

LISA GUERNSEY

MICHAEL H. LEVINE

NEW AMERICA

JOAN GANZ COONEY CENTER/SESAME WORKSHOP

TAP, CLICK, READ

GROWING READERS IN A WORLD OF SCREENS



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Advance Praise for *Tap, Click, Read*

“In the complex field of kids media, Lisa Guernsey and Michael Levine have written an important and digestible book filled with key insights, cutting-edge research, and suggestions that all parents should heed. As someone who’s immersed in this world, I can’t think of two better people to shed light on interactive technology and digital learning. *Tap, Click, Read* is a must-read for all parents, teachers, and those who care about kids.”

—**James P. Steyer**, founder and CEO, Common Sense Media

“A thoughtful look beneath the hood of the ‘quiet crisis’ of children’s reading and into a world that’s at once more fascinating, more nuanced, and more promising than most of us imagined. This book will be essential reading for parents, educators, developers, and policymakers for a generation.”

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“*Tap, Click, Read* is about connecting all children to rich interactive digital learning networks, mindful clicking and playing, and the powers of traditional literacy and new digital literacies when they are mixed and melded. It transcends the old ‘Is it good or bad?’ debate around digital and social media and gets to the heart of the matter: How we can make old literacy and new media work for all kids in the service of a better world? It is a crucial read for teachers, parents, policymakers, and concerned citizens.”

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“Explore, inquire, reflect! Guernsey and Levine remind us that reading remains central to the learning process, moving us past fear of the techno-drug to model thoughtful, directed media use that can build receptive and expressive communication skills, enlarge children’s worlds and enhance their learning. *Tap, Click, Read* is our back-to-the-future guidebook to educating a smarter, kinder generation.”

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“*Tap, Click, Read* is a truly readable, interesting, and informative book about technology for promoting (not displacing!) literacy, language, and thought. Better still, it is complete with take-homes for parents, teachers, and policymakers. I love this book!”

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Psychological Sciences Department, Brown University

“If you want to know the latest about the new world of media and technology and its potential for young children’s literacy development, this is the book for you. Simply the best book on the topic! Highly readable, highly informative, it is a must-read for parents, educators, and policymakers.”

—**Susan B Neuman**, PhD, co-author, *Giving Our Children A Fighting Chance*,
professor and chair of the Teaching and Learning Department at the Steinhardt
School of Culture, Education, and Human Development at New York University,
former assistant secretary, US Department of Education

“This excellent book provides a clarion call and a blueprint for change: rapidly advancing technology is the difference maker for a level learning field for early learning and lifelong literacy. *Tap, Click, Read* provides the evidence, the scalable models, and a fresh national strategy to ensure that every child gets a fair shot at success in a digital age.”

—**Bev Purdue**, former governor, North Carolina, and chair,
Digital Learning Institute

“For everyone who cares about helping children make the most of today’s digital world, *Tap, Click, Read* is the most comprehensive review of what we know about learning in this age of screen technologies. It is smart, accessible, and compelling!”

—**Ellen Wartella**, PhD, Al-Thani Professor of Communication,
professor of psychology, and professor of human development
and social policy at Northwestern University

“In this digital wild west, Guernsey and Levine are the Lewis and Clark of our time, mapping the best trails for venturesome parents and educators. They strike the perfect tone as guides for this challenging terrain: patient, optimistic, and knowledgeable. *Tap, Click, Read* helps us see how we got here and arms us to create a better future.”

—**Milton Chen**, PhD, senior fellow, George Lucas Educational Foundation

“As someone committed to preparing the next generation of leaders—and as a parent—I am delighted that this truly excellent book honors technology for the great potential it has. *Tap, Click, Read* lays out a winning game plan to meet kids where they are, using technology to help them understand the interconnected world in which they live.”

—**Gary E. Knell**, president & CEO of the National Geographic Society

“We’re living through the early stages of a learning revolution with lots of hope and hype—particularly in early learning. The two best sources of wisdom in this space are Sesame Workshop and New America. *Tap, Click, Read* is the best review of the new literacy landscape available. It’s packed with practical advice and examples and videos for parents and educators. Cut through the hype, make sense of the app explosion: get this book!”

