

# The Velcro Effect

## Increase Reading Comprehension, Motivation, and Pleasure with Knowledge

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Children's librarians are not reading teachers. But supporting children's reading is pretty much number one in our portfolio of professional goals, so it makes sense to learn a little bit more about how humans go about learning how to read.

One surprising thing to realize, when digging into recent cognitive science and education research about reading, is that there are really two aspects of reading that get mixed up in confusing ways.

The first element comes first, naturally—decoding. This is literally learning the “code” that written language represents. In other words, anyone who learns how to read must first figure out what letters and combinations of letters represent what sounds, and how to translate those sounds into words, and words into meaningful messages. It's popularly known as phonics and, reading experts have discovered, is best taught as a series of skills over time by trained educators in a classroom.

As the late (and truly great) librarian and writer Michael Sullivan wrote in a 2014 *Public Libraries* essay, “Learning the

actual process of reading is something [children] will do once . . . and should only take a few years.”<sup>1</sup> In other words, it's finite, and once achieved, something to check off and move on.

Phonics is absolutely crucial in reading, but when you've got it, you've got it. You don't have to keep going back to re-learn its skills.

The second aspect of reading is far larger, more interesting, and excitingly infinite—what happens after children learn the basics of decoding and start understanding and appreciating what the words on a page *mean*.

“But,” as Sullivan continues in the same essay, “gaining vocabulary, grammar, story structure, and background information are processes that go on a lifetime. Make them a priority early and start children on the road to becoming a reader.”<sup>2</sup>

This is the Shangri-La of reading, and it's important that librarians understand it should always be our larger objective for children's reading.



**Laura Raphael**, MA, MLIS, started her professional career as a middle school Reading and Language Arts teacher before turning to public libraries. Since 2001, she has worked in public libraries in a variety of capacities, most recently as Children's Services Coordinator for the Tulsa City-County (OK) Library System.

The good news is that we now have a pretty clear idea of what we should be doing to help children become skilled, engaged, and fluent readers.

The even better news is that libraries and librarians are uniquely positioned to be champions of this larger vision of reading.

The answer? The special sauce? The magic bullet? It's right there in what Sullivan wrote, "vocabulary, grammar, story structure, and background information." In other words—knowledge.

## Building Knowledge Is Like Velcro

As Natalie Wexler argues in her book *The Knowledge Gap*, and as other education and cognitive science greats such as E. D. Hirsch and Daniel Willingham have shown, reading comprehension is dependent on the background knowledge that a reader brings (or does not bring) to the text.<sup>3</sup>

When a child does not have much knowledge about a wide variety of topics, they will not be able to understand much about what they are reading. But fill them up with facts and connections about topics like the habitats of golden snub-nosed monkeys and other tree-dwelling creatures, or the impact of building a cross-continental railroad on the nineteenth-century US economy, or how Egyptians mummified their corpses, and suddenly, they are not just understanding what they read, but enjoying it and making additional connections.

Wexler explains, "The more knowledge a child starts with, the more likely she is to acquire yet more knowledge. She'll read more and understand and retain information better, because knowledge, like Velcro, sticks best to other related knowledge."<sup>4</sup>

By increasing children's background knowledge and helping them engage with the rich content of social studies, science, and literature, we create better and stronger readers.

Wexler spent a year observing several elementary classrooms and describes what happens in classrooms that adhere to this idea (and those that do not). In knowledge-based classes, children are excited about learning and are eager to find out, for example, about the strengths of Greek goddesses and gods (enough to have a lively discussion about who should be the "president" of the class—Athena or Poseidon—reinforcing what they had already learned about democracy in Greek civilization), or evaporation, condensation, and the water cycle, or the War of 1812 and our country's complicated history with Great Britain in the early nineteenth century. Scores on reading tests incidentally go up, but more importantly, the complexity and depth of children's reading comprehension skyrocket.

## Not-So-Secret Weapons

How do we translate this into solid library practice? After all, while we are educational institutions, we are not schools, and we do not offer systematic, leveled curriculum or daily pedagogical instruction.

But that doesn't mean libraries and librarians don't have a crucial role in helping children build a wide array of background knowledge to support reading comprehension, pleasure, and motivation.

Our first not-so-secret weapon? Our literal collections of knowledge.

Indeed, every day we are surrounded by volumes of knowledge, perfectly packaged for capturing the attention and interest of children and helping them on their way to Velcro-ing even more knowledge for reading success.

More than that, our second not-so-secret weapon is children's librarians. While children's librarians are not traditional classroom teachers, we are adroit and charming hosts at the magnificent, majestic, resplendent party of human knowledge that libraries represent. We know how to gently draw out what interests kids while introducing them to new books (and knowledge) that we intuit they may enjoy.

We share our excitement about this or that really cool book while giving away just enough of the plot or details or glimpse of the pictures to make kids curious and eager to check out what we're selling.

Of course, we have long been ambassadors of reading, but what we don't fully appreciate is that we are also the perfect ambassadors to knowledge-building that makes reading even more pleasurable to kids and will motivate them to become lifelong readers.

## A Knowledge Focus

In fall 2019, I became increasingly convinced that a knowledge approach to children's programming and services at my library was a worthy and achievable goal. We were offering a lot of programming "candy"—arts and crafts projects, ninja obstacle courses, Pokemon chases—but not much programming "protein" that would inspire children to learn more about rich topics to help increase their reading comprehension.

As children's services coordinator of a library system with twenty-four branch libraries, I started my quarterly children's meeting by presenting the research about knowledge and reading to the approximately forty children's librarians and paraprofessionals I help train and support. I then gave some sketches of possible programming ideas that would shift us to a stronger, knowledge-first paradigm.



