Council's (NRC) Committee on Preventing Reading Difficulties in Young Children concluded that students learn best through a combination of whole language and phonics. The 1998 report concluded that there is no one way to teach reading. It said children need to learn letters and sounds and how to read for meaning. At the same time, children also need the opportunity to surround themselves with many types of books.

The NRC Report outlined critical components necessary to a child's education from birth through third grade to achieve reading fluency. The NRC Report noted, for example, that children should arrive in first grade motivated to learn how to read and equipped with a strong foundation in language and cognitive skills and first-grade students should be taught how to identify words using their letter-sound relationships. Second-grade students should be encouraged to sound out and identify unfamiliar words. And throughout early schooling, students should read for comprehension, develop a rich vocabulary, and receive instruction in comprehension skills.

Next Steps

The task now before the nation is to carefully sift through the research and discover a way to make the research findings useful and relevant to teachers and parents. Teachers should have easy access to these findings as we encourage to let them in teacher practices. In addition, parents need to understand their role in delivering children to the school door equipped to learn about reading.

At the direction of Congress, the National Reading Panel has been established by the director of the National Institute of Child Health and Human Development, in consultation with the Department of Education, to fulfill this mission. Over the last year, it has sought out and listened to the concerns and needs of critical stakeholders, including researchers, educators, parents, community members, and civic and business leaders. In regional meetings, the Panel has learned what these stakeholders know and believe about reading and reading research. The open dialogue of the Panel's regional meetings was designed to give stakeholders — the ones who ultimately will benefit from the Panel's conclusions — a role in guiding the Panel's outcomes. This was a critical step in understanding the needs, concerns, and challenges faced by these audiences. The hearings also helped the Panel determine the readiness of schools to apply the results of research.

Now the Panel is poised to embark on the critical task of determining what information is relevant and useful in the research and how to disseminate it to stakeholders in order to influence the quality and form of reading instruction in our nation's classrooms. Vigorous participation of these stakeholders at the regional meetings, coupled with the detailed methodology criteria developed by the Panel, made it clear that this endeavor should not be rushed. As a result, the Director of the National Institute on Child Health and Research Development has agreed to extend the Panel's efforts, giving it until the beginning of 2000 to fully address the questions set forth in the congressional Charge to the Panel.

Section 2: The National Reading Panel

In 1997, Congress asked the director of the NICHD, in consultation with the Secretary of the Department of Education, to create a National Reading Panel (NRP). According to the congressional charge, the Panel would determine from existing research the most effective approaches for teaching children how to read so that these findings might influence teaching in the classroom and home.

Congress did not expect the Panel to conduct its own research. Rather, it anticipated that the Panel would review the research literature, identify the methods that show the most promise, and then translate the research into key findings that would be disseminated to teachers and ultimately parents. Congress also expected that the Panel would solicit information from the public about pressing needs and about viewpoints toward the research.

Requests for nominations to the Panel were sent to scientists at the Department of Education and NICHD who are involved in reading research, as well as reading and scientific organizations. Electronic mail lists that serve those interested in reading research also were notified of the search for Panel members. Eventually, nearly 300 individuals were nominated to the Panel. From this list, NICHD and the Department of Education selected the 14 individuals who now make up the Panel.

Members of the Panel

The Panel includes prominent reading researchers, leaders in elementary and higher education, teachers, parents, and child development experts. They are:

Dr. Donald Langenberg; Adelphi, Maryland (Chair). Eminent physicist and Chancellor of the 13-member University System of Maryland since 1990. Has served as the Chancellor of the University of Illinois at Chicago, Deputy Director (and Acting Director) of the National Science Foundation, Professor of Physics at the University of Pennsylvania, and President of the American Association for the Advancement of Science and the American Physical Society. Highly respected nationally and internationally for his leadership capabilities, his ability to forge consensus on difficult issues, and his dedication to education at all levels.

Dr. Gloria Correro; Starkville, Mississippi. Professor of Curriculum and Instruction and Associate Dean for Instruction, Mississippi State University. Highly respected educator and teacher educator in Mississippi and the southeast and south central regions of the country. Credited with establishing kindergarten and early childhood programs in Mississippi, as well as the Mississippi Reading Assistant program. Member, National Council of Teachers of Mathematics, Association for Supervision and Curriculum Development, American Association of Colleges of Teacher Education, Association of

Teacher Educators, National Association for the Education of Young Children, Association for Childhood Education International, Phi Delta Kappa, and Phi Kappa Phi.

Dr. Linnea Ehri; New York, New York. Distinguished Professor, Ph.D. Program in Educational Psychology, Graduate School and University Center of the City University of New York. Nationally and internationally recognized scientist for her research on early reading development and instruction. Known among cognitive psychologists for her ability to identify aspects of pedagogy that are popular among teachers and to empirically examine the underlying assumptions of the pedagogy. Past President, Society for the Scientific Study of Reading; past Vice President, American Educational Research Association (Division C-Learning and Instruction); past member Board of Directors of the National Reading Conference; recipient of the Oscar S. Causey Award for Distinguished Research (National Reading Conference). Member, International Reading Association, Reading Hall of Fame, National Reading Conference, American Educational Research Association, American Psychological Association (Fellow), and Society for the Scientific Study of Reading.

Mrs. Gwenette Ferguson; Houston, Texas. Reading Teacher, North Forest Independent School District (Houston). Chair, English Language Arts Department; Kirby Middle School Teacher of the Year (1991). Received the Kirby Middle School Award for Outstanding Dedication and Service (1988, 1989,1990); Houston Area Alliance of Black School Educators Outstanding Educator Award, and North Forest Independent School District Achieving Through Excellence Award. Member, National Council of Teachers of English, Texas Council of Teachers of English. Vice President Elect of Affiliates, North Forest District Reading Council, Greater Houston Area Reading Council, and Texas Classroom Teachers Association.

Ms. Norma Garza; Brownsville, Texas. Certified Public Accountant for Law Firm of Rodriguez, Colvin & Chaney, LLP. Founder and chair of the Brownsville Reads Task Force. Serves on the Governor's Focus on Reading Task Force, Governor's Special Education Advisory Committee, Texas panel member of Academics Goals 2000. Received the Texas State Board of Education "Heroes for Children" Award. Member, International Dyslexia Association. Strong advocate for business community involvement in education.

Dr. Michael Kamil; Stanford, California. Professor of Psychological Studies in Education and Learning, Design, and Technology, School of Education, Stanford University. Chair, Stanford University Commission on Technology in Teaching and Learning Grants Committee; Chair, Technology Committee of the National Reading Conference (NRC). Former member of the Board of Directors of the National Reading Conference and the National Conference for Research in English. Former Editor of the Journal of Reading Behavior (1988-89); Editor NRC Yearbook (1980-82) and Co-editor of Reading Research Quarterly (1991-1995). Co-authored Understanding Research in Reading and Writing and co-edited Volumes I and II of The Handbook of Reading Research. Received Albert J. Kingston Award from the National Reading Conference and the Milton Jacobson Readability Research Award from the International Reading Association. Currently, member of the American Psychological Association, American

Educational Research Association, International Reading Association, National Conference for Research in English (Fellow), and the National Reading Conference.

Dr. Cora Bagley Marrett; Amherst, Massachusetts. Vice Chancellor for Academic Affairs and Provost, University of Massachusetts-Amherst. As Assistant Director, National Science Foundation (1992-1996), was first person to lead the Directorate for Social, Behavioral and Economic Sciences. Also served as Director of the United Negro College Fund/Mellon Programs; Associate Chairperson for Department of Sociology, University of Wisconsin; and member, Board of Directors, Center for Advanced Study in the Behavioral Sciences. Served in 1979 on the President's Commission on the Accident at Three Mile Island. Member, Board of Governors, Argonne National Laboratory; Board of Directors, Social Science Research Council; Commission on the Behavioral and Social Sciences and Education, National Research Council; Peer Review Oversight Group for the National Institutes of Health; National Advisory Council for the Fogarty International Center, also of the National Institutes of Health. Fellow, American Association for the Advancement of Science, and Vice President, American Sociological Association.

Dr. S. J. Samuels; Minneapolis, Minnesota. Professor, Department of Educational Psychology, University of Minnesota. Recipient of the College of Education Distinguished Teaching Award. Internationally respected reading researcher. Highly experienced consultant to inner-city schools. Selected for the Reading Hall of Fame. Received the Wm. S. Gray Citation of Merit from the International Reading Association and the Oscar O. Causey Award from the National Reading Conference for Distinguished Research in Reading. Member of the Governing Council, Center for Research in Perception, Learning and Cognition at the University of Minnesota; American Educational Research Association; American Psychological Association (Fellow); International Reading Association; and National Reading Conference.

Dr. Timothy Shanahan; Chicago, Illinois. Professor of Urban Education, Director of the Center for Literacy, and Coordinator of Graduate Programs in Reading, Writing, and Literacy at the University of Illinois at Chicago. Internationally recognized reading researcher with extensive experience with children in Head Start, children with special needs, and children in inner-city schools. Editor of the Yearbook of the National Reading Conference and formerly Associate Editor of the Journal of Reading Behavior. Received the Albert J. Harris Award for Outstanding Research on Reading Disability and the Milton D. Jacobson Readability Research Award from the International Reading Association. Member, Board of Directors of the International Reading Association. Member, American Educational Research Association, National Council on Research in Language and Literacy, National Council of Teachers of English, National Reading Conference, and Society for the Study of Reading.

Dr. Sally Shaywitz; New Haven, Connecticut. Professor of Pediatrics and Co-Director, Yale Center for the Study of Learning and Attention, Yale University School of Medicine. Neuroscientist nationally and internationally recognized for research contributions in reading development and reading disorders, including recent demonstration of neurobiological substrate of reading and reading disability. Unique for contribution to development of conceptual model of reading and reading disability and

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for identifying high prevalence of reading disability in girls. Received Distinguished Alumnus Award, Albert Einstein College of Medicine. Most recently served on National Academy of Sciences Panel on Preventing Reading Difficulties in Children. Diplomate, American Board of Pediatrics; member, Institute of Medicine of the National Academy of Sciences, American Academy of Pediatrics, American Association for the Advancement of Science, American Educational Research Association, Council for Exceptional Children, International Dyslexia Association, Society for Developmental and Behavioral Pediatrics, Society for Pediatric Research, Society for Research in Child Development, and Society for the Scientific Study of Reading.

Dr. Thomas Trabasso; Chicago, Illinois. Irving B. Harris Professor, Department of Psychology, The University of Chicago. Cognitive scientist internationally recognized for investigations of comprehension during reading. Has most recently developed a connectionist model that simulates dynamic processing over the course of reading. Has served as Chair of Department of Psychology, Editor of Cognitive Psychology, and Associate Editor of the Journal of Experimental Child Psychology. Member, Psychonomic Society, Society for Research in Child Development, American Educational Research Association, International Reading Association, National Reading Conference, American Psychological Society, Society for Discourse and Text Processing (Founding Member and Chair), and Society for the Scientific Study of Reading.

Dr. Joanna Williams; New York, New York. Professor of Psychology and Education, Columbia University. Internationally recognized scholar for research on linguistic, cognitive, and perceptual bases of reading development and disorders. Fulbright Scholar, University of Paris; Oscar S. Causey Award for Outstanding Contributions to Reading Research from the National Reading Council; elected to Reading Hall of Fame (1994); and recognized as a Guy Bond Scholar by the University of Minnesota (1997). Currently serves as Editor of Scientific Studies in Reading and has served as the Editor of the Journal of Educational Psychology. Member, American Educational Research Association, American Psychological Association (Fellow), Council for Exceptional Children, International Reading Association, National Conference on Research in English, National Reading Conference, New York Academy of Sciences, and Society for the Scientific Study of Reading.

Dr. Dale Willows; Toronto, Ontario, Canada. Professor, Department of Human Development and Applied Psychology, Ontario Institute for Studies in Education, University of Toronto. Internationally recognized scholar in reading development and reading difficulties. Has served on the editorial boards of the Journal of Research on Reading and Reading Research Quarterly. Member, American Educational Research Association, International Dyslexia Association, International Reading Association, and National Reading Conference.

Dr. Joanne Yatvin; Portland, Oregon. Principal, Cottrell and Bull Run Schools, Boring, Oregon. Forty-one years' experience as a classroom teacher and school administrator. Served as Chair of the Committee on Centers of Excellence for English and the Language Arts, National Council of Teachers of English. President of the Wisconsin Council of Teachers of English and the Madison (Wisconsin) Area Reading Council, and a member of the National Advisory Board, Educational Resources Information Center on Reading

and Communication Skills ERIC/RCS. Named Elementary Principal of the Year by the Wisconsin Department of Public Instruction and the Wisconsin State Reading Association. Received the Distinguished Elementary Education Alumni Award from the University of Wisconsin School of Education. Member, National Council of Teachers of English, International Reading Association, Association for Supervision and Curriculum Development, and Oregon Reading Association.

