The Research Foundation of Waterford.org Curriculum

Waterford.org
CURRICULUM

The Research Foundation of Waterford.org Curriculum

Waterford programs leverage the science of reading and evidence-based research to optimize reading development, accelerate learning, and target intervention for PreK–2nd grade learners.

Science of Reading

The initial content for Waterford programs was developed in consultation with **Dr. Marilyn Jager Adams** and in alignment with the principles set forth in her landmark book *Beginning to Read: Thinking and Learning About Print* (1990). In addition, recommendations from the **National Research Council** (1998), the **National Reading Panel** (2000), the **National Early Literacy Panel** (2008), and the **What Works Clearinghouse** K–3 Reading Practice Guide (**Foorman,** et al., 2016) have guided Waterford's curriculum development. These major research syntheses emphasize the importance of phonological awareness, phonics, vocabulary, fluency, and comprehension as critical components of effective reading instruction.

Waterford's instruction is explicit, systematic, cumulative, diagnostic, and responsive (**National Reading Panel**, 2000). The programs provide direct instruction, guided and independent practice, prompt feedback, scaffolding, distributed practice, and ongoing review (**Spear-Swerling**, 2018). Instruction is delivered at a brisk pace, and student responses are elicited frequently to maximize engagement.

Progression is mastery based, and embedded assessment drives adaptive learning pathways for individual students. Actionable data highlights achievements and identifies areas of struggle, allowing teachers to provide targeted support, including whole-class, small-group, and individual interventions.

Waterford's Instructional Strands

Waterford continues to rely on the many experts in the education field, including **Ehri, Torgersen, Stanovich, Snow, Beck, Moats, Kilpatrick,** and more. This intense focus on research is in support of our mission—*to blend the best aspects of learning science, mentoring relationships, and innovative technologies to form community, school, and home programs that deliver excellence and equity for all learners.*

In order to accomplish the mission of equity for all learners, Waterford also infuses culturally authentic stories and mindset skills through digital books and surrounding activities.

Culturally Responsive Instruction

Waterford's learning paths embed culturally responsive instruction by providing learners with windows into the lives of others and mirrors that reflect their own experiences. Recent content audits led the team to reflect on both the range of representation across the curriculum and the authenticity of the content. Research from **Geneva Gay, Ladson-Billings, Yvette Jackson,** and **Zaretta Hammond** inform the way Waterford designers consider the lived experiences of young learners as they update and build content. Stories provide natural opportunities to include examples of challenges that characters face and how they use mindset skills to find solutions.

Mindset Skills

Waterford's mindset skills include four areas: executive function, self-awareness, social awareness, and citizenship. The skills were created based upon social-emotional standards from across the nation and research on cognitive development and learning from **Harvard's Center for the Developing Child, Raver, Blair,** and others. Young learners need opportunities to practice organization, mental flexibility, and working memory. Content in the program provides learners with exposure to stories that model responsible problem-solving and regulating emotions.

Waterford builds family-facing content to support caregivers as they support learners. Family engagement research by **Karen Mapp** and others informed the dissertation work of **Dr. Jenni Torres**, Waterford's senior vice president of curriculum, which led the organization to develop a rubric based on feedback from families. Waterford's CARES rubric contains five areas designers consider when building content: **C**ommunication, **A**cademic Content, **R**ecommendations, **E**xpectations, and **S**upport. Reviewing family content through the lens of these guidelines ensures that resources are responsive to family needs. Centering caregivers in designing solutions is a key component of the continuous learning and improvement of Waterford's implementation and resources.

