

# The Ready To Learn Initiative

IMPROVING CHILDREN'S SCIENCE AND LITERACY LEARNING  
THROUGH THE POWER OF PUBLIC MEDIA



2015-2020



2015-2020 READY TO LEARN GRANT: SCIENCE AND LITERACY LEARNING THROUGH CONTENT, COMMUNITY AND COLLABORATION

# By the Numbers

**100+**  
new episodes



**38**  
new games



**8**  
new apps



**9,500+**  
station events<sup>1</sup>



Photo courtesy of WFSU – Tallahassee, FL

**200+**  
new educator  
resources

**70+**  
new resources  
for parents  
and caregivers

**240,000+**  
children  
participated in  
local workshops  
and events<sup>2</sup>



Photo courtesy of WHRO – Norfolk, VA

**PBS KIDS reaches 34.5 MILLION TV viewers  
and 14.5 MILLION digital users each month<sup>3</sup>**

# Meeting a Need

Every child is deserving of opportunity, and research shows that access to educational resources and tools in the early years of life is critical to children's long-term well-being. Yet, for many children, access to these resources is limited.

To set the stage for future success, as a part of a multi-year early learning initiative, CPB and PBS KIDS developed free, high-quality, educational television series, digital games and apps, streaming content, parent and educator resources and community engagement materials to improve school readiness skills for kids ages 2-8. PBS stations and their local partners directly connected families, educators and caregivers with PBS KIDS series, digital games and experiences that support early science and literacy learning, especially in low-income neighborhoods, rural regions and other communities that are sometimes overlooked. Along the way, independent evaluators tested these resources to measure educational impact and efficacy. A Ready To Learn grant from the U.S. Department of Education, funded by Congress, made all of this possible.



Photo courtesy of Arizona PBS – Phoenix, AZ

**More than half of America's 3- and 4-year-olds do not attend preschool.<sup>4</sup>**

**Independent research indicates that Ready To Learn-funded PBS KIDS content has an educational impact comparable to comprehensive early childcare or preschool programs.<sup>5</sup>**

**PBS KIDS is a free and accessible source available to more than 95% of U.S. TV households.**

**An extensive body of research demonstrates the potential of educational media to support children's learning, particularly when adults are involved with children's media use. These findings underscore the value of public media's multi-generational focused science programs.<sup>6</sup>**

**Each PBS KIDS series funded by the Ready To Learn grant has resources for parents and educators:**

- **PBS KIDS for Parents Newsletter has 1.1 million subscribers<sup>7</sup>**
- **PBS LearningMedia reaches 1.6 million users each month<sup>8</sup>**
- **PBS KIDS Twitter has 635k+ followers**
- **PBS KIDS Facebook has 870k+ followers**

# Multi-platform Series



**Age**

**3-5**

**3-5**

**4-8**

**4-8**

**About**

This animated series for preschoolers encourages children to follow their curiosity, ask questions when they don't understand and find answers and solve problems through science inquiry and engineering design.

Series games are available on [pbskids.org](http://pbskids.org) and on the free PBS KIDS Games App, along with clips and full episodes streaming across PBS KIDS' video platforms.

Guided by the Cat, his friends Nick and Sally figure things out by engaging in science inquiry and engineering design.

Apps include THE CAT IN THE HAT BUILDS THAT! and THE CAT IN THE HAT INVENTS, as well as digital games available on the PBS KIDS Games app and [pbskids.org](http://pbskids.org).

Viewers are introduced to the rich history and modern-day experience of family life in the heart of Alaska through the eyes of Molly, her parents and her friends.

The MOLLY OF DENALI mobile app won the Excellence in Early Learning Digital Media award from the American Library Association.

The show is about two neighborhood kids—one with an all-consuming drive for science fact and another with an overwhelming passion for science fiction. They both befriend the new kid on their street, Jet Propulsion, whose family happens to be aliens from Bortron 7.

Apps include JET'S BOT BUILDER and READY JET GO! SPACE SCOUTS, in addition to digital games available on PBS KIDS Games App and [pbskids.org](http://pbskids.org).