Staff of the Panel

The National Reading Panel also has a number of support staff personnel to-direct the Panel's day-to-day efforts. These staff are:

F. William Dommel, Jr., J.D., *Executive Director*
Mary E. McCarthy, Ph.D., *Senior Staff Psychologist*
Vinita Chhabra, M.Ed., *Research Scientist*
Judy Rothenberg, *Secretary*

The Panel receives logistical support from IQ Solutions, Inc. (IQ Meeting Manager Jamie Nusbacher) and communications and strategic counsel from The Widmeyer-Baker Group, Inc. (Project Manager Patrick Riccards).

Charge to the Panel

Implementing the directive of the Congress, Dr. Duane Alexander, director of the National Institute of Child Health and Human Development, charged the Panel as follows:

The Congress of the United States, when it asked that the National Reading Panel be established, directed the Panel to "assess the status of research-based knowledge (of reading development and disability), including the effectiveness of various approaches to teaching children to read." Based on this assessment, the Panel is to "present a report to the Secretary of Health and Human Services, the Secretary of Education, and the appropriate congressional committees. The report should present the Panel's conclusions, an indication of the readiness for application in the classroom of the results of this research, and, if appropriate, a strategy for rapidly disseminating this information to facilitate effective reading needed regarding early reading development and instruction.

A recent report by the National Research Council Committee on Preventing Reading Difficulties in Young Children summarized converging evidence on what must be in place for children to learn to read and on various approaches to reading instruction. This report provides a valuable foundation on which the National Reading Panel can build.

Accordingly, the Panel is charged to conduct an extensive and critical review, analysis, and synthesis of the research literature on how children learn to read, and on how the components of skilled reading behavior are developed by various approaches to reading

instruction for children of differing backgrounds, learning characteristics, and literacy experiences. Taking into account the relevance, methodological rigor and applicability, validity, reliability, and replicability of the reported research the Panel should address the following questions:

1. What is known about the basic process by which children learn to read?

2. What are the most common instructional approaches in use in the U.S. to teach children to learn to read? What are the scientific underpinnings for each of these methodological approaches, and what assessments have been done to validate their underlying scientific rationale? What conclusions about the scientific basis for these approaches does the Panel draw from these assessments?

3. What assessments have been made of the effectiveness of each of these methodologies in actual use in helping children develop critical reading skills, and what conclusions does the Panel draw from these assessments?

4. Based on answers to the preceding questions, what does the Panel conclude about the readiness for implementation in the classroom of these research results?

5. How are teachers trained to reach children to read, and what do studies show about the effectiveness of this training? How can this knowledge be applied to improve this training?

6. What practical findings from the Panel can be used immediately by parents, teachers, and other educational audiences to help children learn how to read, and how can conclusions of the Panel be disseminated most effectively?

7. What important gaps remain in our knowledge of how children learn to read, the effectiveness of different instructional methods for teaching reading, and improving the preparation of teachers in reading instruction that could be addressed by additional research?

In carrying out this charge, the Panel shall use the means necessary to retrieve, review, and analyze the relevant research literature; seek information and viewpoints of researchers and other professionals in reading instruction as well as of teachers and parents; and exert its best efforts to complete its work of developing responses to the questions above and submit a final report.

Section 3: Accomplishments to Date

Panel Meetings

Thirteen members of the National Reading Panel (NRP) assembled for their inaugural meeting in Bethesda, Md. on April 24, 1998 at the National Institute of Child Health and Human Development (NICHD). At the meeting, Panel members discussed how they would organize themselves, task assignments, and schedule future meetings.

Members also heard a presentation on the report of the National Academy of Sciences' National Research Council (NRC) Committee on the *Prevention of Reading Difficulties in Young Children*. Dr. Alexandra Wigdor, director of the NRC Division on Education, Labor, and Human Performance and Dr. Susan Burns, study director for the Committee on Prevention of Reading Difficulties in Young Children, made the presentations.

Panel members reviewed the literature search engines, databases, and Internet links that are available to help them in their researching tasks. They also reviewed models of methodological approaches for analyzing research, including models recently employed by the Department of Education, models employed by the Cochran Collaboration, the medical model, and a model for evaluation of educational instruction research. Members of the public were invited to present information to the Panel on these and related topics.

The Panel held three more two-day meetings after the inaugural session. The first was on July 24-25 in Bethesda. At this meeting, the Panel agreed that it would be appropriate to study the research on professional development and teacher training. They determined that the topic merits subgroup status, as opposed to including aspects of teacher preparation in review of research being conducted by the other subgroups. *(For a description of the subgroups, see pg. 22)*

At the September 9-10 Panel meeting in Washington, Panelists presented reports of the subgroups, detailing how the subgroups were defining their tasks and the progress they were making.

At the November 19-20 Panel meeting in Washington, Panelists began sorting through the primary areas and assertions about reading instruction that the Panel should investigate. Members then agreed to take the complete list of priorities and select the 10 items that they believed to be most important.

Panel members noted that a substantial amount of work already had been conducted in the areas of phonemic awareness, oral/repeated reading, and strategies/procedures. After a quick tabulation, Panel members determined that the top 13 areas for exploration should be: assessment instruments, oral language, home/preschool/school age influences, writing instruction, materials/texts in instruction, vocabulary, print awareness, phonemic awareness/letters, phonics instruction, oral reading/repeated reading, reading practice

effects in fluency, etc., knowledge base for reading standards in teacher education, and strategies/procedures.

At the January 21-22 Panel meeting in Washington, the Panel adopted the methodology the Panel would follow in conducting its analysis of research pertinent to reading instruction. The methodology is described in depth in Section 5.

Regional Meetings

Despite their diverse professional expertise, interests, and approaches to teaching children how to read, Panel members determined they could not effectively carry out their congressional mandate of assessing the readiness of research-based knowledge for application in homes or schools without gaining valuable perspectives and insights from practitioners and other stakeholders engaged in the teaching and learning of reading across America.

By unanimous decision, Panel members felt it was of paramount importance to supplement their review and scrutiny of research findings by listening to and learning from the many voices of parents, educators, students, community members, and civic and business leaders whose own practical experiences and knowledge of the craft would balance and inform the Panel's inquiry. To accomplish this objective, Panel members decided to organize a series of regional meetings in Chicago, IL (May 29, 1998), Portland, OR (June 5, 1998), Houston, TX (June 8, 1998), New York, NY (June 23, 1998), and Jackson, MS (July 9, 1998).

Through news releases and articles, public service announcements, notifications and letters of invitations, the NRP blanketed the nation and host communities with information on its mandate and approach — encouraging concerned individuals, reading experts, parents, teachers, researchers, and representatives of national, state, and local organizations to attend one or more of the regional meetings, request presentation opportunities in advance, or sign-up on-site to provide public comment that would contribute to the Panel's work.

In total, close to 400 people attended regional meetings. Panelists heard from 44 invited presenters and 73 members of the public who addressed their concerns about reading. The regional meetings helped Panel members better understand how reading is currently taught, what the challenges and opportunities are in changing reading instruction, and how to translate the Panel's findings to meet the information needs of various audiences.

Subgroups

From the start, the Panel recognized that the task ahead was so broad that it would be necessary to separate into subgroups. Initially, the Panel used as guideposts the main themes outlined in the report of the National Academy of Sciences' National Research Council's *Preventing Reading Difficulties in Young Children*. Accordingly, subgroups

were appointed to review the following areas: alphabetics, fluency, comprehension, and technology.

In September, after reviewing the comments presented at the regional meetings, the Panel supplemented the original themes with a fifth subgroup. Because many of the comments were about teacher education and preparation, the Panel added a fifth subgroup to assess research-based activity on teaching standards and practices. In January 1999, the scope of the Technology Subgroup was expanded to include the task of identifying eligible and useful topics that are not now being addressed by the other subject matters.

Section 4: What The Public Told Us

The Panel embarked on a process to yield far more than a compendium of research and research findings for academics. In five regional meetings, it sought voices from the field so that it would be possible to craft a final report that took into account where educators and other stakeholders currently stand on the teaching of reading. Throughout the regional hearings, Panel members remained strong in their conviction that a good faith effort to learn from all who would come forward, as well as those who have long studied reading research, would undoubtedly help them prepare a final report that would speak to the broad spectrum of professions and individuals who work with children, educators, and schools.

The meetings also demonstrated the Panel's respect for the practice and knowledge of those who work with children. This qualitative research into the beliefs and opinions of parents, educators, and members of the general public will provide a vital balance to the investigative research conducted by the Panel subgroups.

Several dominant themes emerged from the regional meetings. They include:

- validity of research;
- breadth of research;
- importance of educators;
- definition of reading instruction and goals;
- phonics and comprehension;
- reading as a cross-disciplinary skill;
- multiple approaches to instruction;
- professional development;
- the role of parents and other concerned persons;
- special-needs individuals and situations; and
- dissemination priorities and recommendations.

Following are summaries of what the Panel heard, synthesized generally around these key themes.

Research: What is Valid?

Many presenters at the regional meetings provided their own experience and opinions about how reading should be taught, or they described their own programs that were designed to help children learn to read. As the purpose of the regional meetings was to learn how reading instruction is perceived by those working with children, very few of the presenters addressed the research issues and the question of what forms of research are valid.

Those who did, however, criticized the accuracy and utility of existing research in reading. Some discussed the problems facing the NRP in determining what research is valid and reliable, noting that the biggest challenge and most important charge facing the NRP is to agree on formal rules of evidence that can help in the selection of research studies meeting the highest evidentiary standards.

The Gold Standard: Scientific Rules of Evidence

At the Houston meeting, Darvin Winick of the Governor's Business Council also stipulated that scientific criteria for determining the acceptability of research findings must be developed. According to Winick, knowledge about how to teach reading does exist but it is not used in many classrooms. For example, Winick said, when Texas business leaders tried to help implement Governor George W. Bush's goal of having all children reading "on grade level" by grade three, they were surprised to receive confusing advice from the experts. "Advocates for various approaches to the teaching of reading quickly came forward. But many were unable to provide us with any credible proof that their approach worked."

In conducting its own research analysis, the Governor's Business Council was surprised to find "an enormous variation in the quality of evidence of effectiveness that was available for various reading instructional programs." Winick said that some approaches were well-supported by controlled experimentation, while others were backed by what he labeled "poor or inappropriate research." Too many studies lacked the standards for proper scientific inquiry, which he characterized as "clear statements of hypotheses, controlled experimental conditions, standardized treatment, and reliable and objective measurement." He blamed this on a tendency in the field of education to inadequately develop data and a hesitancy to look at research in psychology, physiology, and other fields for models.

Winick called on the NRP to eliminate misinformation about how reading skills are acquired. When, for example, his group announced it was looking for research-based programs, everyone claimed that their program was based upon research. But the quality of this research varied. "I just wonder," said Winick, "should it be necessary for people outside of education to go through the high level of effort to protect our investment in the schools. Should educational researchers not have a higher standard? Why is there no accountability for the quality of investigation and reporting?"

Winick also warned the Panel against writing a compromised document that supports every theory. Instead, the NRP should adhere to its charge by "taking into account the relevance, methodological rigor and applicability, validity, reliability, and replicability of the reported research." Only experimental evidence should be used to set a high standard for future research, he asserted. For this reason, Winick did not give his own opinion on how reading should be taught. Instead, he encouraged debate over reliably obtained performance data.

Establishing a High Degree of Confidence in the Research Base

David Denton, the Southern Regional Education Board's director of Health and Human Services Programs, expressed a greater degree of confidence in the reliability of the research. He said that reading research is "as valid as research can be, as long as we recognize that knowledge is not static, and that tomorrow, or next week, or next year, there will be new research that will inevitably alter our understanding of today's research findings." And while more research is always needed, the research we currently have is sufficient to use as the basis for policy and conclusions as long as we are willing to change our minds should we develop different evidence.

However, Denton expressed this confidence only about the research conducted by the National Institute of Child Health and Human Development (NICHD), not about other studies. He said that, "[NICHD] research has been characterized by the highest scientific standards, and it has provided invaluable knowledge about how good readers read, and why many children do not become good readers. The NICHD research has clearly shown us that phonemic awareness, the knowledge that certain letters and letter combinations correspond to certain sounds is a critically important skill that all good readers must master."

Furthermore, he added that much of this research does not make it into the classroom and that some reading programs lack evidence of their effectiveness. "The biggest problem posed by the research on reading today is that we haven't yet figured out how to make sure that all teachers have that full range of instructional tools at their disposal, and that they have the ability to use appropriate assessments to make the right choices for different children. And the piece of those tools which seems to be most missing, particularly among new graduates, is the ability to assess and teach specific skills such as phonemic awareness."

