

MBAEA 2018!

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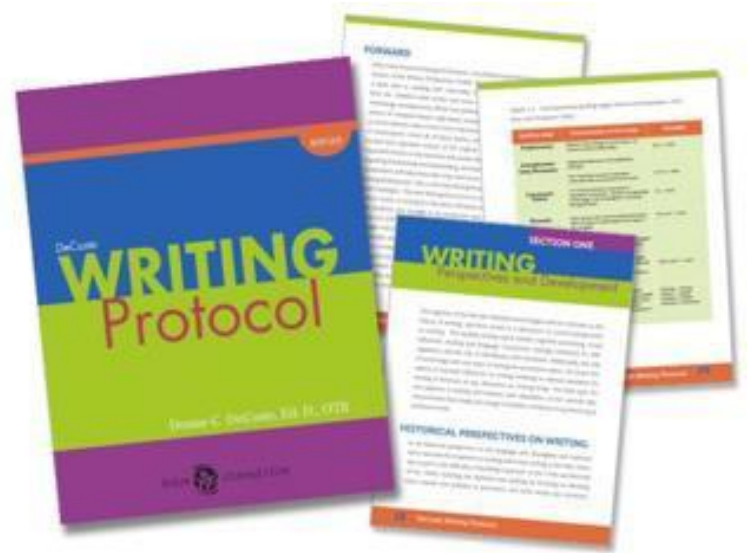
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The DeCoste Writing Protocol:

A protocol for
multidisciplinary school
teams to identify tools
and strategies for
struggling writer



Writing is considered to be the
most complex literacy skill that
all students need to learn

Wendling and Mather (2009)

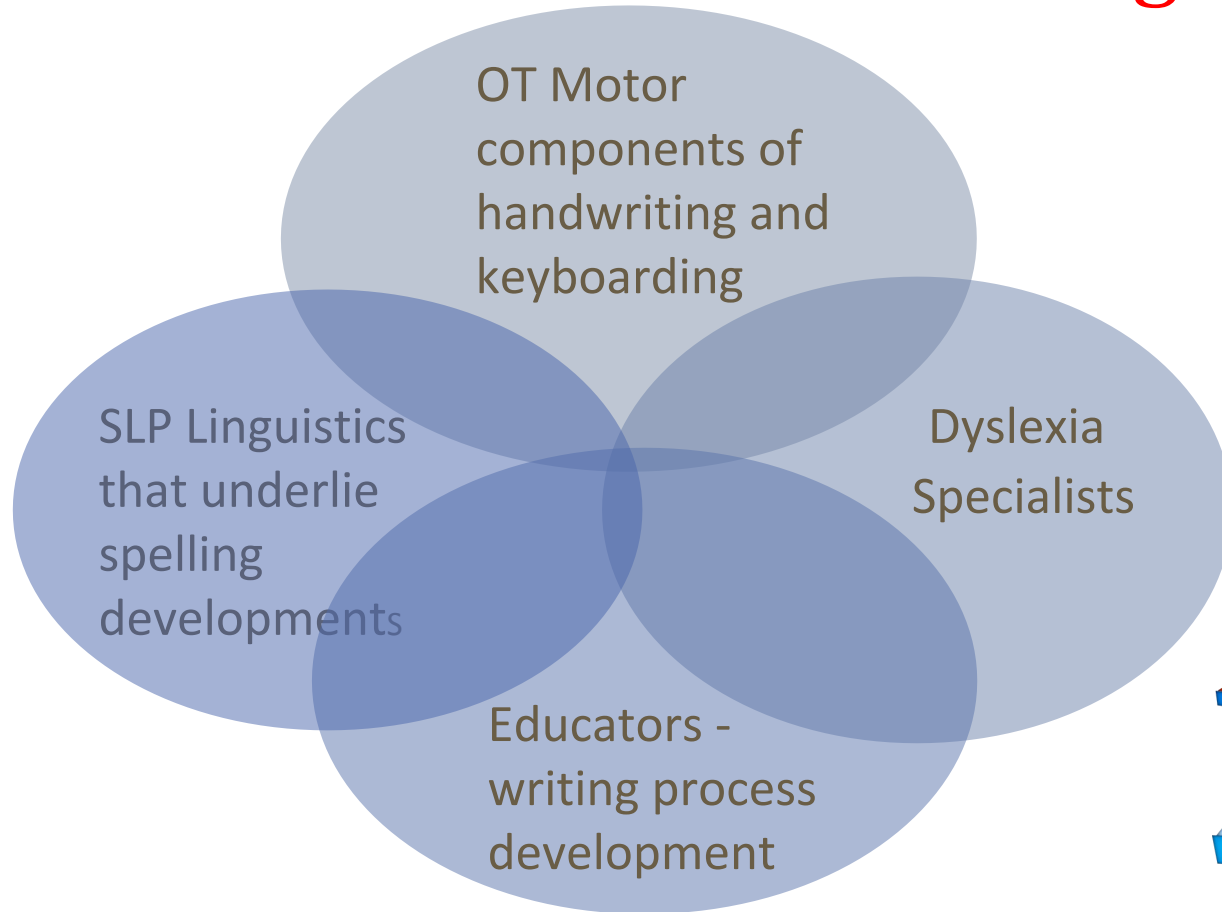
If this is true why don't we have...

Writing teachers?

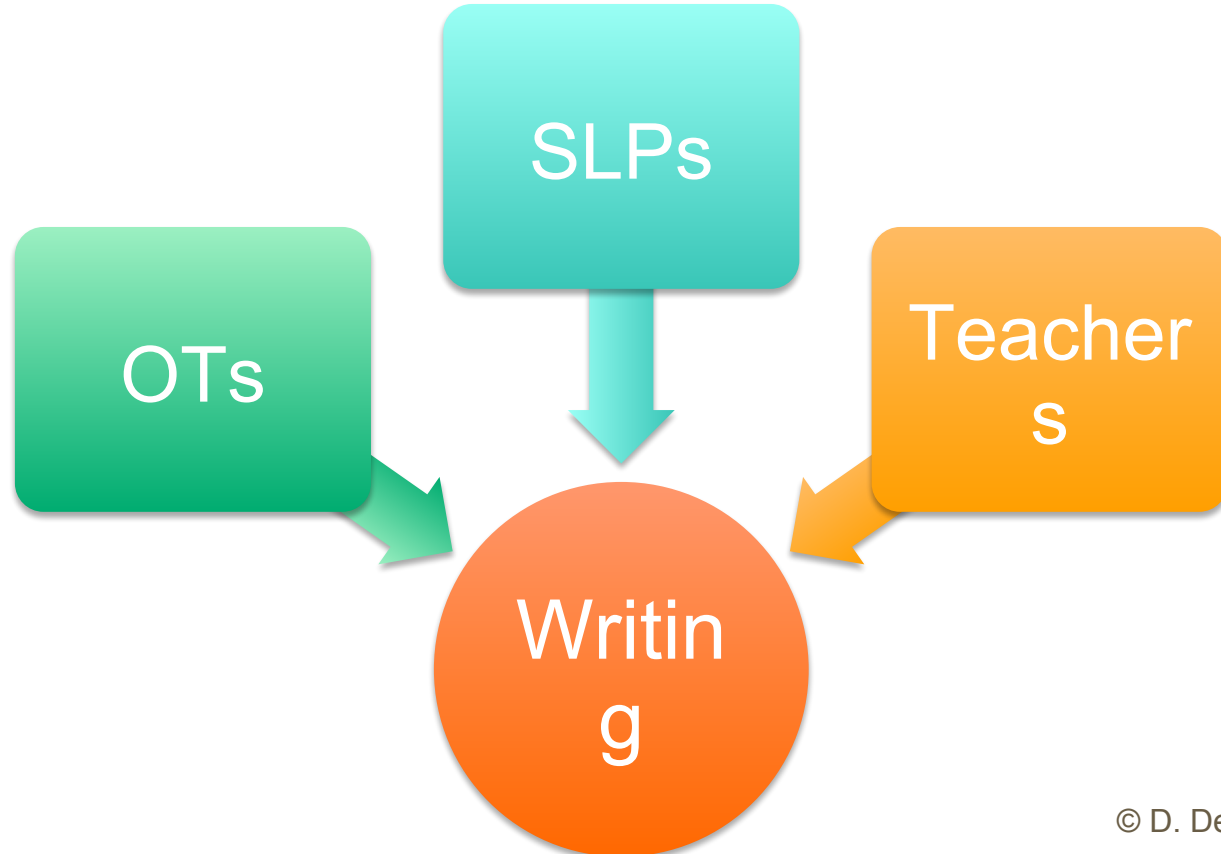
Writing specialists?



