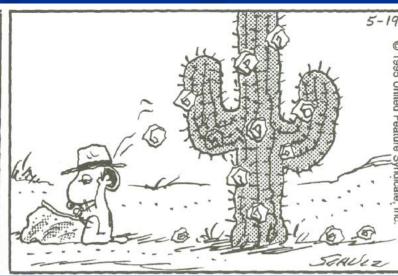
#### Self-Regulated Strategy Development for Writing: Confessions of an Evidence-Based Practice APA D15, 2016

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# Confession: It's Complicated.

I'm not talking about SRSD yet.

Let's Start with Writing.

Let Me Ask You a Question. After a long, hard day of work, do you....

- Skilled writing is complex, requiring extensive self-regulation of a flexible, goal-directed, problem-solving activity. Knowledge about writing (including genre knowledge) and strategies for planning and text production are also critical.
- Teaching writing similarly demanding; most teachers report being poorly prepared and have lower efficacy for teaching writing than any other subject (cf. Applebee et al., 2012; Brindle, Graham, and Harris, 2015).
- The lower a teacher's efficacy for both writing and for teaching writing, the less time he/she spends teaching it (Brindle et al., 2015).

We must also consider writing as a process, writing as a product, and writing as a way of knowing, to inform development and instruction (Harris, 1989).

## Even for Skilled Writers, Writing is not Easy

- "Writing is the mental equivalent of digging ditches." (Kellogg)
- "Writing is simple. Just sit down at the typewriter and open a vein." (Fox)
- "Writing is no trouble- just jot down ideas as they occur to you. The jotting is simplicity itself- it is the occurring which is difficult." (Lealock)
- "Every sentence is like pangs of birth." (Dr. Seuss)

## A Few Things About Skilled Writers

- Organize their goals and sub-goals and can switch flexibly from simple to complex goals
- Draw upon a rich store of cognitive processes and strategies for planning, text production, and revision to achieve their goals.
- Draw upon their knowledge of the patterns and schemas found in different writing genres or models.
- Develop novel or modified frameworks as the writing task becomes more complex.
- Are sensitive to the functions their writing is intended to serve and the needs and perspectives of their audience.
- Use effective self-regulation procedures throughout the recursive writing process

That last one can't be so complicated. Self-regulation of writing simply requires...

- Knowledge about one's self as a writer (e.g., skills, abilities, and strategies mastered or emerging), the writing task/genre (mechanics, form, skills, and strategies), and one's affect (e.g., self-efficacy, motivation, attitudes, beliefs);
- Ability to evaluate the writing task, determine multiple goals (proximal and distal, consider reader, text characteristics, and so on), determine the skills and strategies needed, select among alternative strategies, identify the environmental conditions that can be addressed to make writing conducive, identify when and why to engage in different components of the writing process, manage cognitive load (including working and long term memory), manage affective responses to writing, attentional control, and time management.

(cf. Zimmerman and Risemberg, 1997)

# Examples of Failure to Self-Regulate Writing

- "Homer also wrote The Oddity, in which Penelope was the last hardship that Ulysses endured on his journey."
- "Socrates was a famous Greek teacher who went around giving people advice. They killed him."
- "Bach was the most famous composer in the world, and so was Handel. Handel was half German, half Italian, and half English. He was very large."
- "Milton wrote Paradise Lost. Then his wife died and he wrote Paradise Regained."

# The importance of writing: Our neglected "R"

(National Commission on Writing, 2003)

- Writing is "...how students connect the dots in their knowledge." After 3<sup>rd</sup> grade, writing is the most common way students demonstrate what they know.
- In elementary, middle, and high school, the two most powerful predictors of academic success are \_\_\_\_\_ and reading comprehension.
- Writing is also a powerful tool for self-reflection and participation in civil life within our global society.

## Writing Matters

- More than 90% of white-collar and 80% of blue-collar workers' jobs involve writing (National Commission on Writing, 2005).
- High-level literacy skills are required for most jobs that pay a living wage today, with this likely to increase over the near future (Berman, 2009).
- Jobs today require, on average, a higher level of literacy skill than entry-level jobs did just ten or twenty years ago, and this trend is accelerating (Business Roundtable, 2009).
- Lack of competence in writing puts students at-risk for school failure, and the consequences extend beyond the school years (Graham & Perin, 2007).

## So, How Are We Doing?

- Approximately 2 out of 3 students do not score at the proficient level (according to data collected by NAEP for grades 4, 8, and 12);
- The National Assessment of Educational Progress (NAEP) data show that writing performance has remained stagnant for decades (National Center for Educational Statistics, 2012);
- Students with disabilities and English language learners show even lower performance on the NAEP only 5% perform at the proficient level and only 1% perform above the proficient level, respectively;
- The class of 2012 attained an average score of 488 on the writing portion of the SAT, the lowest score since the assessment was introduced in 2006;
- Two billion dollars is spent each year on remedial courses for postsecondary students (Fulton, 2010);
- Businesses spend 3.1 billion dollars annually to remediate workers whose writing skills are lacking (National Commission on Writing, 2004); and
- Almost one in every five first year college students requires a remedial writing class, and more than one-half of new college students are unable to write a paper relatively free of errors (ICAS, 2002).

## In Writing Instruction, We Support:

- Shift from a product oriented model to a model that emphasizes interactive learning among teachers and students.
- Focus on the meaning of students' writing.
- Student involvement in the selection of topic and genre.
- Creation of a writing community.
- Integrating writing with the rest of the curriculum.
- Developing knowledge, strategies, skills, and mechanics in the context of meaningful writing activities.

# Writer's Workshop/Process Approach: Research Base

The process approach is not very effective for children in general unless teachers receive considerable PD; with strong PD (National Writing Project, for example), effect sizes are small.

For struggling writers - no effect.

