

April 2011

Findings from  
**READY TO LEARN**  
*2005–2010*



Corporation  
for Public  
Broadcasting



**raising  
readers**

# Table of Contents

**Joint Letter from Corporation for Public Broadcasting  
President & CEO Patricia Harrison and  
PBS President & CEO Paula Kerger . . . . . 2**

**Executive Summary . . . . . 3**

**Ready To Learn Initiative, 2005–2010**

    Introduction . . . . . 7

    Highlights from Ready To Learn Research . . . . . 13

    Conclusion . . . . . 23

**Appendix A . . . . . 28**

    Ready To Learn television shows, materials and  
    resources, partners, and key staff

**Appendix B . . . . . 34**

    Ready To Learn research partners, studies completed,  
    books and chapters, reports, journal articles, and  
    presentations produced under RTL



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## Building a Nation of Readers

In 2005, the U.S. Department of Education, together with the Corporation for Public Broadcasting, PBS, local public media stations, and other partners, turned to the research-based recommendations of the National Reading Panel to guide development of new children's programming and other learning tools that would emphasize the fundamental skills necessary to raise a nation of readers. As part of this effort, public media looked beyond broadcast television to emerging technologies and innovative outreach methods that could effectively reach children and families.

The result is a new generation of programming developed to help children master the fundamentals of reading.

This report, which distills research and evaluation studies funded under the 2005 Ready To Learn grant, demonstrates the success of public media's literacy initiatives and reaffirms the vital role that public television stations throughout the country play in educating America's children.

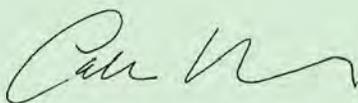
The unprecedented results of Ready To Learn provide definitive evidence that PBS KIDS Raising Readers programs and other complementary educational materials directly contribute to significant gains in word recognition, phonological awareness, vocabulary acquisition, verbal expressiveness, and overall school readiness among children ages 2–8. Some of the most recent studies also suggest that the benefits of these programs are so profound as to set low-income children on course to close pervasive achievement gaps between students from high-poverty backgrounds and their peers from wealthier families.

Key to the success of our collaborative effort has been uncovering and implementing new ways to engage audiences beyond traditional media devices. Ready To Learn has funded PBS stations in 20 neighborhoods throughout the country to create community-based literacy initiatives in partnership with Title I schools, Head Start programs, libraries, and other community-based organizations. These programs have supplemented educational broadcasts with activities that have improved children's literacy.

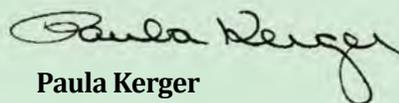
We also continue to look to new technologies—from iPhone applications to e-books—to provide children with a rewarding, interactive learning experience that boosts their literacy and places them on the pathway to success. And the power of those resources extends into the classroom, where teachers take advantage of students' familiarity with characters they've seen on television or online.

Looking ahead, our Ready To Learn partnership will use the lessons learned from this initiative to create new mathematics content and further enhance our work in literacy. Additionally, we will play a leading role in developing educational gaming for our youngest 21st-century learners. Our focus on strong research and new educational technologies, such as augmented reality and 3D-rendered multiplayer games, will enable America's children to tap into their next learning adventure and help them succeed in school and life.

Sincerely,



**Patricia Harrison**  
President and CEO  
Corporation for Public Broadcasting



**Paula Kerger**  
President and CEO  
PBS

## EXECUTIVE SUMMARY

With support from Congress since 1992, the Ready To Learn initiative harnesses the power of television, new media technology, and scientific research to help millions of children—particularly preschoolers living in poverty—master the basic reading skills they need to succeed in school and in life.

Our nation’s economic and social prosperity depends upon a highly literate population. A 1 percent rise in literacy scores results in an eventual 2.5 percent rise in labor productivity and a 1.5 percent rise in GDP per person.<sup>1</sup> The 25 fastest-growing professions in America require workers who have higher-than-average literacy skills. At the other end, the 25 fastest-declining jobs employ people with lower-than-average literacy skills.<sup>2</sup> Finally, increasing literacy would help to reduce both crime and the \$73 billion per year of unnecessary health expenses attributable to poor literacy.<sup>3</sup> Yet today, approximately 6 million kids—70 percent of all eighth graders and 65 percent of all 12th graders—read below their grade level.<sup>4</sup>

Addressing the literacy needs of our nation’s youngest children is a critical part of the solution, and public media can play an even greater role. Ninety-nine percent of American kids have access to a television, and their access to mobile devices and the Internet is continually and rapidly increasing. For more than four decades, the public media system has worked to improve literacy among our nation’s most disadvantaged children. With its earliest groundbreaking programs, the multiple Emmy Award-winning *Sesame Street* and *Mr. Rogers’ Neighborhood*, public media reinvented children’s broadcasting as an educational tool, proving that television can do much more than just entertain—it can teach.

In 2005, CPB and PBS examined the latest scientifically based reading research and reinvented Ready To Learn to focus on multimedia content for early childhood literacy. Not only do they continue to air high-quality educational television; they have used their children’s programs as the basis for carefully designed Web sites, computer games, iPhone apps, online teacher and family resources, print materials, and more—all of them grounded in educational research, and almost all of them available to the public for free.<sup>5</sup>

Additionally, Ready To Learn funded public television stations in 20 targeted communities to create literacy initiatives in partnership with parents, teachers, and youth-serving organizations that succeeded in helping disadvantaged children master the fundamentals of reading.

*“I learned so much. And seeing how the children grabbed the concepts that we were trying to make (clear)—it was just fantastic. I loved it, and they loved it.”*  
 — Jeanette Welcome, teacher, Head Start daycare center in Harlem, N.Y., on incorporating Ready To Learn in the classroom<sup>a</sup>

## Ready To Learn: Content that Educates, Entertains, and Engages

Building on public media’s commitment to providing high-quality programming on television—the medium that reaches the children most in need—CPB and PBS expanded their work with a U.S. Department of Education grant that helped fund:

- four new Ready To Learn television series—*SUPER WHY*, *Martha Speaks*, *The Electric Company*, and *WordWorld*;
- new episodes of two proven shows—*Sesame Street* and the multiple Emmy Award-winning *Between the Lions*; and
- closely related interactive transmedia content.

Ready To Learn’s content is grounded in research based on the 2000 National Reading Panel recommendations and is integrated into a community-based Literacy 360° framework to address all critical learning-to-read skills. Literacy experts now agree that educational media is especially effective when designed to complement one another; when created as a suite of media properties, the resulting television shows, Web sites, print materials, and classroom instruction exceed the sum of the individual parts.<sup>6</sup>

## Proven Results

As part of its 2005–2010 grant award to CPB and PBS, the U.S. Department of Education required that at least one-fourth of Ready To Learn funding—more than \$20 million of the \$72 million—be devoted to rigorous empirical studies and evaluations of Ready To Learn–supported programs. Over the life of the grant every facet of the Ready To Learn initiative—television programs, Web sites and other interactive platforms and applications, classroom materials and interventions, teaching and learning tools, and community engagement activities—has been subjected to rigorous research by some of the nation’s leading experts in educational media and literacy development.

As a result, Ready To Learn has become the nation’s leading sponsor of scientific research on media-based reading instruction. Ready To Learn researchers have learned an extraordinary amount about media-based reading instruction over the last five years, perhaps more than was learned over the previous five decades put together. The findings provide strong new evidence that viewing public media increases students’ ability to read and helps offset learning gaps. They include the following:

### **Public television and computers are part of the literacy solution.**

Many educators and parents assume that television, computer games, and the Internet have intrinsically harmful effects on children’s literacy. But when educational media content is combined with sound science and research, as public media does, the opposite is true.<sup>7</sup> Many PBS children’s shows feature

characters that make a point of reading good books, talking about them, and suggesting to viewers that they read them, too. Researchers have found that these shows motivate children to request trips to bookstores or libraries to get these books.<sup>8</sup> These early benefits are sustained. Kids who watch *Sesame Street* in preschool spend more time reading for pleasure in high school, and they obtain higher grades in English, math, and science.<sup>9</sup>

### **Ready To Learn programs and messages engage low-income parents and their children.**

Audience analysis and survey research indicate that Ready To Learn’s high-quality literacy instruction is reaching and engaging the audience it was designed to serve—children ages 2–8, particularly those from economically disadvantaged families. Nielsen ratings indicate that kids from low-income homes are more likely than their middle-class peers to watch PBS television shows.<sup>10</sup> PBS children’s programming has become increasingly prominent on the Internet as well, with pbskids.org ranking as one of the nation’s most popular children’s sites.

Kids make astonishing gains when taught literacy skills through Ready To Learn’s combination of media.

Two major studies found that when Ready To Learn video, online, and print materials were combined with teacher training, lesson planning, and classroom instruction, kids from low-income backgrounds were able to make such rapid and significant growth in reading that they narrowed or closed the achievement gap with middle-class kids.<sup>11,12</sup>

### **Public media has proven to be a sound investment.**

Ready To Learn is an exemplary public-private partnership, spurring CPB and PBS to seed further fundraising and investment in new properties and community engagement. Ready To Learn funded PBS stations in 20 urban and rural areas nationwide to create new community outreach programs for local kids, parents, childcare providers, and teachers. Each station offered its own unique outreach initiatives as well as specific learning services that capitalized on the popularity of Ready To Learn shows.

The research demonstrates that the programs provide both an effective and an affordable means of boosting the literacy development and other academic skills of children living in poverty. Public media increases students’ ability to read, significantly narrows or erases altogether the learning divide between the poor and middle class, and improves the literacy rates in America. Public media can and should be a key partner in the nation’s ongoing effort to ensure that young children from all backgrounds have meaningful opportunities to achieve in school and succeed in life.

*“We saw clearly that the teachers were invested in the curriculum, in the study. They saw development in the children. They also saw development in themselves. It was a win-win situation. So I would definitely recommend this curriculum for children.”*

*– Rosalie Moran, education director, Head Start daycare center in Harlem, N.Y. <sup>b</sup>*

*“The findings [from Ready-To-Learn research studies] should be enough to convince policymakers that... they should take a fresh look at public media’s potential to boost the early literacy development of children living in poverty.”*

*–Susan B. Neuman, professor, Educational Studies, University of Michigan, and former assistant secretary of elementary and secondary education, U.S. Department of Education<sup>c</sup>*

## The Next Generation of Ready To Learn

The U.S. Department of Education provided CPB and PBS with another five-year Ready To Learn grant in 2010. In this round of funding, public media is embracing the newest technologies and branching out to math concepts. Over the next five years, CPB and PBS will continue to raise the bar for children’s educational programming and remain on the cutting edge of digital media tools. Innovative new properties are already being developed for television and other platforms, including augmented reality games for desktop computers and mobile devices, new mathematics content, transmedia gaming suites, and an immersive world game to complement *The Electric Company*.

### Endnotes

- (a) Ready To Learn Literacy Research Study video <http://cct.edc.org/rtl/video-literacy-research-study.asp>
- (b) Ready To Learn Literacy Research Study video <http://cct.edc.org/rtl/video-developing-early-literacy-skills.asp>
- (c) Susan B. Neuman (August 11, 2011), Public Media’s Impact on Young Readers. *Education Week*
1. *The Economist*, “Counting Heads: A breakthrough in measuring the knowledge economy,” August 28, 2004.
  2. Alliance for Excellent Education, Adolescent Literacy (2011). [http://all4ed.org/about\\_the\\_crisis/Students/Literacy](http://all4ed.org/about_the_crisis/Students/Literacy)
  3. Centers for Medicare & Medicaid Statistics, 2004
  4. Alliance for Excellent Education, Adolescent Literacy (2011). [http://all4ed.org/about\\_the\\_crisis/Students/Literacy](http://all4ed.org/about_the_crisis/Students/Literacy)
  5. There is a fee for downloading certain applications for the iPhone or iPad. All other materials are free.
  6. Pasknik, S., Penuel, W. R., Llorente, C., Strother, S., and Schindel, J. (2007). *Review of research on media and young children’s literacy: Report to the Ready to Learn Initiative*. A report prepared for the Corporation for Public Broadcasting. New York and Menlo Park, CA: Education Development Center, Inc., and SRI International.
  7. Pasknik, S., Penuel, W. R., Llorente, C., Strother, S., and Schindel, J. (2007). *Review of research on media and young children’s literacy: Report to the Ready to Learn Initiative*. A report prepared for the Corporation for Public Broadcasting. New York and Menlo Park, CA: Education Development Center, Inc., and SRI International.
  8. Linebarger, D. L., Taylor-Piotrowski, J. L., and Vaala, S. (2007). *Supplementing television: What factors enhance or detract from learning from television. A literature review prepared for the Corporation for Public Broadcasting*. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.
  9. Anderson, D. R., Huston, A. C., Schmitt, K. L., Linebarger, D. L., and Wright, J. C. (2001). Early childhood television viewing and adolescent behavior: The recontact study. *Monographs of the Society for Research in Child Development*, 66(1),1–147.
  10. Nielsen Television Index. 2008–2009. PBS weekly come for 2008–2009 broadcast season.
  11. Neuman, S.B., Newman, E.H., and Dwyer, J. (2010). *Educational effects of an embedded multimedia vocabulary intervention for economically disadvantaged pre-K children: A randomized trial*. A report prepared for the Corporation for Public Broadcasting. Ann Arbor, MI: University of Michigan.
  12. Prince, D.L., et al. (2002). *Between the Lions Mississippi literacy initiative: A final report to Mississippi Educational Television*. Report prepared for Mississippi Educational Television and WGBH Educational Foundation. Starkville, MS: The Early Childhood Institute, Mississippi State University.

# INTRODUCTION

When the Public Broadcasting Act of 1967 was signed into law, the new Corporation for Public Broadcasting (CPB) was created to be “not just a broadcast system” but, more grandly, “a great network for knowledge.”

More than four decades later, CPB remains as committed as ever to that ambitious mission. In partnership with PBS, it strives to provide not just media content, but media content of the highest quality, helping all Americans deepen their understanding of history, current events, world affairs, science, the arts, and more.

Nowhere, though, has the impact of public media been greater than in the education of young children. Not every child has access to a good school or high-quality reading materials, but 99 percent of American kids do have access to a television—and nearly every television provides access to PBS children’s content. With its earliest, groundbreaking programs such as *Sesame Street* and *Mr. Rogers’ Neighborhood*, public media reinvented children’s broadcasting, proving that television can do much more than just entertain—it can teach. Under the Ready To Learn initiative, newer shows—*SUPER WHY*, *Martha Speaks*, *WordWorld* and an updated version of *The Electric Company* as well as new episodes of *Between the Lions* and *Sesame Street*—deliver instruction and educational resources that are scientifically proven in their effectiveness for the kids who need that support the most.

Further, public media expanded its work across a range of media platforms. It uses public television’s high-quality children’s programs as the basis for carefully designed Web sites, computer games, iPhone apps, online teacher and family resources, print materials, and more—all of them grounded in educational research, and almost all of them available to the public for free.<sup>1</sup>

## The Origins of Ready To Learn

In 1992, recognizing the extraordinary power and reach of public media, Congress scaled up its investments in children’s educational broadcasting.

Under the banner of the Ready-To-Learn Television Program administered by the U.S. Department of Education, and with support from Congress since 1995, the Department funded CPB and PBS to help the nation’s 368 public television stations develop new educational programs and multimedia

*Public media reinvented children’s broadcasting, proving that television can do more than just entertain—it can teach.*

resources for children living in poverty; air several hours of educational shows every day; and provide a variety of educational outreach services to parents, educators, and caregivers in low-income neighborhoods.

Over the subsequent 10 years, spanning two five-year grants, Ready To Learn funding allowed PBS stations and independent producers to build on the success of existing shows—*Arthur*, *Clifford the Big Red Dog*, *Reading Rainbow*, and *Sesame Street*—as well as to create new ones—*Dragon Tales* and *Between the Lions*. Further, Ready To Learn enabled the country’s PBS stations to distribute more than 3 million books to children from low-income families, and it allowed them to provide more than a million parents and childcare workers with training in the basics of effective literacy instruction.