—**Tom Vander Ark**, CEO/partner, Getting Smart, and former executive director of education at the Bill and Melinda Gates Foundation

“Digital education is the wild west. This book changes everything. It gives us a clear and conversational road map (including great videos) to inform decisions at home with our own children, in schools and libraries, and at the national level. *Tap, Click, Read* should be required reading.”

—**Kyle Zimmer**, CEO, First Book

“In *Tap, Click, Read*, literacy pioneers Lisa Guernsey and Michael Levine invite educators, parents, and media makers to join them in “Readialand”—a place where the traditional literacies of reading, writing, and speaking meet technology at the intersection of child development, early learning, and digital media. Even as they identify and describe technology-mediated, evidence-based, and developmentally

informed products and practices, they remind us that what matters most for growing 21st century readers is the convergence of innovative tools and interventions with ‘human-powered’ interactions and relationships between young children, parents and educators.”

—**Chip Donohue**, PhD, director, TEC Center at Erikson Institute

“Mil gracias—a thousand thanks for imagining the class of 2030 in this superb book. The honest, asset-based, and practical view of ‘equity in a new age’ breaks new ground, especially for Latino families. Times have changed but some constants are forever—parents will always aspire and work hard so that their children can have a better future. Reading is key! *Tap, Click, Read* is an excellent resource that demystifies what works, what’s most important, and what’s possible now.”

—**Sandra Gutierrez**, executive director, Abriendo Puertas (Open Doors)

“For anyone committed to increasing social equity, this book is a provocative and inspiring guide, illuminating how the rapidly changing sea of media and technologies surrounding us both creates and dissolves hurdles for people and communities struggling with access to opportunity. Guernsey and Levine invite—and challenge—readers to embrace a new role as co-creators at its dawn of an innovative learning ecosystem that can transform our ability to create children who succeed as the readers, thinkers, and learners of tomorrow.”

—**Kim Syman**, managing partner, New Profit

“Teachers, parents, and anyone interested in the potential role of interactive technology for children’s learning will find that this book covers all of the important issues exceptionally well. *Tap, Click Read’s* descriptions of new creative, cutting edge efforts is especially illuminating and exciting.”

—**Barry Zuckerman**, MD FAAP, professor of pediatrics,
Boston University School of Medicine

“An invaluable resource for any parent, educator or policymaker interested in harnessing the potential and power of media and new technologies to support young children’s learning.”

—**Diana Mendley Rauner**, PhD, president, Ounce of Prevention Fund



Tap, Click, Read

Growing Readers in a World of Screens

Lisa Guernsey and Michael H. Levine

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Preface

We should start by telling you what this book is not. This book is not about how children learn to read (though we do highlight some essentials on that subject). Nor is it about how to teach children to learn to read (though we hope it sparks some ideas). This is a book with technology coursing through every page, but it is not a book about how digital media and new technologies will rescue schools and save the world. Nor, however, is it a book about how those technologies are destroying any good chance of raising readers for the next generation.

So what *is* it? This book presents a third way, an approach to technology that is driven by the urgent need for *all* children and parents to have access to the same twenty-first-century literacy opportunities already at the fingertips of today's affluent families. We worry that without pushing for better quality within, and access to, learning environments that harness media, low-income households will get the short end of the stick. Our firm commitment in writing this book is to stimulate a more informed debate about equity in a new age: we cannot allow technology to exacerbate social inequality instead of opening more opportunities for everyone to succeed.

To carve this new path, we will take you—today's teachers, parents, and change-makers everywhere—on a journey into the spaces of digital-age

literacy learning that are still a mystery for many: the continually evolving app stores, the little-known research labs of e-book scholars, the home-based services for first-time mothers and their babies, the classrooms of elementary schools in high-need areas, and the family literacy programs that are helping immigrant families. We want to show you the state of literacy and children's reading at this tumultuous, technologically driven moment—and what it *could* look like if we forged ahead with some new ways of thinking and teaching to help a greater number of kids. We hope this book will serve as a guide to new ideas for raising the next generation of critically thinking, accomplished readers.

Young children, ages zero to eight, are our focus. Literacy learning happens throughout the life span, of course, but we wanted to figure out what it means to teach children to become literate when they have been born into a world in which smartphones, touchscreen tablets, and on-demand video are nearly ubiquitous. Which features and habits related to these new technologies will serve them well? What should be avoided? How might the answers differ for different children in different circumstances?