(Writing Next, 2007)

#### Confession:

#### SRSD Owes So Much to So Many

- 1. I can only hit some of the foundations and continuing influences here. Harris (1982) was my first paper addressing integration of knowledge gained across affective, behavioral, cognitive, and evolving theories. SRSD is the result of work by hundreds of scholars. It belongs to all of us.
- 2. Serendipity played a large part, beginning with my teaching experiences and then my position as a TA, teaching 4 sections of Foundations of Learning/Intro to Ed Psych a quarter.
- 3. I taught using Biehler's book; he was early in demonstrating applications and integration across theories in the classroom.
- 4. I read Dubin's book, Theory Building, and Meichenbaum's book, CBM, and became an integrationist.
- 5. I met Steve Graham.
- 6. Awesome mentors.

## Self-Regulated Strategy Development =

Developing, in tandem, ownership of:

\*powerful writing strategies and critical strategies for self-regulation of the writing process (goal setting, self-assessment, self-instructions, selfreinforcement);

Explicitly developing, supporting and enhancing:

\*self-efficacy, motivation, and adaptive attributions

# SRSD In Writing Is:

- Continually refined since it's initial development and trial with students with LD in the early 1980's (Harris, 1982: Harris & Graham, 1985, 1999, 2009; in press)
- Based on integration of evidence across powerful theories and research on teaching and learning, regardless of perceived "incompatibility."
- Supported by over 100 studies (single case design, quant, case studies, qual) by various researchers in over 10 countries, involving grades 2-12 and adult learners, and general education & special education students and teachers

#### Confession:

#### SRSD Research in Writing has Not Been Well Funded

Year of Doctoral Degree: 1980; Year of first SRSD study published: 1985 Over 32 years of ongoing research; only 8 years of funding specific to SRSD and 6 years of related funding.

- Fuchs, L., Fuchs, D., Williams, J., Graham, S., & Harris, K.R. (2000 2005). Research Center to Accelerate Learning for Children with Disabilities: Kindergarten through Grade 3. U.S. Department of Education, Office of Special Education.
- Lane, K., Harris, K.R., & Graham, S. (2006 2009). The Effects of Strategy and Self-Regulation Instruction on Students' Writing Performance and Behavior: A Preventative Approach (Project Write). U.S. Department of Education, Institute of Education Sciences.
- Wijekumar, K., Harris, K.R., & Graham, S. (2013 2016). We-Write Persuasively. U.S. Department of Education, Institute of Educational Sciences.

#### And one small foundational grant:

Harris, K.R., Wijekumar, K., & Canavesi, B. (2013 - 2014). Personalized Engaging Adaptive Real-life Learning System for Persuasive Writing (PEARLS). Gates Foundation: Literacy Courseware Challenge. Technology.

# SRSD Has Been Researched by Multiple Independent Teams, Resulting in an EBP (in only 20 years):

- 1. SRSD received a rating of "strong evidence" (the highest rating possible, defined as "consistent evidence that the recommended strategies, programs, or practices improve student outcomes for a wide population of students. In other words, there is strong causal and generalizable evidence." p. 13) in the IES Practice Guide: *Teaching Elementary School Students to Be Effective Writers* (June, 2012). The guide may be downloaded here: <a href="http://ies.ed.gov/ncee/wwc/pdf/practice\_guides/writing\_pg\_062612.pdf">http://ies.ed.gov/ncee/wwc/pdf/practice\_guides/writing\_pg\_062612.pdf</a>
- 2. Identified as having the strongest impact of any researched instructional approach in writing in Writing Next: Effective strategies to improve writing of adolescents in middle and high schools, Commissioned by the Carnegie Corporation, <a href="http://www.all4ed.org/publications/WritingNext/WritingNext.pdf">http://www.all4ed.org/publications/WritingNext/WritingNext.pdf</a>.
- 3. SRSD research has received strong, favorable ratings from the National Center on Intensive Interventions (formerly the National Center for Response to Intervention): <a href="http://www.intensiveintervention.org/chart/instructional-intervention-tools">http://www.intensiveintervention.org/chart/instructional-intervention-tools</a>
- 4. SRSD has been deemed an evidence-based practice by: Baker, S.K., Chard, D.J., Ketterlin-Geller, L.R., Apichatabutra, C., Doabler, C. (2009). Teaching writing to at-risk students: The quality of evidence for Self-Regulated Strategy Development. *Exceptional Children*, 75, 303-318.

## SRSD: The Data Base "Big Picture"

Harris et al., 2010; Graham, Harris, & Zito, 2005

- SRSD significantly and meaningfully *changes how* students with severe writing problems, and their peers, write.
- SRSD significantly and meaningfully *changes what* students with severe writing problems, and their peers, write.
- Self-efficacy, attitudes, and attributions regarding writing change in positive ways, supporting the writing process.
- Short-term *maintenance* is typically achieved; long-term maintenance can require booster sessions.
- Generalization has been achieved across settings, teachers, and writing medium (computer/pencil and paper).

# SRSD Effects

Graham, S., Harris, K.R., & McKeown, D. (2013)

Assessment	Studies	Effect	Percentile
Point	Studies	Size	Change
Posttest			
Quality	28	1.75	96 <sup>th</sup>
Elements	18	2.24	99 <sup>th</sup>
Length	15	0.47	68th

## SRSD Effects

Graham, S., Harris, K.R., & McKeown, D. (2013)

Assessment		Studies	Effect
Point			Size
Maintenance			
Quality		28	1.30
Elements		18	1.41
Length		15	.00

## **SRSD** Effects

Graham, S., Harris, K.R., & McKeown, D. (2013)

Assessment		Studies Effect Size	Effect
Point			Size
Generalization			
Quality		28	1.1
Elements		18	1.55
Length		15	.46

# Sarah's Persuasive Essay - Pre-Internvention 2<sup>nd</sup> Grade, Whole Class SRSD

Should parents give their children money for having good grades on their report cards?