It takes a school village



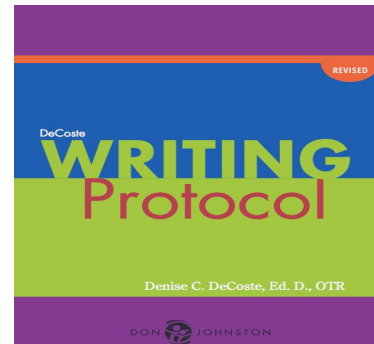
Assessment is Multidisciplinary, Interventions are Transdisciplinary



The New Writing Protocol

The DWP is a protocol designed to:

- Provide a screening and progress monitoring tool to capture the various factors that affect writing so that technology-based (AT) strategies can be planned and applied appropriately.
- Provides the research base to better understand writing development and the basis for instructional strategies.



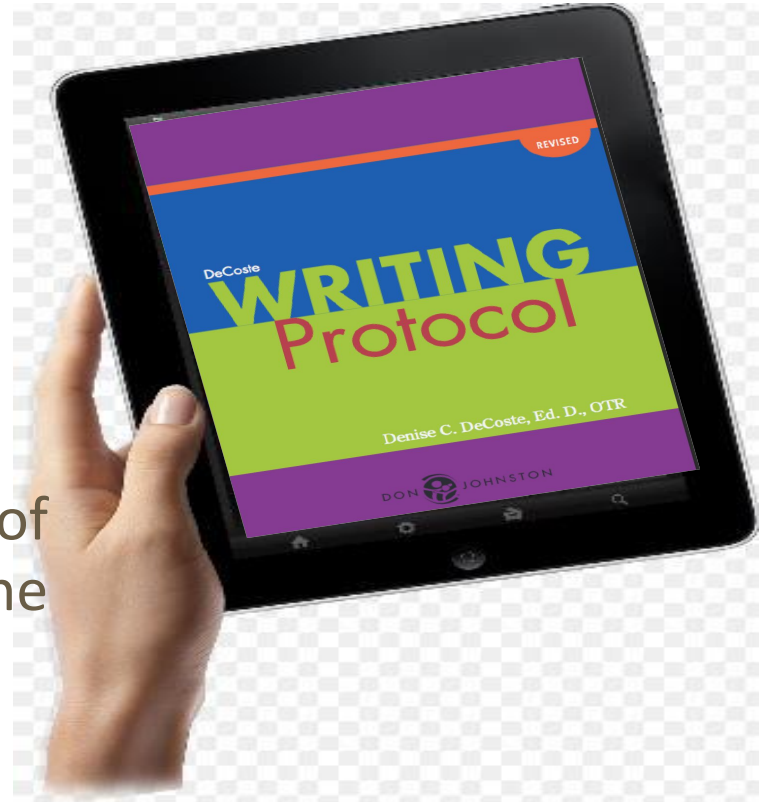
DWP: A Short Course in Writing

- Section 1: Background information on writing perspectives and writing development and summarizes the most recent research on composition, spelling, handwriting, and keyboarding.
- Section 2: A restructured protocol for assessing the written productivity of struggling writers.
- Section 3: Provides research-based instructional strategies linked to handwriting, keyboarding, spelling, composing, and technology accommodations.

E-Book!

Searchable

- Active links in the table of contents
- Forms and directions easily accessible in the Appendices for printing
- \$25.00
- Under copyright: 1 back up copy of the e-book plus one print out of the e-book
- \$529 for a district-wide license



Why revise the 2004 WPP?

- New research provide important background information on writing development for typical students and those with disabilities
- Students are writing more on a daily basis in classrooms (Graham, Berninger, Weintraub, & Schafer, 1998; Graham & Harris, 1994)
- National standards(CCCS) emphasize the importance of daily writing across different “types” of writing
- New national accommodation policies make it imperative that teachers provide evidence of writing deficits for students with documented writing disabilities

1 Timed Handwriting



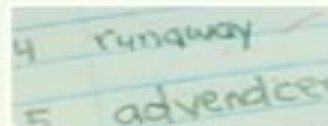
- Alphabet
- Best sentence copy
- Dictated sentences
- Fast sentence copy
- Composed text

2 Timed Keyboarding



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3 Spelling



4 Extended Writing

Tomatoes. Tomatoes
been my favorite veget.
want to talk about my c
here and about how the
scientifically a fruit. Yc

Optional Conditions as Needed

Options	Purpose
On-Screen Keyboarding	When students are using a tablet with an onscreen keyboard
Word Prediction	When students have persistent spelling deficits or motor and/or endurance deficits
Speech to text	When the student has motor and/or endurance deficits or persistent severe spelling deficits
Text to Speech with word prediction	When the student struggles to monitor spelling and/or written language

What are the major Changes?