However, it is the third round of RTL funding—awarded in 2005 to CPB and PBS, and to the Ready To Learn Partnership, a collaborative based at Chicago public station WTTW that creates media products and supplemental outreach services—that has proved to be the real game-changer for children’s media by enabling producers and broadcasters to form strong new partnerships with education researchers.

## Supporting a New Generation of Programming and Research

In 2005, the U.S. Department of Education revised the mission of the Ready To Learn initiative, directing it to focus solely on early reading instruction rather than to cover a broader range of literacy and social skills. More specifically, the Education Department, CPB, and PBS decided to use the well-known 2000 report of the National Reading Panel as a guide for Ready To Learn’s work, ensuring that any new products and programs would emphasize the kinds of reading instruction that research shows to be critical to children’s success in elementary school and beyond.<sup>2</sup>

*SUPER WHY!*



As a result, CPB, PBS, and their partners redoubled their efforts to incorporate the latest scientifically based reading research into existing children’s programs, such as *Sesame Street* and *Between the Lions*, and into resources for educators such as *PBS TeacherLine*, which provides Web-based professional development to many thousands of teachers across the country. Moreover, they created a whole new generation of research-based television programs linked by a single literacy curriculum framework, including *Martha Speaks*, *SUPER WHY*, *WordWorld*, and a dynamic new version of the classic show *The Electric Company*, as well as related print

materials, classroom resources, and Web sites, including PBS KIDS Island, for children ages 2–5, and The Great Word Quest, for kids ages 6–8.

Additionally, Ready To Learn funded PBS stations in 20 targeted communities to create literacy initiatives in partnership with libraries, daycare centers, public preschools, health clinics, and other community-based organizations in order to capitalize on strategic opportunities to help disadvantaged children master the fundamentals of reading. (See sidebar 1 on page 10 for the list of partner stations. Appendix A includes a complete list of Ready To Learn television shows; materials and resources, including Web sites, interactive games, print materials, classroom resources, teacher development projects, and community programs; as well as partners, advisers, and key staff members.)

Finally, but no less important, the Department of Education required that at least a quarter of the 2005–2010 funding for Ready To Learn—more than \$20 million of the \$72 million total CPB/PBS received—be reserved for research.<sup>3</sup> Researchers in some fields might not think that is an unusual level of support. But for those who study media’s impact on children’s literacy, it was an unprecedented infusion of funds.

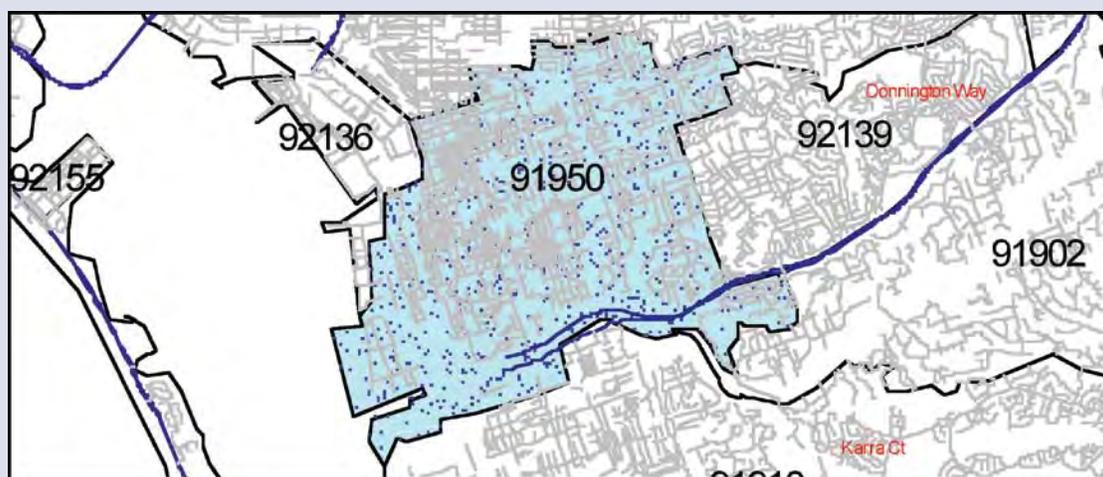
*Thanks to the research funded under the 2005 Ready To Learn grant, policymakers can now rely on data that prove the educational benefits of public media.*

**FIGURE 1: IDENTIFYING LOCAL LITERACY NEEDS THROUGH COMMUNITY MAPPING**

Using the Nielsen Company’s PRIZM Geo Mapping system—which combines neighborhood-level demographic information with data on television viewership—the American Institutes for Research identified neighborhoods that would be likely to welcome and benefit from Ready To Learn outreach programs.

**Sample PRIZM Geo Map**

National City, CA 91950	Target: RTL families		Base
Name	Number of RTL HH in the Zip Code (each dot represents 10 RTL HH)	% Penetration	All Households in 91950 Zip Code
National City, CA	8,102	48.44	16,726



Source Claritas PRIZM NE 2005, Copyright 2005, Claritas Inc.

In part, this funding has been used to bring researchers more fully into the process of developing Ready To Learn's new shows, multimedia resources, and community services. For example, it allowed the producers of *SUPER WHY* to commission a study of viewers' eye movements while watching the show, to ensure that children are interested in and paying attention to specific educational content.<sup>4</sup> Similarly, the funding allowed CPB and PBS to enlist the aid of the American Institutes for Research (AIR) in designing outreach services that helped local public media stations effectively target low-income families. Using marketing research data from the Nielsen Company,<sup>5</sup> AIR produced demographic profiles of neighborhoods with high concentrations of young children living in poverty. It then conducted focus groups and survey research into local educational needs and developed and tested messages to use in social marketing campaigns, leading PBS to create the now familiar Ready To Learn message: "Anytime is learning time."<sup>6</sup> (See figure 1 on page 9 for a sample PRIZM Geo Map identifying a low-income community that could benefit from RTL. Figure 2 on page 12 presents findings from focus groups and survey research conducted with RTL parents.)

## SIDEBAR 1: DEVELOPING COMMUNITY PARTNERSHIPS NATIONWIDE

The following examples of Ready To Learn materials and outreach activities highlight how public television stations, in partnership with local public schools and community-based organizations, adapted and extended the RTL initiative to best serve local needs.

- **Alabama Public Television** distributed more than 3,000 of the *SUPER WHY Learning Adventures Toolkit* DVDs to Title I classrooms statewide, working through the Alabama Department of Human Resources Child Care Services Division. These DVDs featured the same curriculum that was proven effective through the *SUPER WHY Summer Reading Camps*.
- **KAET (Phoenix, Arizona)** worked with local community colleges to develop and implement online courses utilizing content from the childcare-focused public television series, *A Place of Our Own/Los Niños en Su Casa*, distributed resources, and established a *PBS KIDS Raising Readers Library Corner* at the local Gila River Indian Community.
- **KPBS (San Diego, California)** partnered with Athletes for Education, the San Diego Chargers, and local schools to write a children's book, *Fit for Lit*, and develop a curriculum for use in public schools that addresses two local priorities, literacy and childhood obesity.
- **KQED (San Francisco and Oakland, California)** partnered with One Economy Digital Connectors to connect underserved neighborhoods with digital literacy resources. Through a partnership with the Unity Council, KQED helped make an Oakland neighborhood park a safe place for families to play and learn.
- **WSRE (Pensacola, Florida)** worked with its local baseball team, the Pensacola Pelicans, on Scoop's Reading Challenge, a motivational literacy contest for elementary school students. WSRE also launched a consumer-focused campaign—with billboards, print ads in the Yellow Pages, and radio and TV spots—that promoted literacy and the thematic message of "Anytime is learning time."
- **WFSU (Tallahassee, Florida)** worked closely with the mayor of Tallahassee and community organizations to canvass door-to-door for literacy. Volunteers engaged families with literacy materials, DVDs, yard signs, a pledge to help raise readers, and a block party hosted by the mayor.
- **WSIU (Carbondale, Illinois)** developed a *Ready To Learn Literacy Van* that traveled throughout southern Illinois bringing literacy interventions to low-income families without transportation. The Literacy Van idea has now been implemented by seven other RTL stations (Alabama Public Television, KLRN, WSRE, WHUT, WHRO, WFSU, and WSRE).
- **Iowa Public Television** used research-based insights into the training needs of rural childcare providers to recruit and train more than 700 childcare providers with the *PBS TeacherLine "Raising Readers" online courses*.
- **Louisiana Public Broadcasting** launched a Twitter service, LPBRead, to provide parents with literacy tips to help their children learn to read and worked with the business community, including Chase Bank, to fund *SUPER WHY Summer Reading Camps* and other programs statewide.
- **Maryland Public Television (MPT)** worked with the Maryland Education Department to align RTL-funded online resource *PBS KIDS Island* to state standards. It is now a featured part of special-education individualized education plans for students in Head Start. MPT also placed a *PBS KIDS Raising Readers Library Corner* in state libraries in every county in Maryland.
- **Mississippi Public Broadcasting (MPB)** adopted Canton, Mississippi, as a focus, implementing literacy programs in doctors' offices, community centers, childcare centers, and the Piggly Wiggly grocery stores. MPB held a forum on early childhood education attended by the lieutenant governor and, with separate funds, produced an award-winning RTL program of *Between the Lions* during the grant period.

Mostly, though, CPB and PBS have used RTL funding to commission scientific research and evaluation studies into the effectiveness of specific Ready To Learn programs and resources. And as a result, much has been learned about public television-, computer-, and Web-based reading instruction over just the last five years, perhaps more than was learned over the previous five decades put together.

Thanks to the research funded under the 2005 Ready To Learn grant, policymakers no longer have to speculate about the potential benefits of public media. They now have definitive evidence that PBS programs and resources improve children's literacy.

## The Ready To Learn Research Effort

The CPB/PBS Ready To Learn initiative's team of educational research partners—including leading scholars at the University of Michigan, the University of Pennsylvania, the University of Maryland, the Education Development

- **WNED (Buffalo, New York)** engaged Buffalo families and home-based childcare providers through the Read to Succeed Buffalo Coalition, a dedicated group of community businesses and nonprofit organizations that strategically focuses on a "Literacy Zone" zip code in Buffalo. The station trained Boys and Girls Club staff in the use of *The Electric Company Kits* and hosted *The Electric Company Circuit Tour*.
- **WGTE (Toledo, Ohio)** partnered with a local minor league baseball team, the Mud Hens, and community organizations to launch the annual *Raising Readers Week* in Toledo, which culminates in a free day of literacy and baseball for low-income families.
- **WPSU (State College, Pennsylvania)** developed a "passport to literacy" program with local businesses that allowed children to play literacy games throughout the year and earn prizes, starting with the annual Festival of Ice in Lewistown, Pennsylvania.
- **WLJT (Martin, Tennessee)** partnered with public schools for school-day curricula for the first time with this grant. Through successes with *Martha Speaks Reading Buddies* and *PBS KIDS Raising Readers Library Corners*, WLJT developed partnerships with local schools and implemented curricula during the school day, which the schools had been unable to do with previous public television programs.
- **WNPT (Nashville, Tennessee)** worked with local partners Book 'Em and Books from Birth to host 13 *SUPER WHY Summer Reading Camps*, serving 240 low-income children in Nashville. WNPT also worked with WLJT and four other Tennessee public television stations to strategically engage stakeholders statewide through the *PBS KIDS Raising Readers Library Corners*.
- **KLRN (San Antonio, Texas)** worked with the United Way and the H-E-B grocery store to develop and implement a grocery store literacy game that inspired the development of PBS's *Supermarket Explorer Game*. The game, which epitomizes RTL's philosophy that "Anytime is learning time," gives parents the tools to build their children's literacy while they shop and earns prizes from the grocery store partner.
- **WHRO (Norfolk, Virginia)** worked with its local military base to provide *SUPER WHY Summer Reading Camps* and other resources to children on base. In addition, as a school district licensee, WHRO integrated RTL resources into the digital professional development it provides to teachers in the local districts it serves.
- **WHUT (Washington, D.C.)** adapted and hosted *WordWorld Day* for 265 inner-city elementary school children at Oxon Hill Farm in partnership with the National Parks Service. Designed to reinforce and integrate classroom literacy curriculum activities into the experience of visiting a farm, this literacy event was built around the PBS KIDS program *WordWorld*, promoting the "Anytime is learning time" concept. WHUT's *Media and Learning Lab*, also funded by RTL, developed a mobile laptop lab that allows children to act as their own focus group testing online and other digital content of RTL shows.
- **West Virginia Public Broadcasting** focused on McDowell County, one of the poorest counties in the United States, rallying the local business community to ensure that children could attend *SUPER WHY Summer Reading Camps*, installed *PBS KIDS Raising Readers Library Corners*, and built lasting relationships with the community.

RTL products and assets are noted in green.

*The research indicates that Ready To Learn is producing extraordinary outcomes for kids.*

Center, SRI International, and the American Institutes for Research—is one of the most impressive ever assembled. *(For a complete list of CPB/PBS RTL researchers and their completed studies, see appendix B.)*

The researchers have emphasized “gold standard” experimental designs, in which study subjects are randomly assigned to treatment and control groups, providing the most reliable information possible about the effects that particular programs, materials, and practices have on children’s learning.

To gain even richer insights into Ready To Learn’s impact, researchers have employed a number of additional methodologies, including surveys, case studies, content analyses, focus groups, observational studies, and interviews. Further, the research agenda has gone well beyond the impact of individual Ready To Learn programs, Web sites, and materials. An entire strand of research has measured the impact of local PBS stations’ community outreach efforts, including in-school reading buddies and after-school programs, reading-intensive summer camps, training for parents, and professional development for teachers and childcare providers.

Ready To Learn’s research partners have been remarkably productive over the last five years, publishing numerous books, reports, doctoral dissertations, and journal articles. These studies have already made major contributions to the knowledge base on children’s media-use in general, the design of effective media-based reading instruction in particular, and the use of media in combination with face-to-face instruction, print materials, and teacher professional development.

As the present report describes, these research findings are powerful and enlightening. The evidence indicates that Ready To Learn is producing extraordinary outcomes for kids, particularly kids from low-income families, helping them make significant gains in the basic reading skills they need to succeed in school.

## FIGURE 2: IDENTIFYING LOCAL LITERACY NEEDS

In 2010, the American Institutes for Research conducted extensive focus groups and survey research with low-income families in the 20 target public media markets. Key findings include:

- Most parents are focused on basic needs.
- Not all parents see themselves as their children’s teacher.
- Most parents have very little time to be involved in their children’s activities.
- Parents did not know that simple behaviors (rhyming and letter recognition games) could help their children get ready to read.
- Many parents do not read to their kids every day because they do not have time, do not read well, or cannot read English.
- However, parents ARE willing to try activities with their kids if they can easily fit them into their schedules.

**Source:** American Institutes for Research (2007c; 2007d).

# HIGHLIGHTS FROM READY TO LEARN RESEARCH

The U.S. Department of Education had compelling reasons in 2005 to refocus the mission of Ready To Learn to emphasize research-based instruction in early literacy.

First was the knowledge of just how severe the literacy crisis is for children who live in poverty. For example, according to the Education Department's 2005 *National Assessment of Educational Progress* (known as "The Nation's Report Card"), only 16 percent of fourth-graders eligible for free or reduced price lunch (the standard proxy for low family income) scored at or above the proficient level in reading, compared with 42 percent of kids whose families were better off.<sup>7</sup>

Second was the recognition that poverty's impact on learning begins long before kids reach school age. Notably, a major 1995 research study found that a wide gap in vocabulary divides economically disadvantaged children from affluent children by age 3.<sup>8</sup> Subsequent research showed that by the time they arrive at kindergarten, kids who live in poverty have a working knowledge of some 3,000 words, on average, while children of professionals arrive at school knowing about 20,000 words.<sup>9</sup> Such profound differences in early exposure to vocabulary, letters, books, and other print materials help to explain why kids from low-income homes so often struggle to master the mechanics of reading when they get to school. It may also help to explain the fourth-grade slump—when students are asked to shift their focus from learning to read to reading to learn, their lack of background vocabulary and content knowledge can impede their comprehension.