**Learning Focus**

Scientific Inquiry, Life Science, Earth Science, Engineering & Technology, Natural Design



Scientific Inquiry, Physical Science, Engineering & Technology



Literacy, Reading, Writing & Comprehending Informational Text



Scientific Inquiry, Earth and Space Science, Physical Science, Engineering & Technology



## Digital Series



## Apps



**Age**

**4-8**

**4-8**

**3-5**

**3-5**

### About

The RUFF RUFFMAN SHOW features videos, digital games and real-world activities to help kids experiment with science in everyday life. Ruff and his trusty assistants, Blossom and Chet, answer questions from kids, take on challenges and learn the value of failure—all while modeling science inquiry skills.

Hamsters Sadie, Mateo and Tasha are classroom pets by day and secret engineers by night. Kids step into the hamsters' world through animated stories integrated with games. The stories set up problems that kids help solve by playing games using simple machines and creative thinking.

This bilingual app lets users play with shadows, control the weather, roll and slide objects down a ramp, choose the best materials for an umbrella. The games are intentionally designed to serve as catalysts for real-world exploration by modeling real-world locations and experiences. Developed in collaboration with early childhood experts, this app was the recipient of the inaugural Excellence in Early Learning Digital Media Award from the American Library Association.

This bilingual app encourages users to explore and learn engineering concepts with eight educational games that grow with the user. Children can design machines and roller coasters, build towers with robots, and problem solve through an obstacle course while learning STEM concepts.

### Learning Focus

Scientific Inquiry, Engineering Design, Physical Science

Scientific Inquiry, Engineering Design, Creative Thinking

Scientific Inquiry, Earth Science, Physical Science, Life Science

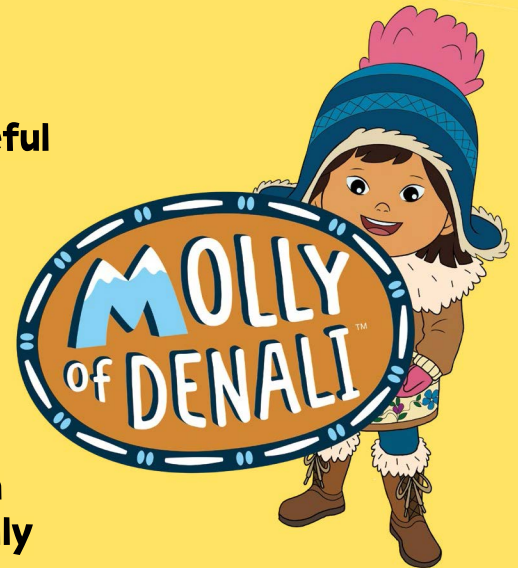
Scientific Inquiry, Engineering Design, Physical Science



# Groundbreaking Educational Content

## MOLLY OF DENALI

- follows the adventures of Molly, a curious and resourceful Alaska Native girl, as she helps her parents run the Denali Trading Post.
- teaches Alaska Native values and culture in the first nationally distributed series to feature a Native American lead character.
- has a significant impact on the ability of children from low-income families to use informational text. After only nine weeks of access, this impact is equivalent to the difference in reading skills a first-grader typically develops over three months.<sup>9</sup>
- provides educational games designed to support children's foundational literacy skills and reading comprehension.



In its first year, the series reached **42 million TV viewers**, including children and families.<sup>10</sup>

Each month it reaches **366k digital users** across PBS KIDS digital platforms.<sup>11</sup>

Indigenous voices – from writers and producers to voice talent, animators and advisors – collaborate on every part of the series, leading to a groundbreaking and inclusive production model for the Peabody and Kidscreen Award-winning series.

“With MOLLY OF DENALI, PBS Raises Its Bar for Inclusion.”  
– The New York Times ”



Photo courtesy of AKPM – Anchorage, AK



Comes to PBS KIDS from co-creators Jorge Cham and Daniel Whiteson.

New to children's television, Cham is a celebrated cartoonist and robotics engineer, and Whiteson is a physicist and educator.

