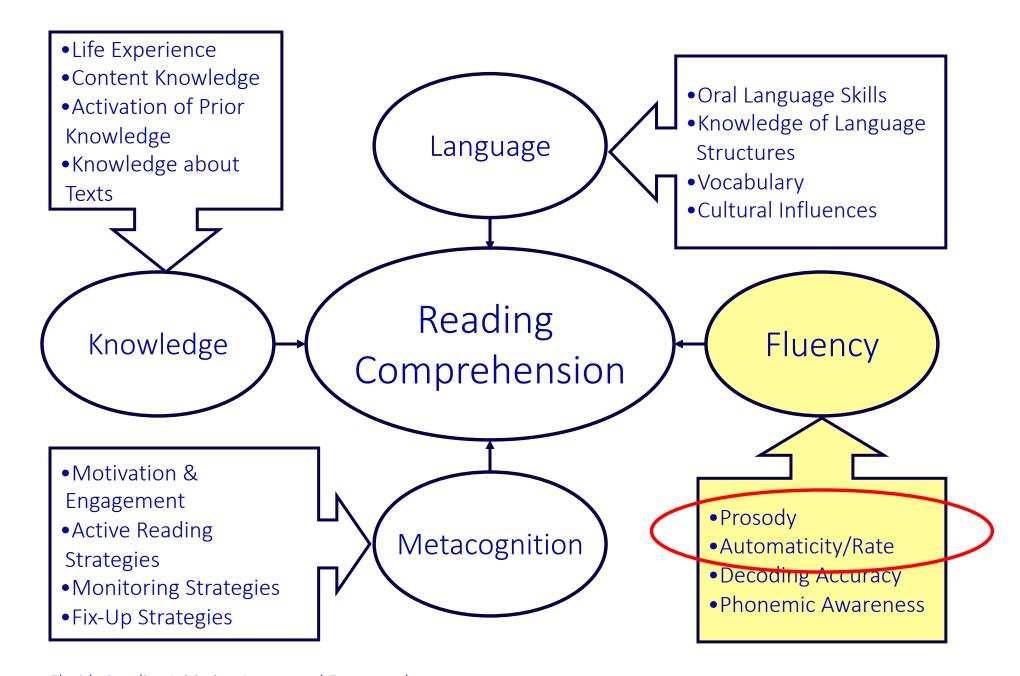


Fluency





Fluency: What is it?



What does the word 'fluency' bring to mind?

- Effortless
- Smooth
- Fluid
- Ease/easy
- Pacing
- Control
- Memory
- Retrieval
- Without hesitation

- Confidence
- Mastery
- Proficiency
- Competence
- Expertise
- Endurance
- Efficiency
- Accuracy
- Automaticity



Developing fluency?

Think of a few skills in which **YOU** have achieved fluency.

What steps did you take to reach fluency?

How long did it take?



Reading Fluency

Accuracy
Automaticity
Prosody



ACCURACY

- Correctly decoding unknown words
- Recognizing familiar or high-frequency words



AUTOMATICITY

- Word level—quick and effortless word recognition or decoding
- Text level—fluid pace in reading connected text



Word-level automaticity

- Slow decoding impairs understanding
- Cognitive load is reduced as automaticity is increased
- Cognitive resources can be devoted to comprehension



Text-level automaticity

- Refers to the fluidity of text reading, including the rate of reading
- Typically measured in correct words per minute (CWPM)
- Allows attention to focus on the connectedness of text



PROSODY

- Making reading sound natural, or like spoken language
- Using appropriate inflection and expression
- Pausing appropriately at phrase boundaries



PROSODY

- Both an aide to and an indicator of comprehension
- Shifts focus from recognizing words to constructing meaning from text



Reading Fluency



Once upon a time, there was a little girl named Goldilocks. Goldilocks went on a walk in the woods and came upon a house. She knocked, but nobody answered, so she went in. On the table, she spied three bowls of porridge. She took a taste from the first bowl and said, "Oh, this porridge is too hot!"

What the research says...