Third was the 2000 publication of the National Reading Panel report, which stoked federal policymakers' interest in effective reading instruction and defined specific priorities to be addressed by new literacy initiatives. Reviewing thousands of empirical studies, the panel found a wealth of evidence to support the teaching of phonemic awareness (knowledge of how letters correspond to sounds), phonics (how letters fit together to make words), fluency (the ability to read quickly, accurately, and with appropriate tone and phrasing), vocabulary, and comprehension (the strategies people use to help themselves follow and understand what they read).

Thus, when it revamped the Ready To Learn initiative, the Education Department was able to draw from a solid body of research on the severity of the literacy crisis, the value of literacy instruction in the preschool years, and the importance of teaching, at minimum, the five dimensions of early reading skills highlighted in the National Reading Panel report.



*Martha Speaks*

In 2005, however, the Education Department could say little about the effectiveness of teaching reading skills via television, the Internet, or emerging media, such as cell phones and other mobile technologies. For decades, educators had been excited about the potential of new media to boost achievement, but few large-scale, empirical studies of public-media-based reading instruction had been conducted.<sup>10</sup>

Public media has always been dedicated to providing high-quality educational programs for young readers. It has always based its work on the most promising approaches to literacy instruction. Characters in Ready

To Learn shows have always mirrored the kinds of parent-child and teacher-student interactions that researchers have found to be most conducive to learning. And the producers of Ready To Learn programs have always consulted reading experts—including many of whom helped write the National Reading Panel report—throughout the development of their shows, Web sites, and other resources.

But just because a TV show, Web site, computer game, or iPhone app is based on effective practices does not necessarily mean that it is effective in advancing children’s literacy skills. Do proven face-to-face teaching practices have the same effects when they have been translated to media such as TV and the Internet? For that matter, do such media have any advantages over face-to-face instruction? And what happens when literacy skills are taught through a blending of media? Or when electronic media are used to enhance face-to-face instruction?

Such questions were at the heart of the Education Department decision to invest more than a quarter of the 2005–2010 RTL funding in research and evaluation. And over five years, those research studies have supplied much-needed answers.

## KEY FINDINGS

### ■ Public television and computers are part of the literacy solution.

Many educators and parents assume that television, computer games, and the Internet have intrinsically harmful effects on children’s literacy. It is often argued that electronic media are taking time away from reading and could even be “re-wiring” kids’ brains, reducing their ability to concentrate on written texts.<sup>11</sup>

However, Ready To Learn researchers have found no evidence to support the belief that such media are inherently harmful. In fact, the evidence suggests that when TV shows and electronic resources have been carefully designed to incorporate what is known about effective reading instruction, they serve as positive and powerful tools for teaching and learning.

In 2006, CPB commissioned the Education Development Center (EDC) and SRI International to conduct an exhaustive analysis of previous research studies that compared the literacy skills of young children who were exposed to television and computers with the skills of those who were not. Over the last several decades, such studies have been relatively few in number, but in the aggregate, the researchers found, they provide enough evidence to show that educational television has positive effects on some key early literacy skills—including word recognition, phonological awareness, and vocabulary development—and they do not show that watching television has, in and of itself, any negative effects on literacy.<sup>12</sup>

Also in 2006, CPB commissioned researcher Dr. Deborah Linebarger at the University of Pennsylvania’s Annenberg School of Communication to conduct a broader literature review, going well beyond the specific comparison-group studies analyzed by EDC and SRI. After surveying the full range of scholarly debate on media’s impact on literacy, she concluded that while critics have issued many diatribes against television and computers, warning that they will have pernicious effects on literacy, they have not backed up those warnings with sound evidence or logic.

Rather, argued Linebarger, the most logical conclusion to be drawn from the existing scholarly literature is that it is the educational content that matters—not the format in which it is presented. In short, there are educationally valuable TV shows and Web sites, and there are educationally worthless ones (just as there are both valuable and worthless books and magazines).<sup>13</sup>

Further, there is no evidence that watching television necessarily detracts from kids’ interest in books. In fact, PBS shows often feature characters that make a point of reading good books, talking about them, and suggesting to viewers that they read them, too. And researchers have found that such shows can motivate children to request trips to bookstores or libraries to get them.<sup>14</sup> These early benefits are sustained as well. Kids who watch *Sesame Street* in preschool spend more time reading for fun in high school, and they obtain higher grades in English, math, and science.<sup>15</sup>

Moreover, a Ready To Learn review of studies from the 1980s and 1990s found that when parents make a point of watching along with their children—and especially if they join their kids in responding to questions raised by on-screen characters, repeating words out loud, and otherwise engaging with the content of the shows—educational television tends to have especially positive effects on learning.<sup>16</sup>

Finally, Ready To Learn research suggests that children’s media can serve as a bridge to formal education. When kindergarten and preschool classrooms feature books, posters, or other resources based on characters from PBS shows, children’s familiarity with those characters—whom they tend to regard as “friends”—can help ease their transition to the new setting, resulting in more positive attitudes toward school and learning.<sup>17</sup>

*Early benefits are sustained as well. Kids who watch Sesame Street in preschool spend more time reading for fun in high school, and they obtain higher grades in English, math, and science.*

■ **Ready To Learn programs boost kids' reading skills—and kids from low-income backgrounds make the greatest improvement.**

A number of high-quality, randomized control group studies have found that kids who watch the RTL *PBS KIDS Raising Readers* shows and do related activities on PBS Web sites and personal computers outperform their nonparticipating comparison group peers on standardized measures of reading and school readiness, and the benefits are most pronounced for kids who live in poverty.

For example, several rigorous control group studies have found that viewing the PBS television show *Between the Lions* has a powerful impact on

literacy development. One study revealed that economically disadvantaged kindergartners who watched 17 episodes of *Between the Lions* made significantly greater gains in key literacy skills (such as recognizing letters and reading whole words) than did similar children who did not watch the show; even watching just two episodes had a measurable impact on those skills.<sup>18</sup> Moreover, the show has been found to be especially effective for bilingual kindergartners, helping them to strengthen their awareness of letter-sound relationships in English.<sup>19</sup>

Likewise, viewing the television show *SUPER WHY* has been found to raise kids' scores on various measures of literacy development, including their knowledge

of letters and their awareness of letter-sound relationships, with low-income children posting the greatest gains. Kids who were randomly picked to watch up to 20 episodes of *SUPER WHY* dramatically outperformed children who were not—and watching as few as two episodes was enough to give their literacy skills a significant boost.<sup>20</sup>

In a study of nearly 800 children at 84 preschools in five states, the Michael Cohen Group LLC—supported by funding from WTTW/Chicago's Ready To Learn grant—found that low-income kids who were randomly chosen to view the show *WordWorld* had meaningful and significantly greater gains than did their peers in phonemic awareness and recognition of written words and oral vocabulary targeted by the show.<sup>21</sup>

For an evaluation of *The Electric Company*—the newest Ready To Learn program, on air since 2009—University of Pennsylvania researchers studied the show's impact on students randomly selected from a pool of kindergartners through fourth-graders attending after-school programs for at-risk students in the Philadelphia area. Students who viewed up to 50 episodes over 10 weeks made significant progress in vocabulary knowledge and phonetic skills, outperforming a control group of students who did not view the program.<sup>22</sup>



*The Electric Company*

**FIGURE 3: RESULTS FROM THE SUMMATIVE EVALUATION OF READY TO LEARN**

Literacy Skill	Treatment Children (Literacy Curriculum)	Comparison Children (Science Curriculum)	Percent Difference
Naming letters	21.2 letters	16.8 letters	20.8%
Knowing the sounds of letters	10.0 letter sounds	6.3 letter sounds	37.0%
Knowing concepts of story and print	10.8 points	9.5 points	12.0%
Recognizing letters in child's name	2.7 letters	2.5 letters	7.4%

**Source:** Adapted from Penuel, Pasnik, Bates, Townsend, Gallagher, Llorente, and Hupert (2009).

The program *Martha Speaks*, which focuses specifically on vocabulary learning, has been shown to be highly effective as well. Dr. Rebecca Silverman, from the University of Maryland, found that children from low-income, urban households gained as much in word knowledge from watching *Martha Speaks* as from listening to read-alouds in school. Further, Silverman found that children who were randomly selected to watch repeated episodes of the show posted significant gains in word knowledge relative to similar kids who watched the show only once.<sup>23</sup> And in a separate study, researchers from the firm Rockman *et al.* found that when children ages 3–7 were invited to play a *Martha Speaks* game on the iPhone for two weeks (playing for an average of 2.5 hours overall during that period), they made dramatic gains in vocabulary, increasing their knowledge of targeted words by as much as 31 percent.<sup>24</sup>

Playing games and doing literacy-related activities on the PBS KIDS Island Web site have also been found to have a strong positive impact on reading skills. Results from a controlled, experimental research study suggest that children whose parents encouraged them to visit the Web site (at least 15 minutes a day, four days a week, for six weeks) performed significantly better on measures of phonological and phonemic awareness than did similar kids who did not visit the site.<sup>25</sup>

#### ■ Kids make remarkable gains when taught reading through a combination of media.

Since the 1990s, literacy experts have theorized that educational media would be especially effective if used in combination. If television shows, Web sites, print materials, and classroom instruction were designed to complement one another, then the result might exceed the sum of the parts.<sup>26</sup>

Recent research has confirmed that hypothesis and shown that teaching reading through a combination of media—known as “media synergy”—is even more powerful than predicted.

In a 2009 study conducted by researchers from the Education Development Center and SRI International, nearly 400 preschoolers from low-income

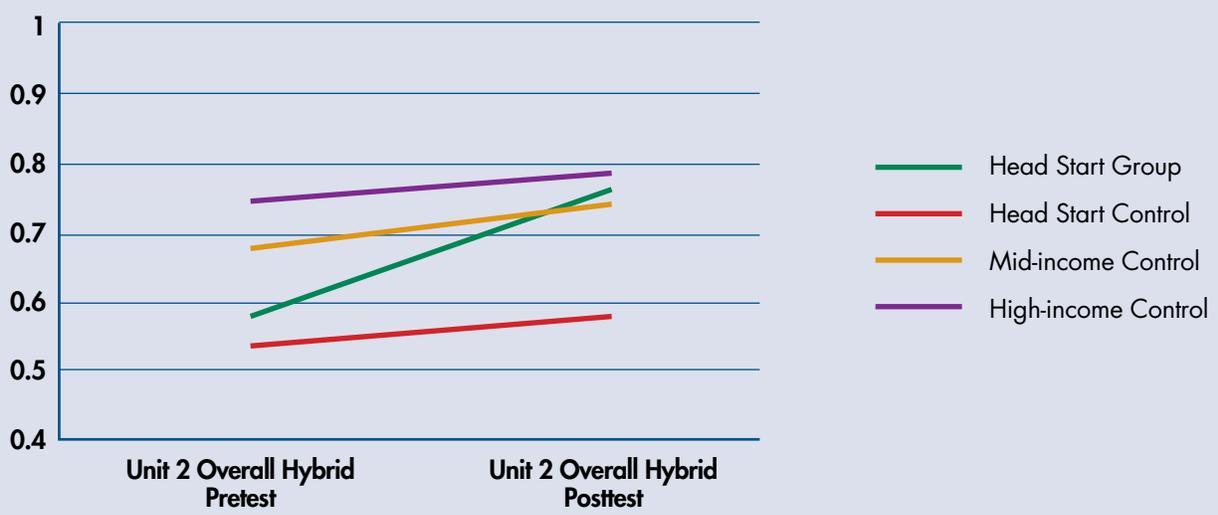
families in San Francisco and New York City were assigned at random to a 10-week enrichment program. Half of the children experienced reading instruction based on a Ready To Learn literacy curriculum that featured video segments from *Sesame Street*, *Between the Lions*, and *SUPER WHY* as well as related online literacy games and activities. The other half followed a curriculum that was similar in design—using PBS video segments and online activities—but that focused on the learning of scientific content, not literacy skills. After 10 weeks, the students in the literacy group significantly outscored the comparison group on measures of their ability to name letters, match letters to sounds, recognize letters in their own names, and comprehend concepts of story and print.<sup>27</sup> (See Figure 3 for a summary of results for the treatment and comparison groups.)

Further, two recent experimental studies found that when Ready To Learn video, online, and print materials were combined with teacher training, lesson planning, and classroom instruction, children from low-income backgrounds were able to make such rapid growth in reading that they closed the achievement gap with middle-class children. That’s a remarkable and unprecedented result.

The first study, conducted by researchers at the University of Michigan, found that a classroom model that features multimedia materials adapted from *Sesame Street*, along with print materials, lesson plans, and teacher training, was so effective at boosting the early literacy skills of low-income

**FIGURE 4: CLOSING THE ACHIEVEMENT GAP: RESULTS FROM A UNIVERSITY OF MICHIGAN STUDY**

**World of Words Conceptual Development Results (Unit 2: Health)**



**Source:** S. B. Neuman (2009, December). *The World of Words (WOW): Increasing vocabulary knowledge and growth trajectory using a vocabulary intervention for at-risk early literacy learners*. Paper presented at the National Reading Conference, Orlando, FL.

children in a Detroit Head Start program that it allowed the students to catch up entirely with middle-income control groups on standardized reading assessments.<sup>28</sup> (See figure 4, which indicates significant increases in conceptual development for Head Start students compared with the Head Start control group and students from more advantaged backgrounds.)

In the second study, researchers from the University of Pennsylvania saw similarly dramatic results from a recent evaluation of a classroom intervention based on the show *Between the Lions*.

Research they had conducted in the early 2000s revealed that the benefits of viewing *Between the Lions* were enhanced when children not only watched the show but also read books and print materials based on the show and its characters.<sup>29</sup> Expanding on that research, they studied the effects of a classroom intervention that combined *Between the Lions* video materials with related print resources, lesson plans, and training and mentoring for teachers. Participating teachers became significantly more likely to teach reading using proven instructional strategies, and students posted significant gains on standard measures of literacy development.<sup>30</sup>

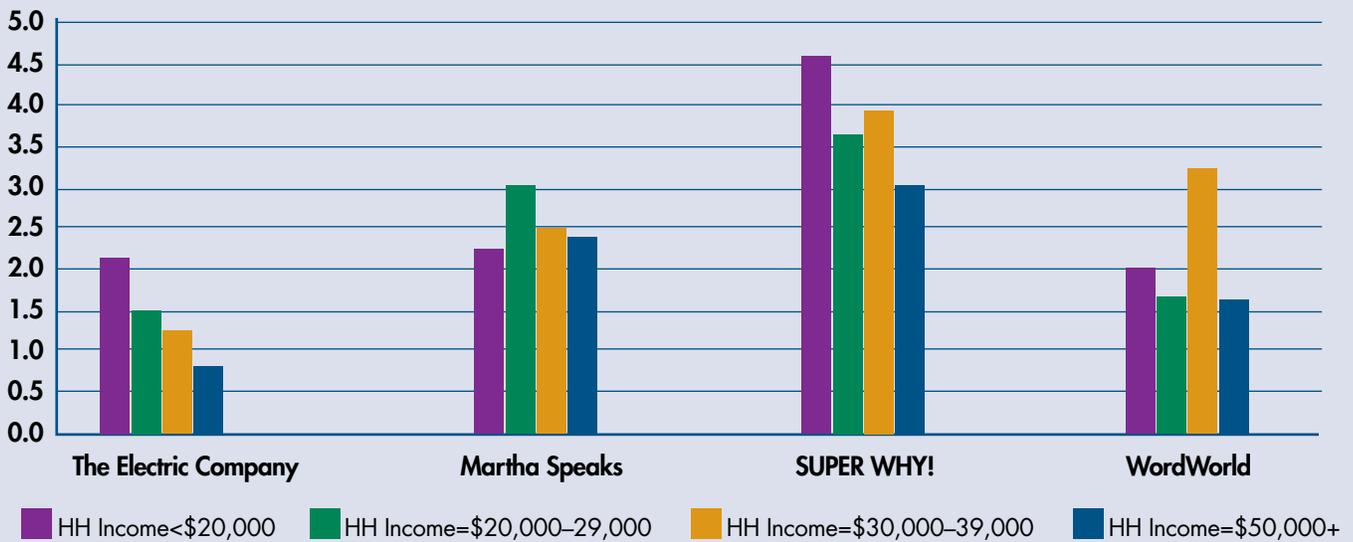
More recently, and with support from Ready To Learn, University of Pennsylvania researchers conducted a larger, randomized control group study of the *Between the Lions* intervention (augmented with enhanced mentoring and teacher support), that was implemented in 24 preschool classrooms in Mississippi. Students made dramatic gains (up to 300 percent) on measures of basic literacy—including tests of oral language and vocabulary, letter knowledge, and phonemic awareness—far outpacing similar students whose teachers were not selected to teach that curriculum. In 30 weeks, RTL enabled the study’s low-income children to catch up entirely with middle-class children.<sup>31</sup>

Moreover, the researchers observed similar gains in three different years, suggesting that the intervention is both replicable and consistent in its results. And gains were dramatic both for kids whose initial literacy skills were weak and for those whose skills were relatively strong, suggesting that the model is flexible enough to serve children of varying needs.