Science of Reading

Title	Citation	Keywords & Academic Terms	Summary as it Relates to Waterford.org Programs
Beginning to Read: Thinking and Learning about Print	Adams, Marilyn J. (1990). Beginning to read: Thinking and learning about print. MIT press.	reading, beginning	Dr. Marilyn Adams worked with Dr. Dusty Heuston and the team as they developed the foundation of Waterford Reading.
Phonemic Awareness in Young Children: A classroom curriculum	Adams, Marilyn J., Foorman, Barbara R., et al (1998). Phonemic Awareness in Young Children: A Classroom Curriculum. Paul H. Brookes.	phonological awareness, phonemic awareness	This book provides a clear overview of the phonemic awareness skills that young children must develop. It provides insight into how to help children make connections between phonemic awareness and phonics.
Explicit Instruction: Effective and Efficient Teaching	Archer, A. L., & Hughes, C. A. (2011). Explicit instruction: Effective and efficient teaching. New York, NY: Guilford Press.	explicit instruction, guided practice, scaffolding	Explicit instruction includes modeling, guided practice with scaffolding, and independent practice with timely, targeted feedback.
Bringing Words to Life: Robust vocabulary instruction	Beck, I. L., McKeown, M. G., & Kucan, L. (2002). Bringing words to life: Robust vocabulary instruction. New York, NY: Guilford Publications.	vocabulary, tier	Students benefit from direct, systematic vocabulary instruction. Effective practices include language-rich environments, content-area instructions, focus on shades of meaning, and the use of examples and non-examples.
Building Content Knowledge to Boost Comprehension in the Primary Grades	Cabell, S.Q., & Hwang, H. (2020). Building content knowledge to boost comprehension in the primary grades. Reading Research Quarterly, 55(Suppl. 1).	content knowledge, background knowledge	Content knowledge and vocabulary knowledge are key building blocks for comprehension.
Ending the Reading Wars: Reading acquisition from novice to expert	Castles, A., Rastle, K., & Nation, K. (2018, January 11). Ending the reading wars: reading acquisition from novice to expert. Psychological Science in the Public Interest, 19, 5-51.	reading wars	Research has been slow to make inroads into educational policy and practice. Instead, the field has been plagued by decades of "reading wars." Even now, there remains a wide gap between the state of research knowledge about learning to read and the state of public understanding. This is a comprehensive review of the science of learning to read, spanning from children's earliest alphabetic skills through to the fluent word recognition and skilled text comprehension characteristic of expert readers.
An Exploration of Instructional Practices that Foster Language Development and Comprehension: Evidence from prekindergarten through grade 3 in Title I schools	Chiang, H., Walsh, E., Shanahan, T., Gentile, C., Maccarone, A., Waits, T., Carlson, B., & Rikoon, S. (2017). An exploration of instructional practices that foster language development and comprehension: Evidence from prekindergarten through grade 3 in Title I schools (NCEE 2017-4024). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.	language, comprehension	This evaluation brief provides an exploratory analysis of practices that are related to young students' growth in language skills and comprehension in listening and reading.
Pathways to Word Reading and Decoding: The roles of automaticity and accuracy	Cummings, K. D., Dewey, E. N., Latimer, R. J., & Good, Roland H., I., II. (2011). Pathways to word reading and decoding: The roles of automaticity and accuracy. School Psychology Review, 40(2), 284-295.	phonics, print, sound awareness, automaticity, awareness, explicit instruction, mapping, alphabetic principle	Reading involves learning to recognize words automatically, which requires several steps. "In order to make print accessible to all students, we must create explicit links between the awareness of sound structure, the mapping of speech to print, and engaging reading and writing activities (Moats, 2000). Assessment tools that allow us to screen important preliteracy skills (e.g., the alphabetic principle), monitor student progress, and provide appropriate input on the context of reading instruction are one powerful component of efforts to enhance student learning."