No because parents aren't supposed to give money for their report cards and their grades.

#### Sarah's Persuasive Essay -- Post Intervention

Should teachers give students grades?
Yes. I think teachers should
give students grades. First
Rids need it so they
can see if they
got a 100. Second
it would much more
easy if you give
students a grade.
Finally teachers would
be proud of themself
if they give kids
a grade. That's why
teachers should give
students grades.
The End
I have all my parts.
3

## Paige – 4<sup>th</sup> grade pretest, whole class SRSD

Should children have to go outside for recess?

No because kids need to be inside in storms and icky wet weather. Also to stay warm and cozy. Yes because it might be really hot. Also it might not be too cold.

# Paige post test after classwide SRSD: Should kids be paid to go to school?:

Listen up! Kids should get paid for going to school. My first reason is that they'll do their work better because if kids don't get paid, they won't do their work. Another reason is that kids work hard to learn. If kids really work hard to learn, they've earned cash. My last reason is that if kids are paid to go to school they can use the money to buy things that will help them learn better. They can buy pencils, paper, crayons, books, calculators and even more. This will be great for teachers too because they won't have to buy kids supplies like they do now. Now you know why kids need to be paid to go to school!

# Confession: I'm a Theory Junkie, But I'm Still Sane

I wrote about it here, so it's true:

Harris, K.R. (1990). Paradigmatically induced schizophrenia [Letter to the Editor]. *Journal of Learning Disabilities*, 21, 586–587.

## Confession:

#### I Believe Some Things, Actually Many Things, Don't Belong to Any Single Theory

- All of our major theories today embrace meaningful learning in communities that are educationally purposeful, open, just, disciplined, caring, and celebrative (Harris, 2015).
- "No one asks how to motivate a baby. A baby naturally explores everything it can get at, unless restraining forces have already been at work. And this tendency doesn't die out, it's wiped out."

# SRSD Development: Thoughtful Theoretical Triangulation and Integration

(Harris, 1982, 1995, 2015)

#### A Theoretical Integrationist:

- Rejects false dichotomies, prejudice, and straw men; treats competing theories with thoughtfulness and respect.
- Focuses on both how knowledge is constructed and instructed; on cultural, social, school, classroom, family, and community factors that impact learning and development.
- Believes understanding and integrating what we know across theories, methods, and paradigms will allow us to advance the field by assisting policymakers and practitioners to define, acquire, interpret, and ultimately use research.

# SRSD Development: Thoughtful Theoretical Triangulation and Integration

#### A Theoretical Integrationist:

- Believes interdisciplinary relationships, built on trust and respect, are essential to our future and the future of our field.
- Believes in all children and their futures.
- Seeks, as Dubin argued in his book *Theory Building* in 1978, contiguous problem solving where interdisciplinary efforts based on disciplinary research add up in a manner not otherwise likely, even as we *value and continue* focused research emanating from differing theories and paradigms.

# SRSD Development: Thoughtful Theoretical Triangulation and Integration

Selected Characteristics or Components of SRSD and Selected Theories Supporting Them

- 1. Criterion Based:
  - Carroll's model of learning
  - behavioral theory
  - cognitive-behavioral theory
- 2. Active/Engaged Learning:
  - motivation theory
  - social cognitive theory
  - constructivism
  - sociocultural theory
  - cognitive-behavioral theory

- 3. Scaffolding
  - -behavioral theory
  - motivation theory
  - -cognitive-behavioral theory
  - -constructivism
  - -social cognitive theory
  - -social cultural theory
- 4. Focus on Attitudes Toward Writing, Self-Efficacy, and Attributions
  - -attributional theory
  - self-efficacy theory
  - expertise theory
  - -motivation theory
- 5. Explicit Development of Self-Regulation (over 8 theoretical groups here; cf. Boekaerts, Pintrich, and Zeidner, 2000)
  - -behavioral theory
  - -cognitive-behavior modification
  - -social cognitive theory

# Confession: I'm Done Changing Names

- Harris, K.R., & Graham, S. (1985). Improving learning disabled students' composition skills: Self—control strategy training. Learning Disability Quarterly, 8, 27–36.
- Graham, S., Harris, K.R., & Sawyer, R. (1987). Composition instruction with learning disabled students: Self-instructional strategy training. Focus on Exceptional Children, 20(4), 1–11.
- Harris, K.R., & Graham, S. (1992). Self-regulated strategy development: A part of the writing process. In M. Pressley, K.R. Harris, & J.T. Guthrie (Eds.), *Promoting academic competence and literacy in school* (pp. 277–309). New York: Academic Press.

#### Confession:

# Writing does not develop naturally, but it can be taught.

(Graham & Harris, 1997)

Talking doesn't develop naturally either, it is likely the most scaffolded learning experience in our lives (Harris, 2015; in press).

SRSD is not a stand alone, total writing program.

SRSD works very well in the context of Writers' Workshop/Process Approaches to Writing.

Does not directly address handwriting, keyboarding, spelling, and grammar.

#### Almost All of Our Research:

- Has been done in writers' workshop/whole language/process writing classrooms.
- Has been done in low SES or Title 1 schools.
- Has been done in very diverse classrooms.

# Confession: SRSD is Complicated Too

We do hands on, practice based professional development (cf. Ball et al., 2009) with teachers and it takes 12 to 14 hours in small groups, focusing on learning and planning for their own students. (PBPD for SRSD – a growing set of quant, qual, and mixed methods studies; not alphabet soup).

I can only give you an overview of SRSD here.