*WordWorld*

**FIGURE 5: WHO'S THE AUDIENCE FOR READY TO LEARN?  
 NIELSEN RATINGS ARE HIGHEST AMONG THE LEAST AFFLUENT VIEWERS**



HH = Household

**Note:** According to the Department of Health and Human Services, the 2009 poverty guidelines for a family of four is \$22,000.

**Source:** Nielsen Television Index (2008-2009). PBS weekly come for 2008-2009 broadcast season.

■ **Ready To Learn programs and messages reach low-income parents and their children.**

Audience analysis and survey research indicate that Ready To Learn is delivering large amounts of high-quality literacy instruction to the audience it was designed to serve—children ages 2–8, particularly those from economically disadvantaged families. In fact, Nielsen ratings indicate that kids from low-income homes are *more* likely than their middle-class peers to watch PBS television shows, which they consider as enjoyable as commercial programs.<sup>32</sup> (See figure 5 for a breakdown of Nielsen ratings for diverse income levels across four RTL shows.)

Further, according to the most recent Grunwald Survey of educational media, parents and pre-K educators value PBS children’s shows, Web sites, and materials far more than resources from commercial broadcasters or any other provider. And many parents, when surveyed as to why they encourage their children to watch PBS KIDS shows, explain that they have little time to help their children learn basic literacy skills or do not see themselves as teachers, but trust PBS to be their partners in providing their kids with valuable content.<sup>33</sup>

According to data collected by the American Institutes for Research, low-income parents have become increasingly familiar over the last several years with Ready To Learn’s core message—“Anytime is learning time”—

and the stronger their awareness the more likely they are to read with their children, play word games with them, and participate in community-based PBS KIDS Raising Readers activities.

PBS children's programming has become increasingly prominent on the Internet as well, with the pbskids.org ranking as one of the most popular children's sites. It now averages roughly 10 million unique visits per month, with more than 70 percent of users returning to the site regularly.

- **Ready To Learn's community engagement programs are highly effective in serving disadvantaged families.**

Since 2005, Ready To Learn has used a Literacy 360° approach and funded PBS stations in 20 urban and rural areas to create a new generation of community outreach programs, designed to supplement their children's broadcasts with various support services for local kids, parents, childcare providers, and teachers. (See figure 6 for a conceptual drawing of RTL's Literacy 360° approach.)

While each station offers its own unique set of outreach initiatives, all have implemented specific programs that seek to capitalize on the popularity of Ready To Learn shows. One is the *SUPER WHY* Summer Reading Camp, created by independent producer Out of the Blue, which offers free, one-week programs for children ages 4–5 from low-income families, combining familiar camp activities with instruction in early literacy skills that children will need when they get to kindergarten. Another is a child-to-child peer-mentoring program, *Martha Speaks* Reading Buddies, created by WGBH/Boston, which created the *Martha Speaks* television show as well. Both programs have undergone rigorous evaluations and been found to have positive effects on literacy development.

Analyzing 2009 data from 80 *SUPER WHY* Summer Reading Camps across the country, San Diego State University researchers found that

**FIGURE 6: LITERACY 360°**



Ready To Learn's 360° approach to community outreach is rooted in comprehensive study of the needs of local communities and the capacity of local PBS stations to reach and serve children from low-income families. It also builds on lessons from social marketing, reaching young children where they spend their time and providing tools to support the adults—parents, teachers, librarians, and day-care providers—who most influence their learning.

## FIGURE 7: A POWERFUL PROGRAM: RESULTS FROM SUPER WHY SUMMER READING CAMPS

In a study of 80 SUPER WHY Summer Reading Camps, participating children showed gains in all of the literacy skills presented in the program, including a:

- 112% gain in word decoding
- 64% gain in encoding
- 33% gain in reading words
- 20% increase in letter sounds

**Source:** Marshall, J., Lapp, D., and Cavoto, K. (2010).

the program had boosted participants' scores on a number of standardized literacy assessments by an average of nearly 12 percent—a particularly remarkable finding given that the camps run for only five half-days. Further, the data showed that the children made gains similar to those of campers in 2008, even though a number of PBS stations offered the camp for the first time in 2009. This suggests that the design of the camps allows for a high degree of consistency in implementation. In other words, the intervention is robust and its success is replicable. (See figure 7 for a summary of literacy gains resulting from participation in SUPER WHY Summer Reading Camps.)

During the 2008–09 school year, University of Maryland researchers conducted an experimental study of the *Martha Speaks* Reading Buddies Program (MSRBP). Like other reading buddies models, MSRBP pairs fourth- and fifth-graders with kindergartners and has them play literacy games, write journal entries, and read books together. However, unlike participants in other reading buddies models, MSRBP children also watch video segments from *Martha Speaks* and review vocabulary introduced by the show.

At schools located in five PBS markets, pairs of students were randomly chosen to participate in eight 45-minute sessions of a reading buddies program, with only some pairs given the *Martha Speaks* material. According to standardized vocabulary tests, those kindergartners who used the *Martha Speaks* Reading Buddies material learned a significantly greater number of words than those who did not, and their fourth- and fifth-grade partners exhibited gains as well.<sup>34</sup>

## SIDEBAR 2: IT'S A TV SHOW! IT'S A SUMMER CAMP! IT'S SUPER WHY!

During the summer of 2010, youngsters in Baltimore's Druid Hill neighborhood got a chance to be superheroes courtesy of Maryland Public Television.

To a casual observer at the John Eager Howard Elementary School, they may have looked like ordinary 4- and 5-year-olds, a dozen of them sitting on a colorful carpet and watching a video about the *Three Little Pigs*. But then camp instructor Betty Randel flicked off the DVD player and peppered them with questions about what they had learned from the story, and something remarkable happened.

"Good job, friends. You guys are wonderful!" said Randel, a veteran public school teacher. "And what is today?"

"SUPER WHY Day!" the kids screamed in unison. A moment later, their special SUPER WHY character masks pulled on, they had turned into Super Readers.

PBS's researched-based, award-winning, and top-rated SUPER WHY show features fairytale characters that transform into literacy superheroes who jump directly into the pages of books to save the day. The animated friends help teach young children important literacy skills and instill a lifelong love of reading.

Offered for the first time in 2007, more than 200 SUPER WHY Summer Reading Camps have reached more than 3,200 children from low-income families in targeted communities across the United States. Operated in collaboration with local public television stations, each camp is an interactive learning adventure taught mainly by certified teachers from area schools. Kindergarten-ready 4- to 5-year-old campers gather 3.5 hours per day for reading-powered lessons, games, crafts, exercise, and music.

## CONCLUSION

Since 2005, every facet of the Ready To Learn initiative has been subject to rigorous research. The Corporation for Public Broadcasting and PBS’s television programs and Web sites, along with other interactive platforms and applications, classroom interventions, and community engagement activities, have been studied closely by some of the nation’s leading experts in educational media and literacy development.

The results are impressive. Few, if any, large-scale educational media initiatives have been as successful, and none has had a greater impact on the literacy development of children from low-income backgrounds.

When it comes to reading instruction, public television has met the ambitious standard Congress set for it more than four decades ago. Judging by the research findings, CPB and PBS indeed created a “great network for knowledge.”

And they have done so with relatively modest levels of funding. Since the early days of *Sesame Street*, public television programs have provided both an effective and affordable means of boosting the literacy development and other academic skills of children living in poverty.

The most recent CPB/PBS Ready To Learn grant—\$72 million for 2005–2010—represented less than one-tenth of 1 percent of the U.S. Department of Education’s discretionary spending during those five years. However, by working in partnership with local stations, independent producers, teachers, community organizations, and other funders, CPB and PBS turned that small investment into a wealth of important new resources that included television programs, online activities, classroom and parent support materials, and outreach projects. And by reserving a portion of their funds for research and evaluation, they supported a major expansion of the scientific knowledge base on media-based literacy instruction.

All of these resources belong, and will continue to belong, to the American people. Virtually everything that has been produced under Ready To Learn can be accessed for free on television and the Internet. Parents, teachers, and other caregivers—no matter where they live or how tight their budgets—know that they can find excellent educational tools and materials from public media, all of which are appealing to children, grounded in research, and closely aligned with state and professional academic standards.

*CPB and PBS turned a small investment into a wealth of important new resources.*



*Between the Lions*

With public media now in its fifth decade, many people cannot remember a time when high-quality educational programs were not freely available over the airwaves. Some parents may even take those programs for granted. Truly, though, public media's programming for children represents a great American success story, one that has only begun to enter its golden age. It can and should be a crucial partner in the nation's ongoing effort to ensure that young children from all backgrounds have meaningful opportunities to achieve in school and succeed in life.

## Innovating for the Future: Ready To Learn 2010-2015

In September 2010, the U.S. Department of Education committed funding to the Ready To Learn initiative for another five-year period. The Department's Office of Innovation and Improvement made awards to CPB and PBS, WTTW/Chicago in partnership with Wildbrain Entertainment, and the Hispanic Information and Telecommunications Network, Inc. (HITN).

Thanks to that support, CPB and PBS will continue to deliver innovative, high-quality content via the Internet, broadcast television, and other dynamic new technologies. They will:

- align all content with academic standards;
- develop new pre-K and early-elementary curriculum frameworks for mathematics and literacy;
- create new children's mathematics content and enhance existing literacy content;
- pioneer new styles and methods of gaming, including multiplatform gaming suites, augmented reality, 3D-rendered multiplayer games, and an immersive game;
- design dynamic new tools for educators and families that aggregate and customize resources as well as monitor children's progress;
- engage leading national partners in the development and deployment of educational resources to children and communities most in need;
- enlist public television stations and community partners in on-the-ground efforts to test and implement new resources and methods to benefit young children, families, and educators; and
- conduct extensive research on and evaluation of the design and learning impacts of media content as well as the overall effort to pave the way for even more effective programs.

Moreover, during the next five years, the RTL initiative will push hard at the frontiers of educational technology. Public media will capitalize on its philosophy that “every new technology is an opportunity to learn.”

After decades of hype and anticipation, media-based instruction is poised to make dramatic leaps in sophistication and quality, and CPB and PBS are ready to lead the way. Under the 2010–2015 Ready To Learn grant, they will make major new investments in interactive online games, mobile applications, multimedia classroom tools, and other cutting-edge educational resources. They will guarantee that such resources are not just slick and shiny, but also firmly grounded in the latest research on effective teaching and learning, and produce demonstrable learning gains. Finally, as always, they will ensure that the most powerful new resources are made available to all children, particularly those with the greatest educational needs.



*SUPER WHY iPad application*

## Endnotes

1. There is a fee for downloading certain applications for the iPhone or iPad. All other materials are free.
2. National Institute of Child Health and Human Development. (2000). *Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction* (NIH Publication No. 00-4769). Washington, DC: U.S. Government Printing Office.
3. An additional \$37 million was awarded to Chicago PBS station WTTW, with a similar percentage going to research.
4. Lapierre, M., and Linebarger, D. L. (2008). *Onscreen print and eye-tracking*. A report prepared for Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.
5. The PRIZM database, owned by Claritis Marketplace, was the original source of data for this study. Claritis has since been acquired by the Nielsen Company.
6. Heil, S. K. R., Hurtado, M., Frazier, K., Castillo, G., Chan, S., and Owens, T. (2009). *Report on Corporation for Public Broadcasting's 2009 Ready To Learn marketing outreach assessment*. A report prepared for the Corporation for Public Broadcasting. Silver Spring, MD: American Institutes for Research.
7. U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Reading Assessments.
8. Hart, B., and Risley, T. R. (1995). *Meaningful differences in the everyday experience of young American children*. Baltimore, MD: Paul H Brookes.
9. Moats, L. C. (2001). Overcoming the language gap. *American Educator*, 25, 5, 8–9.
10. American Institutes for Research. (2006). *Ready To Learn program environmental scan*. A report prepared for the Corporation for Public Broadcasting. Silver Spring, MD: Author.
11. In response to a survey conducted by researchers from the University of Pennsylvania, the majority of parents indicated that they “see television and, perhaps, screen media in general, as having an untoward effect on young users.” Wainwright, D. K., and Linebarger, D. L. (2008). *Bedroom television: Behaviors and beliefs of parents regarding bedroom TV for young children*. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania; Heil, S. K. R., Hurtado, M., Frazier, K., Castillo, G., Chan, S., and Owens, T. (2009). *Report on Corporation for Public Broadcasting's 2009 Ready To Learn marketing outreach assessment*. A report prepared for the Corporation for Public Broadcasting. Silver Spring, MD: American Institutes for Research.
12. Pasnik, S., Penuel, W. R., Llorente, C., Strother, S., and Schindel, J. (2007). *Review of research on media and young children's literacy: Report to the Ready To Learn Initiative*. A report prepared for the Corporation for Public Broadcasting. New York and Menlo Park, CA: Education Development Center, Inc., and SRI International.
13. Wainwright, D. K., and Linebarger, D. L. (2006). *Elements of effective educational television: A literature review prepared for the Corporation for Public Broadcasting*. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania; American Institutes for Research.
14. Linebarger, D. L., Taylor-Piotrowski, J. L., and Vaala, S. (2007). *Supplementing television: What factors enhance or detract from learning from television. A literature review prepared for the Corporation for Public Broadcasting*. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.
15. Anderson, D. R., Huston, A. C., Schmitt, K. L., Linebarger, D. L., and Wright, J. C. (2001). Early childhood television viewing and adolescent behavior: The recontact study. *Monographs of the Society for Research in Child Development*, 66(1), 1–147.
16. Linebarger, D. L., Taylor-Piotrowski, J. L., and Vaala, S. (2007). *Supplementing television: What factors enhance or detract from learning from television. A literature review prepared for the Corporation for Public Broadcasting*. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

17. Linebarger, D. L., Piotrowski, J. T., and Vaala, S. (2007). *Vocabulary knowledge, conversational language skills, and map knowledge: Can Postcards from Buster help inside the classroom?* A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.
18. Flagg, B. N. (1999). *Formative evaluation of Between the Lions pilot shows.* A report for WGBH-TV and Sirius Thinking. Bellport, NY: Multimedia Research.
19. Linebarger, D., Kosanic, A. Z., Greenwood, C. R., and Doku, N. S. (2004). Effects of viewing the television program *Between the Lions* on the emergent literacy skills of young children. *Journal of Educational Psychology*, 96(2), 297–308.
20. Uchikoshi, Y. (2006). Early reading in bilingual kindergartners: Can educational television help? *Scientific Studies of Reading* 10: 89–120.
21. Cohen, M., and Hadley, M. (2009). *The Effects of WordWorld viewing on pre-school children's acquisition of pre-literacy skills and emergent literacy: A cluster-randomized control trial.* New York, NY: The Michael Cohen Group LLC.
22. Garrity, K., et al. (2010). *A summative evaluation of The Electric Company.* Philadelphia, PA: Children's Media Lab, Annenberg School for Communication, University of Pennsylvania.
23. Linebarger, D. L., Moses, A. M., and McMenamin, K. (2010a). *A Summative evaluation of Martha Speaks: Learning outcomes.* A report prepared for Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.
24. Rockman et al. (2010). *PBS KIDS iPod app study findings and outcomes.* A report prepared for PBS KIDS. Bloomington, IN: Author, Chiong, C., and Shuler, C. (2010). *Learning: Is there an app for that? Investigations of young children's usage and learning with mobile devices and apps.* New York: The Joan Ganz Cooney Center at Sesame Workshop.
25. Schmitt, K., et al. (2010). *Summative evaluation of PBS Kids Island: Usability, outcomes, and appeal.* Philadelphia, PA: Children's Media Lab, Annenberg School for Communication, University of Pennsylvania.
26. Pasnik, S., Penuel, W. R., Llorente, C., Strother, S., and Schindel, J. (2007). *Review of research on media and young children's literacy: Report to the Ready To Learn Initiative.* A report prepared for the Corporation for Public Broadcasting. New York and Menlo Park, CA: Education Development Center, Inc., and SRI International.
27. Pasnik, S., Penuel, W. R., Bates, L., Townsend, E., Gallagher, L. P., and Llorente, C. (2010, May). *A media-rich curriculum for improving early literacy outcomes of low-income children: Evaluation results for the Ready To Learn Initiative.* Symposium presentation at the Annual Meeting of the American Educational Research Association, Denver, CO.
28. Neuman, S. B., Newman, E. H., and Dwyer, J. (2010). *Educational effects of an embedded multimedia vocabulary intervention for economically disadvantaged pre-K children: A randomized trial.* A report prepared for the Corporation for Public Broadcasting. Ann Arbor, MI: University of Michigan.
29. Prince, D. L., et al. (2002). *Between the Lions Mississippi literacy initiative: A final report to Mississippi Educational Television.* Report prepared for Mississippi Educational Television and WGBH Educational Foundation. Starkville, MS: The Early Childhood Institute, Mississippi State University.
30. Wainwright, D. K., and Linebarger, D. L. (2007). *Evaluation of Between the Lions season 6: Characters and cutaways, the impact on appeal and story comprehension.* Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania; Linebarger, D. L. (2006). *The Between the Lions American Indian Literacy Initiative Research Component: Report prepared for the United States Department of Education.* Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.
31. Linebarger, D. L. (2010). *Between the Lions Mississippi literacy initiative: 2008–2009 review.* A report prepared for Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.
32. Nielsen Television Index. (2008–2009). PBS weekly come for 2008–2009 broadcast season.
33. Grunwald Associates, LLC. (2010). *Seventh annual PBS survey of education media and technology.* New York: Author.
34. Silverman, R. (2009d). *WGBH Martha Speaks outreach evaluation.* A report prepared for the Corporation for Public Broadcasting. College Park, MD: University of Maryland, College Park.