The basic areas remain the same

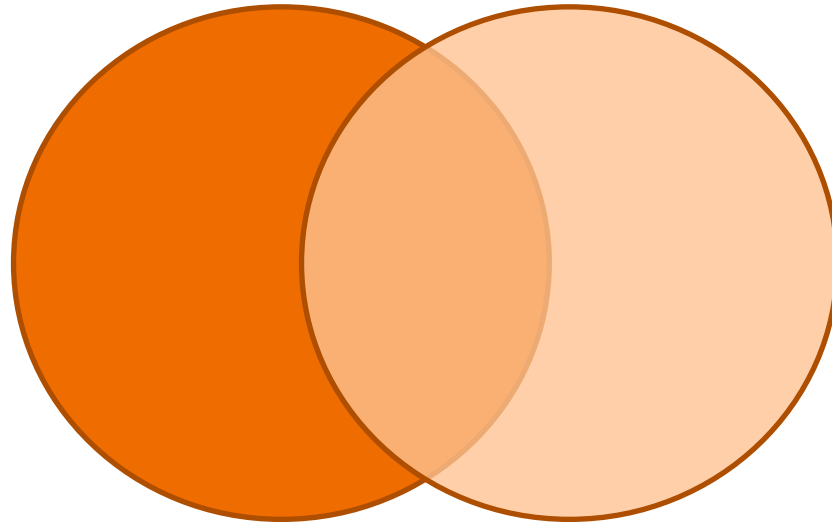
- Writing the Alphabet unaided from memory
- Fast sentence copying
- Spelling analysis based on Linguistic knowledge
- Extended task



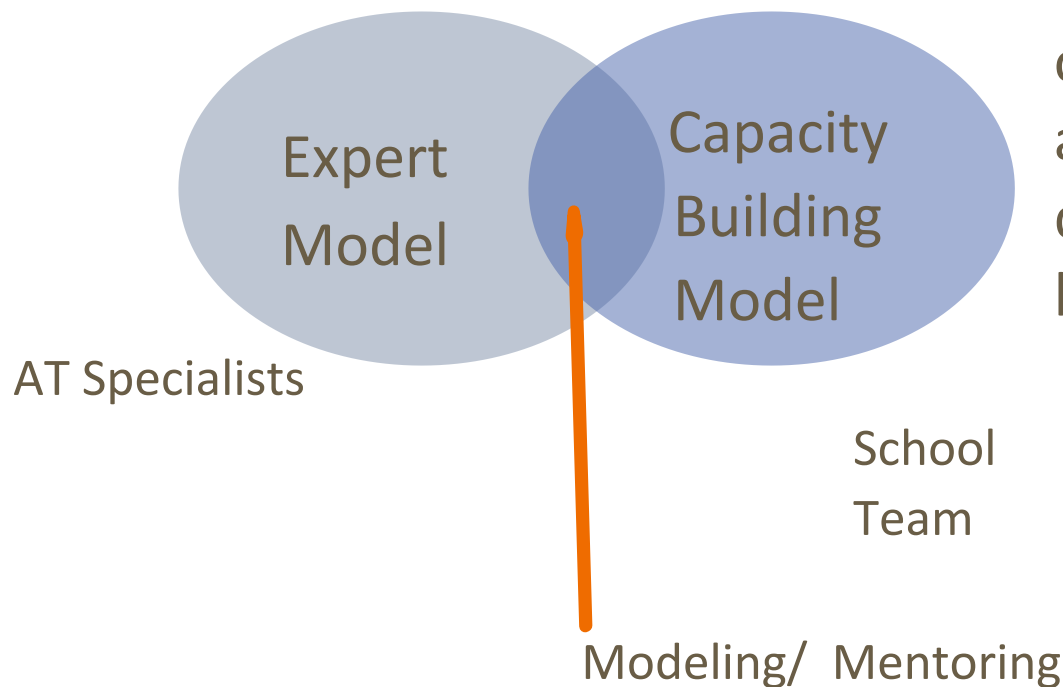
Why Change?

- **Writing the alphabet unaided from memory** - New Research indicates that in handwriting and keyboarding orthographic fluency has a significant impact on writing
- **Fast copying** – More data on student ability/need to shift to a faster writing mode in response to classroom and testing demands
- **New spelling list** – Addressing the underlying linguistic elements of misspellings
- **Extended Writing** – current research reflects differences in the ways Students are expected brief v's longer responses
- **Likert Scale** – research supports the importance of student preferences

**The strength of the DWP is that it
compares the student's productivity
across writing tasks based on individual
performance data**



Who should administer the DWP?



This process promotes ownership of writing accommodation decisions at the school level.

Who benefits? – Criterion Based Preview

- Can the student's handwriting be read by an unfamiliar reader?
- Does the student currently have a scribe accommodation on an IEP, or 504 plan?
- Is the student's writing below basic measures of proficiency?
- Is the student below grade level on college and career readiness standards?
- Will the student be writing below grade level even if the current writing goals are achieved?

Who benefits? Data- Driven Process

Wright (2013) has developed guidelines for curriculum-based measurements for written expression

Conduct a writing probe

- Administer to a general education classroom to get comparative level data at a given grade level
- Given a grade appropriate writing prompt (e.g. story sentence starter or phrase), students are given one minute to think about the writing prompt and then 3 minutes to write

Review Data for Number of Words written

- (Gansle, VanDerheyden, Noell, Resrtar and Williams, 2006)

Preview Data for Number of Words Correctly Spelled

- (Gansle 2006)

Figure 2.3. Total Words Written-Fall Measures (Gansle et al., 2012)

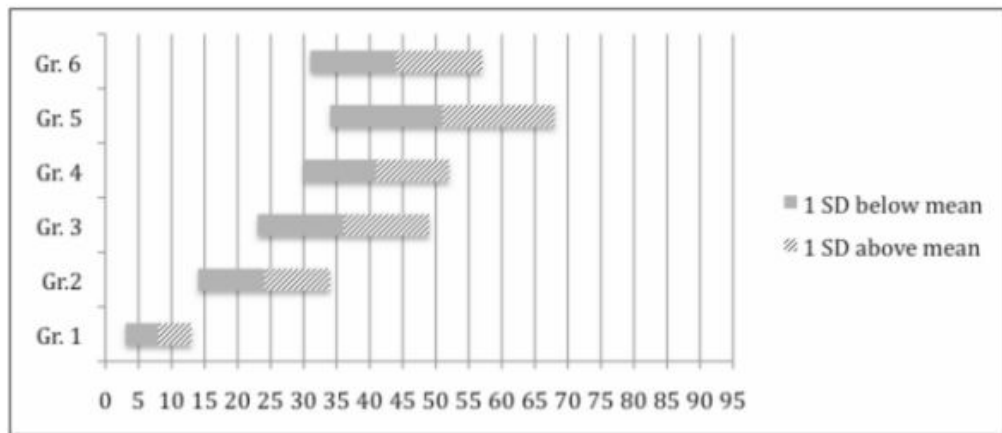
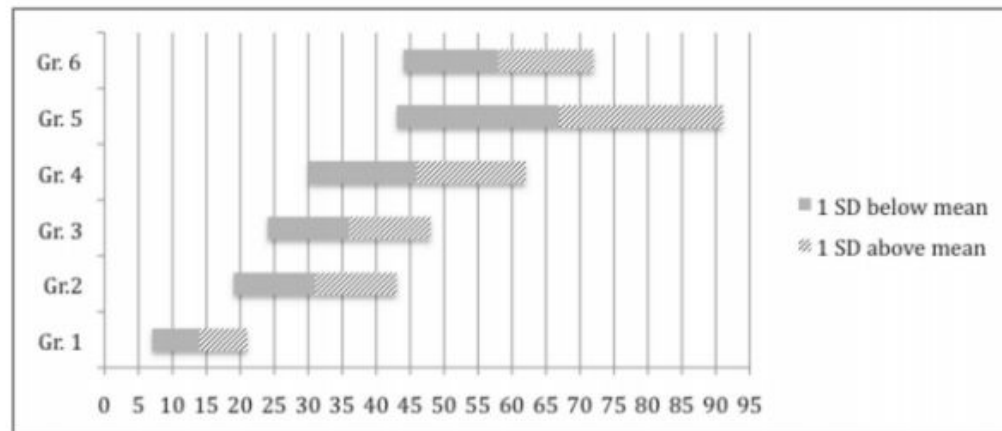


Figure 2.4. Total Words Written-Spring Measures (Gansle et al., 2012).