We also aim to be inclusive and expansive in our use of the words *media* and *technology*. In the past decade or more, these two words have taken on narrow connotations that lead to even narrower debates about what is best for children's learning. Hear “media” and you may think primarily of mass media (CNN, Fox, and so on) or anything delivered via video. Hear “technology” and you may automatically envision smartphones, electronic whiteboards, or tablets. We see those examples as only part of the world of media and technology. Books—printed or electronically available—are also a form of media. Printers, voice recognition software, and video cameras count as technology too.

Your guides on this journey are me—Lisa, a journalist and director of the Early Education Initiative and the Learning Technologies Project at New America, a think tank in Washington, D.C.—and me—Michael, a child development and policy expert and founding director of the Joan Ganz Cooney Center at Sesame Workshop in New York City. Throughout the

book you'll see us pop in once in a while to distinguish who is telling which anecdote, but the vast majority of the research and reporting that went into this book was conducted in partnership over a more than two-year span that involved many members of our teams and contract writers, reporters, and video producers.

The seeds for this book were planted in early 2012 in a series of conversations with Ralph Smith of the Annie E. Casey Foundation. Ralph had just launched the Campaign for Grade-Level Reading, an ambitious national effort to catalyze and coordinate early literacy efforts and philanthropic investments in more than 150 cities and towns around the United States. Lisa had spent more than a decade reporting on education and technology and had written the book *Screen Time: How Electronic Media—From Baby Videos to Educational Software—Affects Your Young Child*. Michael was directing a series of research studies on how interactive technologies were affecting families, students, and teachers, and advising one of the world's most successful nonprofit educational media organizations on how best to navigate a fast-changing digital marketplace while making children's interests central. Ralph wondered whether the two of us might be able to scan the landscape of literacy products and literacy interventions for young children to see where technology was playing a role. The result was our report, *Pioneering Literacy in the Digital Wild West: Empowering Parents and Educators*, which came out in December 2012. The report caught the attention of Jeff Schoenberg and J. B. Pritzker of the Pritzker Children's Initiative, which provided a generous grant to allow us to continue our research, create an advisory group that intersected with the Campaign for Grade-Level Reading, and develop a book and online space that would showcase what we were learning.

We say "create" a book, not "write" a book because from the beginning we wanted to include video and graphics as well as written narrative. We wanted to explore not only how children were learning to read in an age of new media but also how book publishing could harness new media to tell stories and increase understanding among educators and parents. As you

will see in part 3, we have produced five videos that provide a window onto new initiatives that hold promise. (If you are reading the print version or non-enhanced e-book version, you will find hyperlinks that take you to these videos.) Barbara Ray and Sarah Jackson of HiredPen, a communications firm in Chicago and San Francisco, coordinated the video shoots and directed the videos with Chicago-based videographer Nat Soti and his team.

The collaborative nature of this book also opened our eyes to what is possible with shared writing-and-reading spaces online. For sure, we had our share of tech-induced mishaps, and we relied on print on paper in several cases. But we would not have been able to write this together without Google Docs' functionality that allowed many of us to be writing and commenting in the margins of one document while sitting in several different cities simultaneously. We also used tools such as Skype to conduct interviews with scholars overseas. We were almost perpetually using search-and-find functions and tapping into online archives of journal articles to pinpoint materials and discover new experts. Hours of thinking and exchanging ideas happened through e-mail and chat.

Along this journey, after becoming inspired by dozens of brilliant early educators and innovators, we started to see an alternative to simply reacting to the new media marketplace and constantly lamenting what the technology industry brings forth. The alternative is not to retreat to the twentieth century. Instead we suggest ways to proactively shape children's literacy environments and envision a future that marries the best of the old with the potential of the new. We want to act on the research about effective strategies to help children become literate, while enlisting help from innovative educators and media of all kinds, from books to video to twenty-first-century tools such as tablets and e-readers. We want to stop seeing technology and reading as in opposition to each other, and instead start building places, online and off, that put media in service of reading and, more broadly, in service of literacy and critical thinking for all kids.