# APPENDIX A

Complete list of CPB/PBS Ready To Learn television shows, materials and resources, partners, advisors, and key staff members

**Table A.1. New Ready To Learn Television Series**

SHOW	TARGET AGE	TARGETED SKILLS	NUMBER OF EPISODES
<i>SUPER WHY!</i> Producer: Out of the Blue Launch: September 2007	3- to 6-year olds	Letter identification Word decoding Phonemic awareness Word encoding Phonics Reading comprehension Vocabulary Fluency	65
<i>Martha Speaks</i> Producer: WGBH Launch: September 2008	4- to 7-year olds	Oral vocabulary development Oral language comprehension	70
<i>The Electric Company</i> Producer: Sesame Workshop Launch: January 2009	6- to 8-year olds	Vocabulary Phonics Connected text Motivation to read	40
<i>WordWorld*</i> Producer: WTTW/Ready To Learn Partnership Launch: September 2007	3- to 5-year olds	Letter identification Word decoding Phonemic awareness Word encoding Phonics Reading comprehension Vocabulary Fluency	34

\**WordWorld* airs on PBS and Web content resides on PBS KIDS. Its production was funded by WTTW's Ready To Learn grant.

Table A.2. Ready To Learn Outreach Materials and Learning Resources

NAME/PRODUCER	DESCRIPTION OF MATERIALS AND RESOURCES
<i>SUPER WHY</i> Summer Reading Camps Producer: Out of the Blue	A five-day reading camp where children engage with <i>SUPER WHY</i> media, combined with games and activities that improve early reading skills.
<i>Martha Speaks</i> Reading Buddies Producer: WGBH	An eight-week program that pairs kindergarten students with older students to learn new vocabulary words, play word games, watch episodes of <i>Martha Speaks</i> , read books together, and write about their experiences.
<i>The Electric Company</i> Outreach Kit, Vols. 1 and 2 Producer: Sesame Workshop	Available for teachers to use as supplementary classroom materials and for after-school programming, the kit provides a DVD with episode content, a CD with downloadable activity sheets, and a printed guide with instructions and games.
<i>The Electric Company</i> Circuit Tour Producer: Sesame Workshop	A community engagement event featuring hands-on literacy activities and an interactive <i>Electric Company</i> stage show.
Online Professional Development Courses Producer: PBS TeacherLine	PBS TeacherLine is an online professional development series of courses helping preschool and early elementary caregivers and teachers integrate engaging media into their literacy curricula for children ages 2–8. Course 1: Raising Readers: Preparing Preschoolers for Success Course 2: Raising Readers: Ready to Read and Write with Digital Media Course 3: Raising Readers: Ready to Spark Word Power!
PBS KIDS Island and The Great Word Quest Producer: PBS	PBS KIDS Island is a Web site of reading games featuring PBS KIDS characters for children ages 2-5, while tracking their progress through early literacy skills games. The Great Word Quest is a literacy activity Web site for children ages 6–8 that features games from <i>The Electric Company</i> , <i>Martha Speaks</i> , and <i>WordGirl</i> .
<i>SUPER WHY</i> iPhone and iPad app Producer: Out of the Blue	The app is designed for children ages 3–6. It has four minigames that aim to increase early literacy skills.
<i>Martha Speaks</i> Dog Party iPhone app Producer: WGBH	The app is designed for children ages 4–7. It focuses on introducing new vocabulary through three minigames and a quiz.
PBS KIDS Raising Readers Library Corner Producer: PBS	A kit of materials featuring PBS KIDS characters designed to create and customize a unique space in a library where children can participate in librarian-led or self-directed literacy activities, play reading games online, or watch related educational video materials on a DVD.
<i>Raising Readers with PBS KIDS</i> DVD Producer: PBS	A DVD featuring episodes of <i>Sesame Street</i> and <i>Between the Lions</i> , plus a literacy message for parents.
<i>Watch. Learn. Read.</i> DVD Producer: PBS	A DVD featuring episodes and extra clips from <i>SUPER WHY</i> and <i>WordWorld</i> , with introductions by PBS KIDS host Miss Rosa.
<i>Really, Really Fun Pages Activity Book</i> Producer: PBS	Features literacy activities (in English) for children, with instructions for parents in English and Spanish.
<i>Fun Games to Help Your Child Learn to Read</i> Producer: PBS	Literacy tip sheets in English and Spanish, featuring entertaining educational activities for parents and kids to do together.

**Table A.2. Ready To Learn Outreach Materials and Learning Resources**  
(continued)

NAME/PRODUCER	DESCRIPTION OF MATERIALS AND RESOURCES
<i>Supermarket Explorer</i> Grocery Store Game Producer: PBS	This game involves parents and kids in activities designed to strengthen children’s skills with letters and words while shopping at the grocery store.
<i>WordWorld</i> Zoo Game Producer: WordWorld LLC	A day of literacy activities at the zoo, featuring characters from the animated series <i>WordWorld</i> .
PBS KIDS GO! Writers Contest Producer: PBS	An annual competition that encourages children in grades K–3 to write and illustrate stories and submit them to their local PBS stations. Local winners are entered into the national contest, where a renowned panel of judges identifies the winners.
“Fun on the Run” Activity Booklets Producer: PBS	A literacy and health resource for low-income families featuring characters from <i>Sesame Street</i> , <i>SUPER WHY</i> , <i>Martha Speaks</i> , <i>Between the Lions</i> , and <i>WordWorld</i> . It incorporates important health messages and engaging games designed to increase reading skills.
Literacy Van Wrap Producer: PBS	Creates a branded mobile literacy van featuring colorful PBS KIDS characters.
Literacy Web Page Producer: PBS	Web page templates that can be cobranded and adapted for local stations.
Media Campaign Materials Producer: PBS	Two local print ads featuring PBS KIDS host Miss Rosa. Two direct-mail postcards featuring “Anytime Is Learning Time” messaging. Two TV and two radio spots featuring PBS KIDS host Miss Rosa and Martha of <i>Martha Speaks</i> .
Promo Spots Producer: PBS	Eleven 30-second promotional spots for station use: “Written Impossible”; “Jest Side Story”; “Super Grover”; “Casablanca”; “Chalk Drawing”; “Grocery List”; “Rhyme Time”; “Miss Rosa & Martha” (English version); “Miss Rosa & Martha” (Spanish version); “PBS KIDS Island” (parent version); “PBS KIDS Island” (kids version)
Reading Activity Calendar Producer: PBS	PBS KIDS Island online module that features entertaining and educational reading activities for each day of the year.
Sizzle Reels Producer: PBS	Four proof-of-performance reels that showcase the impact of the PBS KIDS Raising Readers initiative. Two- and four-minute versions of local impact reel; <i>SUPER WHY</i> Summer Reading Camps reel; PBS KIDS Raising Readers project report reel.
<i>SUPER WHY Learning Adventures Toolkit</i> Producer: PBS Distribution	Designed for easy adaptation in classrooms, libraries, and after-school programs, the toolkit (on a DVD) features music, an episode of the <i>SUPER WHY</i> television series, games and activities, and guidelines for instructors on leading five days of fun and learning for kids.
Word of the Day Producer: PBS	A PBS KIDS Island online module featuring children’s vocabulary words and their definitions.

## Partnership Power

### National Partnerships

- CPB and PBS created partnerships to develop national awareness of the Ready To Learn Initiative, including research and impact
- Partners include:
  - National Association of Childcare Resource and Referral Agencies
  - National Association for the Education of Young Children
  - The Council of Chief State School Officers
  - National Center for Family Literacy
  - National Association of Elementary School Principals
  - American Association of School Librarians

### Producers

- Out of the Blue, Sesame Workshop, and WGBH cultivated advisory boards to ensure that on-air and online content is appealing and effective in teaching young children reading skills
- Partners include:
  - Boys and Girls Club of America
  - National Council of La Raza
  - Urban Libraries Council
  - American Library Association
  - International Reading Association
  - Barksdale Reading Institute
  - Colleges and universities, schools of education, departments of communication and media

### Statewide and Local Partnerships

- At the state and local levels, public television stations created partnerships to maximize the effective use of Ready To Learn content and to ensure that it reaches young children and families in poverty
- Partners include:
  - State departments of education and state agencies such as health and human services (Head Start)
  - Title I schools
  - Mayors' offices
  - Citywide literacy coalitions, including local library and parenting organizations
  - Local childcare resource and referral agencies
  - Local sports teams
  - The United Way
  - Local colleges and universities, including reading researchers and extension services

## RTL Programming Advisory Board

**Francie Alexander**

Scholastic, Inc.

**Chris Cerf**

Sirius Thinking

**Gail Connelly**

National Association of Elementary School Principals

**Sharon Darling**

National Center for Family Literacy

**Carmen Di Rienzo**

V-Me

**Jackie Jackson**

U.S. Department of Education, retired

**Barbara Keeling**

Capitol Hill Day School

**Gary Knell**

Sesame Workshop

**Babs Bengtson**

WPSU & Affinity Group Coalition

**Michael Levine**

The Joan Ganz Cooney Center

**Jana Martella**

National Association of Early Childhood Specialists in State Departments of Education

**Susan Petroff**

American Association of Colleges for Teacher Education

**Carol Riley**

National Association of Elementary School Principals

**Tom Schultz**

Council of Chief State School Officers

**Marsha Semmel**

Institute of Museum and Library Services

**Dorothy Strickland**

Rutgers University

**Brigid Sullivan**

WGBH, Boston

**Susan Traiman**

Business Roundtable

**Julie Walker**

American Association of School Librarians

## Key Ready To Learn Staff Members

### U.S. Department of Education

**Jim Shelton**, Assistant Deputy Secretary, Office of Innovation and Improvement

**Margo Anderson**, Associate Assistant Deputy Secretary, Office of Innovation and Improvement

**Cheryl Garnette**, Director, Technology in Education Programs

**Joseph Caliguro**, Program Manager, Ready To Learn Television

**Brian Lekander**, Acting Program Manager, Ready To Learn Television

**Ayesha Edwards**, Management and Program Analyst

### Corporation for Public Broadcasting

**Debra Tica Sanchez**, Senior Vice President, Education and Children's Content

**Michael Fragale**, Vice President, Educational Programming and Services

**Pamela Johnson**, Executive Director, Ready To Learn

**Barbara Lovitts**, Director of Research and Evaluation, Ready to Learn

**Kecia Campbell**, Project Manager

**Sarah Bean**, Project Manager

### PBS

**Rob Lippincott**, Senior Vice President for Education

**Lesli Rotenberg**, Senior Vice President, Children's Media and Brand Management

**Sharon Philippart**, Project Director, PBS KIDS Raising Readers

**Linda Simensky**, Vice President, Children's Programming

**Sara DeWitt**, Vice President, PBS KIDS Interactive

**Kimberly Berglund**, Director, Ready to Learn Curriculum

**Jennifer Rodriguez**, Content Manager, Ready To Learn Interactive

**Gina Montefusco**, Project Manager, Parents and Teachers

Ready to Learn Content

**Anjelika Kosanic**, Researcher, Ready To Learn

**Maria Vera**, Senior Project Associate, Ready To Learn

### Special Acknowledgment of Former CPB and PBS Colleagues

Nathan Eagle

Maria Salinas

Cheryl Head

Steven Stolarski

Jayne James

Allison White

Mary Kadera

Susan Zelman

Peggy O'Brien

### Production Credits

**Executive Editor:** Lisa McCormack of MWM Creative

**Editorial Writers:** Rafael Heller, Sheppard Ranbom, Alexandra Dall, and Kari Hudnell of Communication**Works** LLC

**Art Director:** Gretchen Maxwell of MWM Creative

**Proofreader:** Lois M. Baron of Baron Editorial

# APPENDIX B

List of RTL research partners, studies completed, books and chapters, reports, journal articles, and presentations produced under RTL

**Table B. 1. Summary of Reports, Publications, and Presentations That Resulted from Ready To Learn-Funded Research**

	REPORTS	BOOKS/ BOOK CHAPTERS	JOURNAL ARTICLES*	PRESENTATIONS
PROGRAMMING AWARD				
EDC/SRI	8	0	0	12
University of Michigan	13	7	15	29
University of Pennsylvania	41	2	12	31
OUTREACH AWARD				
American Institutes for Research	18	0	0	3
OTHER				
Other RTL-Funded Research	17	0	0	2
<b>Total</b>	<b>97</b>	<b>9</b>	<b>27</b>	<b>77</b>

\*Includes only published articles or articles accepted for publication. Additional articles have been or will be submitted for publication.

## American Institutes for Research

Awarded \$4,753,000 under the purview of Ms. Julia Galdo, managing director of the Communication and Social Marketing Health Program at the American Institutes for Research, to provide proven messages and methods with which to reach low-income families and affect change in their literacy-learning awareness, attitudes, and behaviors. The work falls into four main categories: marketplace analysis, message and materials testing, appeal and demand research, and campaign outreach assessment.

### Reports

American Institutes for Research. (2006a). *Ready To Learn program environmental scan*. A report prepared for the Corporation for Public Broadcasting. Silver Spring, MD: Author.

American Institutes for Research. (2006b). *Findings from interviews with national organizations*. A report prepared for the Corporation for Public Broadcasting. Silver Spring, MD: Author.

American Institutes for Research. (2006c). *Findings from interviews with community organizations*. A report prepared for the Corporation for Public Broadcasting. Silver Spring, MD: Author.

American Institutes for Research. (2007a). *Reading camps: 2007 program*. A report prepared for the Corporation for Public Broadcasting. Silver Spring, MD: Author.

American Institutes for Research (2007b). *Ready To Learn families segmentation analysis*. A report prepared for the Corporation for Public Broadcasting. Silver Spring, MD: Author.

American Institutes for Research. (2007c). *Focus groups with Ready To Learn families*. A report prepared for the Corporation for Public Broadcasting. Silver Spring, MD: Author.

American Institutes for Research. (2007d). *In-home interviews and observations with Ready To Learn families*. A report prepared for the Corporation for Public Broadcasting. Silver Spring, MD: Author.

American Institutes for Research. (2007e). *Report of concept testing: PBS Ready To Learn DVD for parents*. A report prepared for the Ready To Learn Initiative and the Corporation for Public Broadcasting. Silver Spring, MD: Author.

