



Reach Out and Read

Early Literacy Development: A Pediatric Perspective

Perri Klass, MD

National Medical Director, Reach Out and Read

Professor of Journalism and Pediatrics, New York University

Reach
Out and
Read



Reach
Out and
Read



The cow jumping over the moon

Reach
Out and
Read

The Importance of a Clinic-Based Intervention

Medical Providers:

- Reach most parents and children
- Have repeated one-on-one contact with families
- Provide trusted guidance about children's development
- May serve as the only source of formalized support for poor families

Update

- Reach Out and Read started in 1989, as a single program at Boston City Hospital
- Collaboration between pediatricians and early educators
- Initial funding for expansion from Annie E. Casey Foundation, collaboration with Association of American Publishers
- National Center—501(c)3 status
- Federal funding (Department of Education)

Where we are now:

- Now over 4100 sites in all 50 states, DC, Guam, Puerto Rico, US Virgin Islands
- 34 city, state, and regional coalitions
- Over 50,000 doctors and nurses trained
- Over 3.5 million children from low-income families reached annually
 - 80% below 2x poverty level
- Over 5.7 million books distributed per year
- Over 20 million books distributed since 1989

So, after 20 years, and 20 million books, what have we learned?

- I. About the problem of children growing up without books and reading
- II. About changing pediatric practice
- III. About what happens when doctors promote early literacy
- IV. About what books mean in children's lives
- V. About policy and advocacy
- VI. About next steps

I. The problem: children growing up without books and reading

- Many children are not being read to regularly
- Children growing up in poverty are less likely to be read to
- Minority children and children in non-English-speaking households are less likely to be read to
- Starting school without early literacy skills puts children at risk for school failure

Chartbook: Reading Across America, 2007

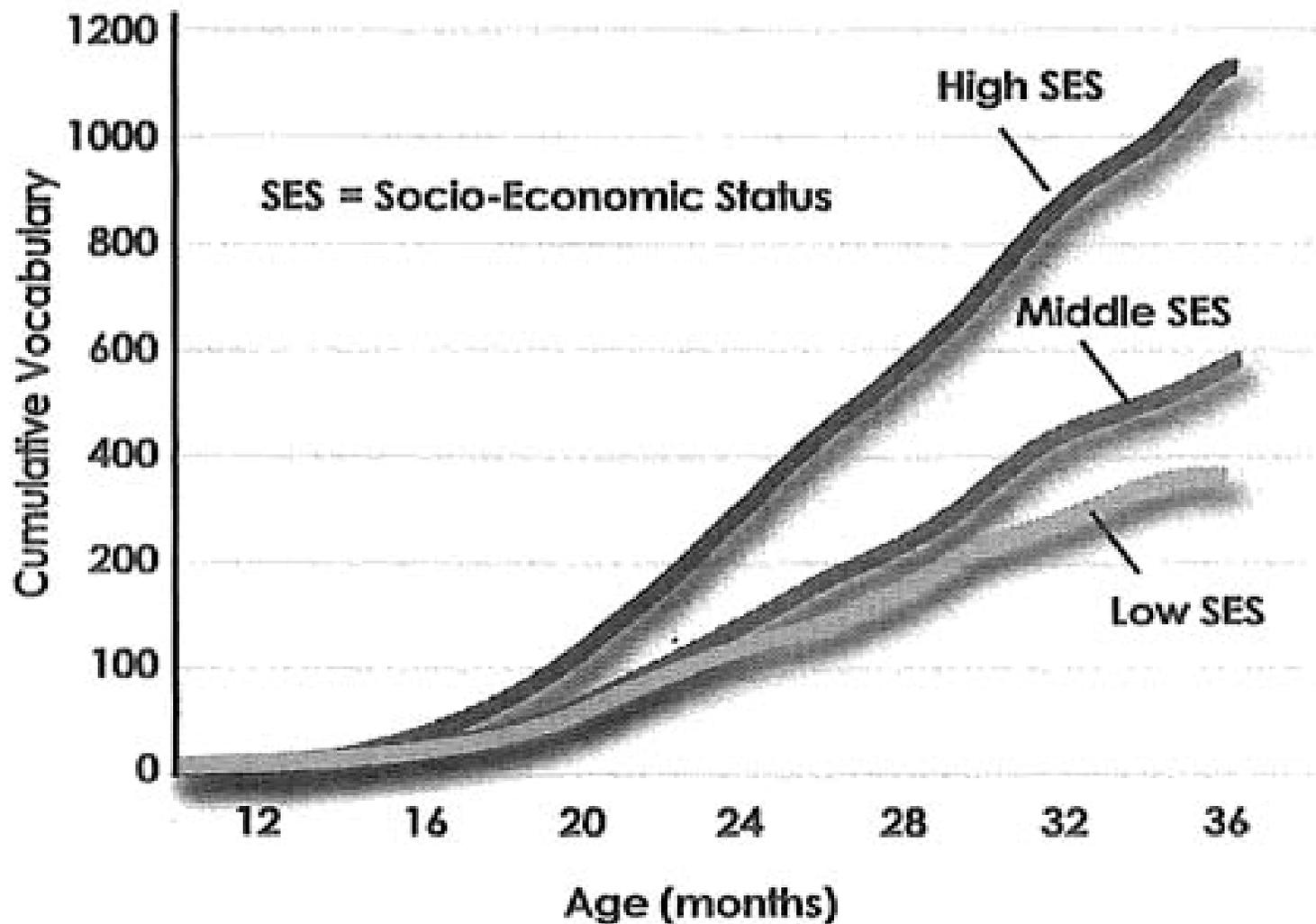
Russ et al, 2007

Data from National Survey of Children's Health, 2003, and National Assessment of Educational Progress, 2005

- 47.8% of children 0-5yo in US read to every day by
- Minority and low-income children less likely to be read to every day
- Varies by state, and within state, by family income and ethnicity

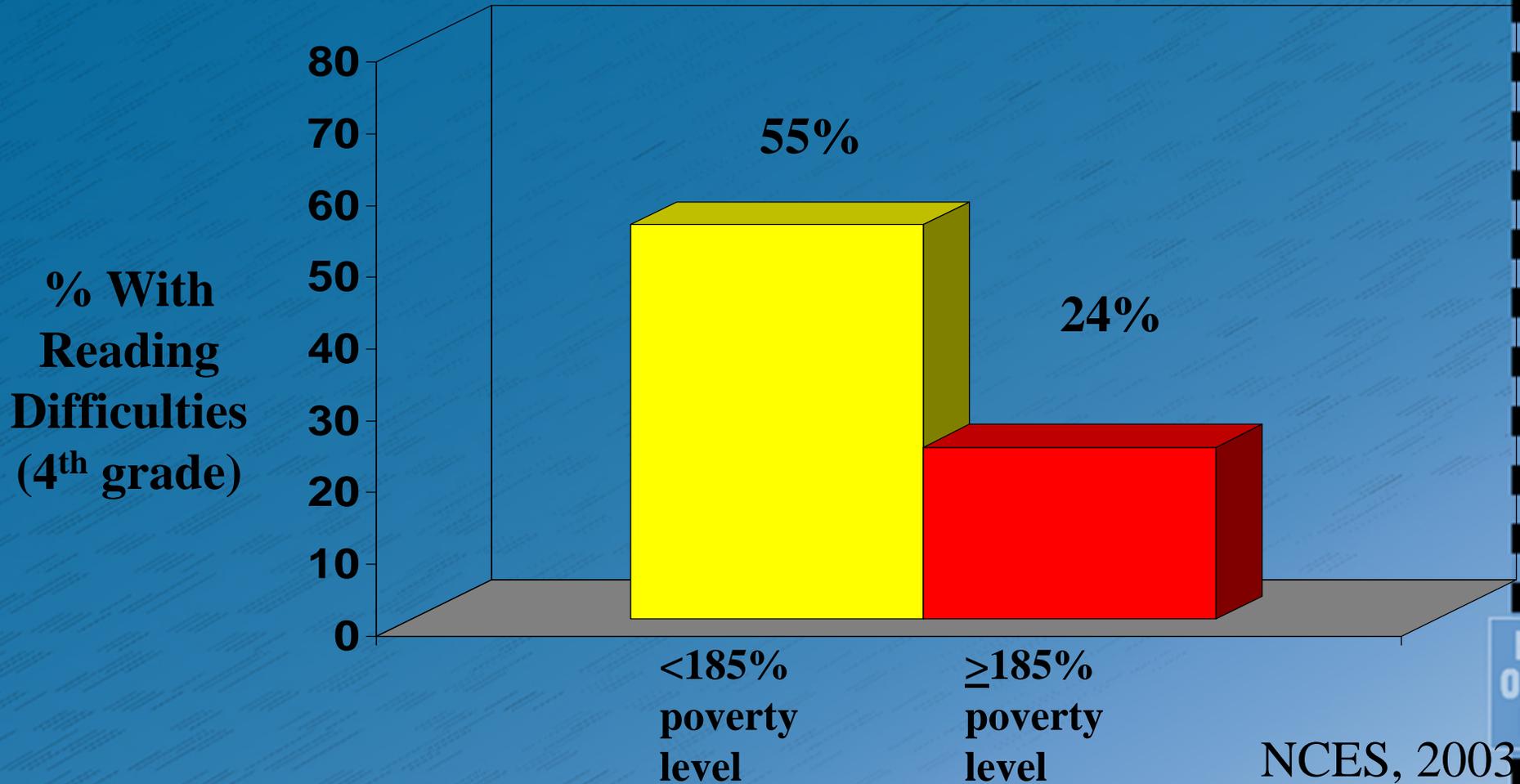
Reach
Out and
Read

Disparities in Early Vocabulary Growth



Source: Hart, B., & Risley, T. (1995). *Meaningful differences in the everyday experiences of young American children*. Baltimore, MD: Brookes.

Reading Difficulties in Low SES Children



Reach
Out and
Read

NCES, 2003

35 % OF U.S. CHILDREN ENTER
KINDERGARTEN UNPREPARED TO LEARN,
MOST LACKING THE LANGUAGE SKILLS
THAT ARE THE PREREQUISITES OF
LITERACY ACQUISITION

NATIONAL ACADEMY OF EDUCATION, 1985

Reach
Out and
Read

National Assessment of Educational Progress (2000)

- 37% of 4th graders perform below basic reading levels on national standardized tests for reading

- US 12th graders
 - 23% do not have basic reading skills
 - Only 40% considered proficient

Source: US Dept of Ed, NCES, 2000

II. Changing pediatric practice

- Primary care context
 - Behavior and development
- Making the program practical and doable in the clinic, the office, the exam room
- Helping primary care providers use their time with patients more efficiently

The ROR Model

1. Literacy-Rich Waiting Room:

- Volunteer readers demonstrate reading aloud techniques
- Displays about books, libraries, family literacy opportunities
- Gently used books





Reach
Out and
Read



Reach
Out and
Read



Reach
Out and
Read



The ROR Model



2) Anticipatory Guidance

- Underscore idea that reading aloud is important even before a child can talk
- Stress that reading aloud promotes the child's love of books by linking books with the parent's voice and attention
- Encourage parent and child to read together for pleasure





Anticipatory Guidance

- Encourage parent to read aloud and talk about the book:
 - Ask questions (“Where is the baby?”
“What does a dog say?”)
 - Point and name or describe objects
 - Relate the book to child’s experiences (“He has a sister, just like you.”)