## ELINOR WONDERS WHY

- introduces kids ages 3-5 to science, engineering, nature and community.
- encourages children and parents to ask questions about the world around them, and experience the joy of discovery and understanding together.
- models respect for others, the importance of diversity, ways to care for the environment, and how to work together to solve problems.
- supports the development of the foundational practices of science inquiry and engineering design, including observation, asking questions and investigation.
- highlights how nature's ingenious inventions relate to our human-designed world.

Since its September 2020 launch, the series reached **12.6 million TV viewers**, including children and families.<sup>12</sup>

Each month it reaches **530k digital users** across PBS KIDS digital platforms.<sup>13</sup>

“ The natural world isn't a one-size-fits-all experience. Some children live near parks or have backyards, while others learn about plants and animals through interactions in their homes. As [creators] Cham and Whiteson imagined Elinor investigating science, they created stories that would be accessible to audiences regardless of their access to nature. ”

– Live Science



## THE CAT IN THE HAT KNOWS A LOT ABOUT THAT!

- based on Random House's best-selling Beginner Book collection "The Cat in the Hat's Learning Library™."
- designed to spark a love of science and engineering in preschool children.
- increases science learning in children from low-income households, according to research conducted by EDC and SRI.<sup>14</sup>
- has a positive impact on children's understanding of core physical science concepts of matter and forces—equivalent to the difference in science knowledge an early elementary student develops over five months.<sup>15</sup>
- boosts preschoolers' understanding of the nature of science—77% depicted scientists and engineers working in everyday spaces and places by the end of the study, compared with 44% at the beginning of the University of Rhode Island study.<sup>16</sup>

In 2020, the series reached **27.5 million TV viewers**, including children and families.<sup>17</sup>

Each month it reaches **468k digital users** across PBS KIDS digital platforms.<sup>18</sup>



Photo courtesy of Austin PBS – Austin, TX

Studies done during the 2015-2020 grant cycle demonstrate that Ready To Learn-funded resources from the PBS KIDS series THE CAT IN THE HAT KNOWS A LOT ABOUT THAT! increase science learning for young children from low-income households<sup>19</sup> and increase positive perceptions of science and engineering among children.<sup>20</sup>







## PLAY & LEARN SCIENCE App

This app, available in English and Spanish, engages kids ages 3-5 in the science of their everyday lives. The 12 engaging games cover core topics in Earth Science, Physical Science and Life Science, while serving as catalysts for real-world exploration by modeling familiar locations and experiences. Related hands-on activities and parent notes encourage families to engage in their children’s learning and explore science at home.

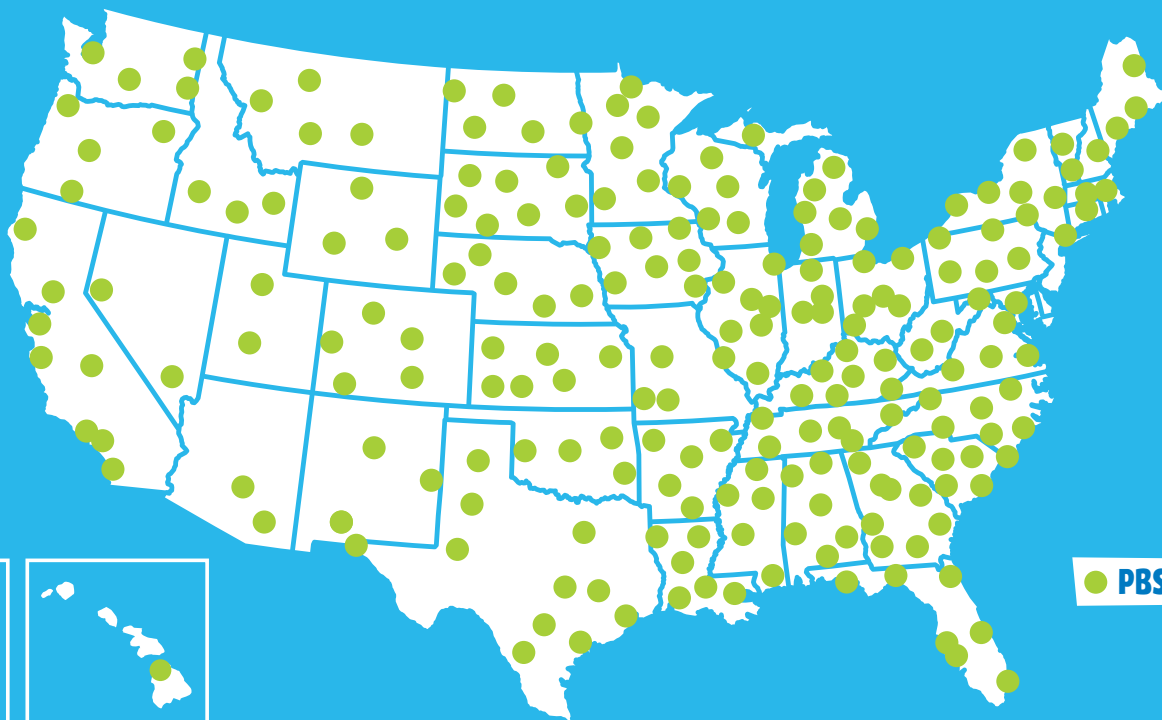
Research shows that when parents used the app with their kids, children’s understanding of science content and practices improved, and parents engaged in science-related activities with their children more often. In addition, kids’ use and understanding of science vocabulary increased, as did their understanding of science content and practices after using the app and activities. Kids also showed increased excitement about science, technology, engineering and mathematics.<sup>21</sup>