Denton described the NICHD research as supporting the claims of non-extremists from both the phonics and whole language camps. "It is clear from that research that the best reading programs provide many opportunities for children to read a wide variety of good literature. There is nothing in the research that supports the idea that a program based exclusively on skills instruction or phonics, with little emphasis on reading for meaning and pleasure, is an appropriate way to teach reading. Children must master the necessary skills, but they must also be engaged and given reasons for wanting to read." He found that "the great contribution of the NICHD research is that it tells us how important it is to make sure that one particular piece of the reading puzzle, phonemic awareness, is in place for all children at least by third grade." Ultimately, he supported a balanced approach that recognizes that this balance could be different for different children.

Although only a few of the speakers examined the question of the validity of the research, many who did supported a hard, scientific approach. Without such a scientific approach, they maintained there is a danger in relying merely on opinion or being seen as a combatant in the false dichotomy between phonics and whole language that has been dubbed the "reading wars."

Reading Research: Cast the Net Broadly

The NRP was advised by presenters to cast its net broadly — making sure to capture the essence of reading research. In general, presenters appeared to convey that while the graphophonemic system of language and its relevance to the reading process has been well documented, other areas that also directly bear on reading acquisition have been neglected or not conveyed to teachers.

Specifically, speakers petitioned for the inclusion of emerging brain research, writing as part of reading instruction, and anthropological considerations to become part of a reading research "package" that is made available to educators.

Jennifer Monaghan, founder of the History of Reading Special Interest Group of the International Reading Association, questioned why writing is not an integral part of the reading process. "Why is there a National Reading Panel, but no National Writing Panel?" she queried. "Why are we so obsessed by children's failure to read when we are relatively cavalier about their failure to write?"

One way Monaghan linked reading and writing is through phonemic segmentation, a basic requirement of both. She encouraged those in the field of reading to focus on teaching teachers about the orthography and phonology of their own language.

Reading research also should devote time to the study of emerging brain research, particularly in early childhood, noted Kathy Grace, an early childhood expert from Tupelo, Mississippi. She cited a national program involving physicians that helps disseminate reading information to parents. Noting her familiarity with the program locally, she said pediatricians in Greenville, South Carolina, regularly give parents a "prescription" that says: "Read to your child." They also give them a book. Said Grace; "The physician gives the book because it is a health issue. It is a development of the brain issue. It is not just an educational issue."

A number of presenters advised the Panel to include in its study a review of research on the impact of technology on reading. Mark Horney, from the Center for Advanced Technology in Education at the University of Oregon, described two research projects designed to make better use of technology to teach reading: "Project Literacy High," which uses electronic versions of text to help hearing-impaired students improve reading skills, holds significant promise for all readers; and the "de Anza Multimedia Project," currently under construction, applies the "supported text" notion to create a Web-based learning environment "where you would study from a whole collection of texts all with resources on a particular domain of study," explained Horney. He added that his work centers on reading to learn, rather than learning to read.

Educational anthropology is missing from the reading research equation, according to Jan Lewis, a professor at the Pacific Lutheran University in Tacoma, Washington. In presenting to the Panel, she defined educational anthropology as a "way of taking what we know from anthropology, that of looking at cultures... from the perspective of the participant or the stakeholder or the person who was involved." In the education field, that means examining the players involved in schools — primarily the student and

teacher — and observing, from their perspective, what is happening in the classroom. "We look at the perspective of the teacher," said Lewis. "We look at the perspective of the child and how those [perspectives] may interact."

Becky McTague, an Illinois teacher, also counseled the Panel to consider research from a variety of fields. She called the Reading Recovery program effective because of its ability to answer questions about a child's reading development within a "broader base and context" than is generally the case with other reading programs.

Panel Urged to Avoid Skirting Tough Issues

A few speakers stated that, contrary to media headlines and professional judgments that various approaches to reading instruction are segments of a broad spectrum associated with child development and acquisition of reading skills as opposed to competing camps, the "reading wars" are not over — at least not on the frontlines of education. They called on the NRP to clear up the muddied waters.

For example, rather than adding new items to the reading research agenda, Ali Sullo, editorial director of reading language arts at Houghton-Mifflin Company, made a case for addressing issues only partially covered by the recent National Research Council (NRC) report. Sullo claimed the artillery is still firing between phonics and whole language forces because the NRC report failed to "come to grips with some of the most contentious issues... including organizing or grouping for reading instruction, the role of phonics, and the advantages and disadvantages of various beginning reading texts." She hoped the Panel would "further the fine work of the NRC committee and... address some of these contentious issues as well as establish a research agenda."

Charles Arthur, a first-grade teacher in Portland, also expressed concern over the "very murky" view of reading caused by "statements made by this particular panel and other councils on this subject." He maintained that political balance "was king," rather than helping teachers make good choices. According to Arthur, the one question that must be answered is: "Are there good starting skills that lead more successfully to the full act of reading than others?"

Teachers: The Missing Voice

Numerous presenters praised the NRP for seeking out the perspective of classroom teachers. They repeated a common refrain among American teachers about the lack of respect afforded them by the public and policymakers. Panel members were urged to "continue to put human faces on this issue," and to extend to teachers "the trust and the expectation that they will make effective professional decisions about how to use them."

Portland English-Language Arts Coordinator Michael Ann Ortloff discussed the need to respect the knowledge and work of teachers. Ortloff underscored that respect for the professional efforts of reading teachers should be "implicit" in the work of this Panel or any other that may be assigned the task of tackling a subject as complex as reading.

One speaker blamed schools of education, state legislative bodies, and others for disempowering teachers by taking instructional decision-making out of their hands. James Hoffman, professor of language at the University of Texas, said disempowerment occurs when teacher educators promote a particular method of teaching, when researchers study "method A versus method B," or when policy makers "who control the curriculum through mandated assessments manipulate the teacher incentive or reward systems to reflect a particular conception of teaching, who impose standards for student performance with high-stakes consequences for both teachers and students, who control the very nature of the curriculum materials that enter classrooms."

Hoffman suggested that the Panel stamp out these disempowering factors by first visiting state testing plans that define the curriculum. He looked no further than his home state of Texas, to challenge what he considers to be the false claims of increased reading scores as demonstrated by the state's TASS test. He compared the increase in TASS scores to the fact that reading achievement scores on norm-referenced tests have remained relatively flat. "How can this be?" he queried. "Could it be that we are only teaching to the test?"

Hoffman clearly stated that his position does not suggest that empowering teachers alone is sufficient to produce effective teaching. He acknowledged that "you cannot empower ignorance and expect results." Instead, "we must educate and empower. Both are necessary."

Teachers As Researchers

A more common theme echoed by other speakers was to highlight teachers' roles as classroom researchers. Kim Patterson, with the Mississippi Writing-Thinking Institute, and Pacific Lutheran University Professor Jan Lewis discussed the merits of examining the role of teachers as researchers. Patterson's Institute promotes professional development opportunities that allow teachers to develop instructional strategies based on research. She urged the Panel to hear the voices of front-line teachers who have conducted "action research" that provides "valuable information about how kids learn to read."

Lewis depicted teachers as "classroom researchers" who are "critical to our understanding" of how reading takes place. She encouraged the Panel to seek out teachers who best exemplify solid teaching, "support their work, encourage the publication of their own classroom stories, consider the successes."

While teachers' voices as "classroom researchers" should be heard, several speakers underscored that teachers should not work in isolation to advance student reading skills. Paula Costello, English language arts coordinator for a large suburban school district outside Buffalo, New York, relayed to the Panel the benefits of teacher study groups in describing her recent work with seventh- and eighth-grade English teachers who formed such a group to examine remedial practices.

Collaboration is a requirement for success in the classroom, according to New York University Professor Trika Smith-Burke. Unfortunately, collaboration among teachers, central administrators, researchers, and others is an onerous task. Smith-Burke's first-hand experience of trying to mesh schedules between the university and the classroom often ended in defeat, she noted.

Obstacles to Teaching Success

Scheduling conflicts pale in comparison to other obstacles that block teacher success, especially for beginning teachers. University of Southern Mississippi Professor Dana Thames elaborated on these dilemmas to Panel members at the Mississippi meeting. Many teachers decide to begin their teaching career on the road easiest to travel, partly due to the lack of respect and compensation awarded American teachers, she noted.

Other obstacles cited include:

- family members who harp on the new teacher that they are working too hard;
- the lack of effectiveness of student-teacher mentors;
- the role played by the building and school administration, especially if it is one that hinders creativity and innovation;
- state accountability and school-level accreditation, which may lead to higher test scores and a high accreditation level, but do not "necessarily indicate success in literacy, because most assessments focus on isolated segments of decoding rather than on comprehension;" and
- peer pressure from older teachers that causes the new teacher to try to fit in by not doing things "too far out of the norm."

Effective Reading Instruction and Goals: Some "Big Ideas"

Skepticism prevailed among the speakers over the status of the "reading wars." Even if overt fighting has ceased, fundamental questions have been left unanswered and information on the teaching of reading reaches the hands of too few teachers.

One speaker observed that the introduction of new state-driven standards has added a new dimension to the reading debate. A paradigm shift in education has left reading research languishing in a past era, according to Dick Allington, professor and chair of reading at the State University of New York, Albany. "Research has not caught up with policy and practice," he argued, since new student standards have been introduced in schools nationwide. The new standards "offer a different vision of what it means to be literate from the old minimum competency definitions that have been so pervasive," he observed.

An example Allington offered is the preponderance of research that supports the importance of phonemic awareness and phonemic segmentation. This, he said, stands in stark comparison with the paucity of information on how to develop phoneme awareness and segmentation in young students. He also reported that while research studies exist that "describe the nature of teacher training," few "describe the impact of the training in terms of how teachers teach, much less whether student learning is affected."

Allington raised concerns that few studies tease out why something is working. He noted that often long-term effects might significantly differ from short-term effects that are evident in a program under study.

Ken Pugh, representing Haskins Laboratories in Connecticut and Yale University School of Medicine, offered a detailed description of neurobiological research that examines brain functions of dyslexic adults compared to a control group that is underway as a collaborative effort between Haskins and Yale. The research detected that when both sets of readers moved from orthography to orthography plus phonology, there was a noted difference in the way their brain systems responded. The bottom line: "the signature of a phonological deficit" in the dyslexic adults is evident. Pugh called for additional studies to ascertain how intense phonological remediation affects brain patterns.

One critic of the recently released report by the National Academy of Sciences' National Research Council's Committee on Preventing Reading Difficulties in Young Children, urged Panel members to pick up the pieces by addressing several research issues. Jerome Harste, vice president of the National Council of Teachers of English, claimed the NRC report offers no consistent model of learning, which results in teachers receiving a "mixed message" regarding how to teach. The NRC report also did not offer a consistent definition of reading, said Harste, nor did it allocate sufficient time to research surrounding comprehension issues.

Another theme that emerged from regional meetings was the stated dangers of "tinkering around the edges of reading." Most who spoke to the issue believed that minor changes would not lead to more effective reading instruction. Mike Walters, director of the Mississippi Association of School Superintendents, said he learned that tinkering with the system "will result... in the disappointment of us all." For him, the reading problem transcends the schools, forcing the community and family to evaluate their role in student achievement.

While some speakers urged professional development opportunities to focus on providing teachers with knowledge of multiple strategies for enhancing reading programs, other speakers focused on more discrete issues. For example, Seattle University Professor Katherine Schlick Noe said helping children see themselves as readers and writers is a key component of effective reading instruction. She suggests that children learn to read and write "within a context of its application in the real world."

Barbara Foorman, professor and director of the Center for Academic and Reading Skills at the University of Texas, Houston, asserts that to teach reading effectively, instruction must "promote reading success, specifically success in identifying words and understanding text." Foorman contended that a first step is the child's ability to segment

the sounds of words. Programs that focus on the most frequent spelling patterns for the approximately 44 phonemes of English "can bring children at risk for learning to read to a national average in decoding words." She coupled the phonological approach with an emphasis on reading for comprehension, the ultimate goal of reading. According to Foorman, an effective reading program would include word recognition, spelling, vocabulary, and comprehension. All are linked. Word recognition allows children to develop memory and attention, which are key for comprehension. Spelling takes students beyond phonics to "learn about word meanings and writing conventions." It is hard to read and spell, said Foorman, without broadening one's vocabulary. Comprehension is the ultimate goal of reading.