- Reading before writing celebrate and analyze model/mentor texts, which is critical to....
- ...development of declarative, procedural, and conditional knowledge needed to use both general and genre specific writing strategies and selfregulation strategies
- Interactive, explicit, and scaffolded learning of strategies for genre specific and general writing
- Rich in discussion/discourse, cognitive modeling, and collaboration/co-construction as major vehicles for achieving these goals

- Explicit development of self-regulation of strategy use and the writing process (e.g., goal setting, self-assessment, self-speech, and selfreinforcement – and more).
- Deliberate development of self-efficacy, attributions (strategy use; effort), attitudes, and motivation; tailored to students' needs

- Differentiated to meet differing needs among students
  - Basic goals for all students are combined with specific goals for individual students based on current writing performance, strengths, and needs
- Criterion-based: Students are allowed the time and support needed to reach their goals

- A "problem-solving method of instruction;" it is not scripted.
- "Student centered" but "Instructive" Teachers must be in charge and have explicit and differentiated goals for their students.
- Framed within six flexible, recursive, and highly interactive stages that serve as a meta-plan for instruction (Develop It, Discuss It, Model It, Memorize It, Support It, Independence).

(Harris & Graham, 2009; Harris, Graham, Brindle, & Sandmel, 2009)

**SRSD Is NOT Teaching Mnemonics!** 

Please don't P.E.E. in the classroom!

Post; Explain/Discuss, Even Model; Expect

It just won't make a meaningful difference for most students. Our and others' research clearly shows that collaborative writing and gradual release of control are critical to major gains. Real improvement requires all six stages of instruction be implemented with integrity. There is no magic in the mnemonics!

# Messages From our Students

- "This is a really good thing you taught us."
- "It was super duper fun!"
- "If you use the strategies, you will definitely improve."
- "It makes writing easier."
- "This should be taught to all the children in the world."
- "Of course I can write now, someone taught me how."

# Recent Comment from a Parent

• Recently, a second grader told her Mom (an English Language Arts Coordinator for the district where her daughter attends school) that she now loved writing, and was really good at it! Mom contacted her daughter's teacher and asked her, "How did you turn writing, which used to be like broccoli in our home, into ice cream sundaes?"

Harris, K.R., Graham, S., Chambers, A., & Houston, J. (2014). Turning broccoli into ice cream sundaes: Self-regulated strategy development for persuasive writing using informational text. In Gansky, K. (Ed.), *Write now! Empowering writers in today's K-6 classrooms* (pp. 87-111). Newark, DE: International Reading Association.

# SRSD: Demanding?

- In elementary grades, 8-12 lessons lasting 20-40 minutes have been needed for struggling writers; normally achieving writers move even faster.
- Learning a second set of strategies is faster than learning the first one.
- Teachers can get better maintenance and generalization than researchers – of course! Teachers can and do integrate these strategies across the day and the curriculum.
- Why teach students writing strategies they don't need? If a couple of students are already doing well, teachers have to create appropriate new goals for these students and work with those students.

# Confession: There are still more questions than answers.

Every line of research raises more and more questions.

The community of SRSD researchers is going in numerous directions.

# Examples

- Use of SRSD for writing within science, history, and math classes, as well as college entrance tests like the ACT.
- Cost-benefit issues in PD and scaling up.
- Role of technology in supporting teachers with SRSD.
- Challenges in scaling up numerous challenges identified at the whole class level; differentiation particularly challenging.
- Insufficient focus on teacher learning and change in PD.

### PBPD for SRSD (only 1 funded study, in red)

- McKeown, D., Brindle, M., Harris, K.R., Graham, S., Collins, A., Brown, M. (2016). Illuminating growth and struggles using mixed methods: Practice-based professional development and coaching for differentiating SRSD instruction in writing. Reading & Writing: An Interdisciplinary Journal.
- Harris, K.R., Graham, S., & Adkins, M. (2015). Practice-based professional development and self-regulated strategy development for Tier 2, at-risk writers in second grade. *Contemporary Educational Psychology*.
- Festas, I., et al. (2015). The effects of self-regulated strategy development (SRSD) on the writing performance of eighth grade Portuguese students. *Contemporary Educational Psychology*.
- Harris, K.R., Lane, K.L., Driscoll, S., Graham, S., Wilson, K., Sandmel, K., Brindle, M., & Schatschneider, C. (2012). Tier 1, teacher-implemented self-regulated strategy development for students with and without behavioral challenges. *Elementary School Journal. IES funded*.
- McKeown, D., Brindle, M., Harris, K.R., Sandmel, K., Steinbrecher, T., Graham, S., Lane, K., & Oakes, W. (in revision). Teachers' voices: Understanding effective practice-based professional development for elementary teachers on SRSD in writing.
- Kiuhara, S., A., Harris, K. R., Graham, S., Brindle, M., McKeown, D., & Gilbert, J. K. Examining the effectiveness PBPD for SRSD for on demand writing. In preparation.
- Harris et al. PBPD for SRSD:close reading and writing from source text. In preparation.
   AND: Mason et al. under review. The officery of DBDD for SRSD instruction for excuspline.

AND: Mason et al., under review, The efficacy of PBPD for SRSD instruction for struggling and non-struggling writers in rural schools: A randomized control trial.

# Examples

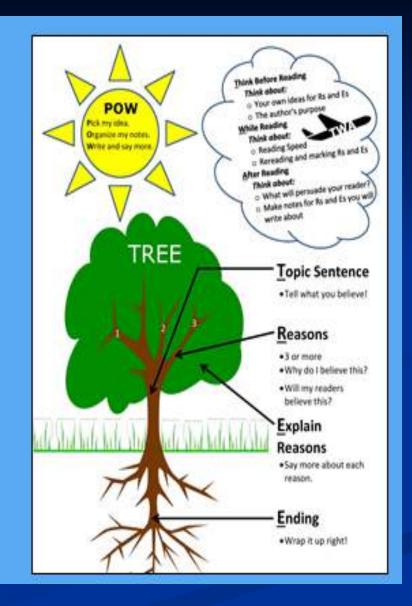
- Need greater developmental research base to inform SRSD.
- No longitudinal studies of writing development, let alone of SRSD.
- Need more research on components and process of change.
- SRSD is a beginning, not an ending need research on how to support teachers and students after initial independent performance.
- Many reading and writing tasks not yet studied.
- And the list goes on.