Photo courtesy of PBS SoCal – Orange & Los Angeles Counties, CA

## Reach Through Local Stations

More than 330 PBS member stations support children across the country through community partnerships and outreach.



ALASKA



HAWAII

**PBS Station**

Stations not pictured: Puerto Rico, Guam, American Samoa and the U.S. Virgin Islands

# Station Partners

Thirty stations received Ready To Learn funding to support science and literacy learning for children, families and caregivers in low-income communities. Partnering with local organizations, these community collaboratives help maximize the impact of PBS KIDS science and literacy-based programming, apps and digital games from trusted series, including MOLLY OF DENALI and THE CAT IN THE HAT KNOWS A LOT ABOUT THAT! These partnerships also support professional development for educators and training for facilitators and caregivers in best practices to engage families and children to learn together through digital media, building increased station and community capacity for intergenerational learning. This work also enables PBS KIDS and the public media community to continue to discover new and inventive ways to create media that responds to community needs and improves learning.

- Alabama Public Television – Birmingham, AL
- Alaska Public Media – Anchorage, AK
- Arizona PBS – Phoenix, AZ
- Austin PBS – Austin, TX
- Ball State PBS – Muncie, IN
- Detroit Public Television – Detroit, MI
- GBH – Boston, MA
- Georgia Public Broadcasting – Atlanta, GA
- Iowa PBS – Johnston, IA
- KBTC – Tacoma, WA
- Kentucky Educational Television – Lexington, KY
- Louisiana Public Broadcasting – Baton Rouge, LA
- Maryland Public Television – Owings Mills, MD
- Mississippi Public Broadcasting – Jackson, MS
- Nine PBS – St. Louis, MO
- Oklahoma Educational Television Association – Oklahoma City, OK
- PBS ideastream – Cleveland, OH
- PBS North Carolina – Research Triangle Park, NC
- PBS SoCal – Orange & Los Angeles Counties, CA
- PBS Wisconsin – Madison, WI
- Vegas PBS – Las Vegas, NV
- WCNY – Syracuse, NY
- WCTE – Cookeville, TN
- WFSU – Tallahassee, FL
- WFYI – Indianapolis, IN
- WHRO – Norfolk, VA
- WHUT – Washington, DC
- WLVT – Lehigh Valley, PA
- WNET – New York, NY
- WQED – Pittsburgh, PA



Photo courtesy of WCNY – Syracuse, NY



Photo courtesy of Vegas PBS – Las Vegas, NV

# Supporting Community Learning Through Parent Involvement

Over the course of five years, more than 335,000 children, educators, families and caregivers<sup>22</sup> participated in Ready To Learn-funded family learning workshops, camps for young children and educator professional learning activities implemented by local PBS stations and their community partners. This high-tech, high-touch approach fosters meaningful relationships and hands-on learning opportunities.

