

Instructional Ideas for DI: Reading Centers (aka Work Stations) and Timed Repeated Readings

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Timed Repeated Readings: How to Build Automaticity at all Levels of Reading Fluency



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**Research-Based
Method to Improve
Reading Fluency
Through an
Increase in
Automaticity**



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Reading Fluency



**Accuracy
Automaticity
Prosody**

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Reading Fluency



AUTOMATICITY

- Letter level—quick and effortless identification of letter sounds
- Word level—quick and effortless word recognition or decoding
- Text level—fluid pace in reading connected text

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Automaticity



Letter level

- Slow access to letter sounds impairs decoding accuracy and fluency (Hudson et al. 2006).
- Not sufficient for students to be accurate in letter sound knowledge.

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Automaticity



Word level

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

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Automaticity



Text level

- 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

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Improving Reading Fluency

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.

(Kuhn & Stahl, 2002)

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Improving Reading Fluency

We will focus on practice that improves automaticity at the letter, word, and text level in order to reduce the readers' cognitive load and increase his or her reading comprehension.

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What the research says...



A meta-analysis of repeated readings research by Theirran (2004) found that these elements are **critical for success**:

- Much more powerful if students read passages to an adult (ES = 1.37) rather than a peer (ES = .36)
- Instructors should provide direct corrective feedback after every session
- Much more powerful if students read until they reach a rate and accuracy criterion (ES = 1.78) rather than a set number of times (ES = .38)

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Timed Repeated Readings

- Can be used to increase automaticity with
 - Letter sounds
 - Sight Words
 - Decodable Words
 - Connected Text
- Should only be used with students who are essentially accurate, but slow.
- Should not be used with students who are not accurate or who are already fluent.
- Are not appropriate for use with all students

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Timed Repeated Readings

- Assess struggling students to see what the areas of difficulty are
 - Letter sounds appropriate for grade level, including digraphs
 - Word families
 - Sight words
 - Connected text
- If a student is accurate but slow, then timed repeated reading is a good choice for him or her

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Timed Repeated Readings

- If using timed repeated reading with levels lower than connected text, ensure there is a connection between the levels of practice.
 - Practice in letter sounds
 - Words with those letter sounds
 - Sight words at a similar reading level (if desired)
 - Connected text with those decodable and sight words

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Timed Repeated Readings: Materials

- Materials can be purchased or teachers can make their own
- It is important that the materials
 - follow a sensible progression that systematically addresses the areas that need to be worked on,
 - increase in difficulty in small steps,
 - are organized so that teachers and students can easily use them,
 - and are at the appropriate level to meet the student's needs.

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Timed Repeated Readings: Materials

- Letter sounds timing sheets go from simple to more difficult in sequence that matches reading intervention materials.
- Words timing sheets consist of increasingly difficult sight words or decodable words that use letter sounds.

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Timed Repeated Readings: Materials

- Connected text can come from anywhere: decodable books, leveled books, core reading program stories, etc.
 - As long as it is at the student's instructional (90-95% accuracy) or independent (95% + accuracy) reading level, any text can be used.

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Timed Repeated Readings: Materials

Materials Organization



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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

PA-3
Consonants & Vowels

n	s	z	p	m	r	v	b	k	e	10
t	c	d	i	f	o	h	a	y	g	20
w	l	u	n	s	p	z	r	u	d	30
e	f	b	a	o	m	c	y	v	k	40
l	i	h	t	g	j	w	u	t	w	50
e	s	n	k	j	f	r	c	h	l	60
d	p	o	i	a	v	m	b	g	y	70
z	o	m	z	n	k	y	r	v	w	80
h	b	g	p	a	e	t	l	c	j	90
l	d	u	s	f	y	f	l	a	r	100