More Anticipatory Guidance

- **Articulate age-appropriate expectations:**
 - **6-month-old babies put books in their mouths**
 - **12-month-olds can point with one finger**
 - **18-month-olds can turn board book pages**
 - **2-year-olds may not sit still to listen to a book**
 - **3-year-olds can retell familiar stories**

The ROR Model

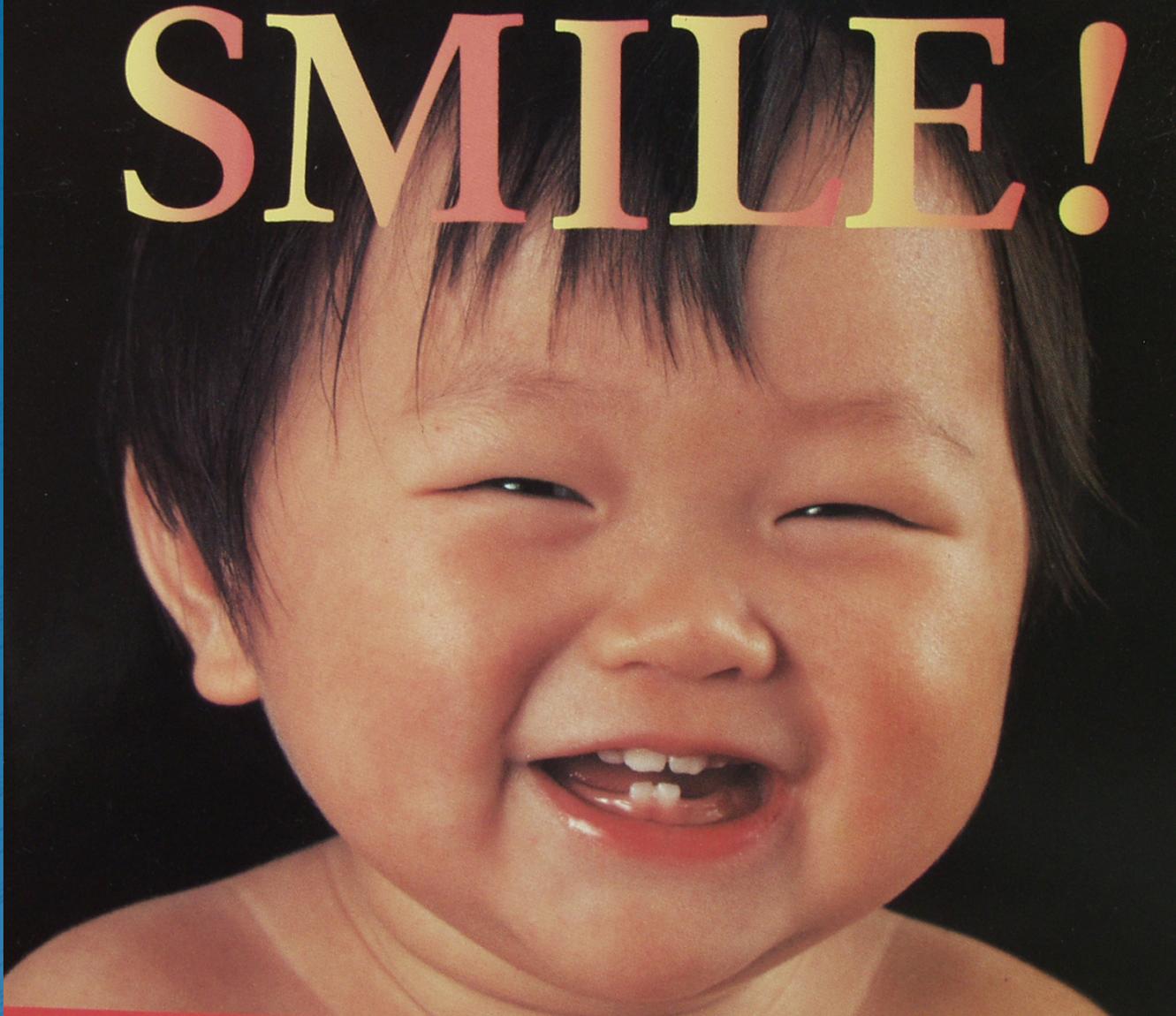


3) Books Given in Exam Room

- At each health supervision visit, a child age 6 mos. - 5 years receives a new developmentally-appropriate book
- Before kindergarten, a child receives 10 books
- Books are introduced early in the visit and integrated into the examination within the context of other anticipatory guidance

B A B Y F A C E S

SMILE!

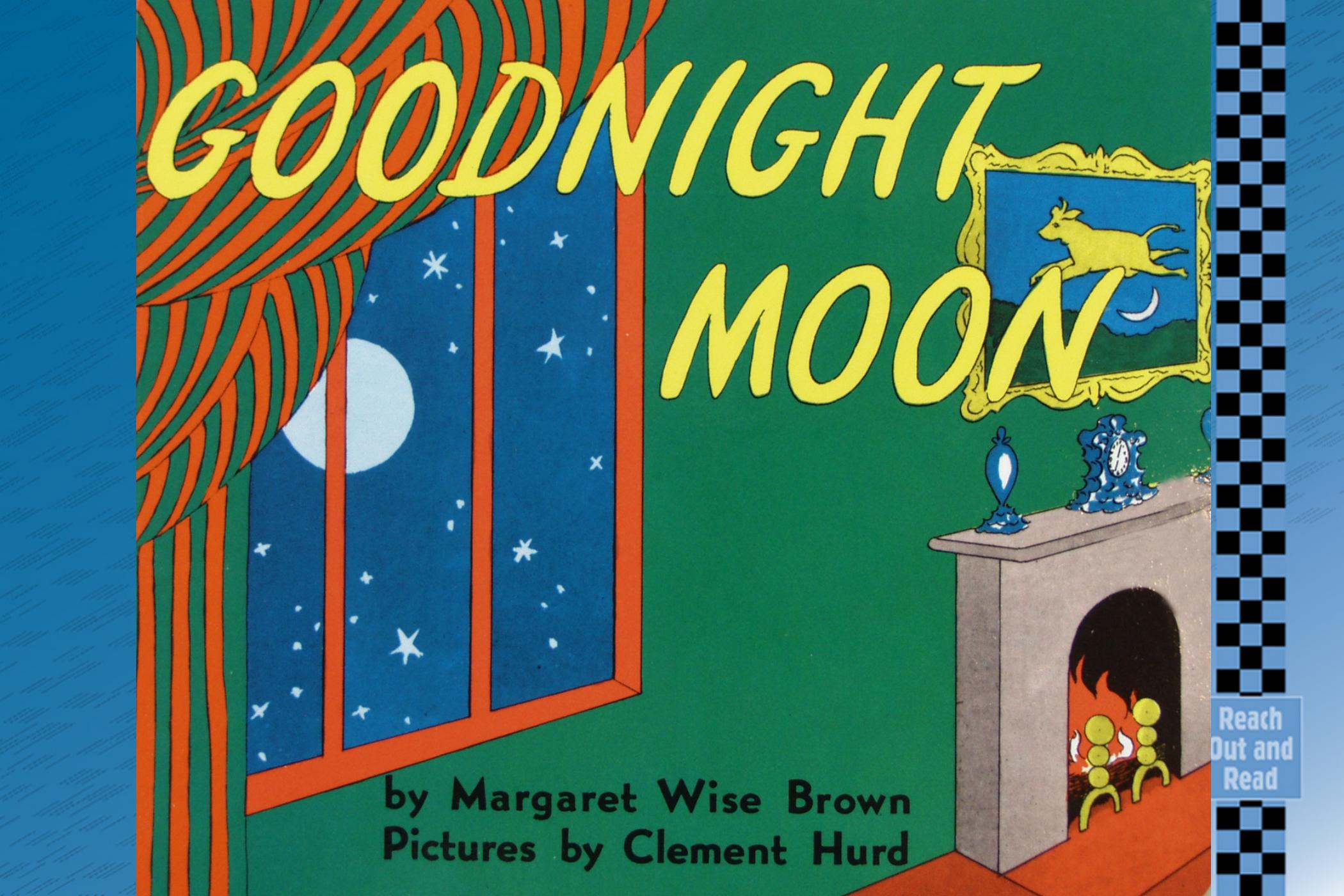


 SCHOLASTIC

by Roberta Grobel Intrater

Reach
Out and
Read

GOODNIGHT MOON



by Margaret Wise Brown
Pictures by Clement Hurd

Reach
Out and
Read

The Book as Assessment Tool

- Using the book to assess child development:
 - Fine motor development (maturity of grasp, hand skills)
 - Social/emotional interaction with others (shared attention, affect)
 - Cognitive skills (attention, memory)
 - Expressive and receptive language (vocabulary, comprehension of words)
 - Vehicle to offer parents concrete advice about child development

6-12 Months

■ Child

- Reaches for book
- Puts book in mouth
- Turns pages w/ help

– Sits in lap

– Communicates through gestures and early utterances

– Begins to understand a few words

■ Parent

– Lets child explore book

– Holds child in lap

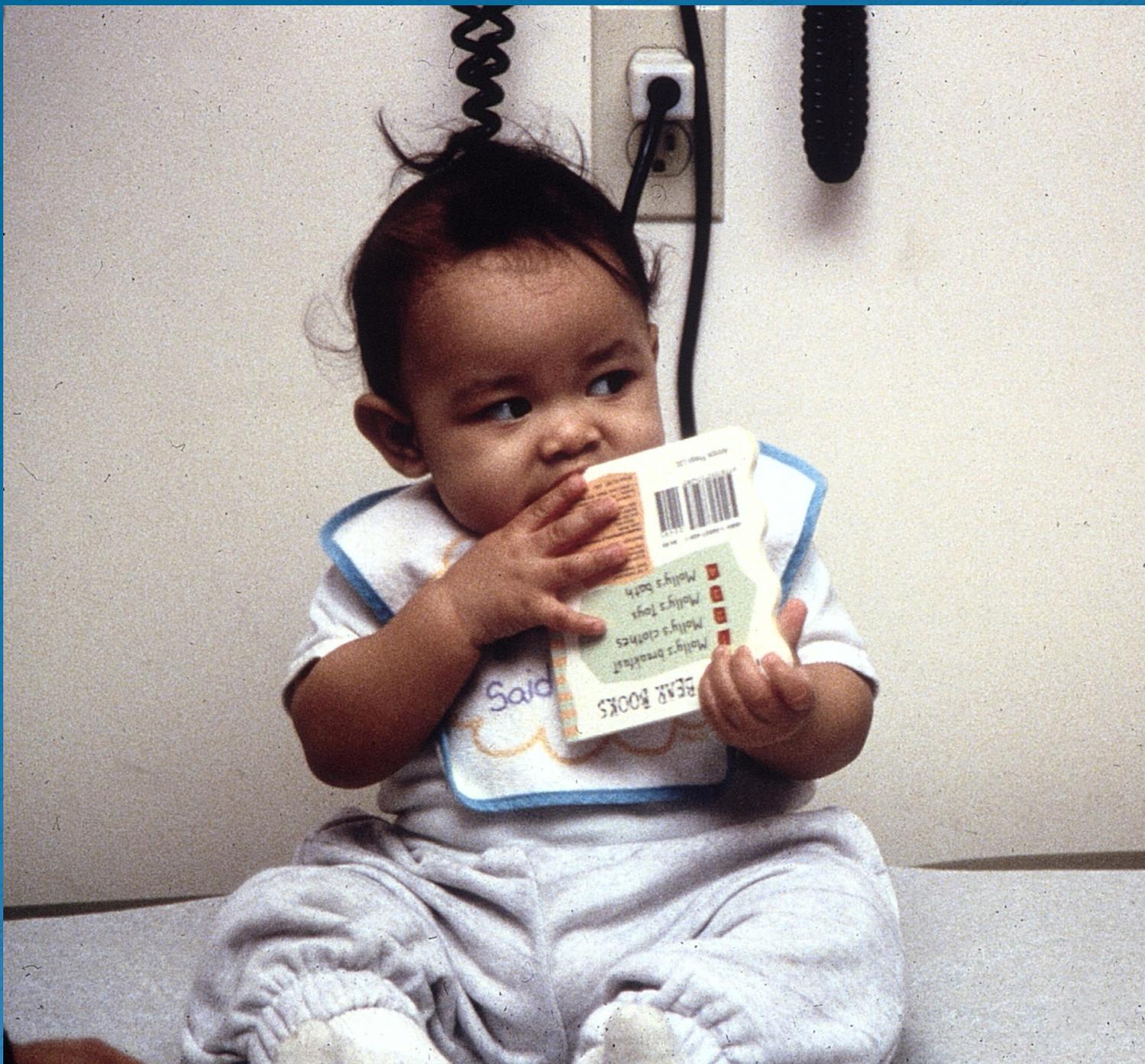
– Responds and interprets child's initiations