Other speakers offered their opinions on whole language, phonics, and other strategies for teaching reading skills. For example, University of Utah Professor Kathleen Brown underscored at the New York meeting that research indicates reading by context alone is an unreliable and inefficient aspect of any reading program. Although many teachers encourage their nascent readers to rely on context clues for decoding unknown words, Brown finds it an abhorrent practice. "Using context to identify words only works about approximately 25 percent of the time and it is poor readers who rely on these strategies to identify words," she said. A more effective strategy, she noted, is decoding by analogy. In other words, when confronted by an unknown word, effective readers use chunks they remember from other words to discover an approximate pronunciation of the unknown word.

Seattle Pacific University Professor Bill Nagy focused his presentation on the important role vocabulary plays in reading comprehension. However, he cautioned that spending more time doing vocabulary activities is not the correct route. Instead, teachers "need to be more intentional about doing what we can to promote vocabulary growth in our students." He suggested a multi-pronged approach, with "wide reading" as a cornerstone, including individual word education, word learning strategies, and word consciousness promotion.

"Big ideas" tangential to reading acquisition also surfaced during the meetings. According to many speakers, improved reading achievement is not possible without addressing such issues as class-size reduction, teacher training, consideration of different learning styles, and early intervention. Portland parent Lisa Leslie advised, "If your desire is to accomplish something other than stirring the reading debate pot, you are going to have to look beyond just finding the best practice and the research and look at some of the big ideas that would apply to any reading method that is used in the classrooms."

Stepping Stones for Reading: From Phonemic Awareness to Comprehension

To borrow from Dr. Seuss, reading is a great balancing act, according to most speakers. Most presenters supported reading instruction that combines systematic phonics with good children's literature. Susan Stires, a staff developer in New York City representing the National Council of Teachers of English, spoke for many when she endorsed a

reading approach that combines "phonology and meaning-making [as] both are essential to children's learning to read."

While not dismissing whole language, other presenters cheered phonics as the "come-back kid" in the great debate. Portland parent and educator Sharim Wimbley Gouveia insisted that children must be taught how to decode the language using phonics since "our system of spelling and reading was created as a sound-symbol relationship."

Several presenters discussed the needs of children who do not require phonics instruction to break the code. Some argued that if reading instruction was truly individualized, the needs of these children could easily be met. On the other hand, Dorothy Whitehead, a veteran reading teacher with 38 years of experience, spoke up in favor of a whole language program that does not "completely ignore the 20 percent of the children who need the phonics to decode the words."

One speaker questioned an approach to reading instruction that includes both phonemic awareness and whole language strategies. Jimmy Kilpatrick, director of READ BY GRADE 3.com, insisted that a program including phonics and whole language only confuses children. Said Kilpatrick, "In actuality, I believe public schools in this country have been teaching the balanced approach for reading for years. This is why our students cannot read. Most teachers have been providing a smattering of phonics with whole language lessons. The children have been totally confused because whole language means teach the children to read from the whole to the part; phonics means to teach children to read from the part to the whole... How can children keep from being confused when the two approaches are mixed or balanced?" Kilpatrick unequivocally concluded that whole language is "educational malpractice for the bottom 20 percent of our student population."

Striking a Balance in Reading Instruction

Flexibility is key to a successful reading program, stated David Denton, the Southern Regional Education Board's director of the Health and Human Services Program, because "children aren't all the same." He called for a "flexible, multi-faceted approach to reading, or a 'balanced approach,' for want of a better term," a theme echoed by a broad range of speakers. Denton stressed that balance means different things for different children.

Officials from Chicago, Portland, Houston, New York, and Jackson presented their schools' plans to improve reading achievement. All promoted balance in their reading programs. Student standards were set and assessments developed to measure progress.

"A Balanced Approach to Reading" is the title given to Houston Public Schools' reading program. Phyllis Hunter, reading manager for Houston Independent School District, explained the six key features of the reading program: phonological awareness; print awareness; alphabetic awareness; orthographic awareness; comprehension strategy; and reading practice. These principles are imbedded in a literature- and language-rich environment.

Early Identification of Weaknesses

One issue that united presenters is the need for an early screening test to detect a weakness in phonological awareness. Yolanda Proust, a linguist who addressed the Houston meeting, called upon researchers to develop tests for teachers to use to assess "on-the-spot" a "poor reader" who has not grasped phoneme awareness skills.

To respond to this need, Hofstra University Psychology Professor Charles Levanthal has been engaged for the past eight years in developing a "quick and effective screening instrument for the detection of reading difficulties based upon the acknowledged role of phonological coding skills in the process of reading." His instrument, "The Quick Rhyming Test" (QRT) is based on phonological and orthographic similarity and dissimilarity. It is a 15-minute test for both children and adults that Levenathal claimed correlates with subscores on the Stanford Achievement Test and the Woodcock Reading Subtests for adults.

Reading: A Cross-Disciplinary Approach that Requires Systemic Change

Steve Bingham, representing the Southeast Regional Vision for Education (SERVE) -- a consortium of educators in the southeast United States -- at the Jackson meeting, described what teachers need to build a strong reading program. Such a program is based on the following principles:

- stated goals and expected student outcomes are discussed and shared;
- goals and outcomes are consistent across a school, not just a classroom;
- texts and other materials fit the program goals;
- individualized instruction is available for students needing more support than others;
- students read frequently from "relevant-leveled books of their choice;"
- student progress is assessed and documented in an ongoing fashion;
- teachers receive more reading research information;
- teachers get continual feedback on how to apply new instructional approaches;
- reading is considered a cross-disciplinary skill;
- the program is modeled, possibly through school-wide reading events and through activities that involve the community.

Another champion of system-wide reform was Amy Alday-Murray, from the Oregon Department of Education, who described the comprehensive educational standards-setting process underway in her state. Common curriculum goals guide local educators in developing a curriculum, while content standards "identify the essential knowledge and skills expected of all students. These standards are assessed statewide. The benchmarks,

set for grades three, five, eight, and 10, serve as indicators and can be used by teachers as diagnostic tools."

Oregon has a multiple-choice assessment and a requirement for local performance assessments, also given at grades three, five, eight, and 10. Statewide scoring guides have been developed, and training for reading teachers is underway. Future goals include engaging parents in home and school literacy activities and providing support in reading instruction for secondary-level teachers.

Chicago Public Schools also produced a comprehensive plan to increase student reading achievement. As told by Cozette Buckney, chief education officer for the city's school system, the plan covers pre-K through 12th grade. The system made headlines by putting 109 schools on probation, with the administration providing extensive help to upgrade programs, including reading. The school system then placed reading coordinators in the 76 next lowest performing schools to help redesign the reading program. Academic standards were established systemwide, and social promotion was eliminated. According to Buckney, students cannot enter high school unless they are reading at the 7.2 grade level, up from 6.8. Strong support systems were put in place, including after-school and summer programs to help students achieve at least grade level in reading.

Mary Ann Graczyk, president of the Mississippi American Federation of Teachers, Paraprofessionals and School-Related Personnel, called upon the Panel to champion a variety of conditions for reform of the many systems that support teaching and learning in individual schools and districts. "This means teachers and students must be guaranteed a safe, orderly environment of learning where there are expectations of high standards of discipline and achievement of all students," she explained. She called for necessary planning time for teachers and an "end to the excessive use of teachers' time for non-teaching duties." For Graczyk, systemic change also means an end to using poverty as an excuse for the lack of achievement. "Poverty is not a synonym for stupidity, laziness, ineptitude, or lack of learning or caring."

Successful Reading—A Lifelong Learning Experience

A focus on reading should start early in a child's life and extend beyond the walls of the classroom. "Early education has got to start earlier and earlier," said William Winters, former Governor of Mississippi. He explained that one of his greatest challenges as governor was to pass a public kindergarten bill in Mississippi. The state now makes kindergarten possible for every child.

Deborah Shaver, a primary teacher from Portland, encouraged the Panel to include in its study the importance of capitalizing on eager attitudes toward learning that youngsters typically bring to first grade. Shaver advocated that more resources and time be devoted to first-grade reading. Teachers must find a way to capture the eagerness first graders bring to school to learn to read, she said. "That is where our biggest payback will be because we are getting children who are engaged and who want to learn and who do not have to carry the baggage of 'I cannot do this, or I have tried, or I am not as good as everybody else,'" she said.

Other presenters called upon the Panel to continue reading education beyond the early years of school. Dawn Tyler, an eighth-grade reading teacher in Mississippi, who just completed her first year in the classroom, addressed the need for reading instruction beyond third grade. She urged Panel members to give special consideration to the needs of older students and to children from rural communities.

Ellen Fader, youth service coordinator for Multnomah County Library, offered insight into how libraries can participate in reading instruction. Libraries in 18 counties in Oregon participate in the Reading for Healthy Start Project, which receives federal and state funding. An emergent literacy program for expectant and new parents is part of the program run out of the Multnomah County Library. Called "Born to Read," the program is affiliated with the American Library Association. Other programs run under the auspices of local libraries are "Ready to Read" and "Similar Books to You," which send trained individuals into third- to fifth-grade classrooms in low-income schools to help with academics.

While underscoring the importance of libraries in supporting reading instruction, Janice Cate, an English-as-a-Second-Language teacher, decried the lack of books in school and classroom libraries. Not only do more books need to be made available to students, she said, children and adults also need to choose what they want to read.

David Wizig, a Houston middle school teacher, reported on the importance of having students choose their own books. He found self-selection to be a great motivational tool.

Reading: There's No Single Magic Bullet

There are many ways up a mountain, said one presenter in describing the various approaches he believes must be corralled to produce effective reading instruction. Other presenters agreed that a one-size-fits-all reading model fails to address the needs of all children. Several presenters added that reading instruction should be part of a cross-disciplinary practice that includes at least writing and spelling.

Learning to read should be a universal goal, presenters maintained, with multitudinous paths leading to goal achievement. Speakers were unequivocal that the one-size-fits-all reading model has failed students nationwide. Instead, teachers must first be able to recognize different learning styles and then be able to match appropriate strategies to the individual needs of the child.

In broader strokes, several speakers distinguished the earliest readers into two groups: those who have phonemic awareness skills and those who require direct instruction to acquire the skills that support reading. Along these lines, Kathryn Ransom, president of the International Reading Association, emphasized the different learning styles of early readers. She noted that phonemic awareness is an "essential element of learning to read," but "universal intensive direct instruction of the alphabetic principle is not as clearly necessary for all children."

More information must get into the hands of educators for them to provide high-quality teaching practice that best fits the needs of any individual or group. Mississippi Teacher of the Year Tina Scholtes hailed the Success for All model because it addresses all learning styles. A belief that all children can learn to read undergirds the program. It also is designed to start reading instruction wherever the child lies on the ready-to-read spectrum, rather than "throw[ing children] into something that they are not prepared for."

One Size Does Not Fit All

Kittye Copeland, a 31-year veteran teacher, urged the Panel to reject ideas about whole group instruction, claiming that it forces "teachers to fragment language and it also sets up situations that children have to sit through things that they already know and they do not need to hear or they are not ready to hear." Children, then, are unable to pay attention and grab hold of what is being presented to them. Copeland stated that the "personalization of reading is ignored and often individual learners are devalued."

Speaking to the issue of whether it is feasible to individualize instruction in the average American classroom, Sholtes maintained, "You can do it. It is not impossible." She added that her school has built into its daily schedule 90 minutes of uninterrupted reading instruction every day. All teachers become reading teachers, with children divided into groups based on "where they felt comfortable."

Yet, most teachers are trained in only one method of reading instruction, noted Miriam Balmuth, professor at the Hunter College School of Education, at the New York Panel meeting. She observed several pitfalls with this approach. First, many first-year teachers trained in one method often end up in a school system that expects them to teach reading requiring the application of the principles of another method. Culpability for this one-method dilemma rests on the faculty of schools of education and reading researchers, who often travel down the "well-trodden path of... research that focuses on examining whole programs..."

Faculty and researchers mistakenly have been searching for a "teacher-proof method," she claimed. Said Balmuth, "What may be needed, instead of one well-grounded teacher-proof method, is a universe of well-grounded, method-proof teachers."

The divide between instructional paths should not be carved between special-needs and regular populations, but on the specific needs of the individual child. One parent attributed the reading success of her profoundly hard-of-hearing child to the individualized instruction she receives at her school. "This should be a goal for all of mainstreamed children," declared parent Lisa Leslie. She conceded, however, that the teacher-student ratio in most classrooms prohibits reading instruction designed to meet the particular needs of an individual child; and she called for "reducing the ratio."

Both Portland primary teacher Deborah Shaver and Peter Thacker, a teacher at Portland's Cleveland High School, supported Leslie's call for individualized instruction. "It is very important to follow the lead of the kids," said Thacker. "No one strategy works for all children," echoed Shaver. Thacker also offered a critical view of reading research, which

he said, "looks at the mean." Instead, teachers should "look at the individual," he declared.