Teaching, parenting, and learning in these newly envisioned places will require a new approach. Public policies and private organizations will

have to shift their conceptions of education and learning downward in age, positioning the early years of children's lives—including those first few years of infancy and toddlerhood—as the foundational years for literacy. Communities will need to ensure equitable access to broadband Internet and media mentorship opportunities for low-income families. And policy-makers will need to open their eyes to the assets among families of different linguistic and cultural backgrounds that, when given the right support, can help children learn to read, write, and become effective communicators in English and their home languages.

For parents and teachers in particular we argue that today's children will be best served by adopting a Tap, Click, Read mindset. Not a tap, click, *cringe*, and hope-for-the-best mindset, but one imbued with that word *read*, guiding children toward literacy and learning in multiple interactions with media throughout their early years. The pages that follow introduce you to many of the educators and leaders we met who have already embraced this mindset. It looks something like this:

Tap: Instead of just tapping open apps, let's not be afraid to tap into new networks of learning for our children and for ourselves as adults. Today's media allow for educators and families to access rich worlds of content and ideas beyond their homes and communities. We should also be mining forgotten or hidden public assets, like libraries and public media.

Click: We need to recognize that to click is to choose, to make a decision, to act. Marketers and their clickbait have made us think we have no choice. But clicking is not and should not be mindless. When a child or parent clicks inside a text, they have opted to dig further, they wonder what is beyond. Let's embrace that as an opportunity and pathway that could be filled with intention—not as a distraction.

Read: Everyone interested in the success of future generations should recognize that reading will always be a critical skill and a key barometer of progress. You cannot fully function in the twenty-first century without being able to read. You cannot achieve any kind of success without literacy. We also should recognize that the contours of literacy have evolved and

expanded over time, and now even more skill and attention are required to teach it well.

Many educators and parents are already pursuing this tap, click, read approach without even realizing it. They are our future advocates for blended literacy environments that harness the potential of media in all forms. By using a research-based approach that combines skill building with knowledge building, they will help raise children who are able to read and write, not only via print on paper and screen, but also via symbols and images, all the while “reading” the motivations of the authors and creators who put this media in front of us. You’ll see many of them in this book, and we anticipate meeting many more in the coming years. This journey isn’t over. On our websites, on TapClickRead.org, and through social media, we will be continuing to document and write about how teaching and learning literacy are changing. And we will maintain our focus on serving children and families in households who are likely to have the least access to high-quality learning environments, online and off. At a time when social mobility seems to have stalled for so many families, the act of learning to read and becoming a literate citizen of the Digital Age remains the most powerful engine for moving up. The stories of this book are, at heart, about making a life-changing imprint on the next generation.

Tap, Click, Read



PART 1

Imagining the Class of 2030



The Quiet Crisis

*I*t's graduation day, 2030. High school students and their families are filing into stadiums and auditoriums around the United States, awaiting the chant-like announcements of hundreds of students receiving their diplomas.

It seems like only yesterday these students were babies. They arrived in the world at a time of immense change in how people communicated and learned—days that began to include smartphone apps, on-the-fly video making, instant photo sharing, text messaging, blogging, YouTube, Facebook, Twitter, Instagram, and more. Some of these students have become focused, careful readers with skills in filtering, creating, and making sense of the continual streams of information coming their way. Guided by a community of parents and educators who recognized the potential of new tools and mentors, they have become über readers, literate in a way that was almost unimaginable in the days before they were born.

Others are flailing. Some didn't make it to this graduation moment at all. Never given consistent attention and disconnected from tools and teaching strategies that could help, they have failed to master the habits of mind and the requisite skills to succeed in a global and digital age. This waste of their potential will have been, tragically, wholly preventable.

The digital age brings a paradox: as workplaces become increasingly dependent on the exchange of information, good reading skills are more important than ever. And yet children and their families are increasingly surrounded by new tools and digital distractions that affect the act of reading and communication. How will children ever learn to read?

That question is what prompted this book. For many, it is a question uttered in fear. The paradigm for instilling reading skills feels like it is crumbling away, as bedtime books morph into bedtime videos and daily routines leave no time for solitary, uninterrupted hours to read and think. The percentage of children who say they read books for fun every day or at least five days a week has dropped since 2010, according to Scholastic. The National Endowment for the Arts has spotlighted what it calls a “general decline in reading,” with data showing that nearly half of young adults read no books for pleasure. Publishers are reporting declines in print book sales and slowed rates of growth in e-books. Some business leaders say it is difficult to find employees who can read and write at even a high school level.