– Labels

– Uses gestures

– Talks during routines





Reach
Out and
Read



Reach
Out and
Read

12-18 Months

■ Child

- Holds book
- Turns board pages
- Turns book right side up
- Has short attention span
- Points when asked “where is--?”
- Points and responds to pictures
- Imitates parent’s vocals



■ Parent

- Lets child control book
- Follows child’s interest
- Asks “where is---?”
- Responds to child’s initiations
- Labels/describes
- Sings songs/rhymes
- Reads as part of routine



18- 24 Months

■ Child

- Turns pages
- Carries book around
- Fills in words of stories
- Recites parts of stories
- Reads to dolls and others
- Begins vocabulary spurt
- Begins to combine words “telegraphic” speech

■ Parent

- Lets child control book
- Repeats same stories
- Engages in verbal turn-taking
- Labels /describes
- Repeats and expands child’s utterances
- Points and asks “What’s that?”
- Relates books to child’s own experiences



24-36 Months

■ Child

- Turns paper pages
- Protests when pages are skipped or story is wrong
- Coordinates text and pictures
- Recites familiar parts of stories
- Begins to use “No”
- May know around 320 words
- Requests same book repeatedly



■ Parent

- Lets child control book
- Points out letters and reads as part of routine (e.g., street signs)
- Reads to assist with daily routines
- Labels/describes
- Asks child to name objects
- Relates books to child’s own experiences



3 Years and Older

■ Child

- Has longer attention span
- Understands more complex stories
- Anticipates outcomes
- Attempts writing
- Begins recognizing letters
- Asks questions about text (“why” questions)
- Attempts to use sentences and grammar

■ Parent

- Asks “What happened?”
- Lets child tell story
- Encourages writing
- Points out letters and sounds
- Writes, displays and points out child’s name
- Responds/expands on child’s questions/stories



III. Evidence base for literacy promotion in primary care: what happens when providers intervene?

- Do parental attitudes change?
- Do parental practices change?
- Are there other changes in the home environment?
- Do children's attitudes change?
- Do children's skills change?

Clinic-based Intervention to Promote Literacy (Needlman et. al., 1991)

- A pilot study designed to determine if exposure to a clinic-based literacy intervention promotes parents' reading aloud to children
- Conducted waiting room interviews with 79 parents regarding children's literacy orientation
- Results indicated that parents who received a book through ROR were 4 times more likely to report reading to children

Literacy Promotion in Primary Care Pediatrics: Can We Make a Difference? (High, 2000)

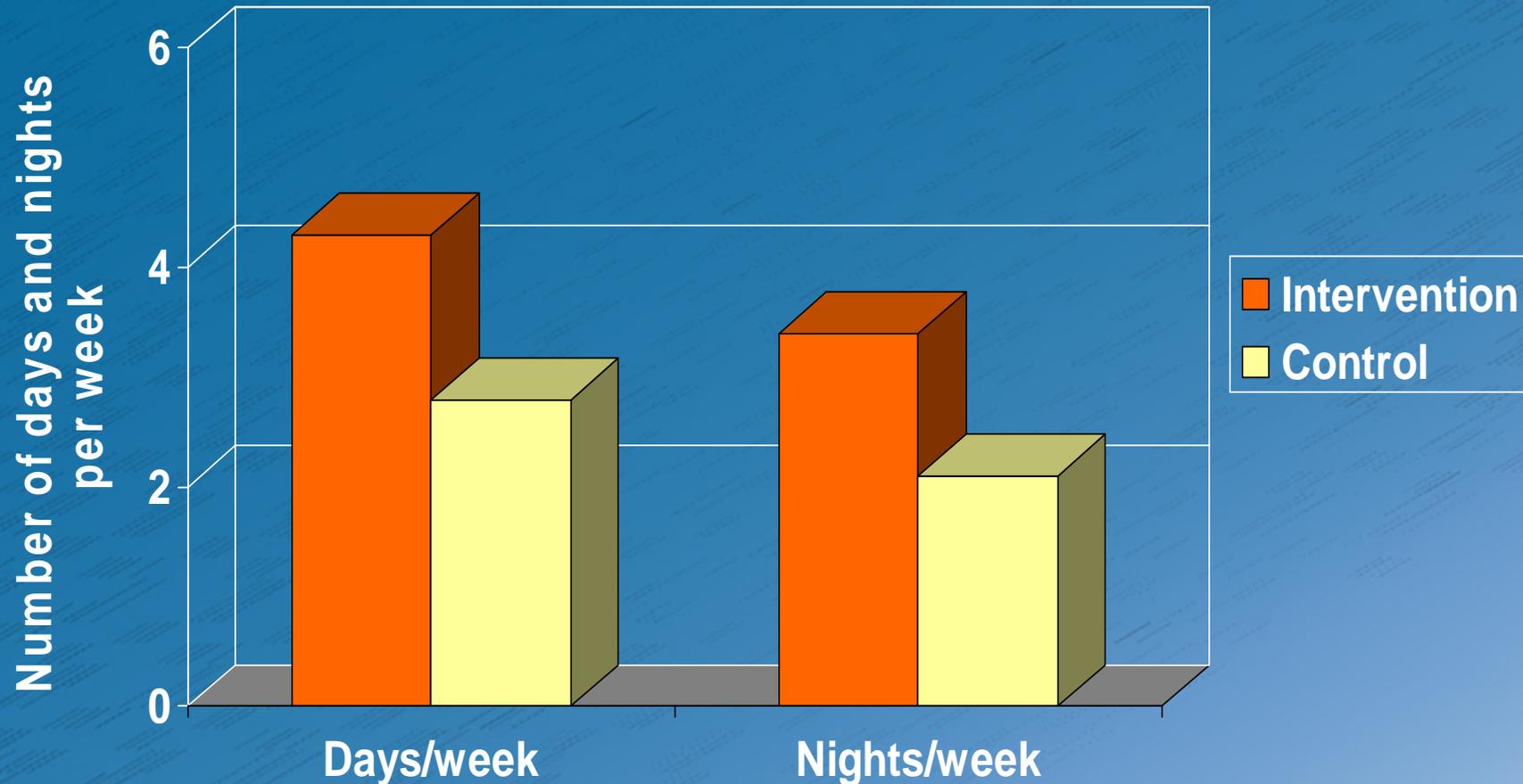
- Evaluated the impact of a clinic-based literacy program, based on the ROR model, on parent-child book sharing
- Measured “Child-Centered Literacy Orientation”
 - reading aloud as child’s or parent’s favorite activity, or usually read at bedtime
- Prospective study: 205 low-income families
 - 106 Intervention
 - 99 Control

High et al, 2000—Results:

- 40% increase in CCLO among ROR-model intervention families compared with 16% among control families
- Receptive and expressive vocabulary scores higher in older intervention toddlers
- No significant differences among younger toddlers 13-17 months
- Significant improvement in vocabulary scores for words in books and for words not in books

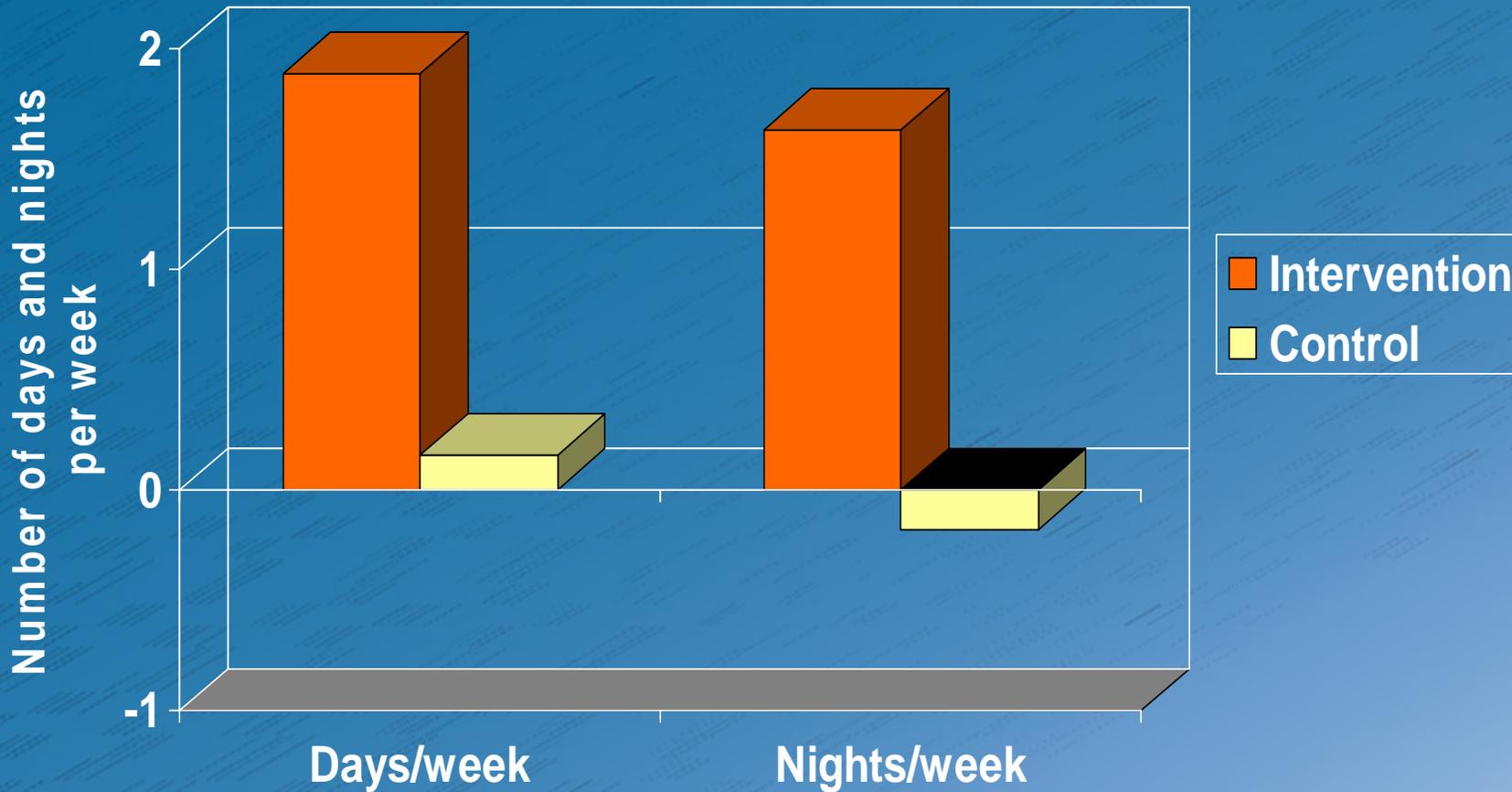
Frequency of Reading Aloud

(High et. al., 2000)