Accuracy, Automaticity, Prosody

All three are related to comprehension

(Hudson, Lane, & Pullen, 2005)

But, the relationship weakens in grade 3

(Paris, Carpenter, Paris, & Hamilton, 2005)

Oral reading fluency builds on word-level fluency.



(Walpole & McKenna, 2007)



Reading Fluency: Why is it important?



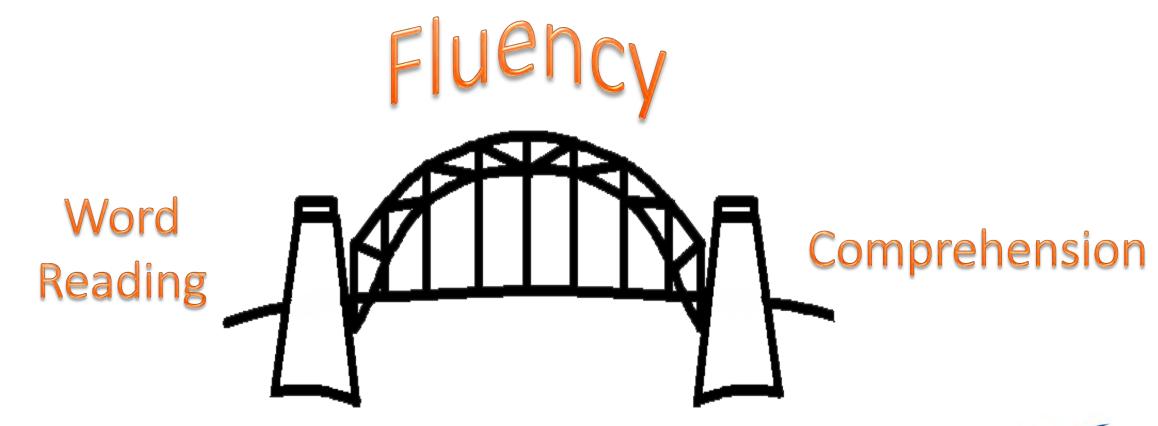
Why is reading fluency important?

"When we read too fast or too slowly, we understand nothing."

Pascal (1670)



Why is reading fluency important?





Why is reading fluency important?

→ More fluent readers focus their attention on making connections among the ideas in the text and between these ideas and their prior knowledge. Therefore, they are able to focus on comprehending the text.

→Less fluent readers must focus their attention primarily on decoding individual words. Therefore, they have little attention left for comprehending the text.

(National Reading Panel, 2000)

Reasons for Poor Fluency

- lack of exposure to fluent models
- too much focus on figuring out words, lack of attention to meaning
- lack of the appropriate level text
- missing the "why" of reading
- lack of practice time.

Blevins (2002)



Levels of Performance



Fluency (true mastery: accuracy + automaticity)



Practice makes the difference



100% accuracy (traditional "mastery")

Beginner's level (inaccurate and slow)

Incompetence (no measurable performance)

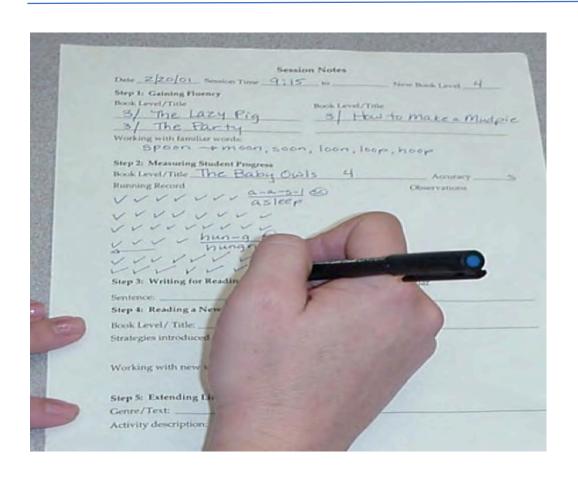




Reading Fluency: Assessing Accuracy



Running Records



- Method for informal assessment of oral reading accuracy
- Allows for analysis of student's use of reading strategies
- Determining current appropriate text level



 $\sqrt{}$

Student reads the word correctly.

attempt text

Student misreads the word. Student's attempt is written over the word from the text.

attempt (

After one or more incorrect attempts to read the word, the student makes a self-correction.