Concurring that the one-size-fits-all approach to reading excludes hordes of students, Shirley Tipton, from the Coalition for Citizens with Disabilities, urged the Panel to pursue multiple approaches to reading instruction that consider a wide variety of learning styles. She also advocated persistence. "Do not change from one type of reading instruction to another so often that the child or the adult, in sheer desperation, simply gives up or drops out and becomes another illiteracy statistic."

Professional Development: The Cornerstone of Reading Achievement

Presenters at all sites implored Panel members to address the need for effective, research-based pre-service and in-service professional development opportunities for teachers charged with teaching children how to read and comprehend. However, it was the prospective teacher's undergraduate coursework in reading, or lack thereof, that received the most attention.

Far too often, teachers unprepared to handle the complexity of reading instruction are sent to the frontlines of education, and, as noted by one speaker, through default refer only to the teacher's manual in a basal reading program. These teachers, at best, do little to advance the reading skills of students who easily break the code; at worst, they wreak havoc on the reading abilities of children who require direct instruction in phonological awareness.

Kay Allen, associate director of the Neihaus Education Center in Houston, was one speaker who called for the renewal of pre-service reading education. The Center is a not-for-profit education foundation that offers teachers ongoing professional development in reading instruction, emphasizing the needs of students at-risk for reading failure.

Many of the teachers who troop through the Center's doors leave complaining, "'why wasn't I taught this information in my education classes at the university?'" reported Allen, in summarizing the Center's propositions to:

- give pre-service teachers the information they will need in order to help all of their students achieve their potential in reading and writing, particularly the 15 to 20 percent who are at risk for reading failure without explicit instruction;
- strengthen training requirements for those teaching reading to first, second, and third graders;
- provide in-service training for teachers already in the classroom whose pre-service training did not provide them with what they need and whose awareness of research does not include more recent findings such as the role that phonological awareness plays in the reading process.

Allen concluded, "To fail to provide teachers with the necessary knowledge base is to fail them in their professional preparation and ultimately to fail those students who look to them to unlock the door to literacy."

Norfolk State University's Reading Partners Clinic is a university-based program that tries to accomplish this training requirement. Carmelita Williams, professor in the School of Education at Norfolk State University, highlighted the Clinic's success with education majors and their young students. The program provides "practical and hands-on experiences [that are] useful in promoting successful readers," she noted.

Teacher training in reading should stress linguistics and language acquisition, according to Glenellen Pace, professor at Lewis and Clark University. She told the Panel this background would allow teachers to see that "the notion of phonics and whole language are not parallel constructs." Pace held that whole language is a philosophy, while phonics is a "little, tiny piece of teaching reading."

While acknowledging an urgent need for a "broadly grounded, scientifically credible, and educationally appropriate knowledge base" of reading instruction to serve as the "foundation for professional development," several speakers also highlighted formidable obstacles hindering progress in this area.

International Reading Association President Kathryn Ransom cautioned in Chicago that teachers are leery of change. "Teachers have grown tired and weary of today's magic bullet," she lamented. She and others also noted the lack of time afforded teachers during the school day to reflect on cutting-edge reading research and innovative ways to bring theory into practice. "I am sure each of you have been in a classroom and realized how little time there is for the professional educator to sit and think, to communicate with colleagues, to visit, to read research. They constantly have children in front of them," she told Panel members. "For any research-based recommendation to be effective it must be adapted to meet the needs of each school and community."

More Resources Are Needed to Improve Teacher Professional Development

Several speakers pointed to a paucity of resources dedicated to reading instruction as plaguing many schools. The lack of available funding, for example, often leads to bad decisions at the local level. IRA's Ransom reported that in some districts, untrained paraprofessionals provide reading instruction in an attempt to save money. Or a student with special needs has less time with a "highly qualified — and, yes — expensive professional reading teacher," she added.

Paula Costello, an English language arts coordinator for a large suburban school district outside of Buffalo, New York, echoed Ransom's dismay over lack of funds. Often, districts purchase "canned program[s]" that they drop in the laps of teachers, who then spend one day sifting through the manuals; and "they consider that professional development," said Costello. She warned that if the Panel develops recommendations that "leave leeway for districts" to grab hold of the basal programs, they will do that

because it's easier than constructing more meaningful professional development opportunities.

Reinforcing the necessity of professional development for teachers, speakers from Oregon and Texas equated their cities' and states' reading success to their ability to target funds specifically to teacher-training needs.

According to Michael Ann Ortloff, targeting funds for professional development that focuses on beginning reading strategies is a key element of early literacy programs in Portland Public Schools. Ortloff has worked as a pre-school through eighth-grade teacher, a middle school assistant principal, and elementary school principal. She also was co-director of the Oregon Writing Project, and currently is the English language arts administrator for Portland Public Schools.

Portland's plan, which emphasizes professional development that allows teachers to "learn, revise, and implement effective literacy practices," also calls for extensive ongoing professional development in reading for all teachers.

Robin Gilchrist, assistant commissioner at the Texas Education Agency, highlighted her state's financial commitment to reading and the required professional development. All of the state's Goals 2000 funds were directed to staff development in reading, "particularly on continued, sustained professional development," remarked Gilchrist.

Methods to help teachers predict a child's reading difficulty and strategies to help young children at-risk of reading problems also were considered a critical piece of the reading puzzle by many speakers. Knowledge of appropriate early intervention strategies is considered essential to help place children on the road to reading, according to numerous speakers.

Patty Braunger, a 25-year teaching veteran, credited her training as a Reading Recovery teacher for allowing her to be a successful teacher of reading, even with children who are severely learning disabled. She joined the choir of reading teachers and researchers who strongly advocate early intervention. Said Braunger, "There are those children that are labeled learning disabled because of a system that has not put the money into early intervention," including teacher training.

Parents and Reading: A Child's First Teacher

The Panel's recognition of the importance of parents as stakeholders met with much applause at each of the meeting sites. For many speakers, the learning at home/learning at school connection is a vital, yet often underutilized, tool for teaching reading. The role of parents as a child's first teacher has gained status as breakthroughs in brain research have lent credence to what many teachers, psychologists, and social workers intuited through clinical experiences: learning takes place at a very early stage in life, and the interaction between child and parents and caregivers can make a significant impact on the child's future academic career.

Despite the potential of parental instruction on a child's future reading ability, Portland teacher Deborah Shaver alerted Panel members to an "us versus them" atmosphere that she has observed, pitting school staff against parents.

One Portland parent-volunteer, Mary Kelly Kline, offered that some educators are hesitant to reach out to parents because it "involves changing parent behavior" in some cases. The dirty little secret that no one wants to disclose, according to Kline, is that "unless a lot of parents' behaviors change... regarding their children and reading in the home, it is unlikely that all the literacy strategies that we have heard today are going to be ultimately successful."

Mary Hardy, representing the Mississippi PTA, echoed Kline's concern, calling on the Panel to help get the message to parents that it is important for them to read with and to their children. Reading must be "advertised like McDonald's," she said.

The Value of Volunteers

Other speakers described successful parent volunteer or parent-education programs that help parents encourage reading among their children and also promote intergenerational literacy skills. For example, Margaret Doughty, executive director of the Houston Reads Commission, described the Houston Reads to Lead Program — a program that depends on total community engagement to improve literacy skills. Catering to parents and children, the Program operates in schools, parks, churches, community learning centers, and libraries. Doughty: "Family literacy as an intervention strategy has been proven to work. It ties family needs for self-sufficiency together and puts learning at the heart of change within a family."

Portland reading teacher Kathy Baird pointed to the strong parent-training component for the Reading Recovery program as a model for parent involvement. Miriam Westheimer represented the Home Instruction Program for Preschool Youngsters (HIPPY) at the New York meeting. HIPPY works, according to Westheimer, because it does more than simply tell parents they should read to their children. It helps them get started by providing guidance on how to read to a child. HIPPY also is based on home visits conducted by paraprofessionals.

Joanne Wilson-Keenan, a language arts teacher from Springfield, Massachusetts, informed the Panel of the Springfield Learning Community Collaborative, which she directs. The program was designed to "tap families' funds of knowledge and to change the relationships between urban families and schools." The Collaborative involves teachers, students, their families, and the University of Massachusetts at Amherst.

Jill Brennan, chairman and president of Reading is Fundamental (RIF) in Chicago, and Nedra Whittig, executive director of RIF in Chicago, discussed RIF's strong parent component. Brennan clearly stated that the program's mission is not to teach children how to read, but to motivate them to want to read. Making parents partners is a critical element of RIF, and its subsidiary program, Project Open Book at Children's Memorial Hospital.

Whittig, director of Project Open Book, also acknowledged that parents are key to the program she directs. Similar to the emphasis on parents in the HIPPY program, Project Open Book gives parents pointers on how to help their child read and organizes meetings of parents, giving opportunities for parents to learn from each other.

In Mississippi, Nadine Coleman described the Parents As Teachers program, which operates under the Petal School District parenting center. Coleman, director of the center, explained that the parent program involves home visits, in which staff make monthly visits to the parents of children ages zero to three.

Special Needs: No Child Benefits from a "Wait and Fail Model"

Prevailing commentary among speakers focused on the similarities of special-needs and regular-tracked students, rather than on their differences. For example, early intervention for reading was hailed by numerous presenters as imperative for both special-needs and general-education students.

Individualized reading programs also were identified as essential for both special-needs and general-education students. However, many presenters acknowledged that learning-disabled students who are not appropriately taught how to read are especially vulnerable to failure.

Sandra Britt, from the Learning Disability Association of America, described the path far too many learning-disabled (LD) children travel. "Unless these children are identified early, and appropriate instruction provided, they may be passed along in school until basic reading instruction is no longer available," she said.

She added that many LD children require a multi-sensory phonics-based approach with instruction in phonemic awareness. Others need a "more meaning-based approach, while other students need interventions to address comprehension problems."

Some presenters asserted that it is not the child who is at risk of a reading disability, but a school that is at risk for failing to teach children how to read. Cheryl Ames, from the Beaverton School District in Oregon, stressed that "policy and practice should emphasize effective early intervention prior to labeling [children as] disabled." In support of her view, Ames cited an International Reading Association publication statement that identifying a child as learning disabled based simply on reading problems is inappropriate unless that child has received proper early intervention in reading instruction. She added that instruction for these children should be led by a reading specialist, carried out in small groups, if not one-on-one, and consist of at least 30 minutes each day for at least one full year.

Houston parent Synda Frost echoed Ames by stating that some children are "disabled by instruction." She said she is "no longer moved by the common excuse given by schools that begins with, 'If only the parents would do their part.'" According to Frost, an

effective school-based reading program would preclude any need for parental involvement in order to achieve reading success.

Informed instruction is key for reading achievement for all students, including learning-disabled children, notes G. Emmerson Dickman, board member of the International Dyslexia Association. He also advocated early intervention, quoting Tom Hehir, director of the Office of Special Education Programs in the U.S. Department of Education, who said, "Special education for pupils with learning disabilities in the United States is a wait and fail model."

In Louisiana, a 1991 law mandates identification and treatment of dyslexic students. However, staff development models were, and still are, desperately needed, said Mary Scherff, from the Louisiana State Board of Education. She urged the Panel to identify and distribute to schools information on reading programs appropriate for "normal readers, inadequate readers, dyslexic students, and special-education students."

For children whose primary language is not English, Lupita Hinojosa, president of the Texas Association for Bilingual Education, urged reading programs to begin in the child's first language. "Reading is reading is reading," she told the Panel. "In whatever language the children bring to the school, reading is reading and they will be able to read." She also urged the Panel to examine teacher-preparation programs and instructional materials that serve bilingual students.

The Paramount Task: Dissemination of Findings and Successful Practices

"How to deliver the goods in the professional development market" is a daunting task, but one that must top the Panel's agenda, according to Sheldon Horowitz of the National Center for Learning Disabilities. Most presenters concurred with the general sentiment that the Panel's greatest contribution would be to deliver a report that moves "beyond research" and tells educators and parents what steps to take to improve student reading achievement. However, they acknowledged that it is a formidable task to get the report into the hands of all the right people.

Broad distribution — not only to teachers, administrators and other policymakers, but also to parents — was the clarion call of most speakers. "Until the parents are informed of what is happening in reading, I don't think we are going anywhere," cautioned Mississippi State Representative Rita Martinson.

Presenters in all regions of the country called upon the Panel to be aggressive and creative in the tactics used to disseminate the results of its study. Not only were Panel members counseled to address diverse audiences — parents, educators, members of the community, and business and civic leaders — they were encouraged to use a variety of media and tools to get out news and information of the findings.