1 Timed Handwriting



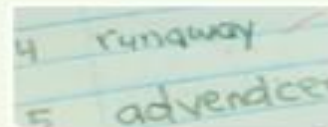
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4 Extended Writing

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Optional Conditions as Needed

Step 1: Timed Handwriting

The Student

- Handwrites the alphabet from memory for 1 minute
- Handwrites a copied sentence for 1 minute
- Handwrites a sentence from dictation for 1 minute
- Handwrites a copied sentence quickly for 1 minute
- Composes and handwrites text, measures in one minute intervals
- Indicates on a Likert scale his or her feelings about handwriting

Alphabet from Memory: A Measure of Orthographic- Motor Integration

Requires the child to retrieve letter sequences from memory, then recall and execute the motor production of the letters

(Medwell and Wray 2007)

Alphabet Task

The timed alphabet writing task has been found to be a strong predictor of orthographic-motor integration which contributes to writing fluency when using either handwriting or keyboarding (Christensen, 2004; Christensen & Jones, 2000; Medwell et al., 2009).

OMI Speeds

Mean letter per minute scores for students ages 9-16 writing the alphabet from memory.

(Barnett, Henderson, Scheib and Schulz, 2007) Figure 1.6

Age	Mean LPM
9	42.04
10	47.32
11	54.76
12	55.44
13	67.73
14	70.45
15	73.45
16	75.08

*Updated
Data in
DWP*

OMI Speeds: Young Adults

Mean letter per minute scores for young adults writing the alphabet from memory. (Barnett, Henderson, Scheib and Schulz, 2011)

Age	Mean LPM
17-18 years	79.60
19-21 years	86.71
22-25 years	88.77

Best Sentence Copy



- Sentence copying tasks have been used by many researchers as a way to measure handwriting speed (Wallen, Bonney, & Lennox, 1996; Connelly, Gee & Walsh, 2007).
- Copied sentences demand less working memory, and do not require composing or spelling (Barnett, et. al, 2009).
- In order for the sentences to reflect *copying*, rather than memorized writing, additional sentences that include all the letters in the alphabet are included

Sentences for Best and Fast Sentence Copying Tasks

Sentences for Copying Tasks	Grade Levels
The quick brown fox jumps over the lazy dog. (33 letters)	1-3
The five boxing wizards jump quickly. (31 letters)	2-4
Six big juicy steaks sizzled in a pan as five workmen left the quarry. (56 letters)	3-5
A mad boxer shot a quick, gloved jab to the jaw of his dizzy opponent. (54 letters)	5-8

Dictated Sentence



- When handwriting (or keyboarding) sentences from oral dictation, reading and higher order thinking to compose is factored out (Horne, Ferrier, Singleton and Read (2011), while spelling is factored in.
- Sentences with words at different reading levels have been created.
- When evaluating students with moderate intellectual impairments (not being held to CCSS) who are using modified materials, use the level commensurate with the student's reading level.

Grades 3-5 Dictation Sentences

	<u>Grade 3</u>	<u>Grade 4</u>	<u>Grade 5</u>
--	----------------	----------------	----------------

1. The talented acrobats amazed the crowd with their exciting and dangerous leaps and flips through flaming hoops. (17 words – G3: 4, G4: 3, G5: 2)
2. Observers were astonished when the magician appeared to make a volunteer from the audience vanish into thin air. (19 words – G3: 3, G4: 2, G5: 3)
3. The English soldiers could not avoid defeat and capture once they ran out of ammunition following a heated battle. (19 words – G3: 3, G4: 2, G5: 2)
4. The tourists flung their coins into the ancient ruins. (10 words – G3: 3, G4: 2, G5: 2)
5. The early astronauts are considered to be mysterious spaces beyond the atmosphere. (14 words – G3: 3, G4: 2, G5: 2)

Dictation sentences for primary and secondary grades in the DWP

Fast Sentence Copy

- Research (Weintraub & Graham, 1998) on transcription that indicates that students are able to modify their speed to complete different tasks.
- Comparing the student's performance on best and fast copying tasks across conditions provides information on the student's ability to increase his or her speed relative to writing demands.
- The Fast Sentence copy task should be administered after the dictation task.

Best and Fast Copying Data

(Barnett,Henderson,Scheiband Schulz,2007)

Age	Copy Best Median WPM	Copy Fast Median WPM
9	12.00	16.50
10	13.75	20.50
11	17.50	24.00
12	19.50	26.00
13	20.00	27.50
14	21.50	29.50
15	23.25	30.50
16	23.00	31.50

*Additional data on
copying speeds in
the DWP*

* Median scores= middle score less skewed by outlier scores

Young Adult Handwriting Speeds

Barnett, Henderson, Scheib, & Schulz(2011).

Examined the handwriting of 393 students ages 17-25. Students who reported a disability or those receiving special needs support were included.

Age Group	Copy Best Mean WPM	Copy Fast Mean WPM
17-18	24.31	32.98
19-21	26.73	35.57
22-25	28.21	36.19

Writing speeds continue to increase somewhat after age 16, leveling out around age 25.

Composed Text



- Composing sentences requires the student to integrate transcriptions skills with some measure of higher order thinking to generate ideas, activate working memory, and formulate written language.
- The evaluator should engage the student in conversation about a topic that is of interest to him or her.
- After one to two minutes, once the student has verbally generated some ideas, the student is asked to write some sentences about these ideas.

Extended, Free Writing Task

O'Mahoney, Dempsey & Killeen (2008) :

- Extended writing tasks provide a way to make inferences about a student's ability to manage writing assignments and examinations that take a longer amount of time.
- A longer writing task may also provide an opportunity to observe self-regulation skills.

Extended free writing task

Barnett et al. (2007)

- Free writing tasks were consistently slower than the *copy fast* task across all ages, confirming that free writing is more demanding than copying.

Ferrier, Horne & Singleton (2013)

- “average speed of free writing in secondary school is largely a function of the cognitive load imposed on the task” (p. 4).

Copying 7 Free Writing Data

(Barnett, Henderson, Scheib and Schulz, 2007)

Age	Free Write Median WPM
9	11.45
10	13.90
11	17.10
12	18.60
13	21.50
14	22.70
15	23.30
16	23.60

*Updated
Data in
DWP*

* Median scores= middle score less skewed by outlier scores

Likert Scale

- Use the Likert graphic to ask the student how he/she likes to write by hand. Be sure the student is not responding to the content of each task, but to the use of handwriting.



Calculating Words Per Minute

Dividing the number of characters by 5 to reach a WPM score

This is a common formula. The mean written word length in general news publications is five letters.