The CPB-PBS Ready To Learn Initiative supports parents of young children through videos, apps, workshops, activities and resources that foster and model parental involvement in science and literacy learning.

- **99%** of parents want to be involved in their children's education.<sup>23</sup>
- **70%** of parents say having ideas for doing science with everyday materials would help them do more science at home.<sup>23</sup>





## Resources for Parents, Caregivers & Educators

### **FAMILY AND COMMUNITY LEARNING (FCL)**

FCLs are a series of workshops led by public media stations and their community partners, such as housing authorities, Head Starts, school districts, libraries and other local organizations, to engage families with PBS KIDS media and hands-on learning. Designed for families with children ages 3-8, the workshops use guided play to introduce both kids and grown-ups to digital and real-world tools that foster an understanding of science and literacy concepts and practices, known to contribute to problem-solving, critical thinking and learning across content areas. The workshops also encourage collaboration, communication and family fun while building caregivers' knowledge and confidence in supporting their children's learning. FCLs include PLAY & LEARN SCIENCE, PBS KIDS SCRATCHJR, RUFF RUFFMAN, READY JET GO! THE CAT IN THE HAT KNOWS A LOT ABOUT THAT! and MOLLY OF DENALI.

### **EDUCATOR AND COMMUNITY LEARNING**

Educator and Community Learning is a professional learning workshop series designed for educators of children ages 3-8. During each workshop, educators actively learn and play together with PBS KIDS digital tools and hands-on activities through topics such as "Integrating Media into Your Teaching Practice" and "Inquiry Practices with THE CAT IN THE HAT KNOWS A LOT ABOUT THAT!" The goal is to empower educators with the tools, skills and confidence to use these media-rich and playful learning experiences in their communities and learning environments.

# Supporting Community Learning Through Station Engagement

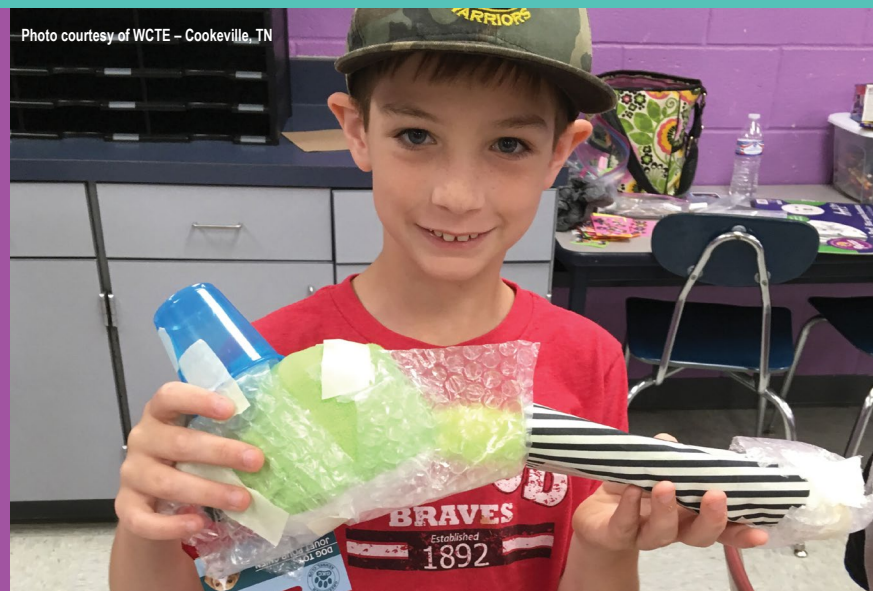
Over the course of this five-year grant, 30 PBS stations partnered with community organizations to meet the needs of their local families and educators, sharing PBS KIDS resources and materials in various ways. When COVID-19 shifted in-person events to virtual and highlighted the necessity of at-home learning, stations devised and implemented creative, community-specific solutions to provide support to parents, caregivers and educators. Below are examples of the work being done on the ground.