Effective Programs Can Serve as Models for Dissemination Strategies

The Panel heard about a number of successful programs that offered a series of initiatives and ideas that could be used as models for dissemination. These programs include:

- Reading is Fundamental
- Reading Recovery
- March of Dimes "Reading Champions"
- Start Making a Reader Today (SMART)
- Time Warner's "Time to Read"
- Project Read
- Success for All
- Reading Partners Clinic

Section 5: Methodology

The importance of the issues under consideration by the Panel cannot be overstated. For decades educators have been studying how children learn to read, often producing conflicting results. More recently, science has opened windows that allow researchers to observe how the brain functions as reading skills develop. Although these advances have afforded a clearer understanding of how the brain processes information transmitted through the written word, the issues remain complex; the debates continue.

Many believe the debates have gone on long enough. Congress has recognized the urgency of sorting through the research and, based on trustworthy evidence, developing recommendations and strategies that can be used directly by educators in the classroom. That is the Panel's task.

The Panel believes that it would not have been possible to accomplish the mandate of Congress without first hearing directly from consumers of this information -- teachers, parents, and students -- about their needs and their understanding of the research. Although the regional hearings were not intended as a substitute for scientific research, the hearings gave the Panel an opportunity to listen to the voices of those who will need to implement any determination(s) the Panel develops. The hearings gave members a clearer understanding of the issues important to the public.

As a result of these hearings, the Panel altered and broadened its own agenda. It decided, for example, that it would be important to examine issues related to teaching standards and practices, since it was clear that the public was very concerned about these matters. The Panel also decided that the issue of research evaluation methodology itself was so important that it should spend time defining a methodology that would constitute a rigorous and replicable scientific exploration.

Meanwhile, the Panel understood that criteria had to be developed as it considered which research studies would be eligible for assessment. There are two reasons for determining such guidelines or rules from the beginning. First, the use of common search and selection, analysis, and reporting procedures will allow this effort to proceed, not as a diverse collection of independent—and possibly uneven—synthesis papers, but as parts of a greater whole. The use of common procedures will permit a more unified presentation of the combined methods and findings. Second, the amount of synthesis needed is great, and, consequently, the Panel must work in diverse subgroups to complete the reports. However, in the end the Panel will need to arrive at findings that all members of the NRP will be able to endorse. Common procedures should increase the Panel's ability to reach final agreements.

Conceptualization of Research Questions and Problem Identification Procedures

Congress mandated that the NRP conduct a series of research reviews on the teaching of reading. The Panel, through an examination of various public databases, determined that

there is a universe of approximately 100,000 studies on reading published since 1966, and, perhaps another 15,000 completed before that time. It was apparent that the Panel could not review all of this material adequately, in the time allotted.

To ensure success, several actions were taken. First, a request was made to extend the Panel's timeline by one year. This request was granted. Second, support for hiring research assistants and consultants was sought from the National Institute of Child Health and Development and this was provided. Third, decisions were made to narrow the search by limiting the reviews to only those studies that focus directly on children's reading development (preschool through grade 12) and are published in English in a refereed journal. The Panel was asked to defer issues of second language learning and bilingual education, as these were to be the focus of future panels and new research efforts.

Following its Charge, the Panel's reviews will seek research-based answers to seven questions that the Panel carefully determined to be of great importance in children's reading development and essential to its Charge:

1. Does instruction in phonemic awareness improve reading? If so, how is this instruction best provided?

2. Does phonics instruction improve reading achievement? If so, how is this instruction best provided?

3. Does guided oral reading instruction improve fluency and reading comprehension? If so, how is this instruction best provided?

4. Does vocabulary instruction improve reading achievement? If so, how is this instruction best provided?

5. Does comprehension strategy instruction improve reading? If so, how is this instruction best provided?

6. Do programs that increase the amount of children's independent reading improve reading achievement and motivation? If so, how is this instruction best provided?

7. Does teacher education influence how effective teachers are at teaching children to read? If so, how is this instruction best provided?

These questions represent topics of widespread interest in the field of reading education. They have been articulated in a wide range of theories, research studies, instructional programs, curricula, assessments, and policies as being central issues in reading achievement. It is likely that clarification of the matrix of the evidence supporting this approach will lead to improved instruction and to greater learning. Each subgroup will generate a list of additional subordinate questions that they will attempt to pursue within each of these major questions.

It must be remembered, however, that these are not the only issues of importance in learning to read. The Panel's silence on other issues should not be interpreted as indicating that other issues have no importance or that improvements in those areas would not lead to greater achievement. The review of other areas of potential value must be left to the later work of this or future panels or independent scholars.

Search Procedures

Each subgroup will conduct a search of the literature using common procedures, describing in detail the basis and rationale for its topical term selection, the strategies employed for combining terms or delimiting searches, and the search procedures used for each topical area.

Each subgroup will limit the period of time covered by its searches on the basis of relative recentness and how much literature the search will generate. For example, it may be wise to limit the years searched to the number of most recent years that will identify between 300-400 potential sources. This scope can be expanded in later iterations if it appears that the nature of the research has changed qualitatively over time, or, if the proportion of useable research identified is small (e.g., less than 25 percent), or if the search simply represents too limited a proportion of the total set of identifiable studies. Although the number of years searched may vary between subgroup topics, decisions regarding the number of years to be searched will be made in accord with shared criteria.

Applying the restriction that any study selected must focus directly on children's reading development (preschool through grade 12) and be published in English in a refereed journal, each subgroup will search both PsycINFO and ERIC databases. Subgroups may use additional databases when appropriate. Although the use of a minimum of two databases will identify much duplicate literature, it will also afford the opportunity to expand perspective and locate articles that would not be identifiable through a single database.

Identification of each study selected will be documented for the record and each will be assigned to one or more members of the subgroup who will examine the title and abstract. Based upon this examination the subgroup member(s) will, if possible at this stage of review, determine whether the study addresses issues within the purview of the research questions being investigated. If it does not, the study will be excluded and the reason(s) for its exclusion will be detailed and documented for the record. If it does, the study will undergo further examination.

After this initial examination, the study, if not excluded in accord with the preceding criteria, will be located and examined further to determine whether the following criteria for inclusion in the subgroup's analysis are met:

> Study participants must be carefully described (age, demographic, cognitive, academic, and behavioral characteristics);
>
> Study interventions must be described in sufficient detail to allow for

- replicability, including how long the interventions lasted and how long the effects lasted;

  Study methods must allow judgments about how instruction fidelity was insured; and

  Studies must include a full description of outcome measures.

These criteria for assessing research literature are widely accepted by scientists in every discipline, and using them assures that all studies included in the final analysis meet rigorous standards that enhance the validity of any conclusions drawn.

If the study does not meet these criteria or cannot be located, the study will be excluded from subgroup analysis and the reason(s) for its exclusion will be detailed and documented for the record. If the study is located and meets the criteria, the study will become one of the subgroup's core working set of studies. The core working sets of studies gathered by the subgroups will be coded as described below and then analyzed in search of answers to the questions posed in this chapter and in the charge to the Panel.

If the core set of studies is insufficient to answer these questions, less recent studies may be screened for eligibility for, and inclusion in, the core working sets of studies. This second search may employ such resources as the reference lists of all core-working studies and known literature reviews to identify cited studies that may meet the Panel's criteria for inclusion in the subgroups' core working sets of studies. Any second search will be described in detail and will apply precisely the same search, selection, exclusion, and inclusion criteria and documentation requirements as were applied in the subgroups' initial search.

Manual searches, again applying precisely the same search, selection, and exclusion criteria and documentation requirements as were applied in the subgroups' electronic searches, may be conducted as a supplement to electronic domains. Manual searching of recent journals that publish research on specific topics of the subgroups' analyses will compensate for the delay in appearance of these journal articles in the electronic databases. Other manual searching will be done in relevant journals to include eligible articles that should have been selected, but were missed in electronic searches.

Source of Publications: The Issue of Refereed and Non-Refereed Articles

In preparation for issuing its final report, the subgroup searches will focus exclusively on research that has been published or has been scheduled for publication in refereed journals. Determinations and findings for claims and assumptions that guide instructional practice will depend on such studies. Any search or review of studies that has not been published through the peer review process may be identified and published only as separate and distinct from evidence drawn from peer reviewed sources (i.e., in an appendix) and will not be referenced in the Panel's report. These non-peer-reviewed data may be treated as preliminary/pilot data that illuminate potential trends and areas for future research. Information derived in whole or in part from such studies may not be

represented at the same level of certainty as findings derived from the analysis of refereed articles.

Orders of Evidence and Breadth of Research Methods Considered

Each type of research (descriptive-interpretive, correlational, experimental) lays claim to particular warrants, and these warrants differ markedly. It is important that we use a wide range of research, but that we use such research in accordance with the purposes and limitations of the various research types

To make a determination that any instructional practice could be or should be adopted widely to improve reading achievement indicates a belief, an assumption, or a claim that the practice is causally linked to a particular outcome. The highest standard of evidence for such a claim is the experimental study, in which it is proved that treatment can make such changes and effect such outcomes. Sometimes when it is not feasible to do a genuine experiment, a quasi-experimental study is done. This type of study provides a standard of evidence that, while not as high, is acceptable to many investigators. To sustain a claim it is necessary that there be experimental or quasi-experimental studies of sufficient size or number, and scope (in terms of population served), and that these studies be of moderate to high quality. When there are either too few studies of this type, or they are too narrowly cast, or they are of marginally acceptable quality, then it would be essential to have substantial correlational or descriptive studies that concur with the findings if a claim is to be sustained. No claim can be determined on the basis of descriptive or correlational research alone. The use of these procedures should increase the possibility of reporting findings with a high degree of internal validity.

Coding of Data

Characteristics and outcomes of each study that has met the screening criteria described earlier will be coded and analyzed, unless otherwise authorized by the Panel. The data gathered in these coding forms will be the information used in the final analyses and so it is important that the coding be done systematically and reliably.

The various subgroups will rely on a common coding form developed by a working group of the Panel's scientist members and modified and endorsed by the Panel. However, some changes may be made to the common form by the various subgroups for addressing different research issues. As coding forms are developed, any changes to the common coding form will be shared with and approved by the Panel to ensure consistency across various subgroups.

Unless specifically identified and substantiated as unnecessary or inappropriate by a subgroup and agreed to by the Panel, each form for analyzing studies will be coded for the following categories:

1. **Reference**

01-843 00 - 8

- Citation (standard APA format)

- How this paper was found (e.g., search of named data base, listed as reference in another empirical paper or review paper, hand search of recent issues of journals)

- Narrative summary that includes distinguishing features of this study

2. **Research Question: the general umbrella question that this study addresses**

3. **Sample of Student Participants**

- States or countries represented in sample
- Number of different schools represented in sample
- Number of different classrooms represented in sample
- Number of participants (total, per group)
- Age
- Grade
- Reading levels of participants (prereading, beginning, intermediate, advanced)
- Whether participants were drawn from urban, suburban, or rural setting
- List any pretests that were administered prior to treatment
- List any special characteristics of participants including the following if relevant:
- SES
- Ethnicity
- Exceptional Learning Characteristics, e.g.,:
    - Learning Disabled
    - Reading Disabled
    - Hearing Impaired
    - English Language Learners (LEP)

- Explain any selection restrictions that were applied to limit the sample of participants (e.g., only those low in phonemic awareness were included)

- Contextual information: concurrent reading instruction that participants received in their classrooms during the study

- Was the classroom curriculum described in the study (code yes/no)
- Describe the curriculum

- Describe how sample was obtained:
  - Schools or classrooms or students were selected from the population of those available
  - Convenience or purposive sample
  - Not reported
  - Sample was obtained from another study (specify study)

- Attrition:
  - Number of participants lost per group during the study
  - Was attrition greater for some groups than for others? yes/no

4. Setting of the Study

Classroom
Laboratory
Clinic
Pullout program (e.g., Reading Recovery)
Tutorial

5. Design of Study

- Random assignment of participants to treatments (randomized experiment)
  - With vs. without a pretest
- Non-equivalent control group design (quasi-experiment) (Example: existing groups assigned to treatment or control conditions, no random assignment)
  - With vs. without matching or statistical control to address non-equivalence issue

- One-group repeated measure design (i.e., one group receives multiple treatments, considered a quasi-experiment)
    - Treatment components administered in a fixed order vs. order counterbalanced across subgroups of participants
- Multiple baseline (quasi-experiment)
    - Single-subject design
    - Aggregated-subjects design

6. Independent Variables

a. Treatment Variables

- Describe all treatments and control conditions; be sure to describe nature and components of reading instruction provided to control group
- For each treatment, indicate whether instruction was explicitly or implicitly delivered and, if explicit instruction, specify the unit of analysis (sound-symbol; onset/rime; whole word) or specific responses taught. [NOTE: If this category is omitted in the coding of data, justification must be provided.]
- If text is involved in treatments, indicated difficulty level and nature of texts used
- Duration of treatments (given to students)
    - Minutes per session
    - Sessions per week
    - Number of weeks
- Was trainers' fidelity in delivering treatment checked? (yes/no)
- Properties of Teachers/Trainers
    - Number of trainers who administered treatments