Dunn & Reay, 1989

Pisha, 1993

Rogers & Case-Smith, 2002

1. Handwriting Assessment

	LPM	WPM	(Letters and Words per minute)
Alphabet:	43	8.6	Notes/Observations Conor displayed right hand dominance during this protocol. His pencil grasp is functional - 4 fingered, with an extended rather than flexed thumb. The pencil shaft is positioned vertically rather than horizontally in the workspace. While this grip can result in faster hand fatigue, Conor reports his hand does not get tired. He does recruit his left hand to stabilize the paper. Conor's handwriting is legible, letters are consistently sized and for the most part anchored on the baseline. Baseline adherence is less accurate when fast copying as he is looking at the sentence to be copied rather than the writing paper. He does display some minor formation errors which do not impact overall legibility. Additionally, his writing speed is sufficient to keep up with classroom demands. Spelling challenges do impact legibility and became evident during the dictation and self generated sections of the protocol.
Dictated sentence:	77	15.4	
Sentence Copying fast	63	12.6	
Sentence Copying best	34	6.8	
Composed Text (one sentence)	77	15.4	
Handwriting Likert Scale 			

Overall, what the current evidence tells us about instructional handwriting intervention

A combination of

- Visual cues
- Plus writing letters from memory
- Plus composing



were found to be more effective than copying and imitating adult modeling to improve handwriting legibility, automaticity and productivity.

Writing Quality plus Automaticity

Tucha, et al. (2008) contend that an over emphasis on neatness during instruction can have a negative effect on fluent writing production.

- Based on their research, they concluded that today's handwriting instruction focuses more on well-formed handwriting and neglects speed of handwriting and orthographic automaticity.

Key Points on Handwriting Instructional Practices



- Incorporate writing into therapeutic activities as the student's level of phonological ability
- Build handwriting automaticity - value fluency and generating meaning over neatness
- Gradually help students move from writing words to phrases to sentences to paragraphs
- Understand writing development
- Understanding the student's level of reading and phonological development is key to fluent writing
- Encourage inventive spelling when students are in the early stages of phonetic development

1 Timed Handwriting



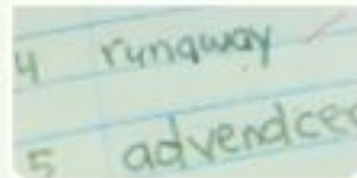
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3 Spelling



3 Extended Writing

Tomatoes. Tomatoes
been my favorite vegetable.
want to talk about my
here and about how the
scientifically a fruit. You

Optional Conditions as Needed

OMI and Keyboarding

- Christensen (2004) conducted research to confirm whether OMI applied to keyboarding.
- Like handwriting, students must achieve a level of orthographic-motor integration relative to keyboarding, in order to devote cognitive resources for ideation, organization of ideas, spelling, and grammar.

Step 1: Timed Keyboarding

The Student

- Handwrites the alphabet from memory for 1 minute
- Handwrites a copied sentence for 1 minute
- Handwrites a sentence from dictation for 1 minute
- Handwrites a copied sentence quickly for 1 minute
- Composes and handwrites text, measures in one minute intervals
- Indicates on a Likert scale his or her feelings about handwriting



Keyboarding

Optional
Condition:
Word
Prediction

Optional
Condition:
Speech to
Text

1. Handwriting Assessment

	LPM	WPM	(Letters and Words per minute)
Alphabet:	43	8.6	Notes/Observations Conor displayed right hand dominance during this protocol. His pencil grasp is functional - 4 fingered, with an extended rather than flexed thumb. The pencil shaft is positioned vertically rather than horizontally in the workspace. While this grip can result in faster hand fatigue, Conor reports his hand does not get tired. He does recruit his left hand to stabilize the paper. Conor's handwriting is legible, letters are consistently sized and for the most part anchored on the baseline. Baseline adherence is less accurate when fast copying as he is looking at the sentence to be copied rather than the writing paper. He does display some minor formation errors which do not impact overall legibility. Additionally, his writing speed is sufficient to keep up with classroom demands. Spelling challenges do impact legibility and became evident during the dictation and self generated sections of the protocol.
Dictated sentence:	77	15.4	
Sentence Copying fast	63	12.6	
Sentence Copying best	34	6.8	
Composed Text (one sentence)	77	15.4	
Handwriting Likert Scale 			

2. Keyboarding Assessment

	LPM	WPM	Notes/Observations Conor types predominantly with the middle finger on his right hand. During this protocol he held the Chromebook screen with his left hand, but occasionally recruited his left index finger and thumb to keystroke. His typing speed is fast enough to keep up with classroom demands. He rated handwriting and typing equally on the Likert scale stating, "I'd rather use a computer but I like handwriting"
Alphabet:	72	14.4	
Dictated sentence:	86	17.2	
Sentence Copying fast	53	10.6	
Sentence Copying best	63	12.6	
Composed Text (one sentence)	95	19	
Keyboarding Likert Rating 			

3rd Grade Example

Actual sentence: I ride my bike with my friend

Student's Typed attempt: I wried mi biek wf mi fran

Word prediction: I wried my bike with my friend.

Speech to text: I ride my bike with my friend

5th Grade Example

Dictated Sentence: The tourists flung their coins into the ancient fountain hoping their dreams of adventure would come true.

Handwriting: The taris flag tare cons in to the astt fantin haping ther dime of and

Typed: The torist floing ther cans in to the ashit fontin hoping ther dims of tran and aveshr,

Word Prediction: Read and Write: The tourist flung their cans in to the ashit fountain hoping their dims of travel and aveshr

Word Prediction: Co-writer: The tourist flung their cans in to the ashit fountain hoping their dream of travelled and aveshr

Speech to text: The Tourist Were there coins into the ancient Fountain hoping their dreams of traveling in advance shirt will come true.

Self Generated typed sentence Im a potr for the kidr in . it fun i t with wis kid in the moning . and i a k a gril name kathe in the afr

Self-generated typing sentence(s)

A fuw yers back in secint grade summer vacahin me and my brather where at arwer grandeparints bech hows in new jerrsy. In the back yared there a doc over deep water my brather and I tock orws and slaped them into the water. Then ben hit the water so hard he fell in. he screemed cus it was coled i screemed cus i was scared. I got my mom and we got him out of the water.

Self-generated sentence(s): With Word Prediction

A few years back in second grade summer vacation me and my brother where at arwer grandparents beach house in new jersey. In the back yared there a doc over deep water my brother and I took orws and slapped them into the water. Then ben hit the water so hard he fell in. he screamed cus it was coled i screemed cus i was scared. I got my mom and we got him out of the water.

Notes: The remaining errors include some incorrect spelling, no capitalization of New Jersey

Self-generated sentence(s): Speech to text recognition

A few years back in grade vacation my brother were at our grandparents beach house in New Jersey. in the backyard there is a doc over deep water my brother and I talked or and slapped them into the water. then then hit the water so hard he fell in. He screamed cuz it was cold I screamed because I was scared. I got my mom and we got him out of the water.

Notes - The remaining errors include a missing word (second), non capitalization at the start of some sentences, incorrect word recognition/inclusion (then/Ben, cuz/because)

Keyboarding v's Handwriting Speeds

- For touch typing to be useful, the process must be automatic and students must reach a typing speed that is at least equivalent to their handwriting speed” (Balajthy, 1988, p 41).
- Dunn and Reay (1989) confirmed this in a study of 52 students age 12 to 13 years old.
 - The reverse of this was also demonstrated in that when students’ keyboarding speeds were less than their handwriting speeds, they demonstrated less proficiency when word processing.