American Institutes for Research. (2008a). *Report on appeal and demand of the Raising Readers with PBS KIDS DVD distributed as part of the PBS KIDS Raising Readers Campaign*. A report prepared for the Corporation for Public Broadcasting. Silver Spring, MD: Author.

American Institutes for Research. (2008b). *Report on Corporation for Public Broadcasting's 2008 Ready To Learn marketing outreach assessment*. A report prepared for the Corporation for Public Broadcasting. Silver Spring, MD: Author.

American Institutes for Research. (2008c). *Report on the street marketing survey conducted as part of the PBS KIDS Raising Readers Campaign*. A report prepared for the Corporation for Public Broadcasting. Silver Spring, MD: Author.

American Institutes for Research. (2008d). *Summary of street market survey findings in four markets: Birmingham, AL (APT), Oakland and San Francisco, CA (KQED), San Antonio, TX (KLRN) and San Diego, CA (KPBS)*. A report prepared for the Corporation for Public Broadcasting. Silver Spring, MD: Author.



Sesame Street

American Institutes for Research. (2008e). *Appeal and demand research*. Watch. Learn. Read. DVD: *Second preliminary analysis*. A report prepared for the Corporation for Public Broadcasting. Silver Spring, MD: Author.

American Institutes for Research (2008f). *PBS KIDS Raising Readers experiential marketing program*. A report prepared for the Corporation for Public Broadcasting, Silver Spring, MD: Author.

Galdo, J., and Agin, L. (2010). *American Institutes for Research overview of social marketing research, community engagement and station support 2005–2010*. A report prepared for the Corporation for Public Broadcasting. Silver Spring, MD: American Institutes for Research.

Heil, S. K. R., Hurtado, M., Frazier, K., Castillo, G., Chan, S., and Owens, T. (2009). *Report on Corporation for Public Broadcasting's 2009 Ready To Learn marketing outreach assessment*. A report prepared for the Corporation for Public Broadcasting. Silver Spring, MD: American Institutes for Research.

Hurtado, M. P., Frenzel, E., Castillo, G., Chan, S., Owens, T., and Nishioka, M. (2009). *Evaluation of the PBS KIDSRaising Readers Corner*. A report prepared for the Corporation for Public Broadcasting. Silver Spring, MD: American Institutes for Research.

Hurtado, M. P., and Castillo, G. (2009). *Final report: Focus groups to test PBS ad concepts in English and Spanish*. A report prepared for the Corporation for Public Broadcasting. Silver Spring, MD: American Institutes for Research.

### **Presentations**

American Institutes for Research. (2009a, June). *Ready To Learn: A social marketing approach for a national education campaign*. Paper presented at the annual Social Marketing in Public Health Conference, St. Petersburg, FL.

American Institutes for Research. (2009b, June). *Social marketing: Let the audience drive your communication strategy*. Paper presented at the annual International Society for Technology in Education Conference, Washington, DC.

Hurtado, M. P. (2010, May). A social marketing approach to promoting literacy-related behaviors among low-income families. In C. P. Garnette (chair), *The Ready To Learn Initiative: A 360-degree surround approach to enhancing early literacy skills*. Paper symposium presented at the annual meeting of the American Educational Research Association, Denver, CO.

## Education Development Center and SRI International

Awarded \$4,984,398 under the purview of Ms. Shelley Pasnik, director of the Center for Children & Technology at the Education Development Center, Inc., and Dr. William Penuel, director of Evaluation Research for the Center for Technology at SRI International, to conduct an independent evaluation of the Ready To Learn Initiative. The work focuses on the efficacy of the materials and activities designed, developed, and implemented to bring about change in the literacy skills of the target audience.

### Reports

Education Development Center, Inc. (2008). *Raising Readers: Online professional development pilot course formative research report*. A report prepared for the Corporation for Public Broadcasting. New York: Author.

Education Development Center, Inc., and SRI International. (2010). *Final Ready To Learn summative evaluation*. A report prepared for the Corporation for Public Broadcasting. New York and Menlo Park, CA: Author.

Education Development Center, Inc. (2010). *Ready To Learn in action: A video collection of early childhood education teachers and children*. A report prepared for the Corporation for Public Broadcasting. New York: Author.

Goldenberg, L. B., Strother, S., Meade, T., Townsend, E., Bangura, L., and Toney, T. (2010). *Impact of Raising Readers online professional development courses on caregivers and educators*. A report prepared for the Corporation for Public Broadcasting. New York: Education Development Center, Inc.

Hupert, N., Cervantes, F., and DeGroof, E. (2010). *A report on the technological enhancements project evaluation: Deepening early learning experiences through technology*. A report prepared for the Corporation for Public Broadcasting. New York: Education Development Center, Inc.

Llorente, C., Pasnik, S., Penuel, W., Martin, W., Bates, L., Hupert, N., Korbak, C., Meade, T., Michalchik, V., Sauerteig, D., Singleton, C., and Townsend, E. (2010). *Organizing for literacy: How public media stations are raising readers in their communities*. A report prepared for the Corporation for Public Broadcasting. New York and Menlo Park, CA: Education Development Center, Inc., and SRI International.

Pasnik, S., Penuel, W. R., Llorente, C., Strother, S., and Schindel, J. (2007). *Review of research on media and young children's literacy: Report to the Ready To Learn Initiative*. A report prepared for the Corporation for Public Broadcasting. New York and Menlo Park, CA: Education Development Center, Inc., and SRI International.

Penuel, W. R., Pasnik, S., Bates, L., Townsend, E., Gallagher, L. P., Llorente, C., and Hupert, N. (2009). *Preschool teachers can use a media-rich curriculum to prepare low-income children for school success: Results of a randomized controlled trial*. A report prepared for the Corporation for Public Broadcasting. New York and Menlo Park, CA: Education Development Center, Inc., and SRI International.

### **Presentations**

Pasnik, S. (2007, March). *Early learning in the United States and the role of public media: Looking ahead to the Ready To Learn evaluation*. Presentation at the 5th World Summit on Children and Media, Johannesburg, South Africa.

Pasnik, S. (2010, January). *Public media's continuing potential to support young children's learning: Experiences from the Ready To Learn Initiative*. Presentation to Women in Children's Media, New York, NY.

Pasnik, S., and Hupert, N. (2010, July). *Data and video highlights from a media-rich curriculum for improving early literacy outcomes of low-income children: Evaluation results for the Ready To Learn Initiative*. Presentation to the Sesame Street in Schools Advisory Board, New York, NY.

Pasnik, S., Penuel, W. R., Bates, L., Townsend, E., Gallagher, L. P., and Llorente, C. (2009, November). *A media-rich curriculum for improving early literacy outcomes of low-income children: Evaluation results for the Ready To Learn Initiative*. Presentation at the Annual Meeting of the National Association for the Education of Young Children, Washington, DC.

Pasnik, S., Penuel, W. R., Bates, L., Townsend, E., Gallagher, L. P., and Llorente, C. (2010, May). *A media-rich curriculum for improving early literacy outcomes of low-income children: Evaluation results for the Ready To Learn Initiative*. In C. P. Garnette (chair), *The Ready To Learn Initiative: A 360-degree surround approach to enhancing early literacy skills*. Paper symposium presented at the annual meeting of the American Educational Research Association, Denver, CO.

Pasnik, S., Strother, S., Schindel, J., Penuel, W. R., and Llorente, C. (2008, April). *Media and young children's literacy: A meta-analysis of scientifically based reading research on the impact of various media on literacy skills*. Paper presented at the Annual Meeting of the American Educational Research Association, New York, NY.

Penuel, W. R., Bates, L., Townsend, E., Gallagher, L. P., Pasnik, S., and Llorente, C. (2010, March). *A media-rich curriculum for improving early literacy outcomes of low-income children: Evaluation results for the Ready To Learn Initiative*. Paper presented at the Annual Conference of the Society for Research on Effectiveness in Education, Washington, DC.

Penuel, W. R., Bates, L., Pasnik, S., Townsend, E., Gallagher, L. P., Llorente, C., et al. (2010, June). *The impact of a media-rich science curriculum on low-income preschoolers' science talk at home*. Paper presented at the 9th International Conference of the Learning Sciences, Chicago, IL.

Penuel, W. R., Bates, L., Pasnik, S., Townsend, E., Gallagher, L. P., Llorente, C., and Hupert, N. (2010, July). *The impact of a media-rich science curriculum on low-income preschoolers' science talk at home*. Paper presented at the 9th International Conference of the Learning Sciences, Chicago, IL.

Penuel, W.R., Clements, P., Pasnik, S., and Llorente, C. (2008). *Mississippi Raising Readers home study: A pilot study*. Paper presented to the U.S. Department of Education, Office of Innovation and Improvement, Washington, DC.

Penuel, W. R., Llorente, C., Mehus, S., and Barron, B. J. S. (2010, August). *Active co-viewing of media for learning in the wild and by design*. Presentation to the Learning in Informal and Formal Environments (LIFE) Center, Seattle, WA.

Penuel, W. R., and Stevens, R. (2010, October). *Studying and fostering joint media attention for learning*. Paper presented at the Principal Investigators' Meeting of the National Science Foundation's Science of Learning Centers Program, Arlington, VA.

## University of Michigan

Awarded \$5,306,355 under the purview of Dr. Susan B. Neuman, professor in the School of Education at the University of Michigan, to conduct research to support the development of media-rich school instructional materials. The work falls into two overarching categories: school readiness (preschool) and reading achievement (kindergarten).

### Reports

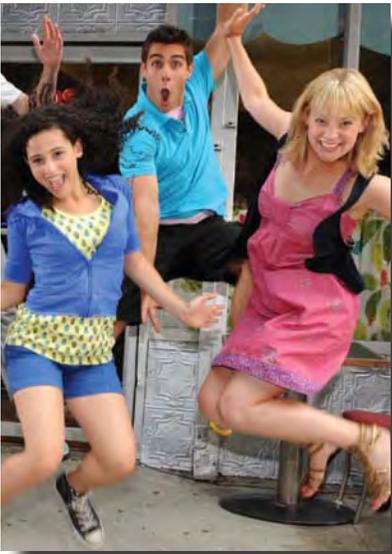
Bus, A. G., and Neuman, S. B. (2010). *Multimedia and literacy development: Improving achievement for young learners*. A report prepared for the Corporation for Public Broadcasting. Ann Arbor, MI: University of Michigan.

Kaefer, T., Newman, E. H., and Neuman, S. B. (2009). *Conceptual support for vocabulary in preschool: Taxonomic category information scaffolds word learning for vulnerable children*. A report prepared for the Corporation for Public Broadcasting. Ann Arbor, MI: University of Michigan.

Marulis, L. M., and Neuman, S. B. (2010). *The effects of vocabulary intervention on young children's word learning: A meta-analysis*. A report prepared for the Corporation for Public Broadcasting. Ann Arbor, MI: University of Michigan.



*Between the Lions*



*The Electric Company*

Neuman, S. B. (2007). *University of Michigan Ready To Learn pre-kindergarten curriculum trial I*. A report prepared for the Corporation for Public Broadcasting. Ann Arbor, MI: University of Michigan.

Neuman, S. B. (2008). *Efficacy of instructional materials on children's school readiness and reading achievement*. A report prepared for the Corporation for Public Broadcasting. Ann Arbor, MI: University of Michigan.

Neuman, S. B. (2010). *Developing vocabulary and conceptual knowledge for low-income preschoolers: A design experiment*. A report prepared for the Corporation for Public Broadcasting. Ann Arbor, MI: University of Michigan.

Neuman, S. B., Cunningham, L., and Tucker, S. A. (2006). *Effects of online teacher training on pre-K teacher practice*. A report prepared for the Corporation for Public Broadcasting. Ann Arbor, MI: University of Michigan.

Neuman, S. B., and Dwyer, J. (2008). *Assessment of achievement using progress monitoring tools*. A report prepared for the Corporation for Public Broadcasting. Ann Arbor, MI: University of Michigan.

Neuman, S. B., and Dwyer, J. (2009). *Developing vocabulary and conceptual knowledge for low-income preschoolers: A design experiment*. A report prepared for the Corporation for Public Broadcasting. Ann Arbor, MI: University of Michigan.

Neuman, S. B., Newman, E. H., and Dwyer, J. (2010). *Educational effects of an embedded multimedia vocabulary intervention for economically disadvantaged pre-K children: A randomized trial*. A report prepared for the Corporation for Public Broadcasting. Ann Arbor, MI: University of Michigan.

Neuman, S. B., and Wright, T. S. (2010). *Promoting language and literacy development for early childhood education: A mixed-methods study of coursework and coaching*. A report prepared for the Corporation for Public Broadcasting. Ann Arbor, MI: University of Michigan.

Pinkham, A., and Neuman, S. B. (2010). *Representational demand mediates the relationship between socioeconomic status and kindergartners' vocabulary knowledge*. A report prepared for the Corporation for Public Broadcasting. Ann Arbor, MI: University of Michigan.

Pinkham, A. M., Newman, E. H., and Neuman, S. B. (2009). *Selecting vocabulary for instruction: Using phonological, lexical, and frequency characteristics to predict word learning*. A report prepared for the Corporation for Public Broadcasting. Ann Arbor, MI: University of Michigan.

## Articles

Celano, D., and Neuman, S. B. (in press-a). A matter of time: Low-income children struggle to get the computer time they need. *Phi Delta Kappan*.

Celano, D., and Neuman, S. B. (in press-b). When the school bell rings: The digital divide still looms large for low-income children. *Educational Leadership*.

Celano, D., and Neuman, S. B. (2010a). How to close the achievement gap? Fund public libraries. *Education Week*, (29)28, 33.

Celano, D., and Neuman, S. B. (2010b). Public libraries provide a safety net for our neediest children. *Teachers College Record*, ID No. 16104, online.

Marulis, L. M., and Neuman, S. B. (2010). The effects of vocabulary intervention on young children's word learning: A meta-analysis. *Review of Educational Research*, (80)3, 300–335.

Neuman, S. B. (2009a). Use the science of what works to change the odds for children at risk. *Phi Delta Kappan*, (90), 582–587.

Neuman, S. B. (2009b). The dumb class. *Education Week*, (28)37, 28.

Neuman, S. B. (2010a). Empowered—after school. *Educational Leadership*. 67, 30–36.

Neuman, S. B. (2010b). Public media's impact on young readers. *Education Week*, (29)37, 37, 44.

Neuman, S. B. (2010c). Lessons from my mother: Response to the National Early Literacy Panel. *Educational Researcher*, 39, 301-305.

Neuman, S. B., and Cunningham, L. (2009). The impact of professional development and coaching on early language and literacy instructional practices. *American Educational Research Journal*, (42)2, 532–566.

Neuman, S. B., and Dwyer, J. (in press). Developing vocabulary and conceptual knowledge for low-income preschoolers: A design experiment. *Journal of Literacy Research*.

Neuman, S. B., and Dwyer, J. (2009). Missing in action: Vocabulary instruction in pre-K. *Reading Teacher*, (62), 384–392.

Neuman, S. B., and Wright, T. S. (2010). Promoting language and literacy development for early childhood education: A mixed-methods study of coursework and coaching. *Elementary School Journal*, (111)1, 63–86.

Wright, T., and Neuman, S. B. (2009). Purposeful, playful pre-K: Building on children's natural proclivity to learn language, literacy, math and science. *American Educator*, (33)1, 38–48.

### **Books**

Bus, A., and Neuman, S. B. (Eds). (2008). *Multimedia and literacy development: Improving achievement for all*. London: Taylor & Francis.

Neuman, S. B. (2008). *Educating the other America: Top experts tackle poverty, literacy, and achievement in our schools*. Baltimore, MD: Paul H. Brookes Publishing Co.

Neuman, S. B. (2009). *Changing the odds for children at risk: Seven essential principles of educational programs that break the cycle of poverty*. New York: Teachers College Press.

Neuman, S. B., and Dickinson, D. (in press). *The handbook of early literacy research: Volume III*. New York: Guilford Press.

Neuman, S. B., and Kamil, M. (Eds). (2010). *Professional development for early childhood educators: Principles and strategies for improving practice*. Baltimore, MD: Brookes Publishers.