Title	Citation	Keywords & Academic Terms	Summary as it Relates to Waterford.org Programs
Reading in the Brain: The new science of how we read	Dehaene, S. (2009). Reading in the brain: The new science of how we read. New York: Penguin Books.	reading science, neurology, letterbox, orthographic mapping, phonological awareness	Three stages of acquisition are outlined: (1) pictorial: seeing each word as an object; (2) phonological: becoming aware of phonemes; and (3) orthographic: quickly recognizing words and their meaning.
The Massive Impact of Literacy on the Brain and its Consequences for Education	Dehaene, S. (2011). The massive impact of literacy on the brain and its consequences for education. Human Neuroplasticity and Education, 117, 19–32, 237–238.	reading science, neurology, letterbox, orthographic mapping, phonological	Understanding how the brain's reading network functions is the basis for understanding the elements of effective instruction. Learning to read changes the brain. With the right kinds of instruction, the neural pathways in the brain of a struggling reader begin to look more like the neural pathways in the brain of a proficient reader.
Learning to Read and Learning to Spell: Two sides of a coin	Ehri, L. C. (2000). Learning to read and learning to spell: Two sides of a coin. Topics in Learning Disorders, 20, 19–49.	orthographic mapping, spelling	Reading (decoding) and spelling (encoding) are reciprocal processes.
Learning to Read Words: Theory, findings, and issues	Ehri, L. C. (2005). Learning to read words: Theory, findings, and issues. Scientific Studies of Reading, 9, 167–188.	orthographic mapping, letter-sound connections, spelling, memory, sight words	The process of learning sight words involves forming connections between graphemes and phonemes to bond spellings of the words to their pronunciations and meanings in memory. Four phases characterize the course of development of sight word learning. The phases are distinguished according to the type of alphabetic knowledge used to form connections: pre-alphabetic, partial, full, and consolidated alphabetic phases.
Orthographic Mapping in the Acquisition of Sight Word Reading, Spelling Memory, and Vocabulary Learning	Ehri, Linnea C. (2014). Orthographic mapping in the acquisition of sight word reading, spelling memory, and vocabulary learning. Scientific Studies of Reading, 18(1), 5-21, DOI: 10.1080/10888438.2013.819356	orthographic mapping, letter-sound connections, spelling, memory, sight words	This article reviews the phases of developing word reading and spelling. These phases are prealphabetic, partial alphabetic, full alphabetic, and consolidated alphabetic.
Developing Early Literacy: Report of the National Early Literacy Panel	Eunice Kennedy Shriver National Institute of Child Health and Human Development, NIH, DHHS. (2010). Developing early literacy: Report of the National Early Literacy Panel (NA). Washington, DC: U.S. Government Printing Office.	phonological awareness, phonics, orthographic mapping, comprehension, vocabulary	Early readers need to develop phonological awareness > phonics > fluency (orthographic mapping) and a strong vocabulary/background knowledge > strong comprehension.
Foundational Skills to Support Reading for Understanding in Kindergarten through 3rd Grade (WWC Practice Guide)	Foorman, B., Beyler, N., Borradaile, K., Coyne, M., Denton, C. A., Dimino, J., Furgeson, J., Hayes, L., Henke, J., Justice, L., Keating, B., Lewis, W., Sattar, S., Streke, A., Wagner, R., & Wissel, S. (2016). Foundational skills to support reading for understanding in kindergarten through 3rd grade (NCEE 2016-4008). Washington, DC: National Center for Education Evaluation and Regional Assistance (NCEE), Institute of Education Sciences, U.S. Department of Education.	reading, foundational skills, synthesis	This guide is an update to the National Reading Panel report, in which the researchers used the same methodology to vet over 6000 new studies from 2000-2015. This is a credible and recent research synthesis for K-3 literacy.
Why is Letter-Name Knowledge Such a Good Predictor of Learning to Read?	Foulin, J. N. (2005). Why is letter-name knowledge such a good predictor of learning to read? Reading and Writing, 18, 129-155.	alphabet knowledge, letter-name knowledge, rapid automatized naming (RAN), letter-sound correspondences	The knowledge of letter names measured just before children enter school has been known for a long time as one of the best longitudinal predictors of learning to read in an alphabetic writing system. Letter-name knowledge influences the emergence of the phonological processing of print, the learning of letter-sound correspondences, and the development of phonemic sensitivity skills.

Title	Citation	Keywords & Academic Terms	Summary as it Relates to Waterford.org Programs
Beneath the Surface of Developmental Dyslexia	Frith, U. (1985). Beneath the surface of developmental dyslexia. In K. Patterson, J. Marshall, & M. Coltheart (Eds.), Surface dyslexia: Neurological and cognitive studies of phonological reading (pp. 301-330). Hillsdale, NJ: Lawrence Erlbaum.	dyslexia, phonological processing, letter-sound relationships	Individuals with dyslexia have difficulty isolating speech sounds and connecting them with symbols of written language.
Language Matters: Denying the existence of the 30-million-word gap has serious consequences	Golinkoff, R.M., Hoff, E., Rowe, M.L., Tamis-LeMonda, C.S., Hirsh-Pasek, K. (2019). Language matters: Denying the existence of the 30-million-word gap has serious consequences. Child Development, 90(3), 985-992.	language, word gap	Sperry, Sperry, and Miller (2018) aim to debunk what is called the 30-million-word gap by claiming that children from lower income households hear more speech than Hart and Risley (1995) reported. However, they also argue that the concept of the 30-million-word gap should not be abandoned, and discuss the importance of retaining focus on the vital ingredient to language learning—quality speech directed to children rather than overheard speech. The following issues are addressed: the characteristics of speech that promote language development, and the importance of language in school achievement.
Decoding, Reading, and Reading Disability	Gough, P. and Tunmer, W. (1986). Decoding, reading, and reading disability. Remedial and Special Education, 7, 6–10.	the simple view of reading, decoding, language comprehension, reading comprehension	Decoding (D) x Language Comprehension (LC) = Reading Comprehension (RC)
Hard Words: Why American kids aren't being taught to read	Hanford, E. (Host). (2018, September 10). Hard words: Why american kids aren't being taught to read Audio podcast episode. In Educate. American Public Media.	reading, challenges, public education	This article discusses the science of reading and why it is necessary for literacy learning.
At a Loss for Words: How a flawed idea is teaching millions of kids to be poor readers	Hanford, E. (Host). (2019, August 22). At a Loss for Words: How a flawed idea is teaching millions of kids to be poor readers. In Educate. American Public Media.	phonics	This article discusses the need for full phonics instruction and the risk if children are not taught with an explicit phonics sequence.
Meaningful Differences in the Everyday Lives of American Children	Hart, B., & Risley, T. (1995). Meaningful differences in the everyday lives of American children. Baltimore, MD: Brookes Publishing.	language, word gap, vocabulary	This study identified the "30-million-word gap." Observers found that 86% to 98% of the words used by each child by the age of three were derived from their parents' vocabularies. Furthermore, not only were the words they used nearly identical, but also the average number of words utilized, the duration of their conversations, and the speech patterns were all strikingly similar to those of their caregivers.
Reading Fluently Does Not Mean Reading Fast	International Literacy Association. (2018). Reading fluently does not mean reading fast [Literacy leadership brief]	fluency, automaticity, cognitive load, sight word bank, comprehension	Reading fluency is to support comprehension. Reading quickly is a product of fluency, but it is not the goal. Too much focus on reading quickly can negatively affect comprehension.
Essentials of Assessing, Preventing, and Overcoming Reading Difficulties	Kilpatrick, David A. (2015). Essentials of assessing, preventing, and overcoming reading difficulties. John Wiley & Sons.	phonological awareness, phoneme manipulation, orthographic mapping, fluency, comprehension, assessment	Students must master phoneme manipulation, the most advanced phonological awareness skills. These skills enable students to successfully use orthographic mapping (connecting the phonemes in a word to the graphemes that represent them) to build a bank of sight words that are stored in long-term memory and that can be recognized automatically. It is this bank of sight words that makes reading fluency possible. Fluent reading, in turn, supports comprehension.