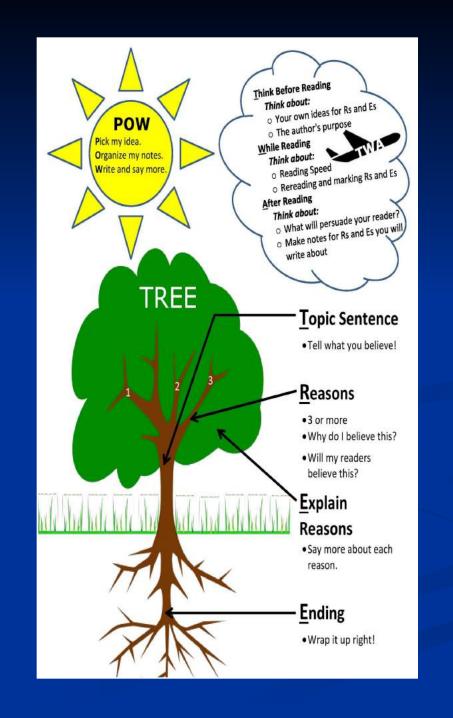
# POW + TREE + TWA

 Students use all three strategies to incorporate reasons and explanations from informational text into an opinion essay.

### Example Writing Prompt:

Write an essay convincing your classmates that it is important to save the rainforest.





### POW +TREE+TWA

- POW + TREE taught first, for writing opinion essays based on your own ideas and knowledge.
- TWA, a close reading strategy, then taught, and writing from persuasively from informative source text then taught using all 6 stages of SRSD (goes faster this time).
- Description of SRSD for this set: Harris, K.R., Graham, S., Chambers, A., & Houston, J. (2014). Turning broccoli into ice cream sundaes: Self-regulated strategy development for persuasive writing using informational text. In Gansky, K. (Ed.), Write now! Empowering writers in today's K-6 classrooms (pp. 87-111). Newark, DE: International Reading Association.
- Complete teacher learning lesson plans and materials for this set: Harris, K.R., & Graham, S. (in press). POW+TREE+TWA for writing persuasively from source text: Lesson plans, materials, and tips. In R. Fidalgo, K.R. Harris, & M. Braaksma (Eds.). Design Principles for teaching effective writing: Theoretical and empirical principles (e chapter accompanying printed book). Hershey, PA: Brill Editions. Available by request now.

### Remember:

- Topic, Audience, and Purpose!
- A good essay is fun to write and fun to read.
- Be clear, be organized, make sense.
- Use linking words.
- Use "million dollar words" to reach the reader.
- Think about what will persuade your reader a good essay has a chance of getting your reader to agree with you.



To think of good ideas:

I need to use tree to thelp me,

I can use pow for any type

Of writeing that I am doing,

sember two, think about my remains speed, what

do I need to do first, put two across the

top of the paper

While I work:

To heed to take time on

my work. To do my work.

The will get factor atdoing two

Te check my werk:

areat writer in my head

good ideas, good job, use your brain

have full when you Woritering

story is rereating will help me pensueden

### My Self - Statements

To think of good ideas:

tree when you presoude someone. Take your time. What do I do before reading.

While I work:

Take time. Use tree of presaudeing . Use your brain of always. Use your brain. I'll get faster at Thinking of Rand ES.

To check my work:

Read it again. You used your brain!
Use Two Check your planning
Sheet.

Linking Words

My first reason\*
One reason
Another reason
Another important reason
One more reason
An additional reason
A second reason
My third reason
My final reason
My final reason
Finally
In conclusion

\*REMEMBER - DO NOT USE FIRST, SECOND, THIRD ONLY!

Attention Getters

one

- 1. Fun Statement
- 2. Question
- 3. Exclamation
- 4. Short story
- 5. Interesting Fact

Wrap it up Right

- Connect to reader
- Interesting and Engaging
- Restate belief
- Summarize reasons

#### Things to Do in Orlando, Florida

Orlando is a city in the state of Florida. A lot of people go to Orlando because Disney World is there. Disney World is a great park. It has rides for all ages. There are also shows during the day. Disney World has a water part too. At night, there is always a parade. There are also fireworks at night!

People visiting Orlando also go to other fun parks nearby.

Visitors like Universal Studios. Universal Studios has many rides based on movies. Universal Studios also has fun shows you can watch. Sea World is also nearby. You can see ocean animals in shows there. Lego Land is also nearby. Kids can play with legos there. There are rides and a water park too.

There are many other things to do near Orlando. You can take hot air balloon rides, go to an alligator show, or see a museum. There are zoos and gardens too. There are many good museums in Orlando where you can learn a lot. The Orlando Science Center is a lot of fun and you learn a lot about science. You can even see space rockets. Dinosaur World is an outdoor museum.

are baseball games, football games, and car races nearby. Orlando has a pro basketball team, too! Florida's many beaches are another reason to go to Orlando. People can swim or play in the sand.

Orlando, Florida has nice weather all year. In the winter, it does not get very cold. The highs are usually above 60 degrees. In the summer, it does not get too hot. Highs are usually in the 80s.