(word added)

Student adds a word that does not appear in the text.

text

Student omits a word from the text.

text

Student rereads a line or word.

Student hesitates for 3-5 seconds before reading a word or line of text. For longer hesitations, mark two or more lines.

G

Teacher Gives the word (do not do this!).

P

Teacher Prompts the student (do not do this, either!).





I Like Shapes

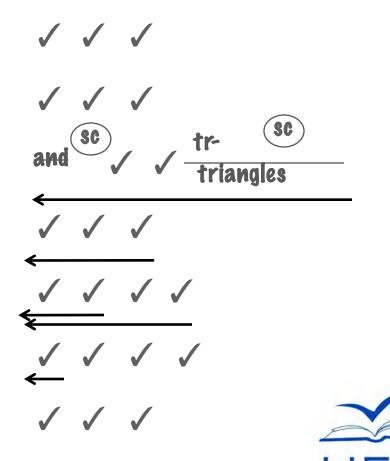
I like shapes.
I like circles
and I like triangles.
I like ovals
and I like rectangles.
But best of all
I like squares.

I Like Shapes

I like shapes.
I like circles
and I like triangles.
I like ovals
and I like rectangles.
But best of all
I like squares.

I Like Shapes

Level 2 24 words



Running Record

Name	Date	Name	Date
Title	Level	Title	Level
Name	Date	Name	Date
Title	Level	Title	Level
Name	Date	Name	Date
Title	Level	Title	Level





Reading Fluency: Assessing Automaticity



Assessing Word-Level Automaticity

✓ High-Frequency Words

- Dolch List—220 words
- Fry List—1,000 words

✓ Word Banks

 Individualized set of cards with highfrequency words for daily practice and assessment

✓ Sight Phrases

 Rasinski Phrases—Phrases of 3-5 words each, constructed from Fry word lists



Assessing Word-Level Automaticity

✓ Jump Start

- Sight Word Assessment
- Nonword Decoding Rate
- ✓ Dynamic Indicators of Basic Early Literacy Skills (DIBELS)
 - Nonword Fluency (NWF)
- √Test of Word Reading Efficiency (TOWRE)
 - Phonemic Decoding Efficiency
 - Sight Word Efficiency



Assessing Text-Level Automaticity

- Rate is usually measured in Correct Words Per Minute (CWPM)
- Words read correctly in context
 - Count self-corrections within 3 seconds as correct.
 - Don't count repetitions as incorrect.
- Words read incorrectly
 - Mispronunciations or substitutions
 - Omissions
- 3-second rule
 - If a student struggles to pronounce a word or hesitates for 3 seconds, tell the student the word, and count it as an error.





Counting Errors

Errors counted and recorded on the student's progress chart:

- mispronounced sounds
- mispronounced words or substitutions
- long pauses (the student is directed to skip the sound or word and go on)
- omitted words, skipped lines
- reversals of letters or words (e.g., saw for was; red, big dog for big, red dog)
- inserted words (words said by student that do not appear in the text)

Counting Errors

NOT counted as errors:

- repeated mispronunciations of proper nouns (count as error only once)
- self-corrections
- repetitions
- hesitations



ORF Norms

COMPILED ORF NORMS

Hasbrouck & Tindal (2017)

From Hasbrouck, J. & Tindal, G. (2017). An update to compiled ORF norms (Technical Report No. 1702).

Eugene, OR. Behavioral Research and Teaching, University of Oregon.