- Teacher/student ratio: Number of participants to number of trainers
- Type of trainer (classroom teacher, student teacher, researcher, clinician, special education teacher, parent, peer, other)
- List any special qualifications of trainers
- Length of training given to trainers
- Source of training
- Assignment of trainers to groups:
    - Random
    - Choice/preference of trainer
    - All trainers taught all conditions

- Cost factors: List any features of the training such as special materials or staff development or outside consultants that represent potential costs

b. Moderator Variables: List and describe other non-treatment independent variables included in the analyses of effects (e.g., attributes of participants, properties or types of text)

7. Dependent (Outcome) Variables

- List processes that were taught during training and measured during and at the end of training
- List names of reading outcomes measured
    - Code each as standardized or investigator-constructed measure
    - Code each as quantitative or qualitative measure
    - For each, is there any reason to suspect low reliability? (yes / no)

- List time points when dependent measures were assessed

8. Non-equivalence of groups

- Any reason to believe that treatment/control group might not have been equivalent prior to treatments? yes/no
- Were steps taken in statistical analyses to adjust for any lack of equivalence? yes/no

9. Result (for each measure)

- Record the name of the measure
- Record whether the difference—treatment mean minus control mean—is positive or negative
- Record the value of the effect size including its sign (+ or -)
- Record the type summary statistics from which the effect size was derived
- Record number of people providing the effect size information

10. Coding Information

- Record length of time to code study
- Record name of coder

If text is a variable, the coding will indicate what is known about the difficulty level and nature of the texts being used. Any use of special personnel to deliver an intervention, use of special materials, staff development, or other features of the intervention that represent potential cost will be noted. Finally, various threats to reliability and internal or external validity (group assignment, teacher assignment, fidelity of treatment, and confounding variables including equivalency of subjects prior to treatment and differential attrition) will be coded. Each subgroup may code additional items that they deem to be appropriate or valuable to the specific question being studied.

A study may be excluded at the coding stage only if it is found to have so serious a flaw that its use would be misleading. The reason(s) for exclusion of any such study will be detailed and documented for the record. When quasi-experimental studies are selected, it is essential that each include both pre-treatment and post-treatment evaluations of performance, and that there be a comparison group or condition.

Each subgroup will conduct an independent re-analysis of a randomly designated 10 percent sample of studies. Absolute rating agreement should be calculated for each category (not for forms). If absolute agreement falls below 0.90 for any category for occurrence or non-occurrence agreement, the subgroup must take some action to improve agreement (e.g., multiple readings with resolution, improvements in coding sheet).

Upon completion of the coding for each study published between 1993–95, a letter will be sent to the first author of the study requesting any missing information. Any information that is provided by authors will be added to the database.

After its search, screening, and coding, a subgroup shall determine whether for a particular question or issue a meaningful meta-analysis can be completed, or whether it is more appropriate to conduct a literature analysis of that issue or question without meta-analysis, incorporating all of the information gained. The full panel will review and approve or modify each such decision.

Data Analysis

When appropriate and feasible, effect sizes will be calculated for each intervention or condition in experimental and quasi-experimental studies. The subgroups will use the standardized mean difference formula as the measure of treatment effect. The formula will be:

$$(M_t - M_c) / 0.5(sd_t + sd_c)$$

where

M_t is the mean of the treated group,
M_c is the mean of the control group,
sd_t is the standard deviation of the treated group, and
sd_c is the standard deviation of the control group.

When means and standard deviations are not available, the subgroups will follow the guidelines for the calculation of effect sizes as specified in Cooper and Hedges (1994).

The subgroups will weight effect sizes by numbers of subjects in the study or comparison to prevent small studies from overwhelming the effects evident in large studies.

Each subgroup will use median and/or average effect size when a study has multiple comparisons, and will only employ the comparisons that are specifically relevant to the questions under review by the subgroup.

Expected Outcomes

Analyses of effect sizes will be undertaken with several goals in mind. First, overall effect sizes of related studies will be calculated across subgroups to determine the best estimate of a treatment's impact on reading. These overall effects will be examined with regard to their difference from zero (*Does the treatment have an effect on reading?*), strength (*If the treatment has an effect, how large is that effect?*), and consistency (*Did the effect of the treatment vary significantly from study to study?*). Second, the Panel will compare the magnitude of a treatment's effect under different methodological conditions, program contexts, program features, outcome measures, and for students with different characteristics. The appropriate moderators of a treatment's impact will be drawn from the distinctions in studies recorded on the coding sheets. In each case, a statistical comparison will be made to examine the impact of each moderator variable on average effect sizes for each relevant outcome variable. These analyses will enable the Panel to determine the conditions that alter a program's effects and the types of individuals for whom the program is most and least effective. Within-group average effect sizes will be examined as were overall effect sizes, for differences from zero and strength. The analytic procedures will be carried out using the techniques described in Cooper and Hedges (1994).

Section 6: The Job Ahead

The regional meetings helped the Panel focus on the job that remains to be done. A number of important issues arose during the hearings, including issues of cost, practicality, methodology and the challenges schools face. The comments and questions raised at the regional meetings made one thing clear for the Panel – if it was to fully complete its charge and determine the best research-based practices for implementation in the classroom, its efforts had to be extended beyond the original November 1998 target date for completion.

The vast database of reading research, coupled by the thoroughness of the methodology criteria developed by the Panel, made it necessary to extend the Panel's life until early 2000. The additional year will provide the Panel with the time necessary to thoroughly analyze the research available and to respond to issues raised by the U.S. Congress and the Charge to the Panel issued by the director of the National Institute of Child Health and Human Development.

Following are some of the issues the Panel will address in the remaining months of its tenure.

- **Defining literacy.** Most Americans define literacy very narrowly as the ability to read and write. But national proponents of literacy strategies generally take a broader view. Organizations such as the National Institute for Literacy, for example, believe literacy means having the reading skills adequate to become self sufficient, stay current with developing innovations and knowledge, and progress in jobs and lifestyle.

  Taking a broader view raises the stakes. It suggests that literacy is a problem that affects more students, more adults, the businesses that employ them and — in general — the national economy. The Panel needs to address how it defines literacy and how it might develop the strategies for getting the public to understand and accept the concept of what literacy means within the context of the Panel's findings.

- **What and how to teach.** One of the most pressing needs regarding reading instruction is that of gathering information on what to teach and how to teach it. Currently, many teachers do not have the answers to these questions, due in part to an absence of empirical evidence that would enable administrators, teachers, and parents to determine specifically what should be taught.

- **Classroom readiness.** In addition to answering the what and how involved in reading instruction, the Panel will also need to address the issues of what is ready for immediate implementation in the classroom and whether classrooms are ready for such implementation.

- **Addressing the issues facing schools.** Schools face a daunting number of challenges. A significant number of teachers are not exposed to the research findings

that emphasize the importance of phonological awareness. And many argue that in-service training will not be enough. They say pre-service coursework is necessary so that teachers will enter the job market skilled in the techniques that will help those at risk, especially those who will fail unless they receive explicit instruction.

Professional development will be especially important for those who teach reading to students in the first, second, and third grade. Reading research makes it clear that these are the most critical years in reading instruction and preparation. If these teachers do not receive adequate preparation, the students who need special attention will undoubtedly fail.

Schools also will have to find a way to engage the interest of the business community. In most cases, school districts will not have the resources to succeed on their own. They will need to tap the resources of those outside the education community, including companies and corporate foundations. It will be up to educators to help the business community recognize that it is in their interest to support the development of a literate workforce.

- **Conquering the dissemination challenge.** Part of the National Reading Panel's charge is to determine how best to disseminate its findings to facilitate effective reading instruction. The Panel can learn from programs such as Reading Is Fundamental and Reading Recovery, which are excellent examples of how best practices can be disseminated through grassroots organizations and community-based programs. The Panel can build upon these models to develop a dissemination strategy that will incorporate its work into the very fiber of daily lives of parents, teachers, and students—while appropriately engaging policymakers, civic leaders, and elected officials as champions and supporters of improved reading instruction.

  Successful dissemination and use of the Panel's findings will require a thoughtful approach to the environment in which these findings are presented.

  Further, parents, educators, and members of the general public already are somewhat skeptical about adopting a new paradigm for reading instruction. They naturally will interpret the Panel's programs and suggestions in light of their own opinions and beliefs. Therefore, the Panel must demonstrate how its findings address the questions and concerns of the American public and present compelling evidence that its work is based on research that is valid, able to be translated into teaching strategies, and will produce results – a nation of readers.

The Panel's work to date has moved it beyond the opinions and research findings offered by academic experts. At all full Panel and regional meetings, the sessions were announced in advance and were open to all members of the public. Panelists have heard the concerns of the target audiences—those who will be using and disseminating the Panel's findings. The regional meetings, for example, have helped establish the Panel's work as a national effort to find the best ways to teach reading. And the meetings have widened the field of inquiry by treating parents, educators, and concerned members as valuable colleagues with information and experiences to contribute.

In the end, if the Panel achieves its objective, its work will provide practitioners with science-based knowledge concerning the direction and skills necessary to lift student performance to new heights. Since students usually are taught by parents and teachers, rather than by experimenters and scholars, the Panel expects that its work will help construct the needed bridge between research and practice.

APPENDIX I -- THE WRITTEN TESTIMONY OF MS. PAULA SINGER, PRESIDENT, CONTRACT SERVICES DIVISION, SYLVAN LEARNING SYSTEMS, INC., BALTIMORE, MARYLAND -- SUBMITTED FOR THE RECORD

1000 Lancaster Street • Baltimore, MD 21202
Tel: 410.843.8000 • Fax: 410.843.8058

PAULA R. SINGER
President

August 2, 1999

Representative William Goodling
Committee of Education and the Workforce
2181 Rayburn House Office Building
Washington, DC 20515-6100

Dear Representative Goodling,

First, I would like to extend my gratitude for your invitation for testimony. I apologize for not being able to be there, as it did conflict with our annual conference. Thank you for allowing us to prepare a written testimony which you will find with this letter. I will also email the written testimony to Pamela Davidson today.

Thank you again for this opportunity to share with the Education Committee our experiences.

Sincerely,

Paula Singer

Paula Singer
President, Contract Services Division

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About Sylvan

Sylvan Learning Systems, Inc. is the leading provider of educational services to families, schools and industry. The company provides lifelong educational services through four divisions: The Sylvan Prometric division delivers computer-based testing for academic admissions, Information Technology and professional certification programs; the Sylvan Learning Centers division provides personalized instructional services to students of all ages and skill levels; the Sylvan Contract Education Services division provides supplemental education, teacher professional development and consulting services under contract to large urban school districts; and the Sylvan International Universities division provides higher education through international private universities. Operating within these divisions, other Sylvan businesses include PACE, which provides performance-based consulting, skills and knowledge development and contracted training services to corporate and government organizations; Canter, which produces training, development and graduate degree programs for teachers; and Wall Street Institute and ASPECT, which deliver English language instruction to adult professionals and college students. Through its affiliate, Caliber Learning Network, Inc., Sylvan also has the ability to distribute world-class adult professional education and training programs. Sylvan's services are delivered through its network of more than 3,000 educational and testing centers around the globe.

Benefits of Third Party Contracting

Third party contracting of Sylvan services supports many public schools' efforts for school-wide reform. By contracting educational support services, such as speech therapy,

special education, or even non-public Title I services, public school districts can focus on their primary mission of comprehensive K-12 education. As a third party contractor, Sylvan also offers school districts access to proven supplementary reading and math programs designed to help them meet the needs of their lowest achieving populations. In working with a third party contractor, like Sylvan, the district can have confidence that programs are reliable, accountable and based on solid research and ongoing evaluation.

The best third party programs are also flexible enough to reflect local differences while maintaining the core principals that allow for consistent replicability and results. Successful third party contracting is a true partnership in which districts do not abdicate their authority, but instead work closely with the contractor, often at the recommendation of the principal or school improvement team, to ensure that district and students needs are met. The contractor brings to the partnership specific core competencies, resources and a cost structure that delivers both value and measurable results.

Sylvan has gained a reputation for providing high quality, flexible, cost efficient services for both public and non-public schools that comply with the complex legal constraints related to maintain appropriate separation of church and state. Sylvan's experience with Title I compliance for non-public school programs helps public and non-public school administrators meet this responsibility.

General Characteristics of All Sylvan Programs

Services to Students - Sylvan contracts with LEAs to provide a variety basic skills instructional services under Title I services for either public or non-public schools. A contract typically extends over multiple school years, with an option out if funding is interrupted. Sylvan provides the materials and supplies, equipment, classroom build out and staff (if applicable).