Handwriting and Keyboarding Speeds at Elementary Grades

(adapted from Connolly, Gee, and Walsh, 2007)

- Based on a copying task (N=312)
- No prior keyboarding experience

- Figure 1.14

Grade	Handwriting LPM (WPM)	Keyboarding LPM (WPM)
Kind.	16 (3.2)	7 (1.4)
1	33 (6.6)	12(2.4)
2	33 (6.6)	13 (2.6)
3	45(9.0)	24 (4.8)
4	57 (11.4)	31 (6.2)
5	65(13.0)	47 (9.4)

Keyboarding v's Handwriting in the Elementary years

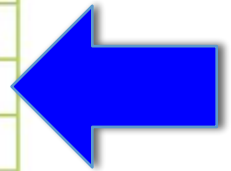
In the absence of keyboarding instruction, handwriting may be more effective at elementary levels, particularly when students are producing higher-level writing tasks.

Berninger, Abbott, Augsburger & Garcia (2009)

Without keyboarding instruction that results in fluent keyboarding, essay writing using keyboarding could potentially hinder writing quality. Connelly, Gee, and Walsh (2007)

Handwriting and keyboarding speeds using a dictated writing task Horne et al. 2011

Grade equivalent	Handwriting (WPM)	Keyboarding (WPM)
6th	16	14
7th	18	16
8th	20	20
9th	22	24
10th	22	25
11th	23	26
12 th	24	27



Allow students to use their most fluent writing modality on high stakes tests.

Russell (2000) conducted a study of roughly 200 8th grade students.

- Students who could keyboard at 20 WPM or above performed much better on the computer.
- Students with slower keyboarding speeds did not perform as well on the computer
- Speaks to the importance of keyboarding fluency and identifying the modality that works best for each student.
- A study with 4th and 10th graders had similar results

A summary of the current evidence about instructional keyboarding Interventions



Average fast keyboarding speed is around 33 words per minute

Deciding on keyboarding as an accommodation should be based on comparative handwriting and keyboarding data

Touch typing fluency as measured by words per minute should be monitored regularly to determine the viability of using keyboarding as an educational accommodation

Spelling should also be monitored as poor spelling

A summary of the current evidence about instructional keyboarding Interventions

Students must move beyond using keyboarding software to composing using keyboarding in real world situations

By middle School, it is expected that students are familiar with keyboard layouts and can begin to use keyboarding for school-related assignments

By high school, the assumption is that students have achieved keyboarding automaticity with speeds approaching that of adult users





1 Timed Handwriting



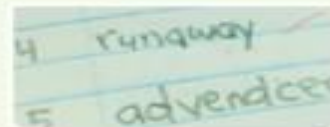
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Optional Conditions as Needed

Linguistic Knowledge

- Linguistic knowledge addresses:
 - Phonological awareness (sounds within words)
 - Orthography (patterns of letters within words)
 - Morphology (i.e., suffixes, prefixes, base words, and word roots)
 - Vocabulary (word meaning)
 - Mental orthographic representations (MGRs) (words stored in an individual's long-term memory after repeated exposure to them in print.)

Current Perspectives on Spelling

Reading involves Decoding

Spelling involves Encoding

Linguistic Approaches to Spelling

- The evaluation of the developmental progression of spelling abilities employing a more linguistic approach is widely accepted.
- Spelling from a dictated inventory of words with a variety of linguistic patterns, as well as words that demand MGRs, provides insight into children's spelling development.

Primary Grade (K-2) Spelling Words	Upper Elementary (3-5) Spelling Words	Middle and High School Spelling Words
hen	fruit	trounce
jog	place	enough
was	city	distinct
thing	knife	whistling
choke	flavor	appealing
raid	bottle	statue
call	grudge	misheard
where	caught	spectator
truck	their	criticize
switch	climbed	changeable
bushes	calves	reinforcement
shopping	squinting	indefinite
cries	voyage	edition
biked	measure	chlorinated
said	misspell	irreversible
	guilty	predetermination
	friendliest	permissibility
	magician	disciplinary
	majority	commercialism
	continuous	expeditious

Procedures for Administering the Spelling List

Research shows the modality does not matter – keyboarding is easier to read

This is an Untimed Task

- Name the file
- Turn off Spell check
- When presenting each word on the spelling list, the examiner should
 - Speak the targeted spelling word
 - Verbally present the targeted word in the context of a sentence,
 - Speak the targeted word once again.
- Save the file.

Figures 1.3 to 1.5

Early Elementary Spelling Word List

Figure 1.3. Early Elementary (K-3) misspellings that may reflect a deficit within each of these five areas of language

		Deficit in Phonological Awareness	Deficit in Orthographic Knowledge	Vocabulary Deficits	Deficit in Morphological Knowledge	Deficit in Mental Graphemic Representation
1	hen	hn henu han hne	hon henn	N/A	N/A	N/A
2	jog	jg joga jug goj	yog jogg gog	N/A	N/A	N/A
3	was	ws wasa wos saw	yas whas uas	N/A	N/A	N/A
4	thing	thng thingng thin thnig	hing theng	N/A	N/A	N/A
5	choke	chk cho chokes shoke chkoe	joke chock tchoke	N/A	N/A	N/A

Spelling Analysis Practice

wuz (was)

Correctly Spelled?

chok (choke)

Phonological awareness errors?

were (where)

Orthographic awareness errors?

trock (truck)

Vocabulary errors?

curis (cries)

MGR errors?

said (said)

Spelling Analysis Practice

wuz (was)  MGR errors?

chok (choke)  Phonological awareness errors?

curis (cries)  Vocabulary errors?

were (where)  Vocabulary errors?

trock (truck)  Orthographic awareness errors?

said (said)  Correctly Spelled?

Spelling Analysis Practice

In general, look for the overall pattern of linguistic knowledge – even if you can't identify the linguistic level of all words - in order to determine if spelling is outside the norm and could be a factor affecting writing productivity.

Persistent Spelling Difficulties and Long Term Effects

On the Isle of Wight, a 30 year follow-up study was conducted with individuals initially identified, at ages 14 and 15, to have significant reading disabilities and spelling deficits (Maughan, et al., 2009).

Isle of Wright – Cont'd

- Poor readers' spelling abilities continued to be impaired at ages 44 and 45.
- Eighty percent of the adults with poor reading perceived themselves as poor spellers who experienced difficulty writing a letter.
- These individuals, with reading skills delayed more than 28 months when tested in adolescence, were more likely to have:
 - Left school or have completed their education earlier than the control group,
 - Were more likely to have jobs with less literacy demands.