Grade	Percentile	Fall WCPM*	Winter WCPM*	Spring WCPM*
	90		97	116
	75		59	91
1	50		29	60
	25		16	34
	10		9	18
	90	111	131	148
	75	84	109	124
2	50	50	84	100
	25	36	59	72
	10	23	35	43
	90	134	161	166
	75	104	137	139
3	50	83	97	112
	25	59	79	91
	10	40	62	63

Grade	Percentile	Fall WCPM*	Winter WCPM*	Spring WCPM*
4	90	153	168	184
	75	125	143	160
	50	94	120	133
	25	75	95	105
	10	60	71	83
5	90	179	183	195
	75	153	160	169
	50	121	133	146
	25	87	109	119
	10	64	84	102
6	90	185	195	204
	75	159	166	173
	50	132	145	146
	25	112	116	122
	10	89	91	91



^{*}WCPM = Words Correct Per Minute



Reading Fluency: Assessing Prosody



NAEP Fluency Scale

- Level 1: Reads primarily word-by-word. Occasional two-or-three word phrases may occur — but these are infrequent and/or they do not preserve meaningful syntax.
- Level 2: Reads primarily in two word phrases with some three- or four-word groupings. Some word-by-word reading may be present. Word groupings may seem awkward and unrelated to larger context of sentence or passage.



NAEP Fluency Scale (cont.)

- Level 3: Reads primarily three- or four-word phrase groups. Some, smaller groupings may be present. However, the majority of phrasing seems appropriate and preserves the syntax of the author. Little or no expressive interpretation is present.
- Level 4: Reads primarily in large, meaningful groups. Although some regressions, repetitions, and deviations from text may be present, these do not appear to detract from the overall structure of the story. Preservation of the author's syntax is consistent. Some or most of the story is read with expressive interpretation.



Multidimensional Fluency Scale

	1	2	3	4
EXPRESSION & VOLUME	Reads words as if simply to get them out. Little sense of trying to make text sound like natural language. Tends to read in a quiet voice.	Begins to use voice to make text sound like natural language in some areas of the text but not in others. Focus remains largely on pronouncing the word. Still reads in a quiet voice.	Make text sound like natural language throughout the better part of the passage. Occasionally slips into expressionless reading. Voice volume is generally appropriate throughout the text.	Reads with good expression and enthusiasm throughout the text. Varies expression and volume to match his or her interpretation of the passage.
PHRASING	Reads in a monotone with little sense of boundaries; frequently reads word-by-word.	Frequently reads in two- and three-word phrases, giving the impression of choppy reading; improper stress and intonation fail to mark ends of sentences and clauses.	Reads with a mixture of run-ons, mid-sentence pauses for breath, and some choppiness, reasonable stress and intonation.	Generally reads with good phrasing, mostly in clause and sentence units, with adequate attention to expression.
SMOOTHNESS	Makes frequent extended pauses, hesitations, false starts, sound-outs, repetitions, and/or multiple attempts.	Experiences several "rough spots" in text where extended pauses or hesitations are more frequent and disruptive.	Occasionally breaks smooth rhythm because of difficulties with specific words and/or structures.	Generally reads smoothly with some breaks, but resolves word and structure difficulties quickly, usually through self-correction.
PACE	Reads slowly and laboriously.	Reads moderately slowly.	Reads with an uneven mixture of fast and slow pace.	Consistently reads at conversational pace; appropriate rate throughout reading.





Reading Fluency: Instruction



Improving Reading Fluency

Accuracy, Automaticity, and Prosody

The Bottom Line

As with any skill that requires an individual to coordinate a series of smaller actions to create a unified process, it is practice that allows the learner to develop expertise.



Improving Reading Fluency

Teachers must ensure that their students have plenty of extended opportunities to read text at their independent reading levels.



Improving Accuracy

- Focus of early reading instruction (phonics)
- Skilled decoding allows the reader to focus on higher level skills and strategies (comprehension)





Improving Automaticity

- Ensure fluency in subskills needed for reading
- Sight word and phrase practice
- Repeated readings
- Repeated reading with recordings
- Monitor progress and provide feedback
- Timed readings



Word-Level Automaticity

- It is not enough for children to be accurate in phonemic blending, letter sounds, and decoding.
- They need to have instant access to the orthographic and phonological information in the words they encounter.
- Automaticity with "tool skills" is important to the development of effortless reading.
- This automaticity develops naturally with practice for most readers, but some children need targeted practice to develop decoding and word recognition skills to an automatic level.

Word-Level Automaticity

 Fluency in phonemic blending, letter sound knowledge, and larger letter patterns, also known as phonograms, predicts decoding fluency in young children.