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sap	gag	tax	yak	dab	bad	ran	dam	mad	man	10
nab	rag	has	rat	wag	hat	sad	rap	jab	pat	20
gab	mat	bag	tap	hag	cat	sag	bat	fan	dam	30
fat	jam	tan	cap	ram	had	lap	sat	ban	map	40
tab	yam	nap	ham	can	jag	pad	nag	pan	tag	50
jab	dam	sad	sap	jag	fat	yak	rag	cat	yam	60
tag	bat	tab	tax	hag	ram	tap	nap	bag	tan	70
jam	has	ran	cap	gab	pan	hat	wag	can	sat	80
rap	mad	map	pad	ban	pat	man	rat	nap	fan	90
gap	bad	ham	had	lap	mat	sag	yam	dab	nag	100
bad	tap	sag	cap	jam	gap	can	gag	cat	ban	110
dab	fan	ran	rag	sap	tax	nag	has	pat	jag	120
nab	gag	man	yak	tax	bad	ran	gap	dab	mad	130



can run	they are	will think	went away	he was	was made	went down	14
is coming	could eat	must be	my father	her mother	I was	I am	28
from home	has made	some bread	was found	will walk	you were	at school	42
we were	to stop	it is	will go	would like	to go	some bread	56
I was	is coming	will walk	went away	at school	you were	will go	70
must be	could eat	to stop	was found	from home	was made	they are	84
with us	my father	will think	I am	we were	would eat	can run	98
went down	to go	it is	her mother	has made	he was	will walk	112
will go	he was	to stop	I am	it is	went away	was found	126
would like	her mother	they are	we were	from home	can run	has made	140
went down	to go	at school	with us	some bread	I was	could eat	154
you were	my father	will think	must be	was made	is coming	went down	168
will go	her mother	with us	at school	could eat	I am	will think	182

These materials are available from the state of Florida...

Online:

- Go to http://www.fldoe.org/workforce/pdf/products_catalog.pdf
- Look on page 37 for the items

By Phone:

- Call 800-342-9271

The items to order:

- 3716 V-D:1: Techniques of Precision Teaching:É
Part 1: Training Material
Florida No Charge
Out-of-State \$4.00
- 3718 V-D:3: Techniques of Precision Teaching:
Part 3: Reading Basic Skills Curriculum . . .É
Florida No Charge
Out-of-State \$8.15

Great site to get your own reading pages of connected text made:

- The website in general (www.interventioncentral.com) is very helpful in the areas of CBM, RTI, positive behavioral support, reading, writing, and math
- The name of the tool is *OKAPI! The Internet Application for Creating Curriculum-Based Assessment Reading Probes* and can be found at <http://www.interventioncentral.org/htmldocs/tools/okapi/okapi.php>

Okapi Tool:

Feedback? jim@imwrightonline.com

OKAPI! On-Line Manual

Be Patient!
Once submitted, CBA probes may take 15 to 90 seconds to appear...

OKAPI!
The Internet Application for Creating Curriculum-Based Assessment Reading Probes

Directions: Type or paste text into the form and submit. In a short time, OKAPI! will return formatted CBA probes or a readability analysis.

Title:

Author:

Font: **Text Size:**

Readability Formula:

From <http://www.interventioncentral.org/htmldocs/tools/okapi/okapi.php>

Okapi Tool:

Text to Be Analyzed: (Submit text samples of up to 200 words)

Additional Options:

Highlight Difficult Words Show Readability Formula Show Sentence Boundaries Count Semi-Colons(?), Colons (?) As Sentence Punctuation

'Magic Characters' Guide: (Optional)

- Place an asterisk (*) in front of any additional word (i.e., first names for Spache, names of persons or places for Dale-Chall) that you would like OKAPI! to accept as an 'easy' word.