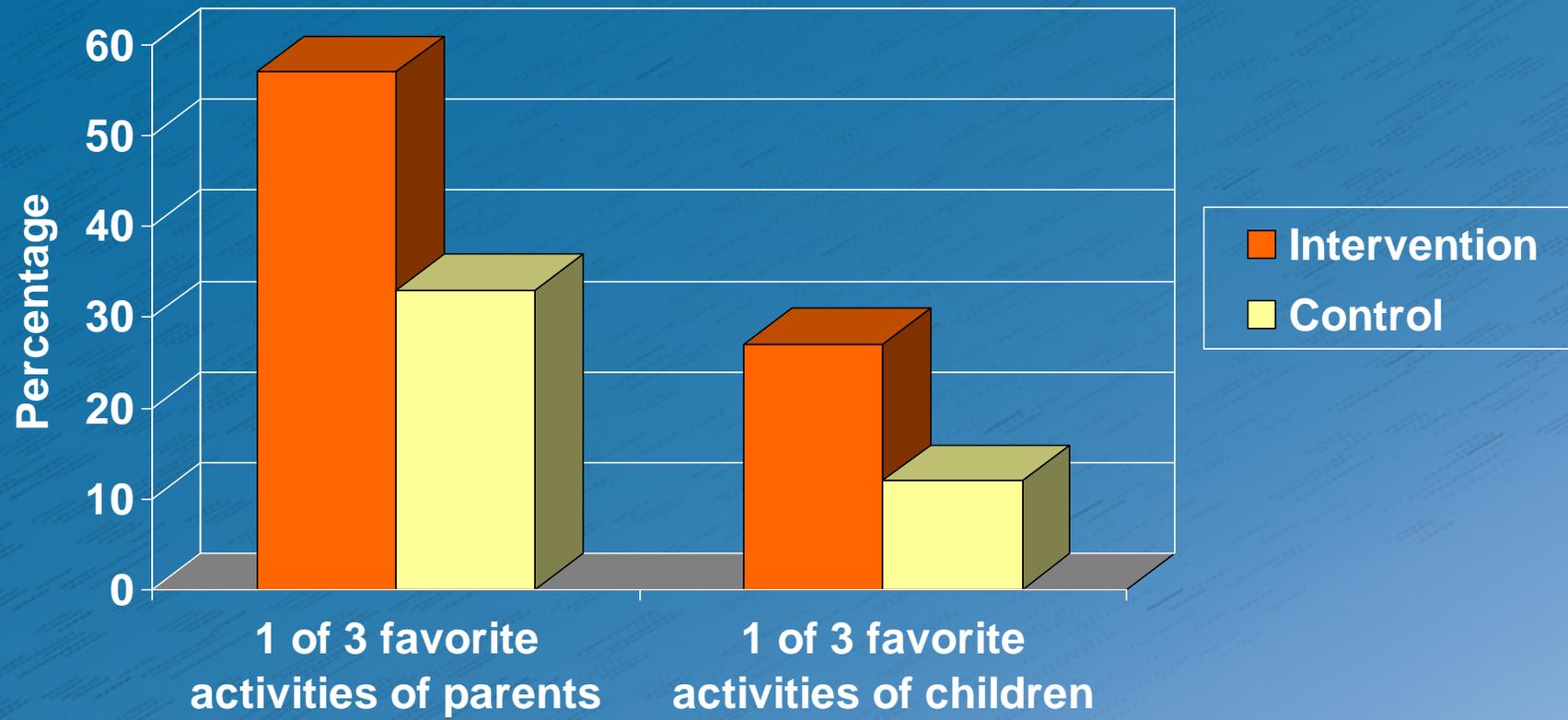
Reach
Out and
Read

Change in Parent-Child Book Sharing (High et. al., 2000)



Attitudes Toward Reading

(High et. al., 2000)



Reach
Out and
Read

The Impact of a Clinic-Based Literacy Intervention on Language Development in Inner-City Preschool Children (Mendelsohn et. al., 2001)

- Examined the impact of an ROR program on children's language development
- Prospective controlled study: 122 participants
 - 49 Intervention
 - 73 Comparison
- READ subscale on StimQ to measure parent-child activities
- Child language development tested directly with One-Word Expressive and Receptive Picture Vocabulary Tests

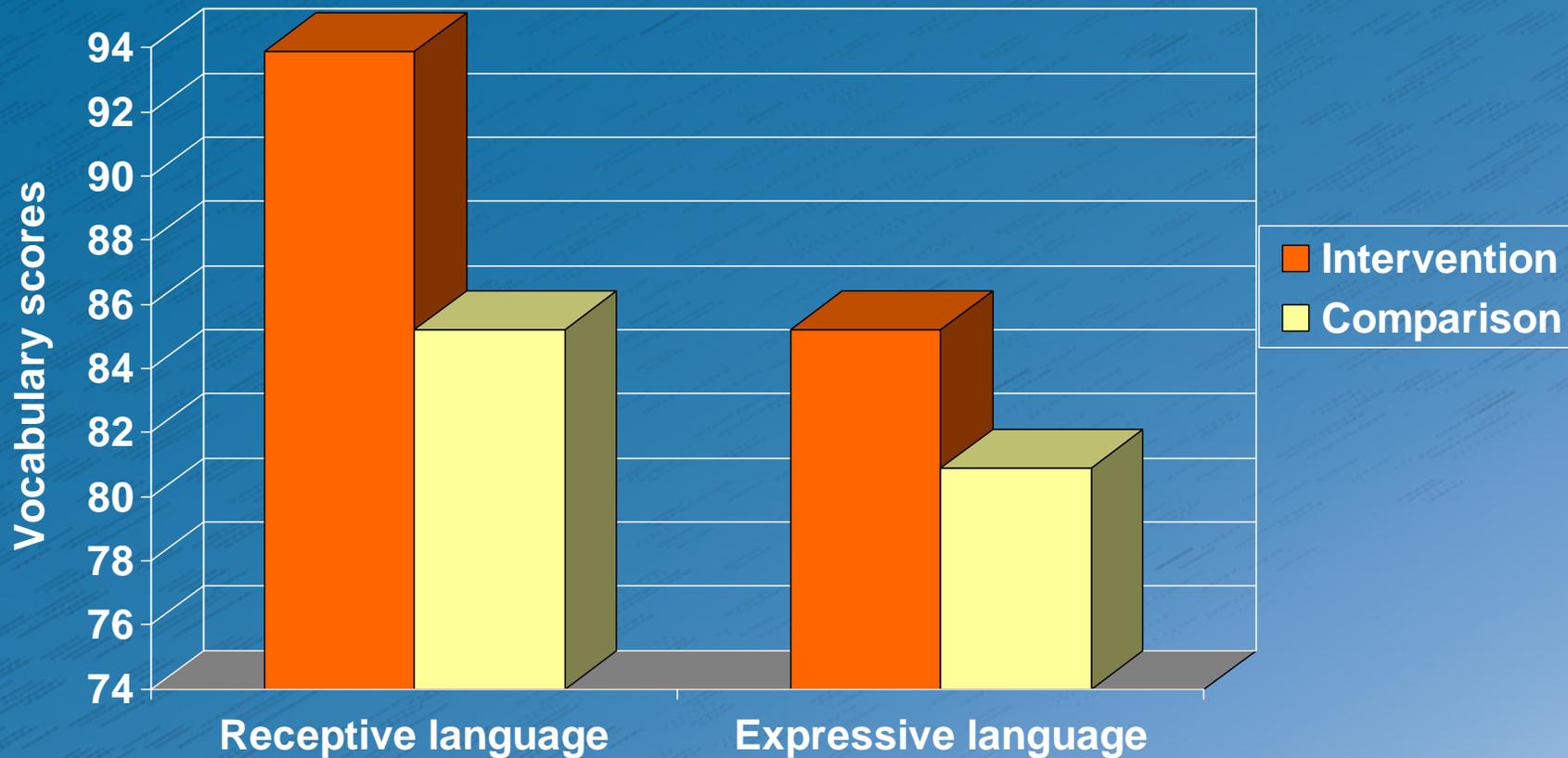
Mendelsohn et. al., 2001—Results:

Intervention group families:

- Frequency of reading to children was higher
- More children's books in home
- Increased number of contacts with ROR program associated with increased reading activities on StimQ
- 8.6 point increase in Receptive Vocab scores
- 4.3 point increase in Expressive Vocab scores
- Each contact with ROR associated with score increase

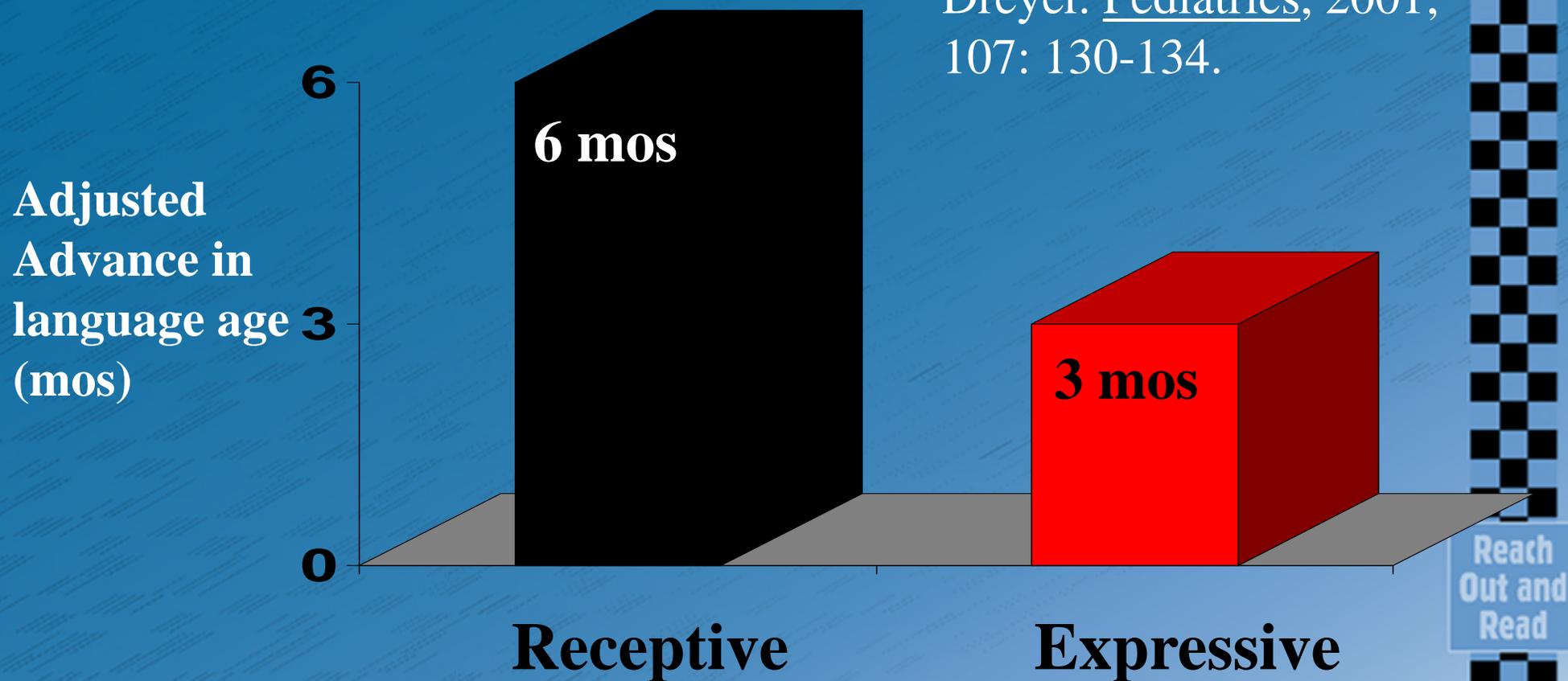
Children's Expressive and Receptive Language Competencies

(Mendelsohn et. al., 2001)



Effect of ROR on Language Age

Mendelsohn, Mogilner,
Dreyer. Pediatrics, 2001;
107: 130-134.