(Hudson, Torgesen, Lane, & Turner, 2006)

sh ough amp unch



High-Frequency Words

- Teach most frequent, useful first
 - Get the "most bang for your buck"
 - Dolch List, Fry List
- Teach a few at a time and separate easily confused words
- Teach with patterns in mind
 - Help students make connections across words
- Provide time for focused practice
- Teach using spelling, magnetic letters, word banks, and word walls

High-Frequency Words

28 high frequency words make up nearly 1/3 of all print for primary readers

the	you	are	this
of	that	as	from
and	it	with	I
а	he	his	have
to	for	they	or
in	was	at	by
is	on	be	one



High-Frequency Words

107 high frequency words make up approximately 50% of all the text we read

get about had after has all have also he her an and him are his as how at back in be because into been İS but by called just can know could like little did do made down make each many even may first more for most from much

must my new no not now of on one only OF other our out over people said see she SO some such than that the their

them

then there these they this through time to two up very was water way we were what when where which who will with would you YOUR



Sight Word Practice

- Practice recognizing high-frequency words can be especially helpful for students who spend little time reading independently.
- Word Bank
 - Select words based on high frequency lists
 - Practice reading words in various formats
 - Conduct daily assessment with limited time (generally two seconds) to identify each word
 - Punch cards with automatically recognized words
 - Words recognized automatically 3 times go in Word Bank
 - Word Bank words are practiced once a week



Sight Phrase Practice

- Practicing high frequency words in phrases can be helpful for students as they transfer their automaticity to the text level.
- Rasinski's Phrases and Short Sentences for Repeated Reading Practice
- Great Leaps Sight Phrases

such a big house

When will we go?

in the country

by the water

the following day

in the country

in the way

with his mom

those other people

under the table

the young girl

It's about time.

the dark night



Text-Level Automaticity

Text-level automaticity, or the fluidity of text reading, is significantly correlated with comprehension.



Fluency Instruction

- Model fluent reading
- Provide direct instruction and feedback
- Provide reader support or scaffolding
- Teach children to read in chunks or phrases, rather than word-by-word
- Provide appropriate level text
- Offer plenty of practice materials



Selecting Appropriate Text

- Frustration Level... < 90% accurate
 - Discourages child from trying, may avoid reading altogether
 - Sends message that reading is just a task of figuring out a series of words
 - Encourages practice of ineffective strategies
- Independent Level... > 95% accurate
 - Allows readers to feel confident and secure in their abilities
 - Connects reading with enjoyment
 - Builds sight vocabulary and promotes the development of automaticity
 - Doesn't challenge reader to learn new strategies



Selecting Appropriate Text

- Instructional Level = 90 to 95% accurate
 - Helps readers develop and expand their knowledge and skills
 - Promotes the development of new strategies to meet the challenges of more demanding text
 - Allows the reader to enjoy immediate success with most words, but requires problem-solving on others



Appropriate Texts to Develop Fluency

- independent level text
- relatively short passages
- variety of texts (fiction, non-fiction, poetry, scripts, speeches, songs, proclamations, pledges, toasts, news, jokes, cheers, etc.)
- interesting text



What do we know about independent reading and its effects on reading fluency?

- We know that good readers typically read far more than poor readers during the school day.
- Many poor readers become expert at fake reading, or looking like they are reading when they really are not.
- Readers who are still developing phonological awareness and decoding skills need auditory input while they are reading.



What the research says...

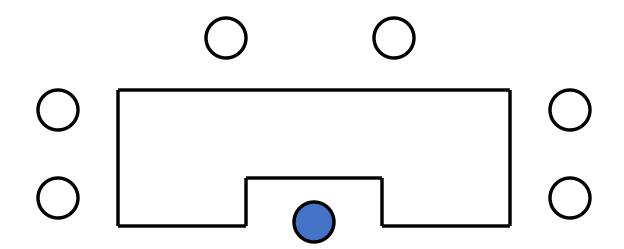


Fluency growth is related to the volume of reading children do

(Kuhn & Stahl, 2003).