Title	Citation	Keywords & Academic Terms	Summary as it Relates to Waterford.org Programs
Equipped for Reading Success: A comprehensive, step-by-step program for developing phonemic awareness and fluent word recognition	Kilpatrick, David A. (2016). Equipped for reading success: A comprehensive, step-by-step program for developing phonemic awareness and fluent word recognition.	phonological awareness, phoneme manipulation, orthographic mapping, fluency, comprehension, assessment	This book is a summary of the ideas presented in Kilpatrick's 2015 book and includes a large bank of practice exercises that can be used with students to build their phonemic awareness to the most advanced level.
Examining the Simple View of Reading with Elementary School Children: Still simple after all these years	Lonigan, C.J., Burgess, S.R., & Schatschneider, C. (2018). Examining the simple view of reading with elementary school children: Still simple after all these years. Remedial and Special Education, 39(5), 260–273. https://doi.org/10.1177/0741932518764833	simple view of reading	The two components of the Simple View of Reading (word identification and language comprehension) do in fact account for most of the variation in readinng proficiency.
Whole-language High Jinks: How to tell when "scientifically-based reading instruction" isn't	Moats, L. C. (2007). Whole-language high jinks: How to tell when "scientifically-based reading instruction" isn't. Thomas B. Fordham Institute.	science of reading, research-based instruction	This practitioners' guide explains how educators, parents, and concerned citizens can spot ineffective reading programs that hide under the "scientifically-based" banner.
Can Prevailing Approaches to Reading Instruction Accomplish the Goals of RTI?	Moats, L. C. (2017). Can prevailing approaches to reading instruction accomplish the goals of RTI? Perspectives on Language and Literacy, 43, 15–22.	response to intervention (RTI), instruction	This article discusses prevalent reading instruction practices that may be the root cause of less than optimal results with RTI implementations.
Speech to Print: Language essentials for teachers	Moats, L. C. (2020). Speech to print: Language essentials for teachers. Baltimore: Paul H. Brookes Pub.	phonological awareness, phonics, orthography, morphology, syntax, semantics	This is a comprehensive and detailed overview of language and literacy. It outlines the principles behind the effective teaching of reading, spelling, and writing and serves as a resource for concepts and definitions related to phonological awareness, phonics, orthography, morphology, syntax, and semantics.
Teaching Reading is Rocket Science, 2020: What expert teachers of reading should know and be able to do	Moats, L.C. (2020). Teaching reading is rocket science, 2020: What expert teachers of reading should know and be able to do. American Federation of Teachers.	reading, achievement, reading science	Most reading failure is unnecessary. Classroom teaching itself, when it includes a range of research-based components and practices, can prevent and mitigate reading difficulty. Students must have instruction directly, systematically, and explicitly to decipher words in print, all the while keeping in mind the ultimate purpose of reading, which is to learn, enjoy, and understand.
Teaching Children to Read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction	National Reading Panel (U.S.), & National Institute of Child Health and Human Development (U.S.). (2000). Report of the National Reading Panel: Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction. Bethesda, MD: U.S. Dept. of Health and Human Services, Public Health Service, National Institutes of Health, National Institute of Child Health and Human Development.	literacy, reading instruction	This report is a synthesis of literacy research and outlines the best research-based literacy practices. Waterford's content aligns with these evidence-based practices.
Preventing Reading Difficulties in Young Children	National Research Council. (1998). Preventing reading difficulties in young children. Washington, DC: The National Academies Press.	literacy development, effective instruction, risk factors	A detailed exploration of how literacy can be fostered from birth through the primary grades and factors that put children at risk of poor reading. It identifies effective instruction for the preschool and early grades and explores approaches to dialects and bilingualism.
Reading Ability: Lexical quality to comprehension	Perfetti, C. A. (2007). Reading ability: Lexical quality to comprehension. Scientific Studies of Reading, 11, 357–383. doi:10.1080/10888430701530730	lexical quality hypothesis, orthography, phonology, word meanings, vocabulary	The lexical quality hypothesis (LQH) claims that variation in the quality of word representations has consequences for reading skill, including comprehension. High lexical quality includes well-specified and partly redundant representations of form (orthography and phonology) and flexible representations of meaning, allowing for rapid and reliable meaning retrieval.