Adding to the worry is the newfound recognition that over the course of human history, our brains have had to be trained to read. “In the evolution of our brain’s capacity to learn, the act of reading is not natural,” writes cognitive neuroscientist Maryanne Wolf. “We were never born to read.” It’s the plasticity of our brains—the ability of neurons to create new connections every time we challenge ourselves in new ways—that has enabled our species to advance from utterances to words, to symbols, to print, to the fluency that enables you to read this last sentence without even having to think about it. Once it sinks in that we really *are* what we experience, the always-humming experiences of the digital age should give us pause. In her book *Proust and the Squid: The Story and Science of the Reading Brain*, Wolf puts the fear this way: “Will the present generation become so accustomed to immediate access to on-screen information that the range of attentional, inferential, and reflective capacities in the present reading brain become less developed?”

THE SORRY STATE OF READING TODAY

For us, the question of how twenty-first-century children will learn to read is not spoken with fear as much as urgency. In essence our nation is facing a “quiet crisis”: an alarming number of children in the United States never become good readers. Some never really learn to read at all. According to the National Assessment of Educational Progress (NAEP), a biannual record of children’s abilities published by the US Department of Education, more than two-thirds of American fourth graders are not reading at a “proficient” level.

What does proficient mean? It is the marker of whether a student has, in the words of the authors of the NAEP, “demonstrated competency” in reading texts deemed appropriate for their grade level. There are other labels too, such as “advanced,” which means being better than proficient, and “basic,” which is a level below proficient and means that a student has only partially mastered the skills needed for competency. Research shows that proficient readers are on track to success in school and life. They are two-and-a-half times as likely as basic readers to be earning \$850 or more a week, or \$44,200 or more a year. And a study in 2011 showed that children who have not reached proficiency by the time they finish third grade are at higher risk of dropping out of high school. Third graders who are not proficient and who are also growing up in poverty are even more likely to drop out. Shockingly, the rates of nonproficient fourth graders among children of color, and children in poverty, are more than 80 percent.

Not everyone agrees with the NAEP’s definition of proficiency. Some education researchers say it is too high a bar and argue that children with basic reading skills might look like proficient readers on other types of tests. Yet even on other tests of reading, large proportions of American children are not doing well. Each spring every state, for example, administers standardized tests. The test items and cut scores vary considerably (a problem that understandably irritates education reformers), but even given those variations, there is no question literacy rates are troubling. Take Massachusetts, a state that gets high marks for its education system. In that

state, 43 percent of third graders are not hitting Massachusetts's proficient mark in reading. That is a high number of children who are likely to have a hard time doing simple things like completing their homework. They struggle to understand the writing prompts, they can't read the five-paragraph assignment on ecosystems, or the Civil War, or how to create a line graph, and they will, without intervention, lag further and further behind.

Reading achievement scores are even more distressing when put in context over decades. Low reading skills have characterized America's nine-year-olds since they began taking national tests in 1971. Reading scores climbed in the late 1990s, but between 2004 and today, the average score has stayed relatively flat. The average score among nine-year-olds—all nine-year-olds, not just those in poverty—hovers around 220 on a 500-point scale. They are not even getting halfway to the top score.

Educators have tried valiantly to fix this. Reading and literacy have been on the radar of experts for decades as the science on how children learn to read has become more and more settled. Years ago, it wasn't unusual to find people (sometimes grouped as "whole language" advocates) who believed children learned to read almost automatically as long as they were exposed to books in one way or another. But these days, you'd be hard-pressed to find a reading expert who thinks reading happens by osmosis. Consensus has formed around a two-pronged, skills-plus-knowledge strategy: teach letters and sounds and help children practice the "de-coding" of written words *while also* immersing them in stories and back-and-forth dialogues that introduce new vocabulary and show them the multilayered worlds of science, art, history, literature, different cultures, and more. This two-pronged strategy should be at the heart of literacy learning everywhere.

Polls show the majority of the public recognizes the importance of starting early and investing in programs to help families when children are very young. This recognition should also be working in children's favor. Society is starting to realize that learning to become literate starts earlier than kindergarten or first grade. The building blocks of literacy start with the smiles and gurgles of babies looking at their parents and caregivers while those adults

return the smiles and coo in response. As babies point to what they want and utter their first words, they learn to communicate, then speak, and then, over time, build upon that experience to develop as readers and writers. That framework sets them up for reading those words years later, written on a page or etched across a screen.