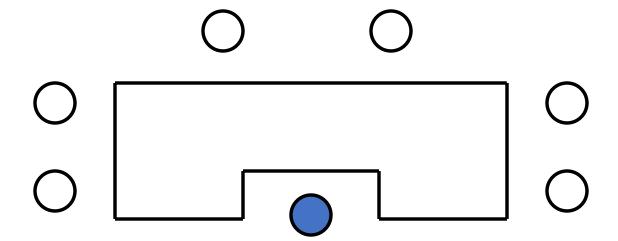


How about round robin reading?



How about round robin reading?

NO!



Why not round robin?

- It is embarrassing to poorer readers.
- It teaches students very little.
- It rarely engages students.
- It typically focuses only on oral reading performance, rather than understanding.



- It has little connection to real life.
- It reduces the time that could be better spent on more valuable reading practice.



Models of Fluent Reading

- Frequent teacher readalouds (highlight aspects of your own fluent reading)
- Listening to books on tape
- Books read by fluent peers



Blevins (2002

Fluent models are especially important for poor readers—chances are most of their models have been other poor readers.

What the research says...



Teacher modeling is very important – superior to modeling done by other children or by technology

(Chard, Vaughn, & Tyler, 2002).



Teacher Read Aloud

- Choose a passage students will enjoy.
- Practice first in order to be smooth and polished.
- Remind students to listen to the expression, speed, stops and pauses.
- Model increased and decreased volume and pitch, voice changes for different characters, change in rate, etc.
- After reading, talk about these factors to heighten students' awareness.

What the research says...



Most of the effective instructional approaches are based on the method of repeated readings.

(Samuels, 1979)



Repeated Readings

- Students reread books, poems, songs, or other materials.
- Helps students remember important information, such as main idea and vocabulary.
- Results in improved comprehension.
- Promotes faster reading with greater word recognition accuracy.
- Helps struggling readers break the cycle of word-by-word reading to reading with more meaningful phrasing.



Repeated Readings

- Make sure the text used for practice is at the right reading level
- Reread texts three to four times
- The more words overlap between texts, the larger the amount of transfer (Rashotte & Torgesen, 1986).
- Can do repeated readings of text read aloud by teacher.



Timed Repeated Readings

- Typically one-minute timings.
- Programs with stair-stepped levels of difficulty are commercially available.
- Connected text for timed repeated readings can come from anywhere. As long as it is interesting to the student and at the right reading level, you can use it.
- Good ideas for many students are nonfiction passages or articles from popular magazines for children—whatever is interesting and motivating to the student.

Fluency Probes

http://www.interventioncentral.org/

- Reading Fluency Passage Generator
- Maze Passage Generator
- Dolch Word List Fluency Generator
- ChartDog Graph Maker





My little brother Willy has a zoo in his bed.

He has a lion. He has a frog.

He has three bears. And he has a monkey.

Willy is the zookeeper.

At night Willy tucks the animals in bed.

He pats lion. He hugs frog.

He sings to the bears and hugs them too.

He kisses monkey. But monkey is asleep.

Then Willy gets his hug and kiss.

And I do too.

Goodnight zoo.

Goodnight zookeeper.

Time to go to sleep.

Child version of the timing



	-	
	_	
_		
	v	-
-	•	
•		

Goodnight zookeeper.

Time to go to sleep.

Curriculum-Based Measurement: Oral Reading Fluency Passage: Examiner Copy

Assessment Date://Student:	Examiner:			
Words Read Correctly (WRC): Errors: Notes:				
The Zoo in Willy	's Bed			
My little brother Willy has a zoo in his	bed.	10		
He has a lion. He has a frog.				
He has three bears. And he has a monkey.				
Willy is the zookeeper.				
At night Willy tucks the animals in bed.				
He pats lion. He hugs frog.				
He sings to the bears and hugs them too.				
He kisses monkey. But monkey is asleep.				
Then Willy gets his hug and kiss. Teacher version				
And I do too				
Goodnight zoo. of the timing				



76

81

© 2008 by R. Hudson Project WORD TH 95 80 70 55 50 45 40 35 30 25 20 15 M W F M W F M W F M W F M W F M W F M W F M W F M W F F M W F Student: Teacher: Goal: Target Skill (circle one): Letter Sounds Words Text



Charting Fluency Progress

Follow consistent charting procedures. Use the graphs with students to provide critical information about progress and motivation.