From <http://www.interventioncentral.org/htmldocs/tools/okapi/okapi.php>

Created by OKAPI!
www.interventioncentral.org

Curriculum-Based Assessment Reading Probe: Student Copy

Title: *Mister Noisy Level 4*

Author: *Rozanne Lanczak Williams*

Mr. Noisy made noise when he walked.
Mr. Noisy made noise when he talked. Mr. Noisy made noise when he danced. Mr. Noisy made noise when he sang. Mr. Noisy made noise when he drove his car. Mr. Noisy made noise when he rode his bike. "It's too noisy!" everybody yelled. Mr. Noisy walked quietly. Mr. Noisy talked quietly. Mr. Noisy danced quietly. Mr. Noisy sang quietly. Mr. Noisy drove his car quietly. Mr. Noisy rode his bike quietly. "It's too quiet!" everybody yelled. "Where's Mr. Noisy?" Here I am!"

Child version of the timing

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www.interventioncentral.org

Curriculum-Based Assessment Reading Probe: Examiner Copy

Title: *Mister Noisy Level 4*

Author: *Rozanne Lanczak Williams*

Total Rd Wds: ____ | #Errors: ____ | Correct Rd Wds: ____ | %Correct Rd Wds: ____

Total Words in Sample: 90 Total Sentences in Sample: 10
Average Number of Words Per Sentence: 5.0
Number of Words Not Matched to Revised Spache Word List: 17
Percentage of Words Not Matched to Revised Spache Word List: 18.88
Spache Readability Index: 3.16

Mr. Noisy made noise when he walked.	7
Mr. Noisy made noise when he talked. Mr.	15
Noisy made noise when he danced. Mr.	22
Noisy made noise when he sang. Mr. Noisy	30
made noise when he drove his car. Mr.	38
Noisy made noise when he rode his bike.	46
"It's too noisy!" everybody yelled. Mr.	52
Noisy walked quietly. Mr. Noisy talked	58
quietly. Mr. Noisy danced quietly. Mr.	64
Noisy sang quietly. Mr. Noisy drove his	71
car quietly. Mr. Noisy rode his bike	78
quietly. "It's too quiet!" everybody	83

Teacher version of the timing

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.	18
He has three bears.	22
And he has a monkey.	27
Willy is the zookeeper.	31
At night Willy tucks the animals in bed.	39
He pats lion. He hugs frog.	45
He sings to the bears and hugs them too.	54
He kisses monkey. But monkey is asleep.	61
Then Willy gets his hug and kiss.	68
And I do too.	72
Goodnight zoo.	74
Goodnight zookeeper.	76
Time to go to sleep.	81

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For example...a first grader

- Accurate but slow in all of the single letter sounds
- Inaccurate on digraphs
- Accurate but slow on decoding CvC words with letter sounds
- Accurate but slow in text with CvC and simple Dolch words

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For example...a first grader

Recommendations:

- Letter pages that systematically practice single letter sounds.
- Word pages that systematically practice CvC words with those sounds
- Connected text with those words and simple Dolch Words

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Letter Sounds Example

Actual letter page samples can be found in your handouts packet

Letter Sounds Pages:

1. 5 consonants + a
2. Previous sounds + 5 new consonants + i
3. Previous sounds + 5 consonants + o
4. Previous sounds + 5 consonants + u
5. Previous sounds + Rest of consonants + a + l + o + u + e
6. All consonants + all short vowels
7. Previous sounds + consonant digraphs
8. Previous sounds + consonant digraphs + vowel digraphs

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f	a	m	s	t	r	6
t	r	a	f	m	t	12
s	a	r	m	t	f	18
f	s	r	t	a	m	24
a	m	s	f	s	r	30

5 consonants + a

**previous sounds
+ 5 new
consonants + i**

t	r	m	k	c	i	6
s	g	r	f	a	l	12
l	a	c	i	k	p	18
f	k	i	l	a	s	24
a	p	c	t	g	m	30
p	m	i	k	t	g	36

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d	z	h	k	j	g	6
c	v	i	d	o	l	12
k	a	d	s	t	j	18
v	i	o	p	a	z	24
a	f	m	v	g	r	30
j	g	o	k	h	h	36
p	i	z	o	l	r	42