Spelling Example

Actual word	Student's Spelling	Word prediction	MS Word Spellcheck	Gradeproof "add-on" editing tool	Chrome spell check
fruit	Apple is my favorite frot	No	No	No	No
place	School is my favorite plaes	Yes	No	Yes	Yes
city	city				
knife	I eat with a kife and fork	Yes	Yes	Yes	Yes
flavor	Strawberry is my favorite flaver	Yes	Yes	Yes	Yes
bottle	I need a botool of water	Yes	No	Yes	Yes
grudge	He has a grug against me	Yes	Yes	No	Yes
caught	I cote a fish	No	No	No	Yes
their	there coats are wet	Yes	No	Yes	No
climbed	I climnd a tree	Yes	Yes	Yes	Yes
calves	baby cows are called cve	No	No	No	No
squinting	He was sqkinting when looking at the sun	No	Yes	Yes	Yes
voyig	the sea voyig was rough	yes	yes	Yes	No
measure	I mazer with a ruler	No	No	No	No
misspell	I missspal many words	Yes	Yes	Yes	No
Guilty	The jury found him gilte	Yes	No	Yes	No
friendliest	My dog is the frandlis dog in the world	No	No	No	Yes

Spelling Example

	Actual word	Spelling	Word prediction	Gradeproof "add-on"	Chrome spell check
1	soldiers	solgers	yes	yes	yes
2	could	culd	yes	yes	yes
3	avoid	avoyed	yes	yes	yes
4	defeat	deffet	yes	yes	yes
5	capture	capcher	yes	no	yes
6	ammunition	anunishin	no	yes	yes
7	following	folling	yes	no	yes
8	heated	heted	yes	yes	yes
9	few	fuw	yes	yes	yes
10	years	yers	yes	yes	yes
11	second	secint	yes	yes	yes
12	vacation	vacahin	yes	yes	yes
13	brother	brather	yes	yes	yes
14	grandparents	grandeparints	yes	yes	yes
15	our	arwer	no	no	no
16	beach	bech	yes	yes	yes
17	house	hows	yes	no	no
18	Jersey	jerrsy	yes	yes	yes

Classroom Spelling Practices

- The Friday “whole class” spelling test approach to teaching spelling continues to be more predominant than spelling instruction that is tailored to individualized development.
- In a national survey, Graham, et al. (2008), found that 90% of 1st to 3rd grade teachers reported using the Friday test approach to teaching spelling.
- Graham, et al. assert that the typical “approach to word selection and instruction does not align with current understanding of the many linguistic strategies that can be used to spell words” (p. 186).

Individualized Instruction

- While teachers group children for reading instruction, this is not the case as often for spelling instruction.
- Morris, et al. (1995) suggested that this may be a management issue in that teachers are provided single grade-level spelling books and use whole class instruction which implies that one-size-fits-all.

Transdisciplinary Approaches

- Speech Language Pathologists: can incorporate these multi-linguistic activities into therapy settings, or model this in the classroom
- Occupational Therapists: can collaborate with teachers to identify word patterns the student is learning and integrate instruction into a multi-linguistic approach to word spelling and writing

1 Timed Handwriting



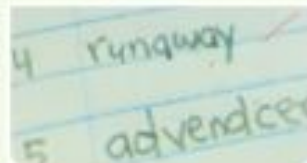
- Alphabet
- Best sentence copy
- Dictated sentences
- Fast sentence copy
- Composed text

2 Timed Keyboarding



- Alphabet
- Best sentence copy
- Dictated sentences
- Fast sentence copy
- Composed text

3 Spelling



3 Extended Writing

Tomatoes. Tomatoes
been my favorite vegetable.
want to talk about my c
here and about how the
scientifically a fruit. Yc

Optional Conditions as Needed

Extended Writing Task Procedures

- The extended writing task was added because the overarching goal for today's students is to write routinely for long and short periods for a range of tasks, purposes, and audiences, beginning in the primary grades (National Governors Association Center for Best Practices, Council of Chief State School Officers, 2010)
- As with the previous version of the WPP, a writing trait rubric is used to gauge writing strengths and weaknesses
- Writing rubrics continue to be recommended in the literature as a guide for teachers to monitor students' writing performance (Moore, Moore, Cunningham, 2011; Olinghouse and Wilson, 2012; Honigsfeld & Dove, 2013, (NEW 2014 6+1 Traits aligned with CCSS)

Renewed Interest in Secondary Literacy Instruction

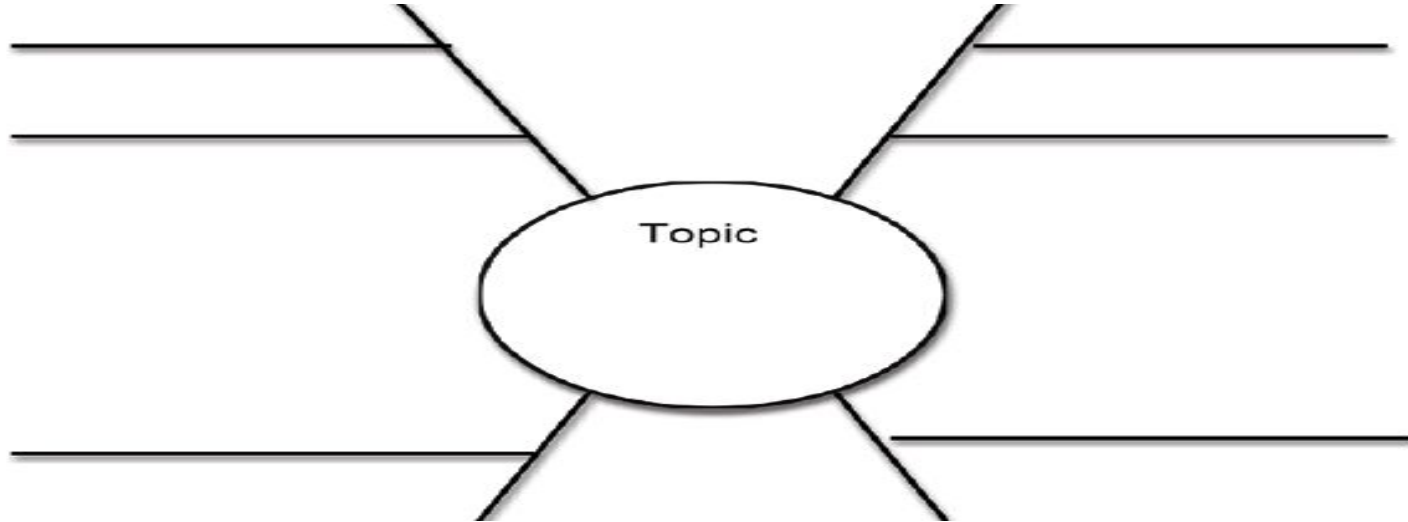
There is renewed interest in secondary literacy instruction (Lesley, 2014) brought about by:

- Less than stellar writing scores (National Center for Education Statistics, 2012),
- A publication on adolescent literacy (Wise, 2009) that highlighted concerns regarding:
 - Adolescent illiteracy rates,
 - Graduation rates that are lower than reported
 - And that one third of students who enter college must take remedial courses.

Elementary		
Type of writing:	Topic Titles	Prompt
Narrative	My life at home	Tell about an important event that happened to you at home.
	My life at school	Tell about an important event that happened to you at school.
	My community	Tell about an important event that happened to you out in your community.
Opinion	Should kids have chores?	Provide facts and reasons to support your opinion on this topic
	Should kids have homework?	Provide facts and reasons to support your opinion on this topic
	Should kids have recess everyday at school?	Provide facts and reasons to support your opinion on this topic
Informative	All about sports or hobbies	Describe a sport or hobby that you know a great deal about. Provide facts, definitions, and details that would help someone new to this sport or hobby learn more about it.
	All about animals	Describe an animal that you know a great deal about. Provide facts, definitions, and details that would help someone who is not an expert with the animal learn more about it.
	All about a special place	Describe a place or location that you know a great deal about. Provide facts, definitions, and details that would help someone who has never visited this location learn more about it.