Reach
Out and
Read

Summary of Research

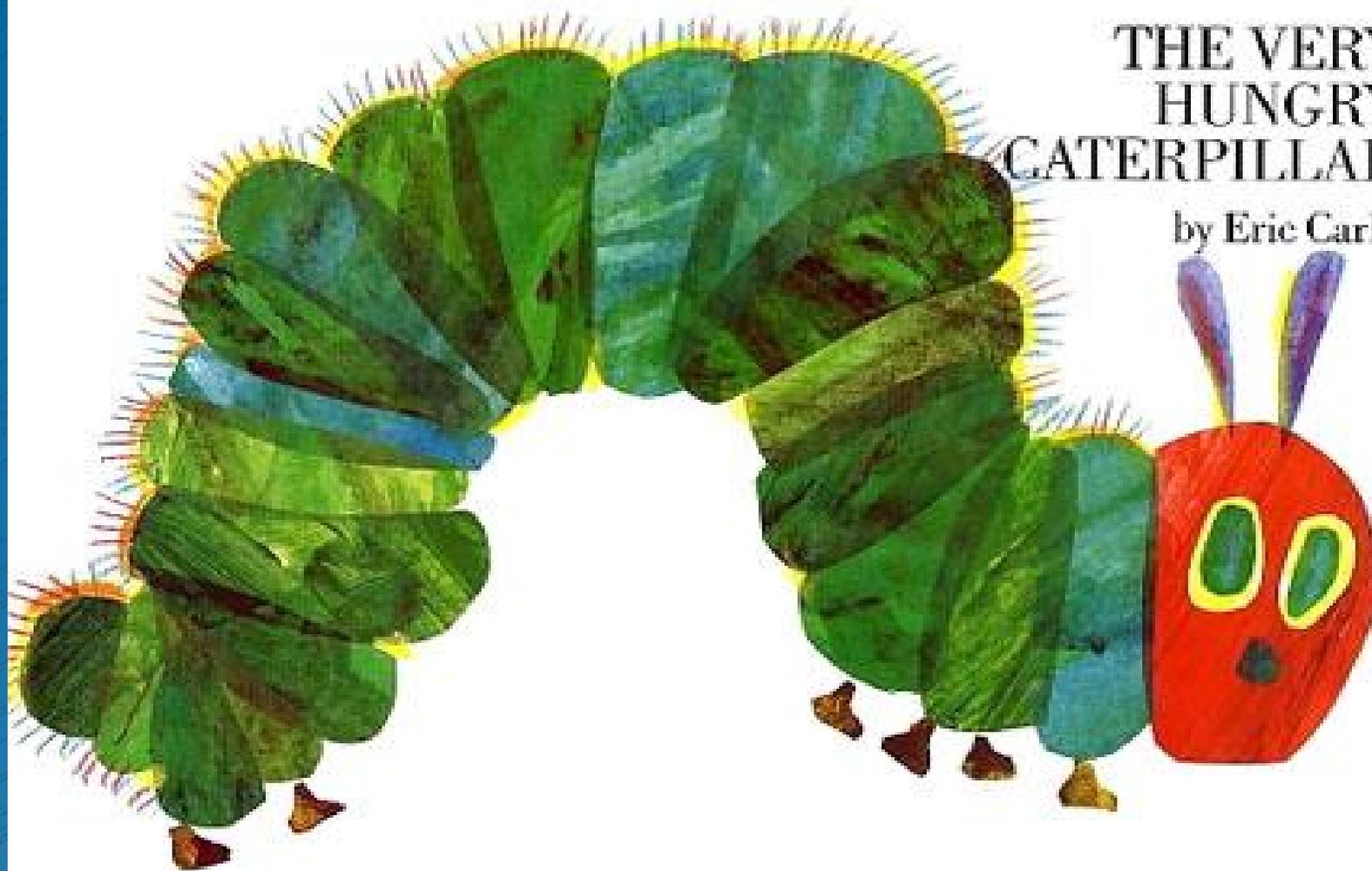
- ROR significantly and positively influences the literacy environment of children
 - Parents read more to their children
 - Parents and children have more positive attitudes toward reading aloud
- Children participating in ROR tend to have increased language development in comparison to non-participating children

IV. What books mean in children's lives

- Reading aloud and language
- Books and school readiness
- Reading aloud and social-emotional development
- Reading, books, and daily routine
- Literacy as a human right

THE VERY HUNGRY CATERPILLAR

by Eric Carle



Reach
Out and
Read

Don't play
with your
food!



Yummy YUCKY



Leslie Patricelli

Reach
Out and
Read

Burgers are yummy.



Boogers are yucky.

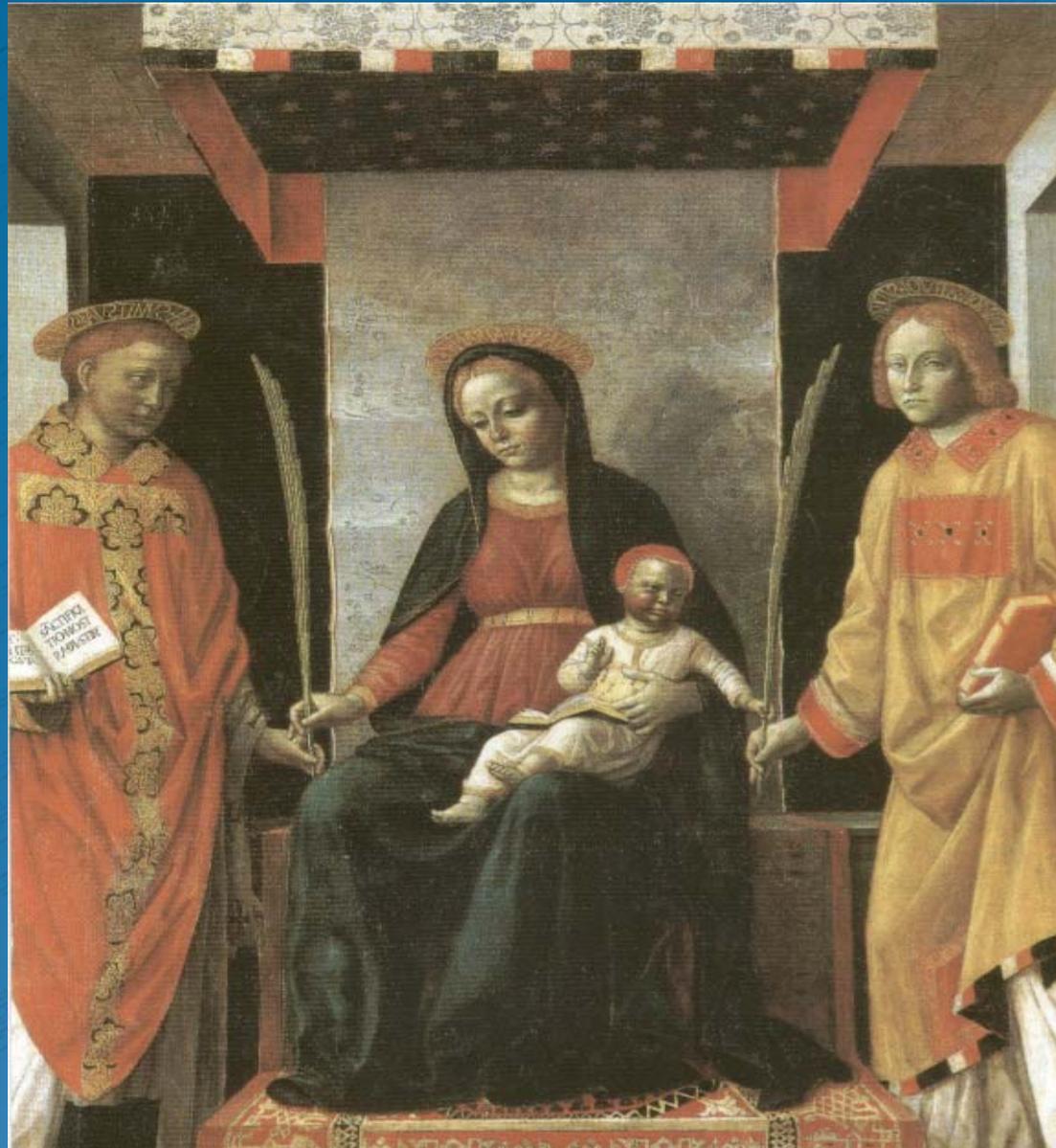


Benefits of Reading Aloud

- Reading aloud to children:
 - Stimulates imagination
 - Fosters language development
 - Promotes reading skills
 - Prepares children for school success
 - Encourages decontextualized language
 - Motivates children to love books



Reach
Out and
Read



Reach
Out and
Read



Reach
Out and
Read



Reach
Out and
Read



Reach
Out and
Read

V. Advocacy and policy

- Including health care providers in the early childhood education conversation
- Inviting legislators into clinical settings to see Reach Out and Read in action
- Legislation and support at state and federal levels

IV. Where do we go from here?

- Spanish-speaking families: Leyendo juntos!
- American Indian and Alaskan Native families
- Military families
- Homeless families
- Children with special needs

- Health literacy
- Media and media literacy
- Parenting interventions in primary care—BELLE Project

Leyendo juntos: lessons and opportunities

- Books with appropriate language and cultural references
 - Monolingual Spanish versus bilingual
 - Varied cultures and varied levels of assimilation
- Messages for parents—language and culture
 - Focus groups
- Helping providers with limited Spanish
 - “Medical Spanish” tools for literacy
- Working through interpreters

Un consejo importante de su doctor:

El amor por los libros empieza en los brazos de los padres.

Esperamos que usted y su familia tengan muchas horas de placer...