Assessment and Planning - Each student is given a series of diagnostic/prescriptive assessments, the results of which are used to develop an individualized education plan.

Staff Communication - Ongoing communication is maintained with each student's regular classroom teacher, and professional development services are offered for all classroom teachers.

Scheduling & Record Keeping - Instructors assist school administrators in the scheduling of students for the Sylvan program. Records are kept on each child, tracking individual progress and monitoring attendance.

Monitoring and Reporting Student Progress - As students work to meet their instructional goals, their progress is reported to parents and teachers through quarterly report cards. When school progress indicates that a student no longer requires supplemental services, the appropriate next steps are discussed. In some instances students are "graduated" from the program and a new student moves into the outgoing student's schedule. In other cases, students are put on a maintenance schedule allowing for continued support at lower frequency of services and increased independence.

Materials - We provide the Sylvan instructors with appropriate materials that "supplement" but do not "supplant" regular classroom instruction. Over the past twenty years, we have evaluated virtually every type of reading and math material available on the market. In the interest of equity, when selecting materials, it is our practice to evaluate materials used in the local public school Title I program.

Parent Involvement - We are acutely aware of the need for effective and informative parent communications. Sylvan typically conducts an annual parent meeting in the first quarter. At that time, parents are advised of eligibility, enrollment, instruction and reporting procedures. They have the opportunity to view instructional materials and student work. Most importantly, parents are encouraged to participate in their children's Title I program through on-going communication through conferences, classroom observation, newsletters, periodic informative handouts, and guest reading.

Program Evaluation: The Sylvan Approach - All Sylvan programs receive an annual program evaluation. These evaluations generally include the analysis of pre-test and post-test score data, interviews with classroom teachers and principals concerning their perceptions and observations of our program, and parent and student questionnaires designed to elicit attitudes, opinions, observations and suggestions for the program. Program evaluation information, once compiled, is interpreted in cooperation with the school district and non-public schools (if applicable).

Training Program for Teachers - Educational research demonstrates that leadership is essential to substantive and enduring progress for students. Therefore, Sylvan's management team has developed a carefully sequenced program of teacher training. This

professional developmental process enables teachers to facilitate academic growth in the students we serve.

Our initial training addresses personnel policies and procedures, as well as the legal ramifications of providing educational services to private school children with public funds. The necessity of providing instruction that is supplemental to regular classroom instruction is thoroughly reviewed. Initial and continuing in-service training includes:

- Communication Strategies
- File Maintenance
- Selection Criteria
- Safety Procedures
- Lesson Planning
- Reading
- Language
- Math
- Student Portfolios
- Learning Differences
- Behavior Management Techniques
- Parent Involvement

Quality Control Plan - Sylvan has a multi-faceted check and balance system to assure quality control in all of its programs. These various facets involve personnel management, on-going supervision and training, regular performance reviews, annual review of administrative functioning, and continuous educational program evaluation and improvement.

Services to Students in Public Schools

Sylvan provides services that support school districts' comprehensive school reform efforts. These services are designed to help schools develop the capacity to serve their growing numbers of students and to assist with their efforts to ensure teacher quality.

Sylvan services include data analysis and consulting services focused on state testing, parent outreach programs, and professional development support provided through practical experience in the Sylvan at School program and through in-service training.

In 1993, through a first-of-its-kind partnership with a public school district, Sylvan Learning Systems began providing educational services within six of Baltimore City's lowest performing public elementary schools. Within these schools, Sylvan provided intensive instruction to address the needs of the schools' most academically and economically disadvantaged students. After Sylvan consistently exceeded the school district's expectations for increasing student academic performance, Sylvan expanded both within Baltimore and to nearly 150 public schools across the country.

Currently, Sylvan serves nearly 80,000 students in elementary, middle and high schools in urban districts nationwide including Los Angeles, Detroit, Chicago, Newark, Philadelphia, Minneapolis, St. Paul, New Orleans and many others. Sylvan's services include remedial math and reading instruction, special education assessments, speech therapy and a range of other specialized services. These services are funded by federal Title I grants, state grants and other funding sources earmarked for children of poverty and those with special needs.

Results

The services provided are supplemental with either Sylvan employees or school district staff (depending upon model chosen). Some examples of current results include:

- As measured by the California Achievement Test for the 1997-98 school year, Sylvan at School students nationwide from elementary through high school increased their overall math scores on average by 37 percent and their reading scores by 25 percent.

- The same students recorded average gains of 10 Norm Curve Equivalents (NCE) on the Math CAT and an average gain of 7 NCEs on the Reading CAT. Gains of 2 are considered standard; 7 is nothing short of exemplary.

Baltimore County: More students reading every year

Sylvan began a reading program at Grange Elementary School in 1994. Over a five-year period, from 1994 through 1998, the percentage of Grange Elementary third graders passing the reading portion of the Maryland State Performance Assessment Program (MSPAP) had doubled. For those same years, scores more than tripled on the language usage test. At Riverview Elementary, results over the same period were equally dramatic: a fourfold increase in those meeting the state standard on the reading test; and in language usage, again more than triple.

Newark, New Jersey: Students score well and feel better

In 1997, Sylvan students at three Newark high schools gained 5.5 Normal Curve Equivalents (NCE) on the reading portion of the California Achievement Test and 12 NCEs on the math portion. The total Sylvan sample had a High School Proficiency Test (HSPT) passing rate of 44.8% versus a passing rate of 25.7% for the control group. Just as significant, over 80% of students surveyed said they were feeling better about themselves and had become more interested in attending school since participating in the Sylvan program. Eighty-eight percent said they were better able to understand the work in their regular classroom.

Services to Students in Non-Public Schools

Sylvan's non-public history started in 1995, but has roots back much further. Sylvan, over the years, has acquired a number of small companies which were servicing non-public schools, through Title 1 and various state funded programs as early as 1976. Since then, Sylvan has grown to servicing over 800 schools nationwide for Title I or state funded programs.

Every student deserves every opportunity to succeed — and equal access to the educational resources our country, states and communities have to offer. That's why Sylvan at School[SM] provides non-public schools high quality supplemental educational programs together with management assistance in identifying the Title I or other funds available to pay for them.

Often private and parochial school directors are not fully aware of the types of outside funding available to them. Meanwhile, many public school superintendents don't have the time or resources to satisfy all their Title I obligations.

Sylvan offers extensive knowledge of funding programs and how to apply to them. We help schools and districts comply with state and federal regulations. And we alleviate the administrative headaches in responding to individual school needs. Sylvan can assist by maximizing both the quantity and quality of the educational services delivered for the Title I funds. Which means with Sylvan reporting to them as a third-party advisor, public school administrators can demonstrate their commitment to Title I success.

Our goal at Sylvan is to help students do better. So we follow a research-based diagnostic/prescriptive approach that develops an Individual Education Plan targeted to each student's needs. Our supplemental reading and math programs help students develop the comprehension and problem-solving abilities they will use for a lifetime. They receive personalized instruction in a positive, motivational environment as conducive to teaching as it is to learning.

Results

Most importantly, at Sylvan we hold ourselves accountable for measurable student improvement. Which is why our students consistently perform well-above non-assisted students.

- In Dayton, Ohio, Sylvan non-public school students recorded five-year average gains of 9.99 Norm Curve Equivalents (NCE) on standardized reading tests and 10.71 in math.

- In Washington, D.C., students' four-year average gains were 8.74 NCEs in reading and 10.28 NCEs in math.

- In the first two years of a reading-only program, Philadelphia, Pennsylvania, students recorded average gains of 18.19 NCEs.

In Conclusion

As we have addressed in previous communications to the committee, we hope that they will simplify the mechanism for allocating funding for Title I schools for non-public schools to allow for greater ease of administration and equitability. We also feel that the

number of schools still served by mobile and modular classrooms and other logistical considerations justifies the continuation of capital expense funding. We also hope that the committee will support enhanced flexibility of Title I services for public and non-public schools.

THE WALL STREET JOURNAL.

August 2, 1999

The ACLU's Hypocrisy on School Vouchers

Like it or not, the one thing people have had to respect about the American Civil Liberties Union is its consistency. No longer.

When the ACLU went to court in June to block Florida's A+ education reform program, which allows children in failing public schools to attend private schools using vouchers called "opportunity scholarships," it unveiled an argument that contradicts core ACLU tenets: If it harms public schools, the ACLU asserts, it's unconstitutional.

The ACLU has long opposed parental choice in education on the premise that the

Rule of Law

By Clint Bolick

moment a dollar of public school funds crosses a religious school's threshold, it violates the First Amendment's prohibition against establishment of religion. ACLU officials who are intellectually honest admit this logic also would overturn the GI Bill, Pell Grants, daycare vouchers, private-school aid for disabled students—and even tax exemptions for religious institutions.

But the ACLU's belief in the sacrosanctity of public schools is newfound. It's hard to think of another single organization that over the years that has done more to undermine public schools. Decades of ACLU-sponsored litigation have banished from public schools not only prayer and moments of silence but also strict standards of conduct and decorum.

Over the past two years alone, the ACLU has sued the Portland, Ore., public schools for allowing the Boy Scouts to recruit during school hours; it has argued against "zero tolerance" policies under which students who bring drugs and weapons to school are suspended; and it has backed a suit in Pennsylvania challenging a student's suspension for creating a Web site that threatened teachers. The ACLU's assault on standards and autonomy has contributed to the very public school decline that makes vouchers necessary.

But now in Florida, the ACLU has changed its tune. It argues that "by withdrawing resources from the public schools," the opportunity scholarship program "will prevent these schools from providing a 'high-quality system of' public education" guaranteed by the Florida Constitution.

> *It's hard to think of another single organization that has done more to undermine public schools.*

Indeed? This is the same organization that filed suit against the Polk County, Fla., public schools seeking $5.8 million in damages for the voluntary use of polygraph tests in student discipline cases. The punitive damages sought by the ACLU in that case alone would "withdraw" from the public schools enough funds to pay more than 20 times the number of opportunity scholarships that will be awarded in the coming school year.

The ACLU itself acknowledges that immunizing public schools from competition and accountability fails outside the definition of civil liberties. When I debated Florida ACLU president Howard Simon in Tallahassee, Fla., in April, he insisted that the ACLU's only concern over vouchers was religious establishment, and declared that an ACLU lawsuit challenging the A+ program would not assert public-school claims. But it does.

Why the conversion? In its Florida litigation—as in previous unsuccessful lawsuits in Wisconsin, Ohio and Arizona—the ACLU has teamed up with special-interest groups that are committed to stopping parental choice such as the National Education Association and People for the American Way. The ACLU literally has ceded lead control over the voucher litigation to the NEA's lawyers, whose aim is protecting teachers' jobs, not civil liberties.

The ACLU isn't alone in straying from its mission. In Florida, the NAACP also has joined the challenge, notwithstanding that its constituents strongly support (and benefit from) parental choice. What's more, if the NAACP prevails, the ruling could jeopardize millions of dollars that flow to black religious colleges in Florida under similar programs at the postsecondary level.

Ironically, when the schoolchildren receiving Florida's opportunity scholarships go to court to defend the program, they will wrap themselves inside the very constitutional provision the ACLU and its allies are using to challenge the program. The A+ program vindicates the guarantee of a high-quality public education: Any child who is consigned to a public school that has received a failing grade from the state in two out of four years may instead attend a better public school or a private school.

In the program's first year, two public schools, both in Pensacola, have qualified for the program. Already, more than 50 children from economically disadvantaged families have been awarded opportunity scholarships to attend private schools in the fall. Dozens more will attend better public schools. Next year, students from at least 100 additional schools may receive similar opportunities.

The education establishment that is so bent on challenging the program in court already has the power to prevent a single opportunity scholarship from ever being issued: produce the high-quality education to which Florida schoolchildren are constitutionally entitled. Either way, no child ever again will be forced to attend a failing public school.

That feature is not only what makes Florida's A+ program the most systemic and promising education reform program in the nation, but also what makes it constitutional. How can a state constitution that guarantees a high-quality education be construed to deny it?

Nor should the ACLU's religion claims prevail. The Florida Constitution forbids aid to religious schools "directly or indirectly." But scholarships to children are not "aid" to schools. Not a single public dollar flows to a religious school unless two intervening steps take place: a public school fails, and a parent chooses a religious school from a broad range of public and private options.

Supreme courts in three other states, applying both federal and state religious establishment provisions, already have upheld programs that add private-school options to the array of parental choices. At bottom, these programs are not about aiding religion, but enlisting private schools to fulfill the mission of public education.

It is understandable that interest groups like the NEA would do anything they can to keep children in public schools, even if they're failing. But that goal is incompatible with any notion of civil liberties. Shame on the ACLU for sacrificing principle for expediency.

Mr. Bolick is litigation director at the Institute for Justice in Washington, D.C., which defends school choice programs around the nation.

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