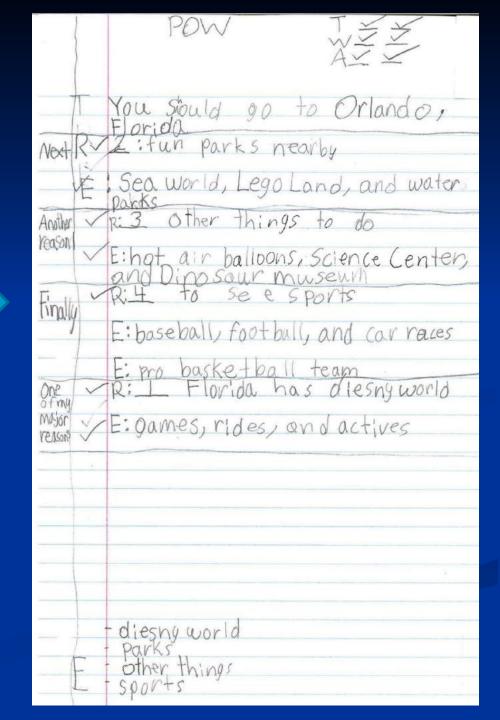
Florida gets a lot a sun, too. There are many things to do in

Z: Fun parks nearby Sea world, Lego Land, and water Yeason, E: baseball, football, and car races E: pro basketball team R: I Florida has diesny world E: games, rides, and actives diesny world other things

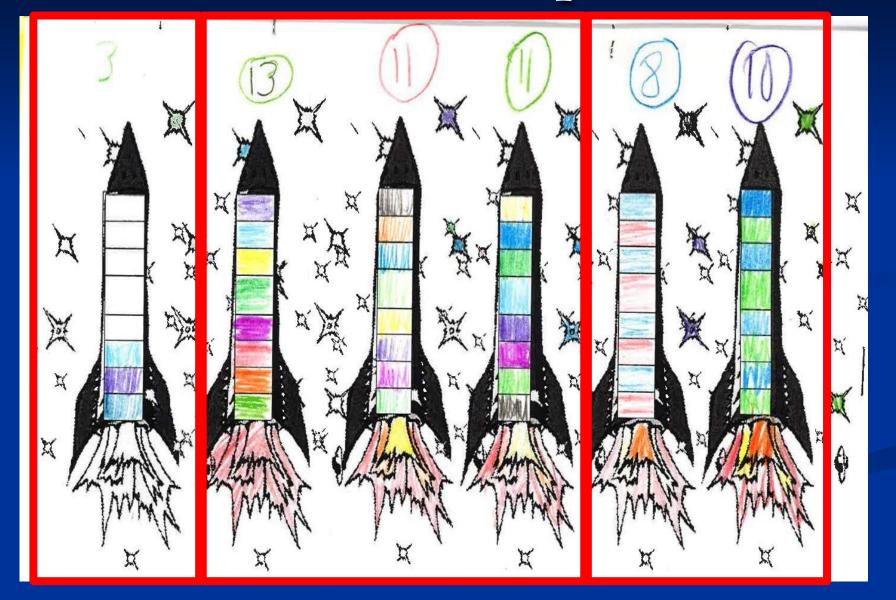
my major reasons is Floridaa diesny world. Diesny world, has games, rides, and a Ctives 3 Next there's fun nearby ! It has 5 sea world, Lego Land, and water parks. Another Other Things hase ball, toot ball, and

#### TREE

	JETALEPOS TERRO
T	Topic Sentence: Tell what you believe.
R	Reasons – 3 or more. Explain each reason further. Reason:
E	Explanation:
	Reason:
	Explanation:
	Reason:
	Explanation:
Е	Ending: Wrap it up right.
1	



# Student's Graphs



# Student Discussing Rockets

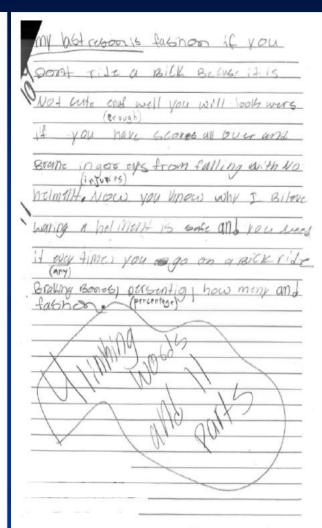
- **Teacher:** Why did we color the rockets?
- Student: It was to show you, ummm, how many parts you added and when you look at the rockets in your previous ones it can show you how much you've grown and how much you've learned and even from our first one we did pretty okay but from the very first essay that we wrote we just like went up a lot so it's a really good strategy and yeah.
- **Teacher:** So do you like tracking your own work and seeing your improvements? Do you think that is helpful for kids?
- Student: It makes them feel good because usually with the strategy you will definitely improve.