- Always use a pencil.
- •Use a timer that counts down from 1 minute to keep your timing intervals consistent.
- •Be consistent in what you chart—either the total words read/errors OR correct words read/errors. Whichever you choose, stick with it.

Charting Fluency Progress

- Use dots for what you want to accelerate (words, sounds, phonograms, etc.) and Xs for what you want to decelerate (errors).
- Be sure to draw a line whenever something changes—new probe, long vacation, extra practice or instruction, illness, or anything else that might affect the student's performance.
- Never connect data points across a line. Only connect data points that are in the same passage and time frame.

Charting Fluency Progress

- Three data points define a trend. Without at least three data points, you are unable to determine if the student is increasing or decreasing. Once a trend is established and it is not going the way you want, intervene. Don't wait to see if things get better.
- Teach students to do as much of the charting as possible.
- Draw an aim line for both the rate and the errors. Remember to stair step your interim goals to the final one. Manageable steps are better than huge jumps in rate.



Growth Per Week

Grade Level	Increase per week in CWPM
First	2 to 3 words per week
Second	2.5 to 3.5 words per week
Third	1 to 3 words per week
Fourth	.85 to 1.5 words per week



Improving Prosody

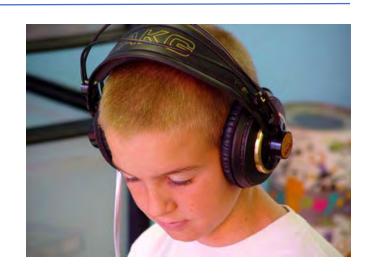
- Listen to models of fluent reading
- Reading with recordings
- Partner reading
- Echo reading
- Duet reading
- Reader's Theatre





Reading with Recordings

- Students read along as they listen to a fluent reader on audiotape
- Books should be at reader's independent level
- Recordings should be free of sound effects, music, or other distractions
- Read book or portion of book 3 times then reread to adult or more capable peer





Reading with Recordings

Resources for Recorded Books

NRSI.com





- High Interest Books
- "SmartReader" recorded at two speeds (40%, 17%)
- "Steady Reader" recorded at 10-15% slower













Choral Reading

- Vary materials: narrative texts, expository texts, poems and chants, songs, text written by the student or class.
- Vary modalities: read silently with a tape, read aloud with the model, read chorally, read to a peer, read to oneself roups of children read the same text aloud.
- Maximizes the amount of reading done per child.
- Struggling readers have support of stronger readers.
- Builds confidence in struggling readers.
- Use shorter texts that have good rhythm and distinct parts such as poems, songs, short stories.

Echo Reading



- I read, then you read.
- Adult models accurate and prosodic reading (reads a line of text while pointing)
- Student 'echoes' the model (reads the same text while pointing)



Echo Reading

- Teacher reads one sentence or phrase and the student echoes back the same sentence or phrase.
- Students feel empowered and responsible as they model good reading.
- Remind students to listen to the expression, speed, stops and pauses.
- Remember to model increased and decreased volume, pitch, voice changes for different characters, change in rate, etc.



Echo Reading

- Practice with short segments if students are unfamiliar with the process.
- Read one or more entire sentences before stopping. (Try not to stop within sentences.)
- Read enough material that students cannot rely on memory alone.
- Make sure that children finger point as they read.
- Monitor to ensure attention to print and tracking.



Paired Reading

- Pair one more proficient reader with one less proficient reader.
- Choose text at appropriate level for less proficient reader.
- May alternate pages, read chorally, echo read, combination, etc.