Leyendo Juntos

El amor por la lectura...es parte de una niñez sana ■ Making books part of a healthy childhood



www.reachoutandread.org



Un consejo importante de su doctor:

Leyendo Juntos

¡Es una muestra de amor!
Lea con sus hijos lo más posible.



El amor por la lectura... es parte de una niñez sana ■ Making books part of a healthy childhood www.reachoutandread.org



Leyendo Juntos

Un consejo importante de su doctor:
Lean juntos lo más posible

Leyendo con su hijo en voz alta le ayudará a tener éxito en la escuela y en su futuro.

*El amor por la lectura... es parte de una niñez sana
Making books part of a healthy childhood*

www.reachoutandread.org



Why ROR for AI/AN?

- 80% of AI/AN children on reservations live in families with income below 200% of the federal poverty level
- Compared to other minority groups, AI/AN children have:
 - poor test scores
 - low HS graduation rates
 - lack of persistence in college
- IHS and tribal clinics serve 75% of AI/AN children

Reach Out and Read American Indian/Alaska Native

- Currently 70 IHS and tribal clinic sites participating in ROR
- Approximately 40,000 children served annually
- Approximately 53,000 books distributed annually
- Partnership with American Academy of Pediatrics

Strategies for working with AI/AN parents:

- Provide books with images that resonate with daily lives and cultural traditions
- Encourage telling stories and asking questions using the pictures in the book
- Recognize the importance of extended family members as readers and story-tellers
- Emphasize the connection between the sound of a parent's voice and the book





Reach
Out and
Read



Reach
Out and
Read



Reach
Out and
Read

Why ROR for Military Families?

- ROR presents a unique opportunity to support and strengthen military families
 - Helping families develop skills and knowledge and building routines which reassure children, especially during stressful periods such as separations, deployments and relocations.
- Military healthcare system provides systematic healthcare for military families.
 - By incorporating ROR practices into this system the message of early literacy will reach all these children without building additional infrastructure!

Reach Out and Read in the Military

- ROR currently serves 90,000 military children, 25% of the ROR eligible population within the military healthcare system
- ROR has sites on 30 military bases worldwide



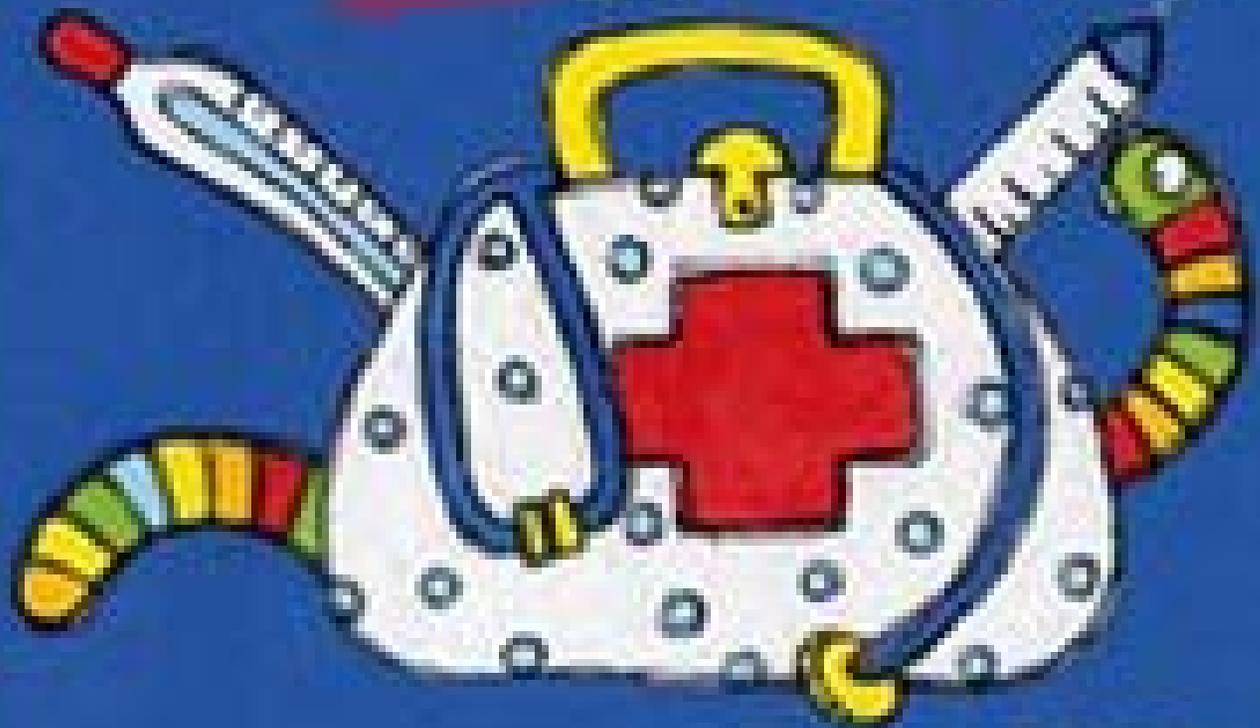
VI. Reach Out and Read: International Connections

- Philippines
 - Philippines Ambulatory Pediatrics Association (PAPA)
- Italy: Nati per Leggere
 - Associazione Culturale Pediatri
 - Associazione Italiana Biblioteche
- Israel
 - Several sites serving Bedouin and Hebrew speaking children
- Portugal
 - Collaboration with a national literacy plan
- Lesotho
 - Program in a Center of Excellence for treatment of HIV/AIDS
- Canada
 - Read Speak Sing
 - Canadian Paediatric Society



Janna Carlioli

dall'aerosol alla Zeta



Illustrazioni di Giulia Furlan



Reach
Out and
Read



Reach
Out and
Read

KAMOHELO TLHAKHONG EA NGOANA OA MOSOTHO

***A TRADITIONAL WELCOMING
OF A MOSOTHO CHILD***

Peter Maphahane MBE

Reach
Out and
Read

International challenges and opportunities

- Different medical systems, different ways of delivering primary care
 - Doctors, health workers, immunization clinics
- Availability of books for young children in the necessary languages
 - Expense of shipping books from overseas
- Mother tongues and tribal languages
- Cost and value of books in very poor countries

2007 Confucius Prize for Literacy

- The UNESCO Confucius Prize for Literacy recognizes the activities of outstanding individuals, governments or governmental agencies and non-governmental organizations (NGOs) working in literacy serving rural adults and out-of-school youth, particularly women and girls.



International opportunities

- To increase focus on child development in primary care
- To emphasize the promise that the child will go to school and learn to read
- To deliver books into the hands of mothers, with the message about helping their children learn
- To enhance the appeal of clinic visits
- To connect to other literacy and health literacy efforts



My body

Can you find all these parts of your body?

back

ankle

leg

foot



Reach
Out and
Read



Reach
Out and
Read



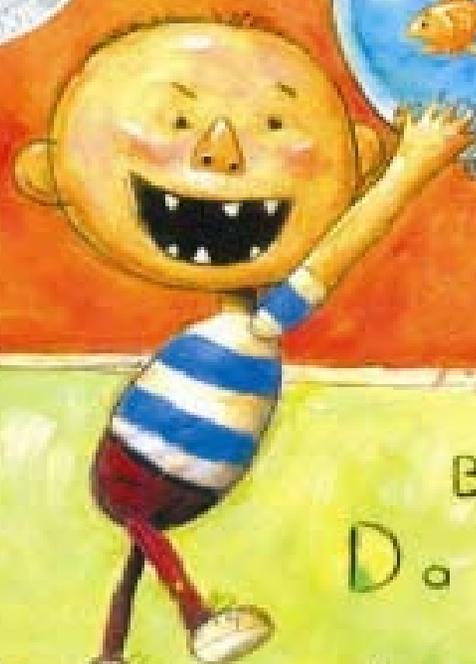
Reach
Out and
Read

What do young children need? Stimulation and language

- Language development takes place through communication
- Early literacy development begins at birth
- None of this involves formal “teaching;” young children learn from daily life
- The architecture of the brain is shaped by this learning



No, David!