Neuman, S. B., Roskos, K., Wright, T. S., and Lenhart, L. (2007). *Nurturing knowledge: Building a foundation for school success by linking early literacy to math, science, art, and social studies*. New York: Scholastic, Inc.

Neuman, S. B., and Wright, T. S. (2007). *A parent's guide to reading with your young child*. New York: Scholastic, Inc.

### **Presentations**

Dwyer, J. (2007, November). *World of Words: Learning words and categories*. Paper presented at the annual meeting of the National Reading Conference, Austin, TX.

Koh, S. (2007, November). *Theoretical and pedagogical support for an embedded multimedia vocabulary intervention: The World of Words (WOW) approach*. Paper presented at the annual meeting of the National Reading Conference, Austin, TX.

Marulis, L. M., and Neuman, S. B. (2010, March). *The effects of vocabulary training on word learning*. Paper presented at the annual meeting of the Society for Research on Educational Effectiveness, Washington, DC.

Neuman, S. B. (2005, June). *Evaluation of the scientific merit of pre-K curriculum materials*. Paper presented at the National Association for the Education of Young Children Professional Institute, Miami, FL.

Neuman, S. B. (2006a, April). *Ensuring school readiness*. Featured address presented at the Preconvention Institute at the annual meeting of the International Reading Association, Chicago, IL.

Neuman, S. B. (2006b, April). *Improving teacher quality in early childhood education*. Symposium paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Neuman, S. B. (2006a, June). *New challenges in early childhood professional development*. Symposium paper presented at the National Association for the Education of Young Children Professional Institute, San Antonio, TX.

Neuman, S. B. (2006b, June). *New tools for examining early literacy development*. Symposium paper presented at the National Association for the Education of Young Children Professional Institute, San Antonio, TX.

Neuman, S. B. (2007, April). *Improving teacher quality in early childhood settings*. Symposium paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

Neuman, S. B. (2007, May). *The knowledge gap*. Keynote address delivered at the Preconvention Institute at the annual meeting of the International Reading Association, Toronto, Canada.

Neuman, S. B. (2007a, September). *Nurturing knowledge*. WOW Professional Development Training, Topeka, KS.

Neuman, S. B. (2007b, September). *The World of Words (WOW): Enhancing vocabulary and conceptual development for preschool children at risk*. Paper presented at a symposium at the annual meeting of the National Reading Conference, Austin, TX.

Neuman, S. B. (2008, March). *The Impact of a practice-based approach to professional development*. Symposium paper presented at the annual meeting of the American Educational Research Association, New York, NY.

Neuman, S. B. (2008, May). *The vocabulary challenge*. Keynote address delivered at the Preconvention Institute at the annual meeting of the International Reading Association, Atlanta, GA.

Neuman, S. B. (2009a, April). "Paper #1: The state of vocabulary instruction in preschools today." In S. B. Neuman (chair), *Giving all children a good start: Strategies for narrowing the vocabulary gap before kindergarten*. Symposium paper at the annual meeting of the American Educational Research Association, San Diego, CA.



Martha Speaks



Sesame Street

Neuman, S. B. (2009b, April). "Paper #2: Support for enhancing preschoolers' vocabulary through teaching vocabulary in taxonomic categories." In S. B. Neuman (chair), *Giving all children a good start: Strategies for narrowing the vocabulary gap before kindergarten*. Symposium paper at the annual meeting of the American Educational Research Association, San Diego, CA.

Neuman, S. B. (2009c, April). "Paper #3: Accelerating preschoolers' vocabulary acquisition: Examining the impact of teaching vocabulary in taxonomic categories on speed of word learning." In S. B. Neuman (chair), *Giving all children a good start: Strategies for narrowing the vocabulary gap before kindergarten*. Symposium paper at the annual meeting of the American Educational Research Association, San Diego, CA.

Neuman, S. B. (2009d, April). *Getting children ready to read*. Symposium paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.

Neuman, S. B. (2009e, April). *Rate of learning: Examining the potential of taxonomic knowledge on vocabulary acquisition*. Paper presented at the biennial meeting of the Society for Research on Child Development, Denver, CO.

Neuman, S. B. (2009f, April). *Teacher knowledge, teacher practice and child outcome: A study of professional development for early childhood educators*. Symposium paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.

Neuman, S. B. (2009g, April). *Teacher logs: A strategy to measure*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.

Neuman, S. B. (2009h, April). *The World of Words: A vocabulary intervention for at-risk preschoolers*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.

Neuman, S. B. (2009i, April). *Understanding the relational aspects of professional development*. Symposium paper presented at the biennial meeting of the Society for Research on Child Development, Denver, CO.

Neuman, S. B. (2009j, April). *Word features: Measuring children's oral language development*. Paper presented at the biennial meeting of the Society for Research on Child Development, Denver, CO.

Neuman, S. B. (2010, March). *Professional development: A practice-sensitive approach*. Paper presented at the annual meeting of the Society for Research on Educational Effectiveness, Washington, DC.

Neuman, S. B. (2010, April). *The interaction between content, vocabulary and comprehension*. Paper presented at the daylong Preconvention Institute co-chaired with Cathy Collins Block and John Mangieri at the annual meeting of the International Reading Association, Chicago, IL.

Neuman, S. B. (2010, May). World of Words: An embedded multimedia vocabulary intervention for at-risk preschoolers. In C. P. Garnette (chair), *The Ready To Learn Initiative: A 360-degree surround approach to enhancing early literacy skills*. Paper symposium presented at the annual meeting of the American Educational Research Association, Denver, CO.

Neuman, S. B., and Dwyer, J. (2008, March). *Efficacy of pre-K instructional materials on school readiness and reading achievement*. Paper presented at the SREE Conference, Crystal City, VA.

Neuman, S. B., Dwyer, J., and Koh, S. (2009). *World of Words: A vocabulary intervention for at-risk early literacy learners*. Fort Worth, TX.

## University of Pennsylvania

Awarded \$5,133,355 under the purview of Dr. Deborah Linebarger, director of the Children and Media Lab at the Annenberg School for Communication at the University of Pennsylvania, to conduct efficacy (impact) studies on Ready To Learn properties and assets as well as basic research to support the development of television and online content. The work falls into four overarching categories: attention research, genre research, content comprehension research, and appeal and usability research.

### Reports

Barr, R., and Linebarger, D. L. (2008). *Music interferes with learning from television during infancy*. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Barr, R., Linebarger, D. L., Horn, P., Fenstermacher, S., Benasich, A. A., and Choudhury, N. (2010). *Preliminary findings on factors influencing rapid auditory processing in 6-month-olds: Household density, maternal education, maternal depression and media exposure*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Fenstermacher, S. K., Barr, R., Brey, E., Pempek, T. A., Ryan, M., Calvert, S., Shewrey, C., and Linebarger, D. L. (2010). *Educational media created for infants, toddlers, and preschoolers: A picture of the interactional quality as modeled by onscreen characters*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Garrity, K. M., Linebarger, D. L., Piotrowski, J. T., and Lapierre, M. A. (2010). *A national parent survey: Predicting language and literacy skills from young children's media environment*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Garrity, K. M., Piotrowski, J. T., McMenamin, K., and Linebarger, D. L. (2010). *A summative evaluation of The Electric Company*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Jennings, N. A., Altenau, M. L., Hunt, K. P., and Linebarger, D. L. (2010). *Examining interactive educational television: A content analysis of SUPER WHY A* report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Jennings, N. A., Hooker, S., and Linebarger, D. L., (2008). *Observing the "Ins" and "Outs" of Between the Lions: Educational television and emergent literacy in preschoolers*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania; University of Cincinnati.

Jennings, N. A., Hooker, S. D., and Linebarger, D. L. (2010). *Children's response to interactive TV: An observational study of SUPER WHY A* report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Jennings, N. A., Hunt, K., Altenau, M., and Linebarger, D. L. (2008). *Electronic company: Children's parasocial relationships and loneliness*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Jennings, N. A., and Linebarger, D. L. (2009). *Television's impact in children's reading skills: A longitudinal study*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Lapierre, M., and Linebarger, D. L. (2008). *Onscreen print and eye-tracking*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Lapierre, M.A., and Linebarger, D. L. (2009). *Children's understanding of print and story conventions as predictor of theory of mind*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Lapierre, M. A., Piotrowski, J. T., and Linebarger, D. L. (2010a). *Measuring the home media environment of young children: Results from a nationally representative sample of American families*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Lapierre, M. A., Piotrowski, J. T., and Linebarger, D. L. (2010b). *A national parent survey: Background television exposure and executive functioning*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Linebarger, D. L. (2007). *Between the Lions Mississippi literacy initiative: 2007 review*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Linebarger, D. L. (2009). *Between the Lions Mississippi literacy initiative: 2007–2008 review*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Linebarger, D. L. (2010). *Between the Lions Mississippi literacy initiative: 2008–2009 review*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Linebarger, D. L., and Barr, R. (2010). *Project FLIP: Fostering learning in infants and preschoolers: A preliminary report of the longitudinal study of early media exposure and school readiness*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Linebarger, D. L., Barr, R. F., Calvert, S., Gibson, L., Fenstermacher, S., Moses, A. M., Valla, S., Lapierre, M., and Pempeck, T. (2010). *Results of a longitudinal descriptive study to evaluate very young children's use of media in relation to language and literacy content and how early media use relates to later skill development*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Linebarger, D. L., Lapierre, M., and Vaala, S. (2007). *Complexity, movement, and text familiarity: Correlates of visual attention to onscreen print*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Linebarger, D. L., McMenamin, K., and Moses, A. M. (2009). *A summative evaluation of Martha Speaks: Indicators of appeal and parasocial relations*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.



SUPER WHY!



PBS KIDS Island

Linebarger, D. L., McMenamain, K., and Wainwright, D. K. (2009). *A summative evaluation of SUPER WHY: Outcomes, dose and appeal*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Linebarger, D. L., Moses, A. M., and McMenamain, K. (2010a). *A summative evaluation of Martha Speaks: Learning outcomes*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Linebarger, D. L., Moses, A., and McMenamain, K. (2010b). *Vocabulary learning and the effect of onscreen print*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Linebarger, D. L., and Piotrowski, J. T. (2007). *Literacy-promoting strategies embedded in children's educational television: A content and validation study*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Linebarger, D. L., Piotrowski, J. T., and Vaala, S. (2007). *Vocabulary knowledge, conversational language skills, and map knowledge: Can Postcards from Buster help inside the classroom?* A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Linebarger, D. L., Taylor-, Piotrowski, J. L., and Vaala, S. (2007). *Supplementing television: What factors enhance or detract from learning from television?* A literature review prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Linebarger, D. L., and Wainwright, D. K. (2006). *Teaching language and literacy on television*. A literature review prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Linebarger, D. L., and Wainwright, D. K. (2007). *Cutaways: The impact on appeal and story comprehension associated with viewing an episode of Between the Lions from season 6*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

McMenamin, K. M. (2010). *Lessons learned: Elements of an effective educational media intervention*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Moses, A. M. (2010). *A content analysis of the literacy-promoting messages found in SUPER WHY across seasons 2 and 3*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Moses, A. M., Jennings, N. A., and Linebarger, D. L. (2010). *The impact of positive literacy messages on literacy skills and attitudes*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Moses, A., Linebarger, D. L., and Lapierre, M. (2010). *Television's impact on children's vocabulary knowledge: A meta-analysis*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Piotrowski, J. T. (2010). *Considering the roles that viewer characteristics, stimuli features, and contextual expectations play on young children's television comprehension*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Piotrowski, J. T., and Linebarger, D. L. (2007). *The impact of TV narratives on the early literacy skills of preschoolers*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Piotrowski, J. T., and Linebarger, D. L. (2010). *How children spend their time*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Piotrowski, J. T., Linebarger, D. L., and Jennings, N. (2009). *Assessing the impact of Between the Lions and literacy manipulatives on the literacy skills of young children*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Schmitt, K. L., and Linebarger, D. L. (2010). *Summative evaluation of PBS KIDS Island*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Vaala, S., Lapierre, M., and Linebarger, D. L. (2009). *Attending to onscreen print in educational programming: The eye movements of children and adults*. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Vaala, S., and Linebarger, D. L. (2009). *Language promoting strategies embedded in infants' educational videos*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Vaala, S., McKnight, M. K., and Linebarger, D. L. (2010). *The educational strength of RTL programming: Comparing RTL-funded content to other literacy-focused content and to the top Nielsen-ranked non-RTL programming*. A report prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Wainwright, D. K., and Linebarger, D. L. (2006). *Elements of effective educational television*. A literature review prepared for the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Wainwright, D. K., and Linebarger, D. L. (2008). *Bedroom television: Behaviors and beliefs of parents regarding bedroom TV for young children*. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

### **Publications in Peer-Reviewed Journals**

Barr, R. (2010). Transfer of learning between 2D and 3D sources during infancy: Informing theory and practice. *Developmental Review*, 30(2), 128–154.

Barr, R., Shuck, L., Salerno, K., and Linebarger, D. L. (in press). Music interferes with learning from television during infancy. *Infant and Child Development*.

Barr, R., Wyss, N., and Somanader, M. (2009). Imitation from television during infancy: The role of sound effects. *Journal of Experimental Child Psychology*, 123, 1–16

Fenstermacher, S. K., Barr, R., Garcia, A., Salerno, K., Shwery, C., Pempek, T. A., Calvert, S., and Linebarger, D. L. (in press). Infant-directed media: An analysis of product information and claims. *Infant and Child Development*.

Fenstermacher, S. K., Brey, E., Pempek, T. A., Garcia, A., Ryan, M., Moses, A. M., Calvert, S., Barr, R., and Linebarger, D. L. (in press). Interactional quality depicted in infant-directed videos: Where are the interactions? *Infant and Child Development*.

Goodrich, S. A., Pempek, T. A., and Calvert, C. L. (in press). Formal features of infant-directed screen-media products. *Archives of Pediatrics & Pediatric Medicine*.

Jennings, N. A., Hooker, S., and Linebarger, D. L. (2009). Educational television as mediated literacy environments for preschoolers. *Learning, Media, and Technology*, 34(3), 229–242.

Linebarger, D. L., and Piotrowski, J. T. (2009). The impact of TV narratives on the early literacy skills of preschoolers. *British Journal of Developmental Psychology*, 27(1), 47–69.

Linebarger, D. L., and Piotrowski, J. T. (2010). Structure and strategies in children's educational television: The roles of program type and learning strategies in children's learning. *Child Development*, 81, 1582–1597.

Linebarger, D. L., Piotrowski, J. T., and Greenwood, C. R. (2010). Onscreen print: The role of captions as a supplemental literacy tool. *Journal of Research in Reading*, 33, 148–167.

Linebarger, D. L., and Vaala, S. (2010). Infants and toddlers, screen media, and language development: An ecological perspective. *Developmental Review*, 30(2), 176–202.

Vaala, S. E., Linebarger, D. L., Fenstermacher, S., Tedone, A., Brey, E., Barr, R., Moses, A., Shwery, C., and Calvert, S. (in press). Content analysis of language-promoting teaching strategies: Do strategies match the claims in infant directed media? *Infant and Child Development*.

### Book Chapters

Linebarger, D. L., and Wainwright, D. K. (2007). Learning while viewing: Urban myth or dream come true? In S. R. Mazzarella (ed.), *20 questions about youth and the media* (pp. 179–196). New York, NY: Peter Lang.

Shaw, A., and Linebarger, D. L. (2008). The influence of computers, interactive games, and the Internet on a child's multicultural worldview (pp. 333–347). In Asamen, J. K., Ellis, M. L., and Berry, G. L. (Eds.), *Handbook of child development, multiculturalism, and media*. Thousand Oaks, CA: Sage.

### Peer-Reviewed Conference Presentations

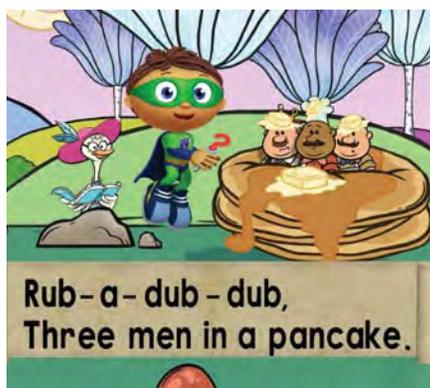
Barr, R., Salerno, K., Shuck, L., Atkinson, E., and Linebarger, D. L. (2008, March). *Background music interferes with imitation from televised and live demonstrations during infancy*. Paper presented at the International Society on Infant Studies. Vancouver, BC, Canada.