## GBH (Boston, MA)

Engaging new immigrant families in meaningful educational experiences was a priority for GBH and its community partners, including Tech Goes Home, English for New Bostonians, the Boston Public School Adult Learning Center and the Boston Public Library. The PBS KIDS ScratchJr workshops were an ideal match for this audience, providing opportunities for parents who are learning English to confidently work side-by-side with their children to explore coding. Since the app uses symbols rather than words, parents don't need to be fluent in English to actively participate in coding activities with their children. When in-person workshops were no longer possible due to the pandemic, GBH and its partners brought the PBS KIDS ScratchJr workshop online. Parents and facilitators of the workshop reported that children learned new skills, and parents also reported that they themselves learned from the workshops and their participation led families to try new learning activities at home.<sup>24</sup>

## KBTC (Tacoma, WA)

KBTC, in partnership with the Tacoma Housing Authority, served families in its community through their academic enrichment program. They hosted weekly in-person workshops in two different neighborhoods for kids to engage in educational PBS KIDS games and activities. The site coordinators developed trusted relationships with the kids and their families, who continue to count on the station to support their academic needs during distance learning. KBTC also joined forces with Tacoma Public Schools and other community partners, powered by the Tacoma Whole Child Partnership, to pilot a free, virtual after-school program. This gives the students an opportunity to learn, create and have fun with Ready To Learn-funded PBS KIDS content while tapping into their talents and connecting virtually with other kids their age.



## WCTE (Cookeville, TN)

WCTE and the Putnam County School System's partnership allowed the station to work closely with families from public housing and Head Start to extend learning opportunities to children, educators and caregivers from 14 rural counties in Tennessee. Through this work, WCTE reached nearly 59,000 children and their families in the Upper Cumberland region from 2015-2020.<sup>25</sup>

## Kentucky Educational Television (Lexington, KY)

KET provided professional development for educators through a hybrid course pilot program. The “Supporting Play with Media and Technology” course gave educators the opportunity to explore how technology and media can promote playful learning in science in their own classrooms. The pilot, a partnership with Maryland Public Television funded by the Ready To Learn grant, provided educators the opportunity to participate in a virtual self-paced course, an in-person learning experience and an independent learning project. Adjustments were made to the course in response to COVID-19, enabling educators to complete it through additional virtual meetings. KET has adopted a variety of course delivery options over the years, and the Hybrid Course fills an ongoing need for high-quality professional development in the state of Kentucky.



Photo courtesy of KET – Lexington, KY

## WNET (New York, NY)

Through a robust partnership with Homes for the Homeless, families living in homeless shelters in the South Bronx became “sensational scientists” with RUFF RUFFMAN, explored outer space with READY JET GO! and shared information about their own community through a MOLLY OF DENALI-inspired mini museum. These families received technology, shared bonding experiences and built new support networks with each other that will continue to serve them long after the workshops end.

## WQED (Pittsburgh, PA)

The experience and success of creating the PLAY & LEARN Family Community Learning workshop helped WQED expand its offerings and create several more FCLs based on topics that were relevant to its communities. Other FCL topics were based on gardening and health and wellness. The Gardening FCL was created because a local school partner, Abraham Lincoln Elementary School in Bethel Park, has a community garden and wanted to bring families together and encourage participation with the garden. The FCL model has helped WQED be responsive to the needs of its partners, funders and families and bring families together to learn. This example shows how stations can customize and scale resources for sustainable use in their local areas.



Photo courtesy of WQED – Pittsburgh, PA

## Nine PBS (St. Louis, MO)

Nine PBS distributed 900 PBS KIDS Playtime Pads and early literacy learning kits to 44 public elementary schools in the Saint Louis Public School District. Implemented through a collaborative effort by Turn the Page STL and St. Louis Black Authors of Children’s Literature, the project addressed known literacy gaps. through books and digital devices. The selected books are featured on Nine’s Teaching in Room 9 on-air classroom series and are written by local Black authors. The project supports Nine’s goal of closing the digital divide by supporting literacy for young learners. Nine PBS’s Ready To Learn-funded work built the foundation for this collaboration between the public school district and key community partners, including the local affiliate of the National Campaign for Grade-Level Reading.