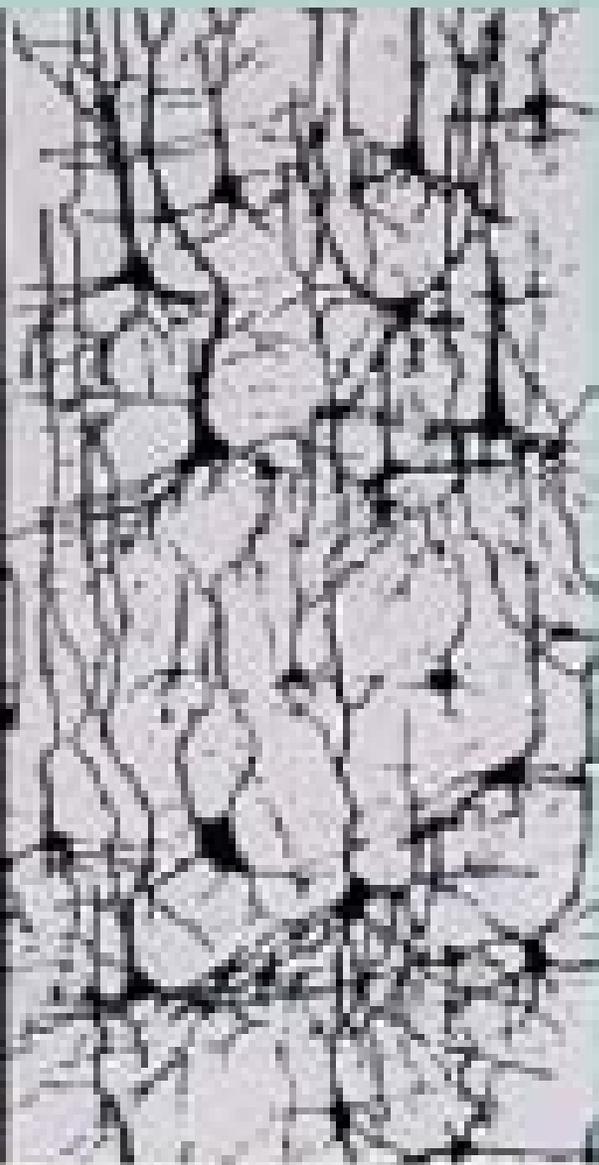
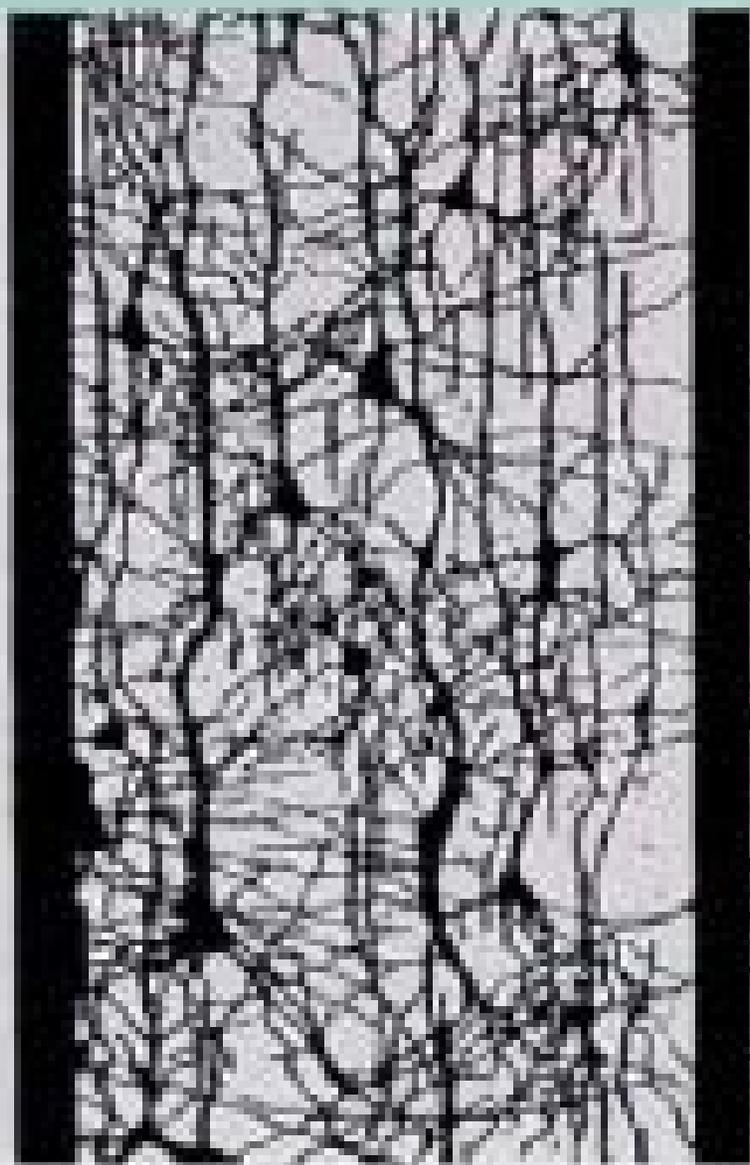
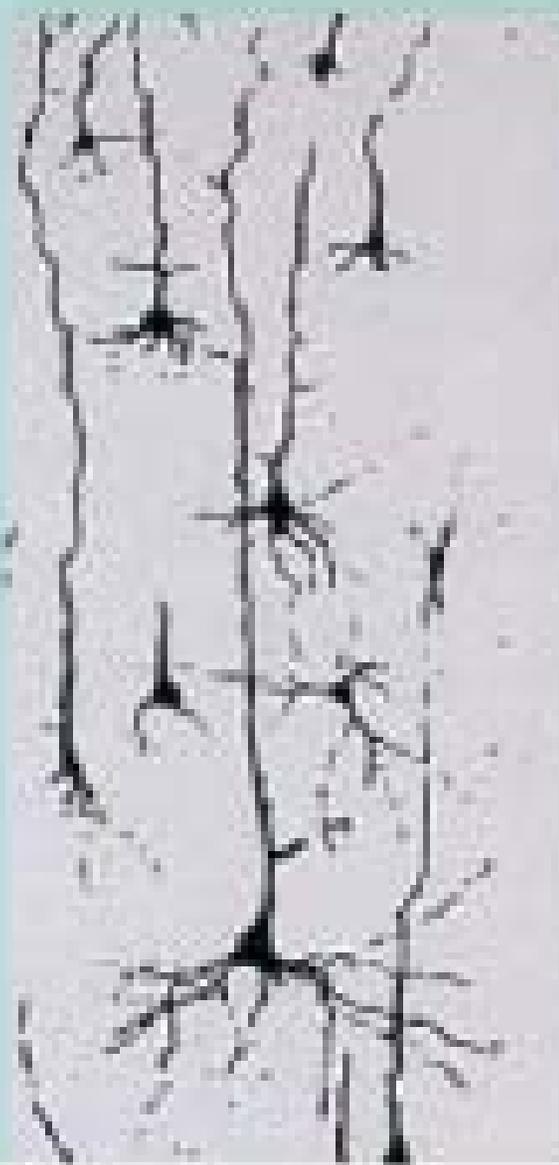
By
David
Shannon

Reach
Out and
Read

At Birth

6 Years Old

14 Years Old



What do young children need? Childcare, preschool, education

- ALL good childcare is educational—don't set up dichotomies between learning and playing
- Double jeopardy: the most at-risk children often face the most stressed institutions
- Some of the best studies have shown long-term advantages of really good pre-schools





Reach
Out and
Read

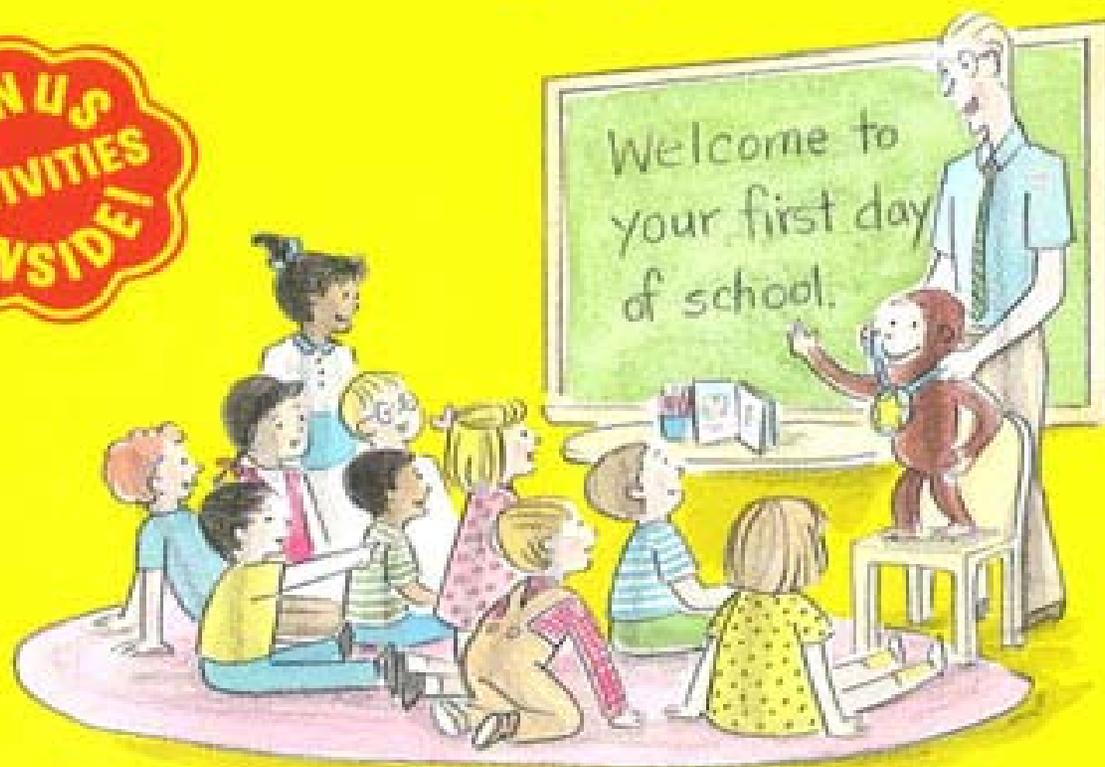


Reach
Out and
Read

MARGRET & H.A. REY'S

Curious George's First Day of School

BONUS
ACTIVITIES
INSIDE!



Reach
Out and
Read

Wemberly Worried



by **KEVIN HENKES**

Reach
Out and
Read

By the time the first day arrived, Wemberly had a long list of worries.

What if no one else has spots?

What if no one else wears stripes?

What if no one else brings a doll?

What if the teacher is mean?

What if the room smells bad?

What if they make fun of my name?

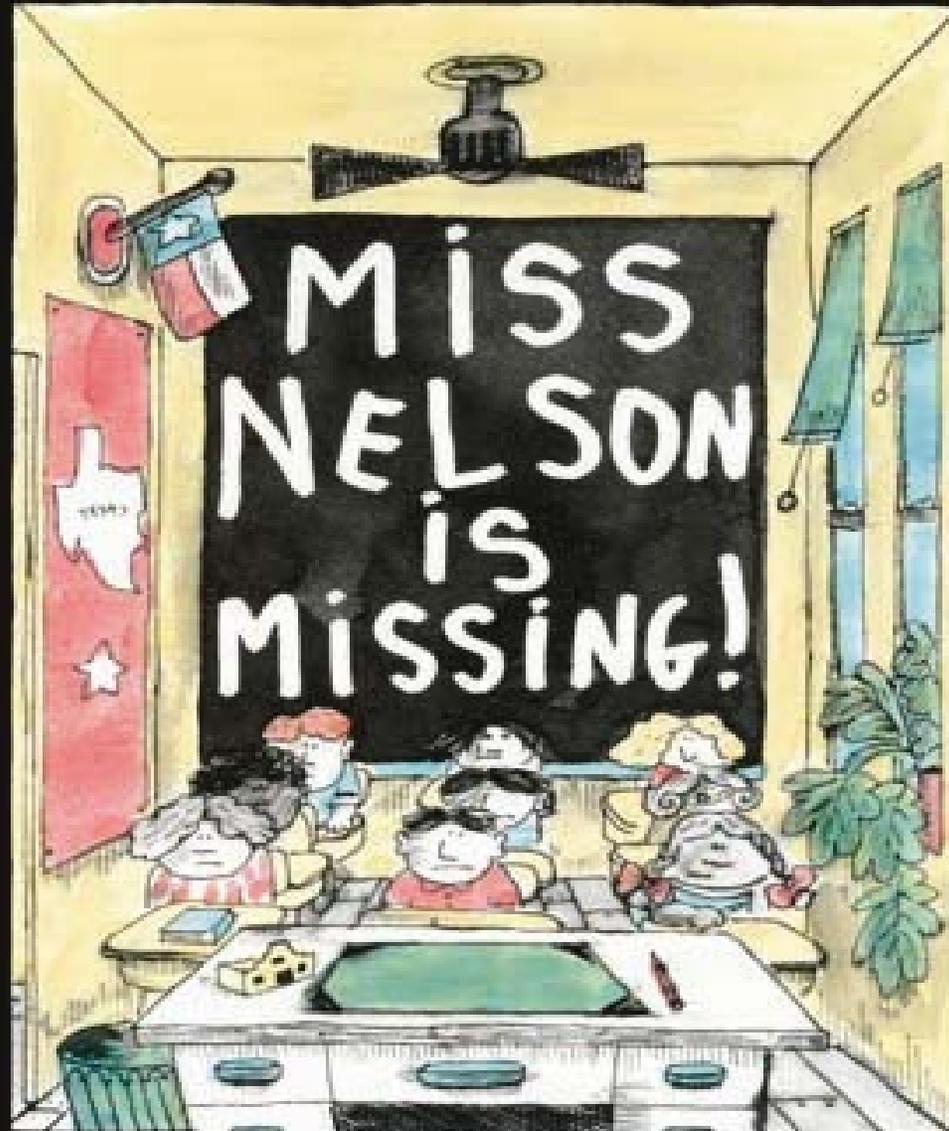
What if I can't find the bathroom?

What if I hate the snack?

What if I have to cry?