**previous sounds + 5
new consonants + o**

**previous sounds + 5
new consonants + u**

y	w	b	m	u	l	6
z	v	o	t	a	n	12
k	a	y	s	b	i	18
f	d	x	n	x	g	24
p	u	y	z	g	r	30
o	c	u	j	n	i	36
b	i	x	h	w	d	42
w	h	j	u	v	o	48

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k	l	x	b	u	z	6
p	v	q	u	e	w	12
x	d	o	y	t	n	18
u	j	i	q	a	d	24
a	e	h	n	g	r	30
p	c	i	y	s	w	36
e	a	m	b	v	j	42
w	o	x	z	b	h	48
g	f	c	i	l	o	54

**21 consonants + a + i +
o + u + e**

**All consonants and
short vowels**

a	d	x	z	c	i	6
c	y	q	v	e	l	12
n	x	w	y	o	e	18
u	j	i	h	y	w	24
o	n	b	t	g	r	30
p	u	l	b	f	k	36
e	p	m	v	e	j	42
w	a	z	q	o	x	48
d	u	n	i	u	s	54
q	a	g	h	t	b	60

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ch	d	x	z	v	e	6
c	y	q	n	e	th	12
o	x	w	y	c	i	18
h	j	th	u	y	w	24
n	o	b	i	g	ch	30
w	u	l	h	th	x	36
e	p	sh	v	e	j	42
sh	a	z	q	o	k	48
d	n	u	i	u	ch	54
a	q	g	b	sh	b	60

**previous sounds +
consonant digraphs**

**previous sounds + oa
+ ee + ai**

z	ee	u	ch	sh	e	6
c	y	q	n	e	th	12
o	ee	w	y	x	ai	18
h	ai	th	u	b	q	24
oa	b	o	p	n	ch	30
w	u	l	ai	v	x	36
i	e	sh	v	e	j	42
q	ee	oa	w	k	o	48
j	n	g	oa	u	ch	54
a	sh	x	d	th	b	60

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Blendable Sounds

A reminder...

Whenever teaching or practicing individual letter sounds, be sure to model, teach, and have the students produce blendable sounds.



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For example...a second grader

- Fluent in single letter sounds
- Accurate but slow on digraphs
- Fluent on reading CvC words
- Accurate but slow on decoding words with blends and digraphs.
- Fluent in simple text primarily made up of CvC words.
- Accurate but slow in text with digraphs and blends.

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For example...a second grader

Recommendations:

- Letter pages that systematically practice digraph sounds.
- Word pages that systematically practice words with those sounds and with blends
- Connected text with those words and common Dolch Words

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For example...a third grader

- Fluent in single and digraph letter sounds
- Fluent on reading CvC words
- Accurate but slow on decoding words with blends and digraphs.
- Fluent in first grade text
- Accurate but slow in second grade text.

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For example...a third grader

Recommendations:

- Word pages that systematically practice words with blends and digraphs, moving to multisyllabic words
- Connected text at the second grade level with the same patterns as the words.

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Timed Repeated Readings: Letter, Word, and Text Level

1. Preview material to be read
2. Review Graph and Set Goal for Session
3. Student Reads for 1 minute
4. Instructor Listens and Records
5. Instructor Provides Constructive Feedback
6. Calculate Score
7. Graph Data
8. Determine if Goal is met
9. Celebrate or Support

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Timed Repeated Readings: 1. Preview Material

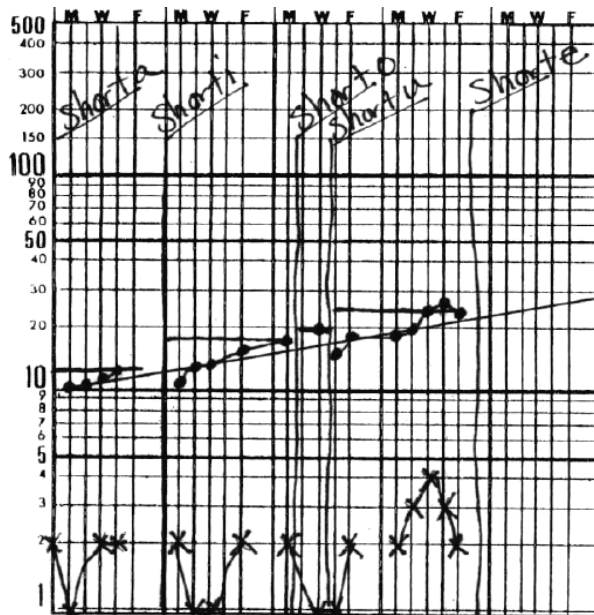
- The student practices the timing probe.
- The instructor models the correct responses (i.e., correct pronunciation of isolated sounds or of difficult words) for any unknown items before beginning the timing.