# Accessibility for All Learners

As part of the CPB-PBS Ready To Learn Initiative, PBS KIDS uses the research-based principles and practices of Universal Design for Learning (UDL) to create content and features of digital games that support the varied abilities and backgrounds of young children. This inclusive design approach focuses on helping learners personalize their experiences and environments by offering multiple options for understanding, and interacting and engaging with content. Similarly, PBS KIDS supports the range of variation across learners by developing feedback systems that can adapt to an individual's needs. With Ready To Learn grant funding, the CPB-PBS team is also engaging advisors to help ensure PBS KIDS content is accessible to the widest possible audience of children.

## Fish Force PBS KIDS' First Adaptive Game



The RUFF RUFFMAN collection of content, games and activities includes PBS KIDS' first personalized and adaptive game, FISH FORCE, which invites children to demonstrate their understanding of the physical science concepts of forces and motion through leveled games that respond to their knowledge and ability during real-time game play. Players engage in science inquiry to make predictions and test their ideas about forces and motion to help rescue Ruff's plushie from the penguins' ice rink in this sports science game. The game dynamically assesses a player's ability at any given time and presents the next best level at that moment. This adaptivity helps PBS KIDS serve children with varied abilities, allowing them to be successful while also driving them towards increasing challenge.



Photo courtesy of Ball State PBS - Muncie, IN



# The Ready To Learn Initiative Through the Years

Since the Ready To Learn Initiative's inception more than 25 years ago, the Corporation for Public Broadcasting (CPB) and PBS have been recipients of six competitive grant awards, allowing them to produce and disseminate pioneering, research-based, educational media and resources proven to advance skills of young children to help them succeed in school, work and life.

1995-2000	 
2000-2005	 
2005-2010	   
2010-2015	 
2015-2020	   

# A Look Back

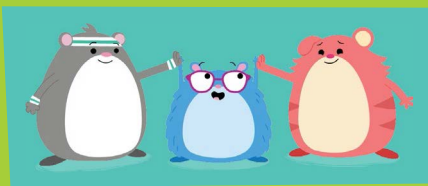
In 1991, Ernest Boyer, then-president of The Carnegie Foundation for the Advancement of Teaching, drew attention to a decline in children’s school readiness in his report, “Ready To Learn: A Mandate for the Nation.” Boyer’s call for “ready to learn” television sparked the Ready To Learn Television Act. Through the bipartisan support of Congress and the U.S. Department of Education, the legislation funded television programming and corresponding educational materials for preschool and elementary school children as a way to improve school readiness. Boyer’s vision continues to inspire the Ready To Learn Initiative, which has touched the lives of millions of children in communities across the country by helping them learn essential skills. Each five-year grant cycle has supported innovations in using media to reinforce learning, and Ready To Learn-funded PBS KIDS content has adapted to support the dynamic needs of children, parents and educators. On July 11, 1994, PBS launched its first collection of Ready To Learn-funded programming with 62 stations as model sites.<sup>26</sup>