## Swinging Easy from the Tree of Knowledge

One of my projects during the pandemic has been working virtually with two of my former storytime kids (and dedicated library users) who have been in virtual school this year. Evan McCartney, eleven, and his sister Elizabeth, seven, demonstrate what happens when you introduce children to the rich knowledge of the world early on.

Their parents have been absolute model parents as teachers from the very beginning, reading to them every day and talking about a wide variety of subjects with increasing sophistication as they grow, so I can't take much credit for their insanely high reading comprehension scores.

Still, I'd like to think I have had a small impact on their reading pleasure, and it has been fun to test out different knowledge-based activities with them over Zoom. So far, we have studied behavioral characteristics of wolves, alongside reading *Old Wolf* by Avi, the effects of global warming, and animal habitats.

The result is those two resting in hammocks during their spring break on a socially distanced camping trip. They were relieved from virtual school for the week, but they still wanted to spend most of their time reading and swaying in hammocks. Isn't that the test of a really dedicated reader?

I emphasized that I wanted to see more programs for school-aged children that would include dynamic explorations of real-world topics and subjects to build background knowledge. I also wanted these programs to connect in significant ways with the books and other sources of knowledge we had in our collection.

For example, I explained, don't just do an arts and crafts program of making elephant hats. To be sure, I had no problem with a program that included elephant hats. (Listen, there are some really cute ones!) However, I wanted them to go further. Perhaps they could also share videos of actual elephants at play, read a description of how elephants form families, and then talk about why the expression "an elephant never forgets" is supported by scientific studies about elephant brains and memory.

You still end up with cute kids in adorable elephant hats, but their knowledge and curiosity about elephants will be exponentially higher—and set them up for deeper reading comprehension when they pick up *The One and Only Ivan* by Katherine Applegate, for example, which features Ruby the baby elephant and her sorrow at being taken from her mother.

Per usual, after I presented this proposal, my amazing colleagues did not disappoint and, within days, they came back with a thousand brilliant, creative, and simply stunning ideas that would focus on knowledge in engaging, kid-magnet ways.

My top two favorites connected popular fiction and stories with deep scientific and historical content—a perfect combination of "candy" and "protein."

## Want To Know More About Knowledge and Reading? Start Here!

My knowledge journey about the importance of knowledge-building in reading comprehension was immeasurably helped by these excellent works.

Hirsch, E. D. *Why Knowledge Matters*. Cambridge: Harvard Education Press, 2016.

-----, *The Knowledge Deficit*. 2006.

-----, *The Making of Americans: Democracy and Our Schools*. New Haven: Yale University Press, 2009.

Willingham, Daniel. *The Reading Mind: A Cognitive Approach to Understanding How the Mind Reads*. San Francisco: Jossey-Bass, 2017.

-----, *Raising Kids Who Read: What Parents and Teachers Can Do*. San Francisco: Jossey-Bass, 2015.

Wolf, Maryanne. *Proust and the Squid: The Story and Science of the Reading Brain*. New York: Harper, 2007.

First, the Baby Yoda Teaches the Solar System Space Party, which a children's staff person put together in less than a month. While there was a fun origami Yoda craft (of course), there were also knowledge stations about each planet that children were invited to visit and get a stamp in their Solar System Passport. When they collected enough stamps, they could choose a free book—related to space, planets, and, of course, the Star Wars storytelling franchise—to keep.

Next, another children's librarian decided to shift the approach of her popular children's book group in their discussion about *Max and the Midnighters* by Lincoln Peirce. They went deep into medieval history of knights, watching short videos about castle sanitation and different configurations of armor, before discussing the novel.

It was all going so well and then . . . the pandemic!

## References

1. Michael Sullivan, "It Isn't About Teaching Your Child to Read," *Public Libraries* 53, no. 2 (March/April 2014): 8–9.
2. Sullivan, "It Isn't About Teaching Your Child to Read," 8.
3. Natalie Wexler, *The Knowledge Gap: The Hidden Cause of*

I don't even want to tell you all of the wonderful knowledge-based programs we had to start cancelling and then filing in our *Maybe 2022?* binders because it hurts too much to reflect on what could have been.

However, all was not lost. In September 2020, I worked with several children's librarians in my system to launch a knowledge-based children's service to temporarily replace all of those amazing in-person programs. We call it Kids Read Curious World ("Kids Read" is our brand for school-aged programming and services), and it involves a monthly topic, a web page of created and curated resources, and some truly inspiring activities, videos, booklists, and more.

We've explored the topics of archaeology, maps and continents, knights and castles, wolves, space and planets, presidents, bugs, weather, and the wild West.

## Sparking Curiosity

There are limitations to what the library and librarians can do to build knowledge in children in a consistent, comprehensive way, of course. For example, we don't have hours every day to spend with children to help them develop a deep knowledge of evolutionary adaptations in animals and characteristics that all invertebrate and vertebrate animals share. But what we can do is give them a book about poison dart frogs.

Or engage them in a program about skunks and other smelly creatures. (Possibly even help them make a skunk hat craft!)

Or use a thousand other ways to spark their curiosity about animal defense mechanisms, which may lead to greater and wider reading that will eventually lead to a broader understanding of the animal kingdom. And when they read novels with animal characters, like *The One and Only Ivan*, the experience will be so much richer because of that understanding.

By sparking these curiosity forays with knowledge, we are opening this big, beautiful, amazing, wonderful universe of ours to children and saying, "Hey, this is all yours!"

Not a bad way to spend our time. &

*America's Broken Education System—And How to Fix It*. (New York: Avery, 2019).

4. Wexler, *The Knowledge Gap*, 35.