Our government has tried to help. The US Department of Education put considerable attention on reading for most of the 1990s and 2000s with public engagement campaigns like America Reads and well-funded programs such as Reading First, a \$6-billion grant program. The administration of President Barack Obama awarded millions to “scale up” reading programs with evidence of good results, such as the Children’s Literacy Initiative, Reading Recovery, and Success for All. Officials for Head Start, the federal government’s early learning program for children in poverty, have required teachers to focus on early literacy skills for more than a decade. Many governors and mayors have launched early education initiatives and passed legislation devoted to get everyone reading. And a coalition of nonprofit organizations, philanthropies, business leaders, and more than 150 communities, organized by the Campaign for Grade Level Reading in 2012, has won wider attention to the quiet crisis in recent years.

Given this momentum, why are two-thirds of American children not reading proficiently and half of children from low-income families not even able to hit the lower level of “basic” on reading tests?

WHAT’S HOLDING US BACK

Unequal access to early learning, spotty funding, and weak teacher training are obvious culprits. Take Head Start, for example. Although it has been shown to moderately improve children’s literacy skills after a year of enrollment, the program has never received enough funding to serve more than half of the children in poverty. And the US child poverty rate has recently climbed to one in five children. Even if all children in poverty had access, there would be many more whose parents may be earning incomes above

the poverty threshold but still unable to afford tuition for quality preschool. Momentum has been building across the United States to fill that gap by creating pre-kindergarten programs for low-income families or even, as is already the case in states like Oklahoma and Georgia, free to anyone regardless of income. But universal pre-K is far from a reality in most parts of the country.

Then there is the teaching of literacy in pre-K, kindergarten, and the first through third grades. Many school districts continue to get by with a hodgepodge of approaches, zig-zagging between fads and switching curricula from year to year. Reading experts say that they have witnessed underprepared faculty in teachers' colleges and underprepared teachers in pre-kindergarten through the third grade. And sometimes the push for literacy is accompanied by uninformed or even harmful techniques, such as when teachers of young children are pressured to drill children on the ABCs and phonics without recognizing the research on how young students can develop language and literacy skills when teachers use playful techniques, expose them to complex vocabulary, and give them opportunities to ask questions and explore.

These significant hurdles have to be removed. The United States must take a more comprehensive approach to improving teaching and learning environments for children from infancy up through elementary school. But even if we do more of what we already know, is that all it would take for all children in the United States to become strong readers? Is there some elephant in the room no one wants to talk about?

TVs, touchscreens, and smartphones are now almost ubiquitous in living rooms, bedrooms, and nurseries. Many preschoolers and elementary schoolers are watching, listening to, or interacting with two to three hours of screen media per day. E-books and videos populate library shelves and coffee tables. Parents and even grandparents are incessantly looking down at personal devices. Classrooms without computers and interactive whiteboards seem antiquated. Is the real barrier to improved reading skills that books can't possibly compete with exciting multimedia products for our attention? Let's face it: screen media is the elephant in the room. True

understanding of children's literacy in the twenty-first century is impossible without turning to face this creature and take a long look.

NOTES

The percentage of children: *The Kids & Family Reading Report* 2015, 12.

For more information on this report, see "4 Surprises in Scholastic's National Survey of Kids and Reading," January 12, 2015, on New America's EdCentral blog: <http://www.edcentral.org/4-surprises-scholastics/>. Also, *Children, Teens, and Reading*, a research brief published in 2014 by the non-profit advocacy group Common Sense Media, presents data between 2006 and 2013 that could be interpreted as a dip during those years in the amount of time parents spent reading to their young children. However, the survey methodology was different between the two studies. The 2006 data were based on a random-digit-dial telephone survey, while the 2013 data were collected using a probability-based online sample. "It is not possible to know for sure," the report's authors state on page 15, "whether the difference between the findings is an artifact of the change in methodology, or reflects a real drop in reading."

The National Endowment for the Arts: *To Read* 2007.

Publishers are reporting: Milliot 2014b, "Print, Digital."

