Helping Your Faculty Make the Shift to SOR: The Science of Reading

Dr. Kelly Raymond, Learning Specialist
Jane Verlin, Head of Lower School
Cynthia Hoemann, Reading Specialist
Dr. Kelly Raymond
Learning Specialist

Jane Verlin
Head of Lower School

Cynthia Hoemann
Reading Specialist
Setting the Stage
Our Story

Why we did it: Kelly
How we did it: Jane
What we did: Cynthia
Science Of Reading
Learning to read is natural.
1. The Science of Reading
2. Brain Anatomy
3. Function of the Reading Brain
4. Structure of the English Language
5. The Developmental Stages of Reading
Do not read the next slide just count the words.
I told you not to read this!
Science of reading is a program or pedagogy.
What it IS

A Collection of Research

Research, over time, from multiple fields of study using methods that confirm and disconfirm theories on how children best learn to read.

Teaching Based on the 5 Big Ideas

**Phonemic Awareness** - The ability to identify and play with individual sounds in spoken words.

**Phonics** - Reading instruction on understanding how letters and groups of letters link to sounds to form letter-sound relationships and spelling patterns.

**Fluency** - The ability to read words, phrases, sentences, and stories correctly, with enough speed, and expression.

**Vocabulary** - Knowing what words mean and how to say and use them correctly.

**Comprehension** - The ability to understand what you are reading.

Ever Evolving

There is new research and evidence all the time. As populations, communities, and approaches evolve, so should practice.
What it IS NOT

A program, an intervention, or a product that you can buy.

The Science of Reading could be considered an approach to teaching reading that is based on decades of research and evidence. It is NOT a specific program.

Phonics-based programs that drill phonics skills.

Phonics is an integral part of teaching reading based on science, but it is just one of the five big ideas that should be taught so all children can learn to read.

Complete and no more study needs to be done.

As with any science, it is never complete. We can always know more. More study happens all the time and researchers, teachers, and families can work together to bring the best research into classrooms.
Science of reading-aligned practice emphasizes phonics only.
Language Comprehension

- Background Knowledge
- Vocabulary Knowledge
- Language Structures
- Verbal Reasoning
- Literacy Knowledge

Word Recognition

- Phonological Awareness
- Decoding (and Spelling)
- Sight Recognition

Skilled Reading

Fluent execution and coordination of word recognition and text comprehension.

Increasingly Strategic

Increasingly Automatic

Scarborough, 2001
Word Recognition \times Language Comprehension = Reading Comprehension

\begin{align*}
1 \times 0 &= 0 \\
0 \times 1 &= 0 \\
0.5 \times 0.5 &= 0.25
\end{align*}

Based on the Simple View of Reading by Gough and Tunmer, 1986
Structured Literacy is only for those students “who need it.”
EXPRESS TEACHING OF
ALPHABETIC DECODING SKILLS
IS HELPFUL FOR ALL CHILDREN,
HARMFUL FOR NONE, AND
CRUCIAL FOR SOME.

Snowling, Hulme, Snow & Juell (2005)
"If a child memorizes ten words, the child can read only ten words. But if a child learns the sounds of ten letters, the child will be able to read 350 three sound words, 4,320 four sound words and 21,650 five sound words."

Dr. Martin Kozloff, 2002
The How:
Time and Space Resources
Make it a Priority: Building Knowledge
Hi all,

I came across this webinar and wanted to share it with you because I think it is one of the best ones I have seen that explains how the brain learns to read. Amplify has a series called Cortex in the Classroom and this is one titled Advancing the Science of Reading in the Early Years by Carolyn Strom. While it specifically addresses early readers (age 3-5) it is beneficial to anyone who is interested in learning more about reading and the brain.

Here is the link if you are interested:
https://youtu.be/5ozikJR3oY8

All best,
Cynthia (the SOR nerd)
Time and Space: Empathy
Building Momentum: Faculty Book Group

**SHIFTING THE BALANCE**
6 Ways to Bring the Science of Reading into the Balanced Literacy Classroom

Jan Burkins • Kari Yates

**SIX SHIFTS...**

**SHIFT 1**
Rethinking How Reading Comprehension Begins

**SHIFT 2**
Recommitting to Phonemic Awareness Instruction

**SHIFT 3**
Reimagining the Way We Teach Phonics

**SHIFT 4**
Revising High-Frequency Word Instruction

**SHIFT 5**
Reinventing the Ways We Use MSV (3 Cueing Systems)

**SHIFT 6**
Reconsidering Texts for Beginning Readers

**DISCUSSED THROUGH...**
- Classroom Examples
- Common Misunderstandings
- A Short Summary of the Science
- Recommendations for Making the Shift
- Questions for Reflection

#THESIXSHIFTS
Reading Inquiry Group Topics

Fostering a Love of Reading

Vocabulary and Comprehension

Development of Reading Skills: Scope & Sequence

Using Data to Inform Instruction

Parent Communication
Celebrate and tell the story!
Resources

Professional Development: in-house training + off-site

Instruction: Heggerty, Fundations, Decodable Library, Boost

Assessment Tools: DIBELS, mCLASS

Reading Team (coaches)
The What:
Analysis & Implementation
What does the science of reading look like in practice?

Shift **away** from using a singular level to understand a student’s reading ability.

Shift **toward** looking at reading skills in isolation, while also understanding how the skills interconnect.
Analysis

- **How were we using what we already had?**
  - Fundations
  - DIBELS-8
  - Schedule / Literacy blocks

- **What could/should this look like?**
  - Connect Fundations to literacy
  - Deeper dive into DIBELS data - which areas / students need more attention?
  - Enable teachers to have a better understanding of the information the data was providing
  - Utilize classroom time more strategically
Analysis

- Use DIBELS assessment data to identify skills that need to be reinforced
- Create differentiated groups for instruction based on this information
What does this look like in the classroom?

