

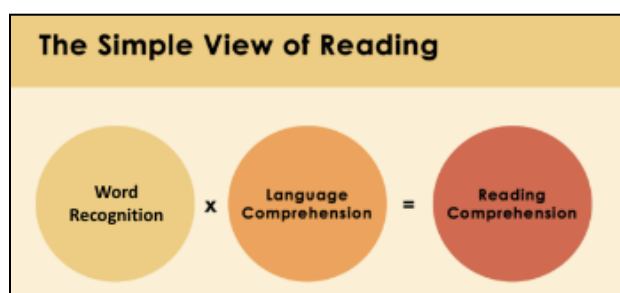
The Science of Reading

What does “Science of Reading” mean in Hawai‘i?

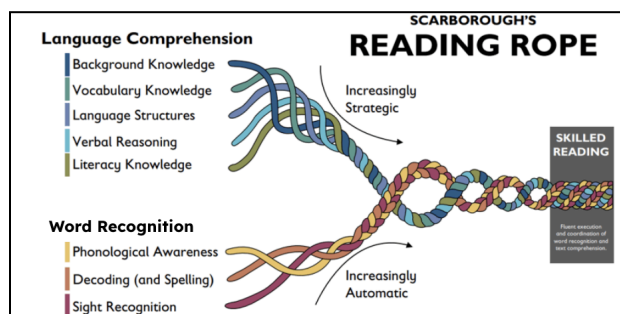
The Science of Reading is an ongoing field of study that examines the last fifty years of research in a variety of fields, including education, school psychology, cognitive psychology, developmental psychology, neuroscience, linguistics, communication sciences, and special education to determine the most effective way to teach reading. A scientific approach to reading instruction includes explicit, systematic, instruction in the following:

- Phonological Awareness (sounds)
- Phonics
- Fluency (ability to read accurately and at an appropriate rate)
- Vocabulary
- Comprehension

There are five key components of evidence-based reading instruction: Phonological Awareness, Phonics, Vocabulary, Fluency, and Comprehension. Hawaii’s Common Core Standards include all five components of reading. These standards documents tell you **what** students need to learn; however, they do not describe **how** students learn. The Hawaii State Literacy Plan includes two key models that help explain how students learn to read. The first model, “**The Simple View of Reading**” (Gough & Tunmer, 1986), explains that a student must be able to **both** decode the words on the page **and** understand the meaning of the decoded words in order to have reading comprehension. The second model, **Scarborough’s Rope** (Scarborough, 2001), details the many strands that must be woven together to ensure a student is able to read. The Hawaii State Literacy Plan also provides a collection of evidence-based practice recommendations for each of the five components of reading.



Philip B. Gough and William E. Tunmer presented **The Simple View of Reading** in 1986. The formula highlights the idea that reading consists of two basic components, **word recognition** and **language comprehension**. The mathematical operation of multiplication within the formula makes clear that both components must be present given that when we multiply any factor by 0, the product is 0; therefore, if an individual is strong in word recognition, but lacking in language comprehension, there will be no reading comprehension (the product is 0) and vice versa.



(Scarborough, 2001)

Dr. Hollis Scarborough, American psychologist and literacy expert, created the reading rope in an effort to describe all the components comprising skilled reading. She compared the multi-faceted process of reading to the strands of a rope, consistently becoming tighter as the skills become more developed. The bottom half of the rope contains the components required for **word recognition**, while the upper half of the rope contains components related to **language comprehension**. In order for an individual to be a skilled reader, ALL of the components of the rope must be equally developed; thus, reading instruction must include a focus on each strand of the rope.

In Hawai‘i, we expect educators to:

Provide:

- Daily, explicit, systematic **Tier 1** instruction in all components of reading:
 - Phonological Awareness (K-3)
 - Phonics/Word Study
 - Fluency
 - Vocabulary
 - Comprehension
- Daily, explicit, systematic data driven **Tier 2** interventions to target individual student needs for those students who score below benchmark on universal screener assessment
- Daily, explicit, systematic data driven **Tier 3** interventions to target individual student needs when Tier 2 interventions are not producing desired growth

The above recommendations are embedded within [Hawaii's Multi-tiered System of Supports](#) (HMTSS).

Plan:

Instruction aligned with grade-level [Hawai'i Common Core Standards for English Language Arts](#) that is focused on student needs as determined by assessment data

- Universal Screeners
- Informal Diagnostics
- Progress Monitoring
- Daily formative assessments

A daily 90-minute Tier 1 reading block is recommended in grades K-3.

A daily 60-minute Tier 1 reading block is recommended in grades 4-6.

It is recommended that middle school and high school English courses **equate to between 50-70 minutes daily**.

A designated intervention block is recommended in all grades for any students who need it. The intervention block takes place outside of the Tier 1 instructional block.

For more specific time block recommendations, see: bit.ly/hiinstructionalminutes

Resources provided by HIDOE include:

- A [list of high-quality Tier 1 curriculum materials](#) and suggestions for how these materials can be supplemented to ensure students have sufficient practice opportunities, especially in the foundational skills;
- **High-quality professional development** opportunities, including asynchronous Literacy Academy on Demand Grades 6-12 and Cox Campus K-5 Structured Literacy course, and an MTSS-R series for school-level teams.
- A **compendium of resources** provided via HIDOE's [Science of Reading Website](#) and [Learning Design Resource Website](#); and
- A **Literacy Coaching Academy** to train and support school-level coaches on the fundamentals of literacy coaching.