Evans, C., and Linebarger, D. L. (2010, March). *Bedtime media use: Linkages to infant sleep behaviors*. Poster presented at the International Society for Infant Studies, Baltimore, MD.

Fenstermacher, S. K., Barr, R., Brey, E., Pempek, T., Vaala, S. E., Tedone, A., Calvert, S., Huynh, H., Kumar, S., Shewry, C., and Linebarger, D. L. (2010, March). *Conveying educational content to babies: How infant-directed programming aims to teach*. In H. Kirkorian and T. Pempek (chairs), *The role of screen media in the lives of infants and toddlers*. Paper symposium conducted at the International Society for Infant Studies, Baltimore, MD.



*The Electric Company*



*SUPER WHY!*

Fenstermacher, S. K., Barr, R., Salerno, K., Vaala, S., Garcia, A., Brey, E., Pempek, T., Shewry, C., Lapierre, M., Calvert, S., and Linebarger, D. L. (2010, March). *“Educational” media for infants: Does the content match the claims?* Poster presented at the International Society for Infant Studies, Baltimore, MD.

Garrity, K., Linebarger, D. L., Piotrowski, J. T., and Lapierre, M. (2010, April). *The influence of the home literacy environment on children’s language and literacy skills.* Paper presented at the Conference on Human Development, New York, NY.

Lapierre, M., Linebarger, D. L., and Vaala, S. E. (2009, April). *Eyes on screen: Effects of age, text complexity and movement on children’s attention to on-screen text.* Poster session presented at the biennial meeting of the Society for Research in Child Development, Denver, CO.

Lapierre, M., Piotrowski, J. T., and Linebarger, D. L. (2010, April). *Understanding the home media environment: Results from the Annenberg survey of children, media, and parenting practices.* In J. T. Piotrowski (chair), *A window into children’s media use: Results from a national parent survey.* Symposium conducted at the Conference on Human Development, New York, NY.

Lapierre, M. L., Piotrowski, J. T., and Linebarger, D. L. (2010, November). *Measuring the home media environment of young children: Results from a nationally representative sample of American families.* Paper presented at the meeting of the National Communication Association, San Francisco, CA.

Linebarger, D. L., (2006, April). *Between the Lions: The evolution of a series via the research.* In K. Roskos (chair), *Children learning; teachers learning: Using media in pre-kindergarten and kindergarten literacy programs for higher levels of performance.* Paper symposium presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Linebarger, D. L. (2006, November). *Young children and technology.* In E. Miller (chair), *Young children and computers: Looking at the evidence of benefits and harm from the use of high technology in early education.* Featured session at the annual conference of the National Association for the Education of Young Children, Atlanta, GA.

Linebarger, D. L. (2006a, December). *Educational media: Descriptions, examples, and appropriate use.* A breakout session presented at the Effects of Media and Technology on Children and Their Learning Conference, East Lansing, MI.

Linebarger, D. L. (2006b, December). *Educational media: Urban legend or dream come true?* Keynote presentation presented at the Effects of Media and Technology on Children and Their Learning Conference, East Lansing, MI.

Linebarger, D. L. (2007, March). *When enemies meet: The unlikely marriage between television and literacy*. Invited paper presented at Michigan State University, East Lansing, MI.

Linebarger, D. L. (2007, November). Supporting language and literacy through media. In R. Lippincott (chair), *Surprise! Media can teach: Opening your classroom to quality TV*. Paper symposium presented at the annual meeting of the National Association for the Education of Young Children, Chicago, IL.

Linebarger, D. L. (2010, May). Using media to enhance the early literacy skills of young children from low socioeconomic status families. In C. P. Garnette (chair), *The Ready To Learn Initiative: A 360-degree surround approach to enhancing early literacy skills*. Paper symposium presented at the annual meeting of the American Educational Research Association, Denver, CO.

Linebarger, D. L., Fenstermacher, S. K., Brey, E., Pempek, T. A., Garcia, A., Ryan, M., Moses, A. M., Calvert, S., and Barr, R. (2009, March). *Interactional quality depicted in infant-directed videos: Where are the interactions?* Paper presented at the annual meeting of the Eastern Psychological Association, Pittsburgh, PA.

Linebarger, D. L., Lapierre, M., and Piotrowski, J. T. (2010, April). The implications of background television exposure. In J. T. Piotrowski (chair), *A window into children's media use: Results from a national parent survey*. Symposium conducted at the Conference on Human Development, New York, NY.

Linebarger, D. L., Lapierre, M., Vaala, S., Piotrowski, J. T., Barr, R. (2010, March). The implications of repeated exposure to background television on young children's executive functioning skills: Results from a national parent survey. In R. Barr (chair), *Learning from media during childhood*. Symposium conducted at the Annual Meeting of the Eastern Psychological Association, New York, NY.

Linebarger, D. L., Piotrowski, J. T., and Lapierre, M. (2009, November). The relationship between media use and the language and literacy skills of young children: Results from a national parent survey. In M. Robb (chair), *Young children's patterns of media use and related outcomes as a function of economic and minority status*. Paper symposium presented at the annual meeting of the National Association for the Education of Young Children, Washington, DC.

Linebarger, D. L., and Wainwright, D. K. (2007, March). American Indian children, their home media and literacy environments, and their literacy abilities in relation to participation in a *Between the Lions* literacy intervention. In R. Barr (chair), *The context of media viewing: The influence of television on infants and preschoolers*. Paper symposium presented at the biennial meeting of the Society for Research in Child Development, Boston, MA.

Moses, A. M. (2009, April). *"Books are fun, books are great": How television messages about literacy affect young children*. Poster session presented at the biennial meeting of the Society for Research in Child Development, Denver, CO.

Moses, A. M., Linebarger, D. L., McMenamin, K., Garrity, K., and Liss-Marino, T. (2009, December). *Vocabulary learning from an educational television program: Can children learn many new words and can print on screen help?* Poster session presented at the 59th annual meeting of the National Reading Conference, Albuquerque, NM.

Piotrowski, J. T. (2007, May). *Measuring narrative in children's television programming*. Paper presented at the workshop Exploring Media Narratives: New Concepts and Methods, Erfurt, Germany.

Piotrowski, J. T., Lapierre, M., and Linebarger, D. L. (2010, April). How young children spend their time. In J. T. Piotrowski (chair), *A window into children's media use: Results from a national parent survey*. Symposium conducted at the Conference on Human Development, New York, NY.

Piotrowski, J. T., and Linebarger, D. L. (2008, May). *The impact of television narratives on the early literacy skills of preschoolers*. Paper presented at the meeting of the International Communication Association, Montreal, Canada.

Piotrowski, J. T., Vaala, S. E., and Linebarger, D. L. (2009, April). *Can Postcards from Buster help inside the ELL classroom? An examination of receptive and productive vocabulary acquisition*. Poster session presented at the biennial meeting of the Society for Research in Child Development, Denver, CO.

Schmitt, K. L., Linebarger, D. L., and McMenamin, K. (2009). *Summative evaluation of PBSKIDS Island: Home study*. A presentation prepared for the Public Broadcasting System and the Corporation for Public Broadcasting. Philadelphia, PA: Annenberg School for Communication, University of Pennsylvania.

Vaala, S. E., Barr, R., Fenstermacher, S. K., Brey, E., Salerno, K., Garcia, A., Pempeck, T., Moses, A. M., Calvert, S., and Linebarger, D. L. (2010, March). *Content analysis of language-promoting strategies in infant educational videos*. Poster presented at the International Society for Infant Studies, Baltimore, MD.

Vaala, S. E., Barr, R. F., Garcia, A., Salerno, K., Brey, E., Fenstermacher, S. K., Pempek, T. A., Moses, A. M., Calvert, S., and Linebarger, D. L. (2009, April). *Content analysis of language-promoting strategies embedded in infant educational programming*. Poster session presented at the biennial meeting of the Society for Research in Child Development, Denver, CO

Vaala, S. E., and Lapierre, M. A. (2008, November). *Complexity, movement, and text familiarity: Correlates of visual attention to onscreen print*. Paper presented at the annual convention of the National Communication Association, San Diego, CA.

Wainwright, D. K., and Linebarger, D. L. (2006, March). American Indian literacy initiative: Home media environment and relations to early literacy abilities. In R. Barr (chair), *Early learning in the social context of television*. Paper symposium presented at the annual meeting of the Eastern Psychological Association, Baltimore, MD.

## Additional RTL-Funded Research by Other Groups and Individuals

Chiong, C. (2009). *Can video games promote intergenerational play and literacy learning? Report from a research and design workshop*. A report prepared for PBS. New York, NY: The Joan Ganz Cooney Center at Sesame Workshop.

Chiong, C., and Shuler, C. (2010). *Learning: Is there an app for that? Investigations of children's usage and learning with mobile devices and apps*. A report prepared for the Corporation for Public Broadcasting. New York, NY: The Joan Ganz Cooney Center at Sesame Workshop.

Freeman, D., Medaugh, S., Greenwald, C., Silverman, R., and Kucan, L. (2010, April). *Martha Speaks: How a dog, a book, and a television program can impact oral vocabulary development*. Presentation at the International Reading Association Conference, Chicago, IL.

Grace, C., Prince, D., and Huffman, J. (2009). *Sesame Street and Between the Lions DVD evaluation*. A report prepared for the Corporation for Public Broadcasting. Mississippi State, MS: Early Childhood Institute, Mississippi State University.

Horowitz, J. E., Sosenko, L. D., Hoffman, J. L. S., Ziobrowski, J., Tafoya, A., Haagenson, A., and Hahn, S. (2006). *Evaluation of the PBS Ready To Learn cell phone study: Learning letters with Elmo*. A report prepared for PBS. Los Alamitos, CA: WestEd.

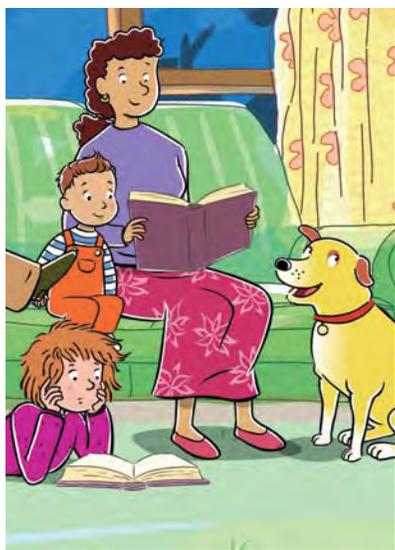
Marshall, J., Lapp, D., and Cavoto, K. (2010). *SUPER WHY summer camp: An analysis of participant learning in 2008 and 2009 summer camps*. A report prepared for the Corporation for Public Broadcasting. San Diego, CA: Department of Educational Technology, San Diego State University.

Meyer, S. E., and Sroka, I. (2010). *A summative evaluation of the impact and appeal of SUPER WHY reading camp*. A report prepared for the Corporation for Public Broadcasting. Jackson Heights, NY: Paradigm Research and Consulting.

Nam, H. (2009). *PBS KIDS treasure hunt games: Final report on usability study with kids Ages 6–8*. A report prepared for PBS KIDS. Reston, VA: Mediabarn User Experience Lab.



*Between the Lions*



Martha Speaks

Nam, H. (2010). *PBS KIDS GWQ Progress Tracker: Top line report on usability study with parents and teachers of kids ages 6–8*. A report prepared for PBS KIDS. Reston, VA: Mediabarn User Experience Lab.

Phillips, B. M. (2008). *SUPER WHY summer camp assessment findings*. A report prepared for the Corporation for Public Broadcasting. Tallahassee, FL: Florida Center for Reading Research, Florida State University.

Revelle, G., Fisher, C. E., Kotler, J., App, C., Golub, N., Fenwick-Naditch, A., Rardon, E., and Green, M. M. (2008a). *The development and evaluation of a targeted, assessment-based multimedia literacy intervention for young children at risk: Formative research report*. A report prepared for the Corporation for Public Broadcasting, RTL Supplemental Outreach Project. New York, NY: Sesame Workshop.

Revelle, G., Fisher, C. E., Kotler, J., App, C., Golub, N., Fenwick-Naditch, A., Rardon, E., and Green, M. M. (2008b). *The development and evaluation of a targeted, assessment-based multimedia literacy intervention for young children at risk: Report on phase 2 research: small-scale efficacy study*. A report prepared for the Corporation for Public Broadcasting, RTL Supplemental Outreach Study. New York, NY: Sesame Workshop.

Rockman et al. (2008). *PBSKIDS.org/read Raising Readers online resource in Spanish: Final report on user testing sessions*. A report prepared for PBS KIDS. Bloomington, IN: Author.

Rockman et al. (2010). *PBS KIDS iPod app study findings and outcomes*. A report prepared for PBS KIDS. Bloomington, IN: Author.

Silverman, R. (2009a). *Dosage evaluation*. College Park, MD: University of Maryland, College Park.

Silverman, R. (2009b). *Martha Speaks website evaluation*. College Park, MD: University of Maryland, College Park.

Silverman, R. (2009c). *Project M.O.V.E.: Multimedia Opportunities for Vocabulary Enrichment*. A report prepared for the Corporation for Public Broadcasting. College Park, MD: University of Maryland, College Park.

Silverman, R. (2009d). *WGBH Martha Speaks outreach evaluation*. A report prepared for the Corporation for Public Broadcasting. College Park, MD: University of Maryland, College Park.

Silverman, R., and Carlis, L. (2010, May). *A reading buddies program to promote vocabulary development*. Presentation at the American Educational Research Association Conference, Denver, CO.

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# Ready To Learn National Demonstration Sites

## Public Media Stations and Community Partners



- Alabama Public Television**
- Alabama Department of Human Services Childcare Services Division
  - First Lady Patsy Riley, Governor's Office



- KAET – Tempe, Arizona**
- Gila River Indian Community
  - Phoenix and Tempe local school districts



- KPBS – San Diego, California**
- Athletes for Education
  - San Diego State University



- KQED – San Francisco/Oakland, California**
- One Economy Digital Connectors
  - Unity Council



- WSRE – Pensacola, Florida**
- Community endowment
  - Florida Center for Reading Research
  - Florida Department of Education
  - WFSU



- WFSU – Tallahassee, Florida**
- Florida Center for Reading Research
  - Mayor's Office



- WGTE – Toledo, Ohio**
- Mud Hens Minor League Baseball Team
  - United Way



- WSIU – Carbondale, Illinois**
- Resource and Referral Center
  - University of Southern Illinois School of Education



- Iowa Public Television**
- Anne E. Casey Foundation, Des Moines
  - Iowa Communications Network (ICN)



- Louisiana Public Broadcasting**
- Baton Rouge Parish
  - Statewide Childcare Organizations



- Maryland Public Television**
- Judy Centers
  - Maryland State Department of Education



- Mississippi Public Broadcasting**
- Barksdale Reading Institute
  - Statewide Library Initiative with State Commission, Rotary Clubs and Women's Clubs



- WNED – Buffalo, New York**
- "Read to Succeed Buffalo" Citywide Literacy Initiative
  - EPIC PIRC – NY Parent Information Resource Center



- WPSU – State College, Pennsylvania**
- Pennsylvania State University
  - United Way – Success by Six



- WLJT – Martin, Tennessee**
- Regional Boys and Girls Clubs
  - Statewide partnership with all six public broadcasting stations in Tennessee



Nashville Public Television

- WNPT – Nashville, Tennessee**
- Mayor's Office
  - United Way



THE LEARNING PLACE

- KLRN – San Antonio, Texas**
- Mayor's Office
  - United Way Citywide Literacy Initiative



- WHRO – Hampton Roads, Virginia**
- 18 school districts
  - Local military bases



Howard University Television

- WHUT – Washington, DC**
- District of Columbia Public Schools
  - Howard University



- West Virginia Public Broadcasting**
- McDowell County Business Community
  - Regional Head Start Programs

*Ready To Learn broadcast and web-based content was made available to every PBS member station.*



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