Partner Reading

- Two students or a student and a tutor or a student and a parent are paired to read the same text aloud
- Readers take turns reading
- Pair a more capable with a less capable reader; the more capable reader provides a model and offers support and feedback

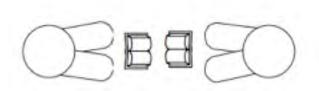


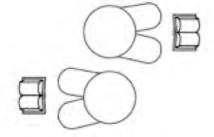
 Equally capable readers reread text after hearing teacher read aloud, or after reading the passage during instruction

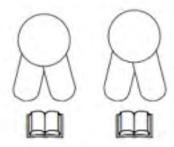
Partner Reading

Key Questions for Partner Reading...

- Which students should be paired?
- How should partners be changed over time?
- How shall the partners sit?
- How shall the partners read?









Suggestions for Partner Reading

- Make sure that children understand the procedure, which includes these rules:
 - Take turns.
 - Listen and follow along in the book while your partner reads.
 - Be polite if you help your partner.
 - Follow the (teacher-made) rule about how much to read.
 - Don't talk about other things.
 - Tell the teacher if there are problems.
- Monitor each pair, offering help as needed.



Whisper Reading

Until children can internalize phonological representations of words, silent reading simply isn't possible. Young children must hear their own reading.



Suggestions for Whisper Reading

- Make a rule about how to ask for help.
- Be sensitive to the possibility that whisper reading may be too hard, and be ready to use partner reading instead.
- Remind students to attend only to their own voices.
- Remind students to use whisper voices.
- Monitor one child at a time.
- Provide pronunciations as needed.
- Use "whisper phones" to keep the noise down and as motivation.



Whisper Phones







Whisper Phones







More Whisper Phones









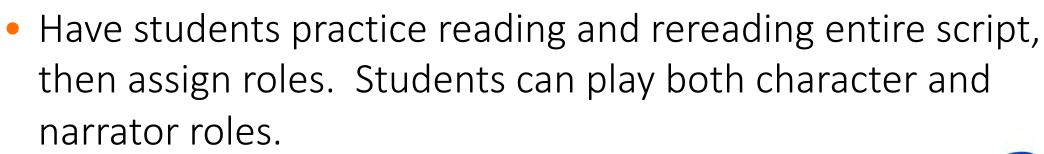
Reader's Theatre

- In reader's theatre, students stand in front of the class or another audience and read from scripts.
- Offers opportunities for students to practice reading in meaningful ways.
- Improves word recognition, fluency, and comprehension.



Reader's Theatre

- Create scripts from selections of literature that are rich in dialogue.
- Read aloud the story on which the script is based.
- Discuss characters' feelings and how they might sound as they speak.



Students rehearse and perform play for peers.



Radio Reading



- Similar to Reader's Theatre, except with sound effects added to make it sound like an old-time radio show.
- Groups of students can create recorded versions of their "radio shows" that can become listening/read-along center readings for their classmates.
- Encourage students to generate questions to pose to listeners at the end of the recording.
- Radio Reading reinforces the importance of prosody, because listeners will not understand without appropriate expression.

Intonation Affects Meaning

Extroverts: Oh, look! Other people!

Introverts: Oh. Look. Other people.





Teaching appropriate intonation...

Recite the alphabet as a conversation:

ABCD? EFG! HI? JKL. MN? OPQ. RST! UVWX. YZ!

Recite the same sentence using different punctuation:

Dogs bark. Dogs bark? Dogs bark!

 Practice placing the stress on different words in the same sentence:

I am hungry. I am hungry. I am hungry.

Practice reading sentences as if talking to a friend.



Phrasing Affects Meaning

Phrase boundaries can contribute substantially to meaning...

A woman without her man is nothing.

A woman, without her, man is nothing.



Teaching Phrasing

- Use punctuation. Commas signal short pauses; periods signal longer pauses.
- Chunk subjects and predicates separately.
- Attend to conjunctions, which are natural breaks in sentences.
- Teach prepositions and use prepositional phrases.



Cue Phrase Boundaries in Text

Insert a slash / for every short pause.//
Insert two slashes / to indicate / where
each longer pause / should occur.//



Cue Phrase Boundaries

Example:

Once upon a time/there was a mother pig/who had/ three little pig children.//

One day/she said to them/"It is time/for you/to go out/into the world/and make your fortune.//

Moving from modeling to independent reading...