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Timed Repeated Readings: 2. Review Graph and Set Goal for Session

- Make sure to use the graph during every session with the student to provide critical information about progress and motivation.
- The student and instructor look at the graph of the previous session to review progress made to date and set a progress goal for today's session.
- Ask the student to state what he or she will work to accomplish (e.g., I will read 5 more words. I will make fewer mistakes).

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Review Graph and Set Goal for Session

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Timed Repeated Readings: 3. Student Reads and 4. Instructor Records

- After instructor modeling, the student is asked to read as many sounds or words as possible in one minute from his or her copy of the reading materials.
- The instructor times the student for 1 minute.



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Timed Repeated Readings: 3. Student Reads and 4. Instructor Records

- While listening, the instructor circles all errors on the instructor's copy of the page with a dry erase marker or wipe-off pen.
- In addition, the instructor offers the correct pronunciations during the timed reading.

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Timed Repeated Readings: 5. Constructive Feedback

- The instructor and student review the student's performance on the task
- First, the instructor provide positive feedback.
- Next, the instructor provides correct pronunciations for errors and student practices the correct pronunciation of sounds and words.

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Timed Repeated Readings: 6. Calculate Score

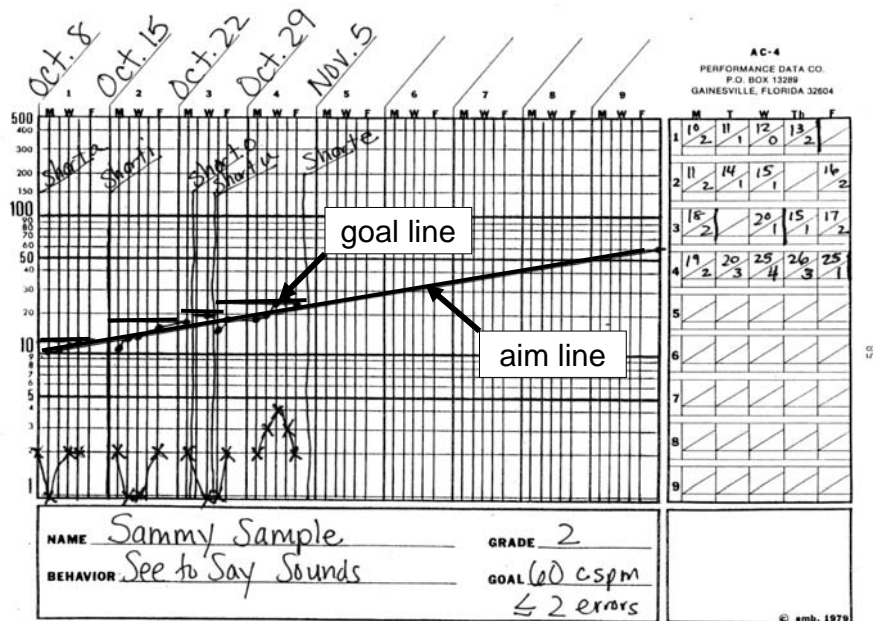
- To determine the number of words the student read, look at the number of words at the end of the last complete line he read and then count on to the last word read.
- Then count the number of errors.
- Subtract the errors from the total words read. This yields the fluency score that will be graphed, the number of correct words read per minute.