Title	Citation	Keywords & Academic Terms	Summary as it Relates to Waterford.org Programs
Write to Read: The brain's universal reading and writing network	Perfetti, C. A., & Tan, L. H. (2013). Write to read: The brain's universal reading and writing network. Trends in Cognitive Sciences, 17, 5	writing, reading, domains of language, spelling, handwriting	The brain's network for reading and writing is largely universal across languages. The development of skills in reading, writing, spelling, and handwriting are supportive of one another.
How the Science of Reading Informs 21st-Century Education	Petscher, Y., Cabel, S., Catts, H.W., Compton, D.L., Foorman, B.R., Hart, S.A., Lonigan, C.J., Phillips, B.M., Schatschneider, C., Steacy, L., Terry, N.P., & Wagner, R.K. (2020). How the science of reading informs 21st-century education. The Reading Teacher, 55(S1), S267-S282. doi: 10.1002/rrq.352	science of reading, effective instruction, intervention	The goals in this article were to clarify what constitutes evidence in the science of reading and to offer a critical evaluation of the evidence provided by the science of reading.
Systematic Review of the Literature on the Effectiveness of Early Childhood Education Curricula and Instructional Practices on Language and Literacy Development	Regional Educational Laboratory Program (REL). (July 2021). Systematic review of the literature on the effectiveness of early childhood education curricula and instructional practices on language and literacy development.	early literacy	Key findings include: 1) Rigorous evidence exists on effective early literacy interventions. 2) Early literacy interventions improved language and literacy performance in taught domains. 3)Among interventions that taught language exclusively, instruction conducted one-on-one or in small groups was likely to benefit language performance. 4) Teaching both phonological awareness and print knowledge improved print knowledge, decoding, and early writing performance.
Scarborough's Reading Rope	Scarborough, H. S. (2001). Connecting early language and literacy to later reading (dis) abilities: Evidence, theory, and practice. In S. Neuman & D. Dickinson (Eds.), Handbook for research in early literacy (pp. 97–110). New York, NY: Guilford Press.	word recognition, language comprehension	It's the combination of word recognition skills that become increasingly automatic, and language comprehension skills that become increasingly strategic, that are necessary for children to become skilled readers.
Learning Through Play: The impact of web-based games on early literacy development	Schmitt, K. L., Hurwitz, L. B., Sheridan Duel, L., & Nichols Linebarger, D. L. (2018). Learning through play: The impact of web-based games on early literacy development. Computers in Human Behavior, 81, 378–389. https://doi.org/10.1016/j.chb.2017.12.036	computers, web-based, early literacy, home	The aim of this study was to determine if literacy games on an educational website could effectively promote early literacy. 136 preschoolers and kindergarteners were randomly assigned to play literacy-focused (intervention group) or puzzle- and arts-themed computer games (control) for 8 weeks at home. Children's early literacy skills were evaluated pre- and post-intervention via 12 literacy assessments. Children in the intervention group outperformed control group peers on eight of these outcomes. Learning was most pronounced for alliteration and phonics, which are important early predictors of later reading abilities.