# Kelly's Pre-test

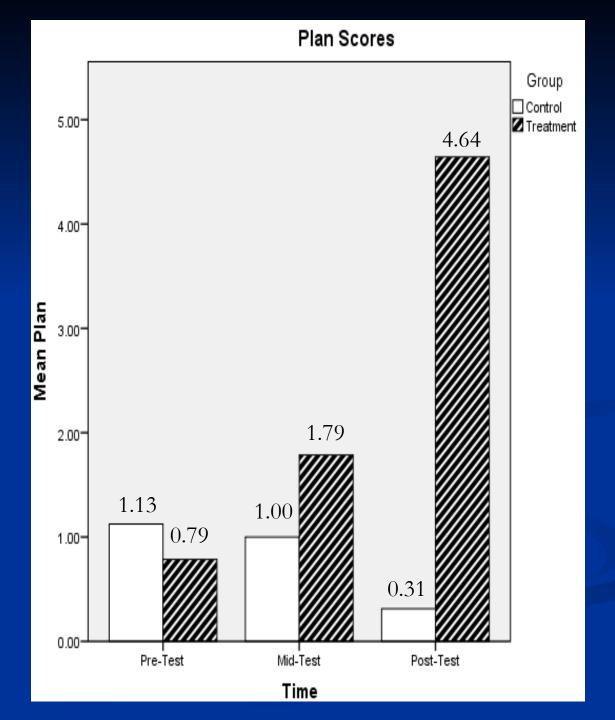
# Kelly's Post-test

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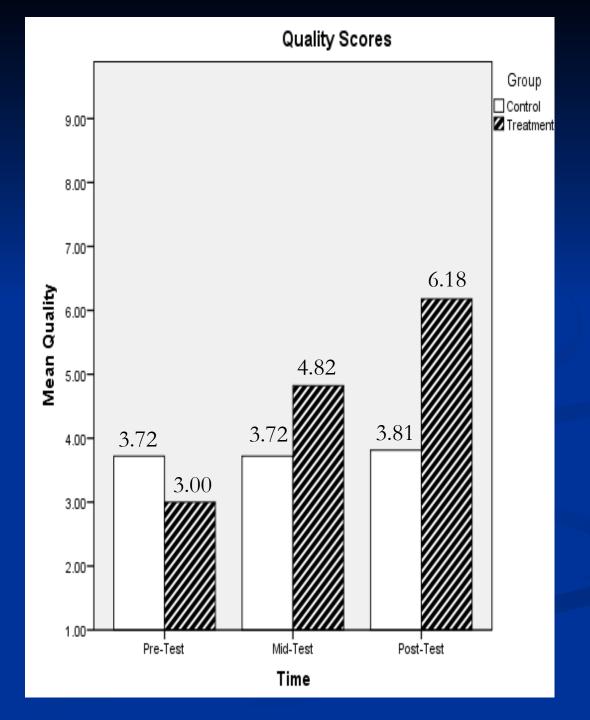
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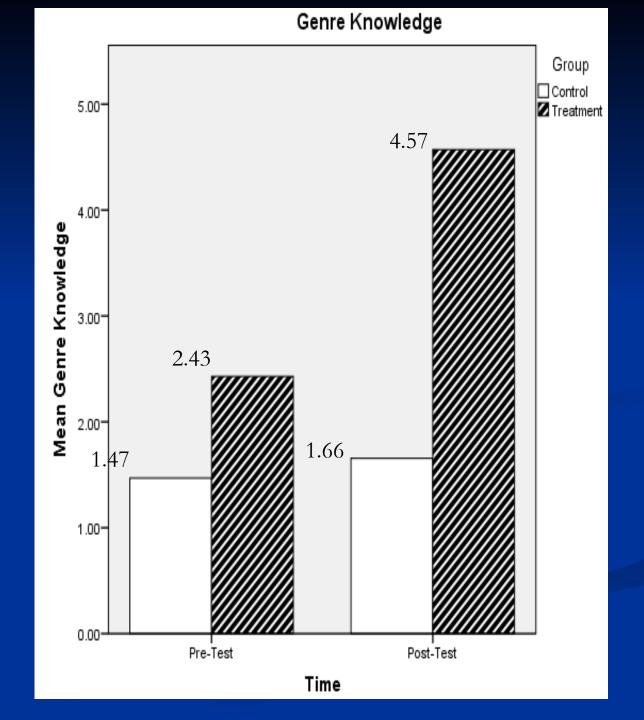
Effect Size for Post-Test: 1.84



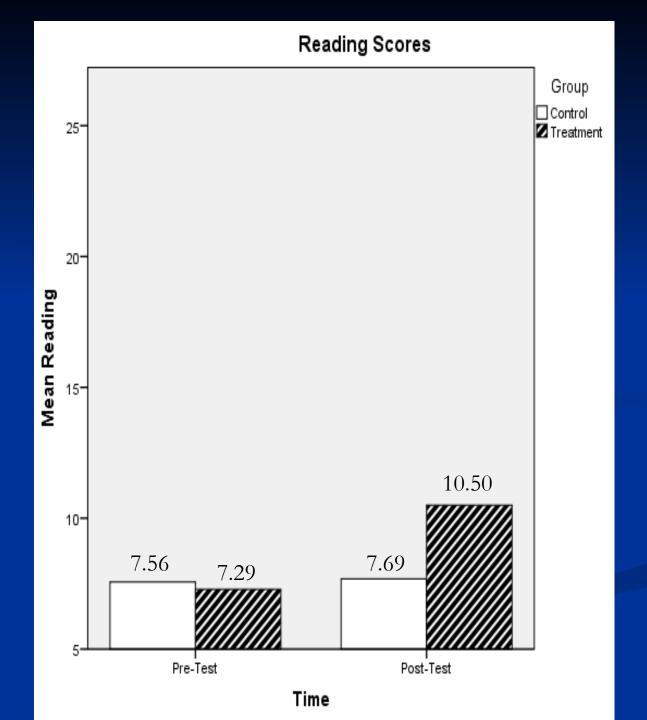
Effect Size for Post-Test: 1.71



Effect Size for Post-Test: 0.76



Effect Size for Post-Test: 0.67



## Attached:

- Appendix: A more detailed description of teacher and student efforts/actions during and across each stage of SRSD.
- Selected References
- Print, video, and online resources for SRSD
- Online Resources:
  - www.thinkSRSD.com
  - www.SRSDonline.org
  - Watch for ASU hosted: www.mySRSD.com

# 1. Develop & Activate Background Knowledge

- \*read and *discuss* works in the genre (persuasive essays); develop declarative, procedural, and conditional knowledge (e.g., *What is an opinion?*, *What does it mean to persuade?*, *Why is it important to think about your readers?* and so on), appreciation of characteristics of effective writing (e.g., *How did the writer grab your interest?*), and other knowledge and understandings targeted for instruction. Continue through Model It as needed until all key knowledge and understandings are clear.
- \* \*discuss\* and explore both writing and self-regulation strategies to be learned (we typically begin development of self-regulation, introducing goal setting and the goals we will be working on)