Some business leaders say: For example, see Chastity Pratt Dawsey, 2014, "As Good Jobs Finally Arrive, Few Detroiters Have the Skills to Fill Them," *Bridge*, a publication of The Center for Michigan, December 16, at http://www.mlive.com/news/detroit/index.ssf/2014/12/as_good_jobs_finally_arrive_fe.html.

"We were never born to read.": Wolf 2007, x and 3.

In her book: *Ibid.*, x.

It is the marker: National Assessment of Educational Programs 2014.

Research shows: According to the US Department of Education, National Center for Education Statistics, in *To Read* 2007, 17.

a study in 2011: Hernandez 2011.

the rates of nonproficient fourth graders: According to data from the 2013 Nation’s Report Card, “What Proportions of Student Groups Are Reaching *Proficient*?” at http://www.nationsreportcard.gov/reading_math_2013/#/student-groups.

Not everyone agrees: See Gerald Bracey, in the June 2008 issue of *The School Administrator* at <http://www.aasa.org/SchoolAdministratorArticle.aspx?id=5096>. Bracey writes that comparisons of the NAEP and an international test known as TIMSS have shown that high-scoring countries would not do well on the NAEP. “Sweden, the highest scoring nation, would show about one-third of its students proficient while the United States had 31 percent,” he says.

Take Massachusetts: Based on the 2014 MCAS results: <http://www.doe.mass.edu/mcas/2014/results/summary.pdf>.

The average score: The Nation’s Report Card 2012.

Polls show: See the results of a July 2014 public opinion poll by Public Opinion Strategies and Hart Research Associates for the Grow America Stronger campaign, commissioned by the First Five Years Fund, at <http://growamericastronger.org/poll>.

Given this momentum: Forty-seven percent of fourth graders eligible for free and reduced-price meals finished below “Basic” on the NAEP reading test in 2013. See 2013 Reading Assessment Report Card, National Center for Education Statistics, page 9.

Although it has been shown: Puma et al. 2012. Of note: “There is clear evidence that access to Head Start had an impact on children’s language and literacy development while children were in Head Start,” as reported on page xvi. Head Start has been criticized, however, for not being able to produce enough positive change in children’s outcomes to carry through five years later, and the education policy community continues to debate why that is and what it takes to ensure that children in Head Start programs continue to show growth through kindergarten and the early grades.

the program has never received: See Christina Walker, “Head Start Participants, Programs, Families and Staff in 2013,” CLASP, August 2014, at <http://www.clasp.org/resources-and-publications/publication-1/HSpreschool-PIR-2013-Fact-Sheet.pdf>. About four in ten eligible are served.

the US child poverty rate: DeNavas-Walt and Proctor 2014.

screen media: In fact, pediatric researchers Dimitri A. Christakis and Frederick J. Zimmerman published a book in 2006 entitled *The Elephant in the Living Room: Make Television Work for Your Kids* (New York: Rodale), which includes several chapters to help parents make smart choices about the types of content their children should watch. Some of the same studies are described in Lisa’s 2012 book, *Screen Time: How Electronic Media—From Baby Videos to Electronic Software—Affects Your Young Child* (New York: Basic Books).



What to Make of Media?

The introduction of new media has always alarmed the arbiters of education and knowledge. Socrates worried about an overdependence on the alphabet. He thought that writing words down, instead of committing them to memory, would lead to less depth of understanding, preferring oral language and performed poetry instead. The religious establishment of the 1400s did not like the idea of the printing press and its potential for enabling a larger number of people to read what it deemed the wrong things. Novels and other works of fiction were once disdained as unsophisticated (those lies! corrupting fantasies!). Radio, telephones, and comic books have all had their detractors.

Over the past several decades, *screen* media has become the beast to begrudge. Although the dawn of moving pictures may have caused some consternation, it was the arrival of television that really began to worry those who tracked educational achievements and social norms. In the 1950s, well before the days of *Sesame Street* and *Mister Rogers' Neighborhood*, researchers and child development experts were concerned that watching TV was a recipe for illiteracy. By the 1970s, research on libraries showed declines in the circulation of library books and drop-offs in people's interest in fiction. "The overall impact of television seems to be a reduction in reading," wrote the researcher Gary D. Gaddy, in an oft-cited 1986 article about high schoolers from *Public Opinion Quarterly*.