Title	Citation	Keywords & Academic Terms	Summary as it Relates to Waterford.org Programs
The Science of Reading and its Educational Implications	Seidenberg, M. (2014). The science of reading and its educational implications. Language Learning and Development, 9(4), 331-360.	science of reading, cognitive science	Research in cognitive science and neuroscience has made enormous progress toward understanding skilled reading, the acquisition of reading skill, the brain bases of reading, the causes of developmental reading impairments and how such impairments can be treated. Seidenberg explores the reasons for students' continued struggles with reading: the fact that English has a deep alphabetic orthography; how reading is taught; and the impact of linguistic variability as manifested in the Black-White "achievement gap."
Language at the Speed of Sight: How we read, why so many can't, and what can be done about it	Seidenberg, M. (2017). Language at the speed of sight: How we read, why so many can't, and what can be done about it. New York, NY: Basic Books.	science of reading, cognitive science	In Language at the Speed of Sight, internationally renowned cognitive scientist Mark Seidenberg reveals the underexplored science of reading, which spans cognitive science, neurobiology, and linguistics. As Seidenberg shows, the disconnect between science and education is a major factor in America's chronic underachievement.
Relationships Between Reading and Writing Development	Shanahan, T. (2016). Relationships between reading and writing development. In C.A. McArthur, S. Graham, & J. Fitzgerald (Eds.), Handbook of writing research. The Guilford Press.	writing, domains of language	Many of the same cognitive processes are required for reading and writing. Good readers are typically better writers, and vice versa.
Phonological Recoding and Orthographic Learning: A direct test of the self-teaching hypothesis	Share, D. L. (1999). Phonological recoding and orthographic learning: A direct test of the self-teaching hypothesis. Journal of Experimental Child Psychology, 72, 95–129. doi:10.1006/jecp.1998.2481	self-teaching, orthographic, phonological awareness	When students become reasonably proficient with the orthographic mapping process, they begin to self-teach. The mapping happens intuitively. For typically developing readers, one to four exposures are required to map a regularly spelled word to long-term memory.
Orthographic Learning at a Glance: On the time course and developmental onset of self-teaching	Share, D. L. (2004). Orthographic learning at a glance: On the time course and developmental onset of self-teaching. Journal of Experimental Child Psychology, 87, 267–298. doi:10.1016/j.jecp.2004.01.001	self-teaching, orthographic, phonological awareness	Results suggest fundamental differences between shallow and deep orthographies in the development of orthographic sensitivity.
Overcoming Dyslexia	Shaywitz, S. & Shaywitz, J. (2020). Overcoming dyslexia. New York, NY: Alfred A. Knopf.	dyslexia	This latest edition provides information on screening and diagnosis, effective instructional practices, and legal accommodations for dyslexia.
The Relations Between Lower and High Level Comprehension Skills and Their Role in Prediction of Early Reading Comprehension	Silva, M., & Cain, K. (2015). The relations between lower and higher level comprehension skills and their role in prediction of early reading comprehension. Journal of Educational Psychology, 107(2), 321–331. https://doi.org/10.1037/a0037769	comprehension, vocabulary, inference, grammar	This study of 4- to 6-year-olds had two aims: 1) to determine how lower level comprehension skills (receptive vocabulary and grammar) and verbal memory support early higher level comprehension skills (inference and literal story comprehension), and 2) to establish the predictive power of these skills on subsequent reading comprehension. Vocabulary was a unique predictor of concurrent narrative comprehension. Longitudinally, inference skills, literal comprehension, and grammar made independent contributions to reading comprehension one year later.
The Role of Vocabulary Versus Knowledge on Children's Language Learning: A fifty-year perspective	Snow, C. E. (2017). The role of vocabulary versus knowledge on children's language learning: A fifty-year perspective. Journal for the Study of Education and Development, 40, 1–18.	vocabulary, language, knowledge gap	Much public attention has been drawn to the '30 million-word gap' between children growing up in more- vs. less-privileged families. Conceptualizing the gap in quantity of words, which is useful in emphasizing the size of the challenge, misconceptualizes the real differences, which are in knowledge of the world rather than just vocabulary size. It's necessary to recogonize the challenge as one of knowledge rather than just vocabulary size to better position support for second language learners whose knowledge base across both languages is a better predictor of academic success than vocabulary in the second language.