Photo courtesy of Vegas PBS – Las Vegas, NV

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1. Corporation for Public Broadcasting Service (10/1/2015 to 9/30/2020). "Community Collaboratives for Early Learning and Media Annual Reporting."
2. Corporation for Public Broadcasting Service (10/1/2015 to 9/30/2020). "Community Collaboratives for Early Learning and Media Annual Reporting."
3. Google Analytics, Jan – Dec '20. Nielsen NPOWER L+7, 12/30/2019 - 12/27/2020, PBS KIDS Avg Mo Reach, P2+, 1+min.
4. Anne E. Casey Kids Count Data Center, Children Ages 3-4 Not Attending Preschool (2020).
5. Hurwitz, L.B. (2018). Getting a Read on Ready To Learn Media: A Meta-analytic Review of Effects on Literacy. Child Development. doi:10.1111/cdev.13043.
6. Christensen, C., Hoisington, C., Vahey, P., Hupert, N., & Pasnik, S. (2019). PBS KIDS Play & Learn Science Evaluation Report. New York, NY, & Menlo Park, CA: Education Development Center, Inc., & SRI International.
7. 1.1m subscribers as of 2/12/2021.
8. Google Analytics July 2019 – December 2020.
9. Kennedy, J. L., Christensen, C., Maxon, T., Gerard, S., Garcia, E., Hupert, N., Vahey, P., & Pasnik, S. (2021). Mahsi' choo for the info! Molly of Denali teaches children about informational text. Education Development Center.
10. Nielsen NPOWER L+7, 7/15/2019 - 7/12/2020, 50% unif, 1+ mins., P2+, K2-11.
11. Google Analytics, January 2020 – December 2020.
12. Nielsen NPOWER L+7, 9/7/2020-11/22/2020, PBS Prog Reach, 50%, 1+ min, P2+, K2-11.)
13. Google Analytics, September 2020 – December 2020.
14. Grindal, T., Silander, M., Gerard, S., Maxon, T., Garcia, E., Hupert, N., Vahey, P., Pasnik, S. (2019). Early Science and Engineering: The Impact of The Cat in the Hat Knows a Lot About That! on Learning. New York, NY, & Menlo Park, CA: Education Development Center, Inc., & SRI International.
15. Sweetman, S., Brand, S., Holland, B., Kim, H., Murray, K., & Shea, K. (2019). The Cat in the Hat Knows a Lot About That™! provides STEM learning opportunities for pre-school children: A mixed methods analysis of children's knowledge, perceptions, and language of science and engineering. Kingston, RI: The University of Rhode Island.
16. Grindal, T., Silander, M., Gerard, S., Maxon, T., Garcia, E., Hupert, N., Vahey, P., Pasnik, S. (2019). Early Science and Engineering: The Impact of The Cat in the Hat Knows a Lot About That! on Learning. New York, NY, & Menlo Park, CA: Education Development Center, Inc., & SRI International.
17. Nielsen NPOWER L+7, 12/30/2019 - 12/27/2020, 50% unif, 1+ mins., P2+.
18. Google Analytics, January 2020 – December 2020
19. Sweetman, S., Brand, S., Holland, B., Kim, H., Murray, K., & Shea, K. (2019). The Cat in the Hat Knows a Lot About That™! provides STEM learning opportunities for pre-school children: A mixed methods analysis of children's knowledge, perceptions, and language of science and engineering. Kingston, RI: The University of Rhode Island.
20. Sweetman, S., Brand, S., Holland, B., Kim, H., Murray, K., & Shea, K. (2019). The Cat in the Hat Knows a Lot About That™! provides STEM learning opportunities for pre-school children: A mixed methods analysis of children's knowledge, perceptions, and language of science and engineering. Kingston, RI: The University of Rhode Island.
21. Christensen, C., Hoisington, C., Vahey, P., Hupert, N., & Pasnik, S. (2019). PBS KIDS Play & Learn Science Evaluation Report. New York, NY, & Menlo Park, CA: Education Development Center, Inc., & SRI International.
22. Corporation for Public Broadcasting Service (10/1/2015 to 9/30/2020). "Community Collaboratives for Early Learning and Media Annual Reporting."
23. Silander, M., Grindal, T., Hupert, N., Garcia, E., Anderson, K., Vahey, P. & Pasnik, S. (2018). What Parents Talk About When They Talk About Learning: A National Survey About Young Children and Science. New York, NY, & Menlo Park, CA: Education Development Center, Inc., & SRI International.)
24. Education Development Center & SRI Education. (October 2017) Ready To Learn Research: PBS KIDS ScratchJr Family Creative Learning Workshop Implementation Study. A report prepared for the CPB-PBS Ready to Learn Initiative. New York, NY, & Menlo Park, CA: Education Development Center, Inc., & SRI International.
25. Corporation for Public Broadcasting Service (December 2020). "Community Collaboratives for Early Learning and Media Annual Reporting, WCTE."
26. Everhart Bedford, K. (1994, June 6). Current.org: Expansion of ready to LEARN, 1994. Retrieved 2021, from <https://current.org/wp-content/uploads/archive-site/ch/ch411r.html>

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