HARRY ALLARD



JAMES MARSHALL

Reach
Out and
Read



Reach
Out and
Read

The Teacher

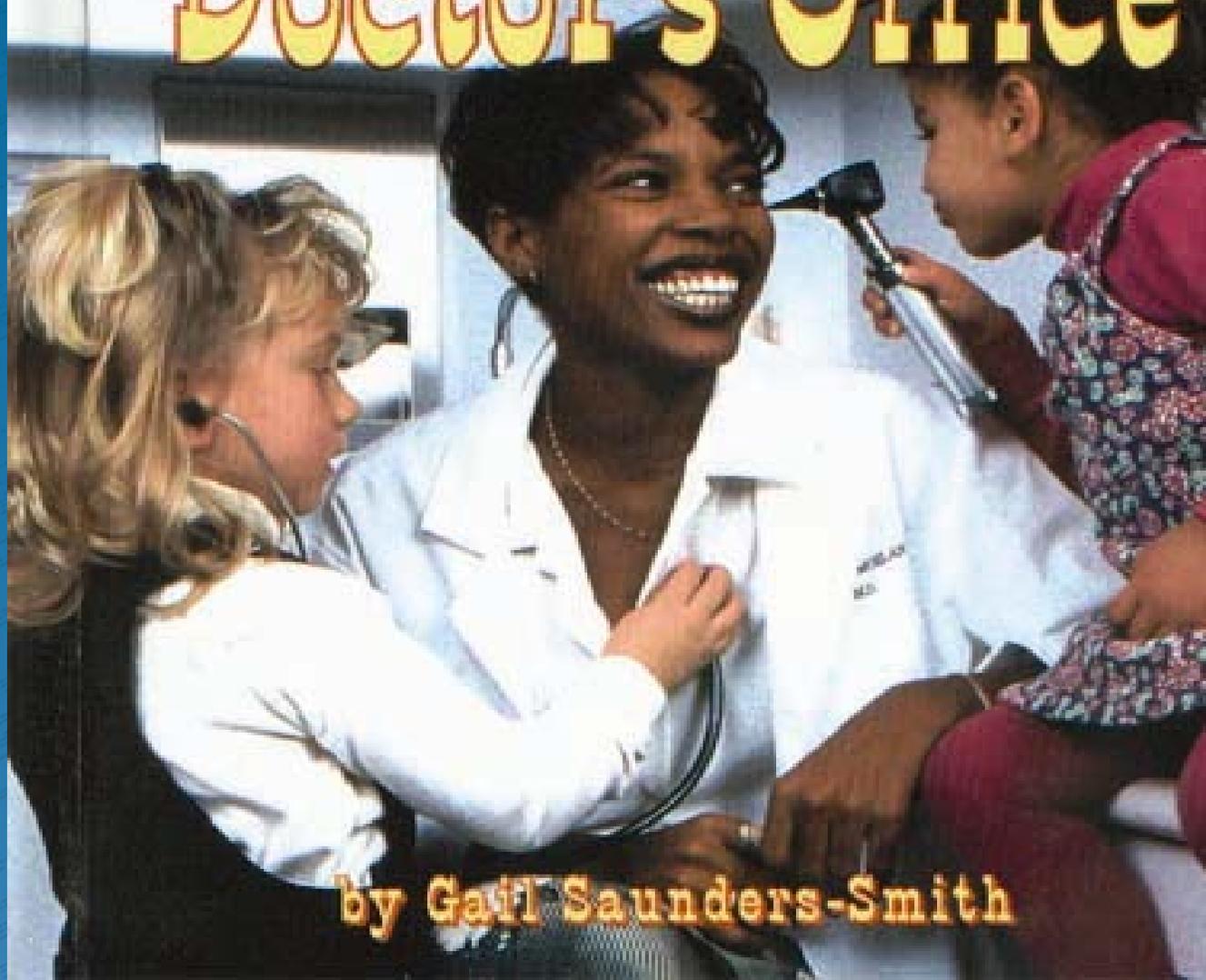
from the

Black Lagoon



by Mike Thaler · pictures by Jared Lee

The Doctor's Office



by Gail Saunders-Smith

Reach
Out and
Read

MARGRET & H.A. REY'S

Curious George

Visits the Library

BONUS
ACTIVITIES
INSIDE!



Reach
Out and
Read

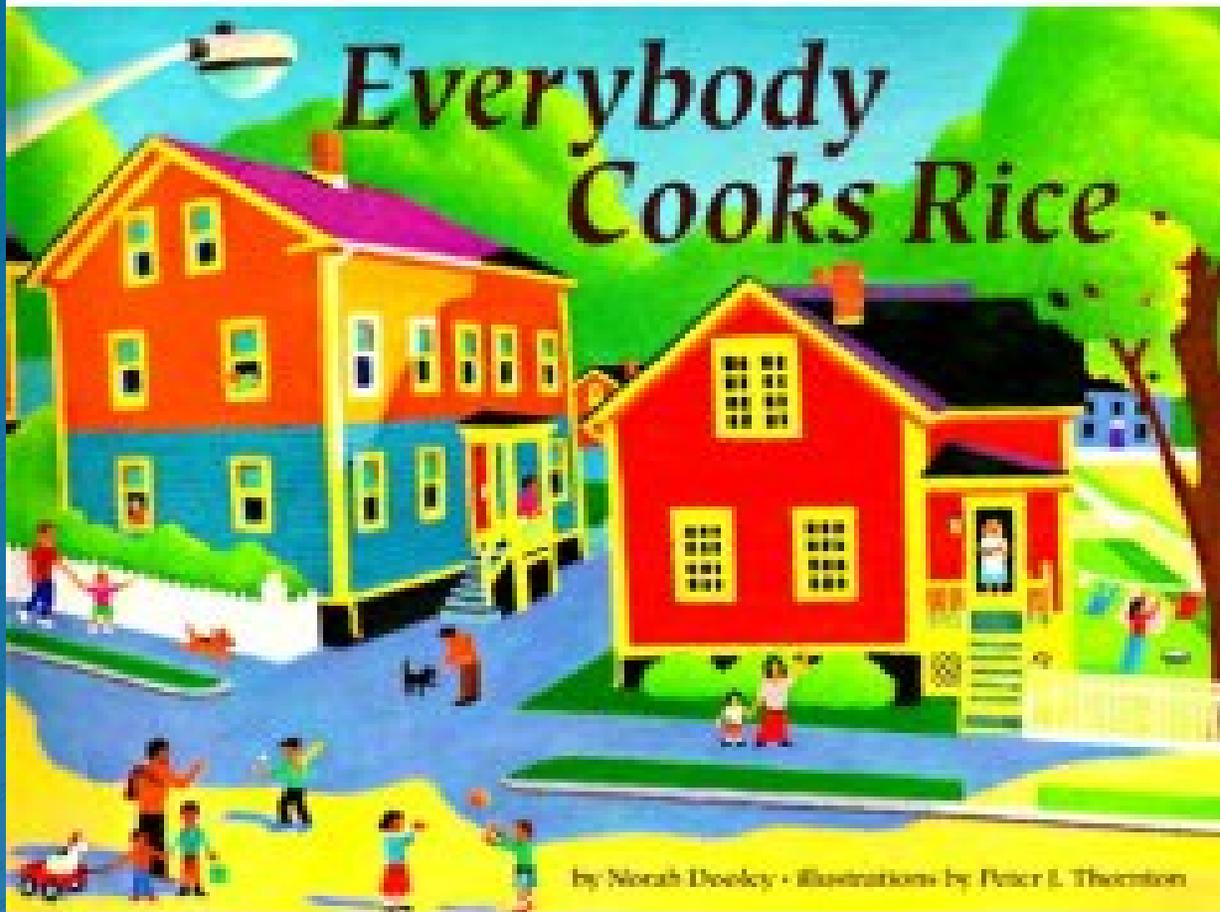
Lola at the Library



Anna McQuinn
Rosalind Beardshaw

Reach
Out and
Read

Everybody Cooks Rice



Reach
Out and
Read

BEDTIME FOR FRANCES



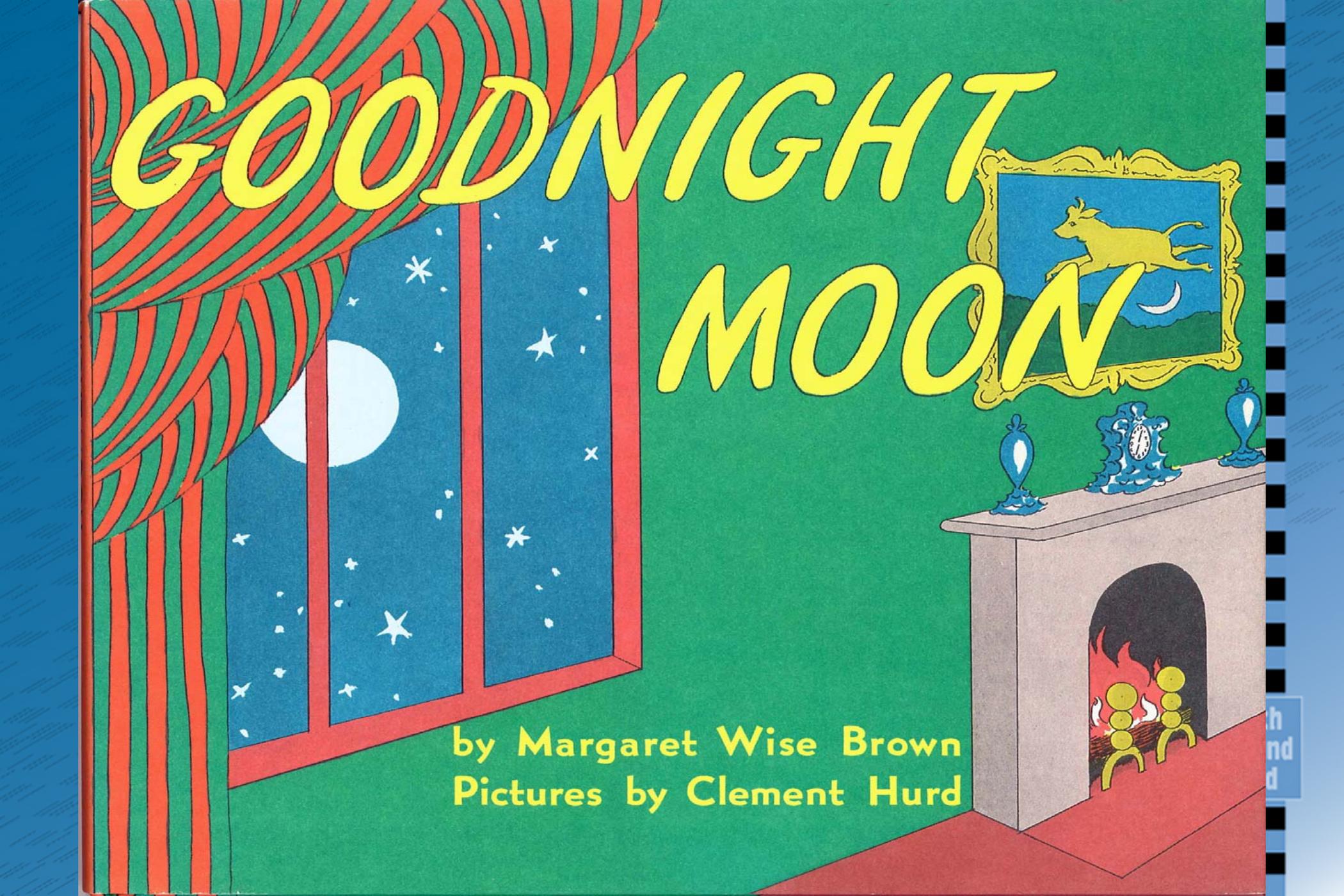
by Russell Hoban
Pictures by Garth Williams

Reach
Out and
Read



Reach
Out and
Read

GOODNIGHT MOON



by Margaret Wise Brown
Pictures by Clement Hurd