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Timed Repeated Readings: 7. Graph Data

- Set the goal line and draw it on the graph.
- In order to determine the goal line, follow these guidelines.
 - Let the aim line guide you.
 - Set the goal a little bit above the aim line with several sessions to reach it and still be above your aim line.
 - You want something challenging, but still achievable.
 - After the first goal is met, consider setting the goal together with the student.

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Graph from Precision Teaching Materials, State of Florida.

Timed Repeated Readings: 7. Graph Data

- You will use the graphs with the student to provide critical information about progress and motivation.
- Record the student's score in the correct week and day, with the number of correct words per minute/errors.
- On the graph, find the correct week and day and put a dot on the right horizontal line for the data point.

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Graphing Tips

- Always use a pencil!
- 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 to way you want, intervene. Don't wait to see if things get better.
- Teach students to do as much of the graphing as possible.
- Remember to stair step your interim goals to the final one using the aim line. Manageable steps are better than huge jumps in rate.

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Timed Repeated Readings: 8. Determine if Goal is Met

- If a student reads at or above the number of correct words (sounds) per minute marked as his goal with fewer than the number of errors, then she has “made his goal”.
- This determination is made based solely on the data. A student may make his goal in one session or seven. Either way, the student moves on to a new passage.

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Timed Repeated Readings: 9. Celebrate

If the student met the goal, Celebrate!!

- In addition to using the graph, put into place a motivation plan
 - Lunch with teacher
 - Banana Split



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Timed Repeated Readings: 9. Celebrate

If the student met the goal, Celebrate!!

- In addition to using the graph, put into place a motivation plan
 - Lunch with teacher
 - Banana Split
 - Pizza
 - Add shapes to a bulletin board for each goal reached



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Timed Repeated Readings: 9. Celebrate

- Then make an instructional decision about the next passage and goal. The instructor has three options.
 - Increase the rate goal for the student while keeping the reading difficulty level the same.
 - Keep the rate goal the same, but increase the reading level of the text.
 - Increase the rate goal and increase the reading level of the text.

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Timed Repeated Readings: 9. Celebrate

1. Increase the rate goal for the student while keeping the difficulty level the same.
 - This causes the student to read faster in the same level of text.
 - This is appropriate if the student is reading material that is near or at his grade level, but is well below his expected reading fluency rate or when the student needs to build some confidence at a particular level of text difficulty.

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Timed Repeated Readings: 9. Celebrate

2. Keep the rate goal the same, but increase the difficulty level.
 - This causes the student to read at the same rate, but in more difficult material that is closer to his grade level.
 - This is appropriate if the student is reading at the expected rate for his grade level, but in material that is well below in difficulty or if the student needs a bit more time at a particular rate to feel more confident.

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Timed Repeated Readings: 9. Celebrate

3. Increase the rate goal and increase the difficulty of the material.
 - This causes the student to read more quickly in more difficult text.
 - This is appropriate if the student is both slow and reading text that is below his grade level.

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Timed Repeated Readings: 8. Determine if Goal is Met

- Together with the student, determine if she reached the goal.
- If a student read below the number of correct words (sounds) per minute marked as his goal or had more than the number of allowed errors, then he has not “made his goal”.
- The student will read that page again during the next instructional session and continue with that page until she reaches the goal.

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Timed Repeated Readings: 9. Support

- If the student has not met the goal, provide support.
- Many students who struggle in school attribute failure to lack of ability or the task being too hard. As you provide support to the student, be sure to attribute reaching his goal to hard work and his failure to reach the goal as a result of not working hard enough.
- You may want to discuss strategies to use, additional practice, or other ways to help himself reach the goal.

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“The goal of helping children learn to recognize words quickly and easily is to ensure that word recognition will feed rather than compete with comprehension. The goal of explicitly and systematically teaching children to understand and use phonics is to bring them to that point faster”

(Adams, 2001, p. 78)

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 - Curriculum Review Team
- Eastern Region Reading First Technical Assistance Center (ERRFTAC)