Middle and High School Grades		
Type of writing:	Topic Titles	Prompt
Narrative	A perfect day	Describe your perfect day. Include well-chosen details that help describe the events of the day and why it was so perfect.
	My worst day	Describe your worst day. Include well-chosen details that help describe the events of the day and why it was so awful.
	A day in the life	Describe a day in the life of your pet (or someone else's). Include well-chosen details that help describe the events of the day from the animals' perspective.
Argument	Dress codes	Do you believe that schools should have a dress code? Why or why not? Provide facts and reasons to support your stand on this.
	Snacks at school	Do you believe that schools should sell sodas and sugary snacks at lunch or after school? Why or why not? Provide facts and reasons to support your stand on this.
	Mobile phones at school	Should students be able to use mobile phones in school? Why or why not? Provide facts and reasons that support your stand on this.
Informative	School activities	A new student has come to your school. Describe the types of extra-curricular activities that they can get involved in. Provide facts and details that would help them choose some clubs or groups to join.
	A pet for the family	Your family wants to get a pet. Describe some options for pets that they might want to consider. Provide facts and details that will help them choose one.
	My town	Your hometown is being featured in a magazine. Describe your town to the magazine editors. Provide facts and details that will allow them to learn about your town before they come to visit it.

Extended Writing Graphic Organizer



Extended Writing Task Procedures

- This task provides evidence of a student's ability to write on demand, and it offers a longer writing sample for the examination of writing traits.
- It can also be an opportunity to reflect on the degree to which grade-level college and career readiness language arts standards are being met.
- One writing sample, however, may not be sufficient. It is advisable to examine additional extended writing tasks that have been completed in class without adult edits or revisions.

Free Write Task

Free writing tasks were consistently slower than the copy fast task across all ages, confirming that free writing is more demanding than copying. (Barrett et. Al. (2007)

“Average speed of free writing in secondary school is largely a function of the cognitive load imposed on the task (p.4) (Ferrier, Horne & Singleton 2013)

Teaching Elementary Students to be Effective Writers: A Practical Guide

Four Recommendations:

1. Provide daily time for students to write.
2. A. Teach students the writing process.
B. Teach students to write for a variety of purposes.
3. Teach students to become fluent with handwriting, spelling, sentence construction, typing, and word processing.
4. Cultivate an engaged community of writers.

(Graham et al., 2012) (NCES 2012-4058)

In the DWP Manual

Strategies for Beginning Writers

Spandel (2012)

Strategies	Purpose	Examples
Planning	Building on children's experiences	Primary forms of prewriting: • Talking • Drawing • Listing details • Listing questions • Simple idea webs • Interviewing
Drafting	Writing as a form of communication to convey a message and ideas.	Primary writing formats: • Drawing wordless books • Drawing plus writing • Writing a story • Writing a letter • A poem • Cartoon bubbles
Revising	Self-talk or sharing with a partner to see what can be added to alter the content	• Adding a picture detail • Adding another drawing • Adding words to enhance the drawing • Adding phrases or a sentence • Changing words
Editing	Polishing the work, making it more visually appealing, fixing distracting errors, making it easier to read.	• Checking the presentation of the work (cover, illustrations, handwriting or fonts) • Checking for basic conventions
Publishing (student choice)	Writing for a purpose	• Posting the work on the wall • Adding "book features." (cover, title page, credits, dedication, about the author, other graphics)

In the DWP Manual

Examples of
process writing
activities
suitable at the
elementary
level

Olinghouse and
Wilson (2012)

Writing Process	Examples of Tasks
Planning	• Brainstorming • Graphic organizers • Story planners • Outlining • Dramatizing • Researching • Summarizing and organizing notes
Drafting	Rough draft, 1st drafts and final drafts • Working from an outline or graphic organizer • Using a word processor
Revising	• Adding words, details or information • Removing unnecessary information • Restructuring text or reorganizing sections • Evaluating “voice ” or “tone”
Editing	• Rereading and checking for conventions, including spelling • Using synonyms to replace repetitive words • Editing checklists
Publishing	• Producing a final copy to display or share • Creating a book • Adding a cover or title page

Summary of the Current Evidence About Instruction that Supports Composition

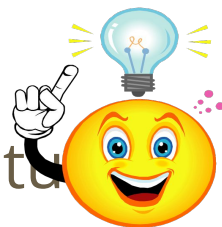
Teach students to write increasingly more sophisticated sentences

Provide opportunities for students to work together to plan, draft, revise and edit their compositions

An overemphasis on editing can be discouraging. The goal is to allow writers grow - not produce perfect papers



Summary of the Current Evidence About Instruction that Supports Composition



Revising strategies should not be presented until a student is producing more writing. Instruction on revising is introduced in stages, adding, replacing, reordering, removing

Self-regulation strategies that help student set writing goals, self-monitoring their writing, and more effectively make revisions are highly effective

Utilize ongoing assessment to guide instruction

DWP Data Informed Decisions

- Handwriting: If it requires undue effort and is slow, then consider parallel training with keyboarding
- Keyboarding; Should be equal or exceed handwriting to be effective. Compare OMI and speed data for handwriting and keyboarding development trends
- Spelling: Is it typical for the students grade level or is it slowing productivity? Analyze spelling errors and examine speed data that require spelling (dictation and brief composed text)
- Composing; Using the 6 traits are the students writing skills strong or weak
(Ideas, organization, voice, sentence fluency, word choice, conventions)
- If transcription skills are typical but composing skills are weak, writing interventions are critical

Assistive Technology

In a recent systematic review of research on technologies to support written productivity, the reviewers concluded that while the quality of the evidence available thus far is at a moderate to low level, trends suggest that technology has a positive influence on students' performance and behavior.

Batorowica, Missiuna & Pollock 2012)

See more in the DWP.....

A summary of what the current evidence tells us about technology-based strategies and accommodations

Computer technology and the internet have changed the way writing is perceived, practice and published. The role of the teacher has shifted from “manager” to writing coach.

Print is no longer the dominant form of communication and expression. Digital text has rapidly become the leading form of writing.

New technology tools typically outpace instructional methods, and educators need to be open to innovative technologies that support literacy development. **In the DWP**



A summary of the current evidence about technology-based strategies and accommodations

Students need to develop competencies using multiple literacies to construct and convey meaning when using the internet and multimedia (e.g. social networking, web pages, discussion forums, podcasting, video content)



Teachers at all grade levels need to incorporate technology across the curriculum, and across all content levels.

As more mainstream digital tools are incorporated into the curriculum, it is easier for students with disabilities to avail themselves of technology features that surmount learning barriers.....**More in the DWP**

According to Moats (2005-2006, p.12)

“Even more than reading, writing is a mental juggling act that depends on automatic deployment of basic skills such as handwriting, spelling, grammar, and punctuation, so that the writer can keep track of such concerns as topic, organization, word choice, and audience needs.”



Ultimately.....

- The goal is not to simply have students who can write neatly and spell accurately, but to have students who can manage these lower order skills sufficiently to free up the resources to focus on the higher order aspects of writing.