Title	Citation	Keywords & Academic Terms	Summary as it Relates to Waterford.org Programs
Structured Literacy and Typical Literacy Practices: Understanding differences to create instructional opportunities	Spear-Swerling, L. (2018). Structured literacy and typical literacy practices: Understanding differences to create instructional opportunities. Teaching Exceptional Children, 20(10), 1-11.	structured literacy, effective instruction	Key features of structured literacy approaches include (a) explicit, systematic, and sequential teaching of literacy at multiple levels—phonemes, letter–sound relationships, syllable patterns, morphemes, vocabulary, sentence structure, paragraph structure, and text structure; (b) cumulative practice and ongoing review; (c) a high level of student–teacher interaction; (d) the use of carefully chosen examples and nonexamples; (e) decodable text; and (f) prompt, corrective feedback.
Reexamining Verbal Environments of Children from Different Socioeconomic Backgrounds	Sperry, D. E., Sperry, L. L., & Miller, P. J. (2019). Reexamining verbal environments of children from different socioeconomic backgrounds. Child Development, 90(4), 1303-1318.	language, vocabulary	This investigation uses language data from five American communities across the socioeconomic spectrum to test, for the first time, Hart and Risley's (1995) claim that poor children hear 30 million fewer words than their middle-class counterparts during the early years of life. Results do not support Hart and Risley's claim, reveal substantial variation in vocabulary environments within each socioeconomic stratum, and suggest that definitions of verbal environments that exclude multiple caregivers and bystander talk disproportionately underestimate the number of words to which children in low-income families are exposed.
Exposure to Print and Orthographic Processing	Stanovich, K. E., & West, R. F. (1989). Exposure to print and orthographic processing. Reading Research Quarterly, 24, 402–433. doi:10.2307/747605	orthographic processing, word recognition, spelling	This article investigates whether orthographic processing ability in adults accounts for variance in individual word recognition and spelling skills, and finds that some individual differences in reading and spelling are caused by variation in orthographic processing skills linked to print exposure.
The Role of Set for Variability in Irregular Word Reading: Word and child predictors in typically developing readers and students at-risk for reading disabilities	Steacy, L. M., Wade-Woolley, L., Rueckl, J. G., Pugh, K. R., Elliott, J. D., & Compton, D. L. (2019). The role of set for variability in irregular word reading: Word and child predictors in typically developing readers and students at-risk for reading disabilities. Scientific Studies of Reading, 23(6), 523–532. https://doi.org/10.1080/10888438.2019.1620749	set for variability	Research suggests successful reading of an irregular word depends at least partially on a child's ability to address the mismatch between decoded form and stored word pronunciation, referred to as a child's set for variability, and the word's relative transparency.
The Nation's Report Card	The Nation's Report Card. (2019). NAEP report card: 2019 NAEP reading assessment.	assessment, achievement	NAEP scores have not changed significantly over the years.
Does Set for Variability Mediate the Influence of Vocabulary Knowledge on the Development of Word Recognition Skills?	Tunmer, W. E., & Chapman, J. W. (2012). Does set for variability mediate the influence of vocabulary knowledge on the development of word recognition skills? Scientific Studies of Reading, 16, 122–140. doi:10.1080/10888438.2010.542527	set for variability, vocabulary, word recognition	This study investigated the hypothesis that vocabulary influences word recognition skills indirectly through set for variability, the ability to determine the correct pronunciation of approximations to spoken English words. Findings were as follows: vocabulary and phonemic awareness made independent contributions to variance in set for variability; vocabulary directly influenced future reading comprehension and indirectly influenced future decoding and word recognition through set for variability; and set for variability influenced future reading comprehension indirectly through both decoding and word recognition.

Title	Citation	Keywords & Academic Terms	Summary as it Relates to Waterford.org Programs
How 'Reading Instruction' Fails Black and Brown Children	Wexler, N. (2020, June 6). How 'reading instruction' fails Black and brown children. Forbes.	systematic instruction, content knowledge, social justice, knowledge gap	"When it comes to reading, what works is a simultaneous mix of two things at early grade levels: systematic instruction in phonics, and starting to build the kind of knowledge students will need in high school and beyond. What doesn't work is what schools have been doing: giving a token nod to phonics while encouraging kids to guess at words, and scrapping social studies and science to focus on illusory reading comprehension skills."
The Reading Mind: A cognitive approach to understanding how the mind read	Willingham, D.T. (2017). The reading mind: A cognitive approach to understanding how the mind reads. John Wiley & Sons.	cognitive science	An explanation of the process of learning to read and the connections between reading and writing are outlined.
Proust and the Squid: The story and science of the reading brain	Wolf, M. (2007). Proust and the squid: The story and science of the reading brain. New York, NY: Harper Collins.	dyslexia	Reading is a human invention that reflects how the brain rearranges itself to learn something new.
The Economic and Social Cost of Illiteracy: A snapshot of illiteracy in a global context	World Literacy Foundation. (2015). The economic and social cost of illiteracy: A snapshot of illiteracy in a global context.	literacy, illiteracy	This paper addresses the growing economic and social costs of ignoring the illiteracy epidemic. It discusses the cost of illiteracy in the British and global economy, as well as provides suggestions for how to address literacy in both developing and developed countries.