- Use assessment data to identify skills that need to be reinforced
- Create differentiated groups for instruction based on this information

### Grade 1: Middle of the Year Instructional Grouping Suggestions

<table>
<thead>
<tr>
<th>Group 1: Likely to need core support</th>
<th>Group 2: Additional Support</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alphabetic Principle and Basic Phonics</strong></td>
<td>At or Above Benchmark (NWF-WRC ≤ 14 or higher)</td>
</tr>
<tr>
<td><strong>Accurate and Fluent Reading of Connected Text</strong></td>
<td>At or Above Benchmark (ORF - Words Correct ≥ 21 or higher)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>NWF - WRC</th>
<th>ORF - Words Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group 3: Additional Support</th>
<th>Group 4: Additional Support</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alphabetic Principle and Basic Phonics</strong></td>
<td>Below or Well Below Benchmark (NWF-WRC ≤ 14)</td>
</tr>
<tr>
<td><strong>Accurate and Fluent Reading of Connected Text</strong></td>
<td>Below or Well Below Benchmark (ORF - Words Correct ≤ 21)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>NWF - WRC</th>
<th>ORF - Words Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** If a large number of students fall in any of the instructional groupings other than Group 1, consider supplementing core instruction addressing the corresponding skill areas.
What does this look like in the classroom?

- Use assessment data to identify skills that need to be reinforced
- Create differentiated groups for instruction based on this information

*created by Matt Burns*
Implementing

- Weekly planning meetings with grade level teams
- Use Fundations curriculum to guide sequence of small group reading instruction
Multiple Meaning:

**drink**

noun: (thing) a liquid that can be swallowed

verb: (action) to take a liquid in to the mouth to swallow

**spell**

verb: (action) to write letters in a correct order to form a word

“Ross will sit a spell” (p12) : to sit and relax for a short time
Deb and Ross on the Job

off the log

Deb is glad

a swell job

ax in the tent

Ross will sit

a full glass

hard to do

thrill to finish

glad his job

Deb and Ross on the Job

Look for words in the story that have **bonus letters**.

<table>
<thead>
<tr>
<th></th>
<th>-ff</th>
<th>-ll</th>
<th>-ss</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Grade 1: After Reading

**Deb and Ross on the Job**

What is Deb’s problem?

Who will help Deb?

**Deb and Ross on the Job**

Put the events from the story in order.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Deb has a big job.</td>
</tr>
<tr>
<td></td>
<td>Ross cuts the log into bits.</td>
</tr>
<tr>
<td></td>
<td>Deb asks Ross for help.</td>
</tr>
<tr>
<td></td>
<td>Ross will drink milk.</td>
</tr>
</tbody>
</table>
Grade 3: Before Reading

Preview Words:

- free
- deep
- feel
- bleed
- sleep
- creep
- breeze
- agree
- sunny
- chilly
- angry
- seize
- calling
- receive
- protein
- read
- heat
- leave
- steam
- dream
- scream
- easy
- sea
- chief
- grieve
- shirk
- shield

How many letters make the long e sound?

Preview Vocabulary & Activate Background Knowledge

**Blanket bog** - A flat landscape of moist earth in an area of high rainfall or humidity.

**Bog** - Wet muddy ground too soft to support a heavy body.

**Limpet** - A mollusk that clings to things.
Grade 3: During & After Reading

- Comprehension questions during & post reading with the whole group

- Practicing written responses that echo the question

What did the author mean by...

“The sea was as flat as a pancake.”

“The sea is angry there.”

“The wind tugged my hooks out of my pocket.”
Additional changes

- **Grade 3:**
  - Extended time spent on Fundations in the classroom
  - Incorporated daily practice with grammar and syntax to enhance comprehension

- **Grade 4:**
  - Added in Megawords to address the need for continued support of morphology and vocabulary
  - Added ReadWorks to support development of background knowledge
Takeaways:

- Develop a system that follows the research
- Use curriculum and instructional strategies that are direct, explicit, and researched based.
- Use assessments that measure the skills that need to be taught
- Intensify instruction early
- Group students according to the skills they lack
- Progress monitor students who are at risk
- Provide coaching and support
Science of reading-aligned practice kills the love and joy of reading.
Foster a Love of Reading
For the Love of Reading Challenge!

As a Lower School, students were challenged to read 1,000 books during the month of February.
Resources

The Reading League https://www.thereadingleague.org/

Reading Science Academy https://www.readingscienceacademy.com/

- Literacy How YouTube channel. https://www.youtube.com/user/Literacyhow
- Moats, Louisa. IDA's Knowledge and Practice Standards: How They Can Improve Reading Instruction for All Students. https://www.youtube.com/user/idachannel

- “Ending the Reading Wars: Reading Acquisition From Novice to Expert” Anne Castles, Kathleen Rastle, and Kate Nation.
- “Ten Myths About Learning to Read” Reading Rockets
- “What Education Schools Aren’t Teaching about Reading and What Elementary Teachers Aren’t Learning” Reading Rockets
- “Teaching Reading is Rocket Science” Louisa Moats 2020
Podcasts

- Teaching, Reading and Learning: The Podcast - The Reading League

- The Science of Reading - Amplify

- APM Reports - all podcasts by Emily Hanford
  [https://features.apmreports.org/reading/](https://features.apmreports.org/reading/)