Culturally Responsive Instruction

Title	Citation	Keywords & Academic Terms	Summary as it Relates to Waterford.org Programs
Racism and Inequity are Products of Design. They Can be Redesigned.	EquityXDesign. (2016). Racism and inequity are products of design. They can be redesigned.	equity, design, programs.	This article promotes the concept of equity in program design. It outline s a process by which groups and organizations can process ideas and revisit them to ensure inclusion. Designed at the Stanford Innovation Lab, it is helpful to those working on what it means to provide equitable services.
Culturally Responsive Teaching and the Brain	Hammond, Z. L. (2015). Culturally responsive teaching and the brain. Corwin Press.	culturally responsive	This book discusses equity and instruction.
Co-Constructing Culturally Sustaining Practices for Fostering Young Children's Literacy in Fiji	Harris, P., Brock, C. H., McInnes, E., Diamond, A., Neill, B., Carter, J. & Giannakis, E. (2020). Co-constructing culturally sustaining practices for fostering young children's literacy in Fiji. Journal of Research in Childhood Education, 34:1, 127-152, DOI: 10.1080/02568543.2019.1692105	Fiji, early literacy, CSP, co-construction, indigenous research	The aim was to use authentic dialogue in "co-constructing culturally sustaining pedagogic (CSP) practices with children and their families and communities, to foster children's literacy in their home languages and English in Fiji's settings" (Harris et al., 2020). The researchers share specific details on efforts to center voices of communities.
The Pedagogy of Confidence: Inspiring high intellectual performance in urban schools	Jackson, Yvette. (2011). The pedagogy of confidence: Inspiring high jntellectual performance in urban schools. Teachers College Press.	high operational practices	Dr. Jackson outlines seven high operational practices that provide learners with access to high intellectual performance.
Culturally Relevant Pedagogy 2.0: a.k.a. the remix	Ladson-Bilings, Gloria. (2014). Culturally relevant pedagogy 2.0: a.k.a. the remix. Harvard Educational Review 84(1), 74-84.	culturally relevant	There are three domains for culturally relevant pedagogy: academic success, cultural competence, sociopolitical consciousness. "This is the secret behind culturally relevant pedagogy: the ability to link principles of learning with deep understanding of (and appreciation for) culture" (p.4). "Teachers undertaking culturally informed pedagogies take on the dual responsibility of external performance assessments as well as community- and student-driven learning" (p.10).
But That's Just Good Teaching!	Ladson-Billings, G. (1995). But that's just good teaching! The case for culturally relevant pedagogy. Theory into Practice, 34(3), 159-165.	culturally relevant	This article discusses Ladson-Billings' work and the ways in which schools should ensure that the content being taught has a "closer fit" with children's lives and experiences.
How 'Reading Instruction' Fails Black and Brown Children	Wexler, N. (2020, June 6). How 'reading instruction' fails Black and brown children. Forbes.	systematic instruction, content knowledge, social justice	"When it comes to reading, what works is a simultaneous mix of two things at early grade levels: systematic instruction in phonics, and starting to build the kind of knowledge students will need in high school and beyond. What doesn't work is what schools have been doing: giving a token nod to phonics while encouraging kids to guess at words, and scrapping social studies and science to focus on illusory reading comprehension skills."

Mindset Skills

Title	Citation	Keywords & Academic Terms	Summary as it Relates to Waterford.org Programs
Executive Function and Self-Regulation	Center on the Developing Child. (n.d.) Executive function and self-regulation. Harvard University Website.	executive function	This site provides basics for executive function and how those skills are beneficial to learning.
Digital Citizenship Curriculum	Common Sense. (n.d.). Digital citizenship curriculum. Commonsense.org.	digital citizenship curriculum	This site provides insight into the types of digital citizenship standards we include in our Mindset Skills.
Digital Intelligence (DQ) Framework	DQ Institute. (n.d.) What is the DQ framework?	digital citizenship	This site provides insight into the types of digital citizenship standards we might choose to include in our Mindset Skills.
The 5 Competencies of Digital Citizenship	Fingal, Jerry. (2020, October 6). The 5 competencies of digital citizenship. ISTE.	digital citizenship	This blog post includes a video about the dos and don'ts of digital citizenship, including five competencies to commit to.
ISTE Standards for Students	International Society for Technology in Education (ISTE). (n.d.). ISTE standards: Students.	digital citizenship	This site provides insight into what types of digital citizenship standards should be infused into the curriculum's Mindset Skills.
Neuroscientific Insights: Attention, working memory, and inhibitory control	Raver, C. C., & Blair, C. (2016). Neuroscientific insights: Attention, working memory, and inhibitory control. The Future of Children, Vol. 26 (2), 95–118.	executive function, working memory	This journal article provides insight into the areas of executive function that are important to include in our Mindset Skills.
The 3 Areas of Executive Function	The Understood Team. (n.d.). The 3 Areas of Executive Function. Understood.org.	executive function	This site provides insight into the three main areas of executive function with examples.