### 2. Discuss It -Discourse is Critical!

- \*discuss students' current writing and self-regulation abilities, their attitudes and beliefs about writing, what they are saying to themselves as they write, and how these factors might help or hinder them as writers; emphasize role of both effort and powerful strategies in becoming a better writer (begin development of attributions)
- \*graph number of genre specific essay elements and other goals targeted included in pretest or prior essays; this assists with goal setting and tracking progress in writing (graphing prior writing can be skipped if students are likely to react negatively)
- \*analyze good, grade appropriate model papers (we often have to write these essays ourselves or collect them from peers, as text found in the classroom is typically above many or most students' writing levels); analyze (and repair!) poor papers

# 2. Discuss It -Discourse is Critical!

- \*take notes from these papers on a graphic organizer to assist students in learning to make notes (many students need practice and support in learning to make notes rather than writing full sentences on graphic organizers)
- \*with the teacher, analyze poor essay(s), make notes for a better essay on a graphic organizer, and write this essay collaboratively
- \*establish students' commitment to learn strategies and act as collaborative partners; further establish role of student effort and strategy use in becoming an effective writer

### 3. Model It

- \*teacher modeling and/or interactive, collaborative modeling of writing and self-regulation strategies; it is not necessary for teachers to model alone, many teachers prefer interactive, collaborative modeling while maintaining control of the writing process and modeled elements)
- \*analyze and discuss strategies and model's performance; make changes as needed; discuss how students will use or modify aspects of the model's performance

### 3. Model It

- \*students develop and record personal selfstatements to assist them throughout the writing process and use of the writing and self-regulation statements
- \*model self-assessment through graphing of multiple collaboratively written compositions
- \*promote student development of self-regulation and writing strategies across other tasks and situations; discuss use in other settings (continue generalization support)

### 4. Memorize It

- \*although begun in earlier stages, require and confirm memorization of strategies, meaning and importance of each step in each strategy, mnemonic(s), and self-instructions as appropriate
- \*continue to confirm and support memorization in following stages, make sure students have memorized the mnemonics, what they mean, and the importance of each step before Independent Performance (as one student told us, "Of course you can't use it if you can't remember it!")

# 5. Support It – Guided Practice

- \*teachers and students use writing and self-regulation strategies collaboratively as needed to meet all of the goals identified for composing in this genre while using the visual supports in students' writing folders (the mnemonic strategy chart, graphic organizer, personal self-statements sheets, and targeted words lists such as linking words or "million dollar words"/effective vocabulary)
- \*challenging initial goals for genre elements and characteristics of writing established collaboratively with students and individualized as needed; criterion levels increased gradually until final goals met
- \*graphic organizer replaced with student creating mnemonic based organizer on scratch paper (this makes use of the strategy "portable" and not reliant on the physical graphic organizer)

# 5. Support It – Guided Practice

- \*prompts, guidance, and collaboration faded individually until the student can compose successfully alone; peer supports as appropriate
- \*self-regulation components (goal setting, self-instructions, self-monitoring and self-reinforcement) are all being used by this stage; additional forms of self-regulation, such as managing the writing environment, use of imagery, and so on may be introduced
- \*discuss plans for maintenance, continue support of generalization

# 6. Independent Performance

- Students are able to use task and self-regulation strategies independently.
- Monitor use over time; support maintenance as necessary.
- Fading of overt self-regulation may begin.
- Plans for maintenance and generalization continue to be discussed and implemented; booster sessions as needed.

#### Selected References for SRSD

- Graham, S., & Harris, K.R. (in press). Evidence-based writing practices: A meta-analysis of existing meta-analyses. In R. Fidalgo, K.R. Harris, & M. Braaksma (Eds.). Design Principles for teaching effective writing: Theoretical and empirical principles. Brill Editions.
- Harris, K. R., & Graham, S. (in press). Self-regulated strategy development: Theoretical bases, critical instructional elements, and future research. In R. Fidalgo, K.R. Harris, & M. Braaksma (Eds.). *Design principles for teaching effective writing: Theoretical and empirical principles.* Hershey, PA: Brill Editions.
- Graham, S., Harris, K.R., & McKeown, D. (2013). The writing of students with LD and a meta-analysis of SRSD writing intervention studies: Redux. In L. Swanson, K.R. Harris, & S. Graham (Eds.), *Handbook of learning disabilities* (2<sup>nd</sup> Edition; pp. 405-438). MY: Guilford Press.
- Harris, K.R., Graham, S., Chambers, A., & Houston, J. (2014). Turning broccoli into ice cream sundaes: Self-regulated strategy development for persuasive writing using informational text. In Gansky, K. (Ed.), Write now! Empowering writers in today's K-6 classrooms (pp. 87-111). Newark, DE: International Reading Association.

#### Selected References and Resources for SRSD

- Harris, K.R., & Graham, S. (2016). Self-regulated strategy development in writing: Policy implications of an evidence-based practice. *Policy Insights from Behavioral and Brain Sciences*. *DOI:* <a href="http://bbs.sagepub.com/cgi/reprint/2372732215624216v1.pdf?ijkey=SgqI7iI7IIrq7ln&keytype=finite">http://bbs.sagepub.com/cgi/reprint/2372732215624216v1.pdf?ijkey=SgqI7iI7IIrq7ln&keytype=finite</a>
- Harris, K.R., Graham, S., & Adkins, M. (2015). Practice-based professional development and self-regulated strategy development for Tier 2, at-risk writers in second grade. *Contemporary Educational Psychology*, 40, 5-16.
- Harris, K. R., Graham, S., Brindle, M., & Sandmel, K. (2009). Metacognition and children's writing. In D. Hacker, J. Dunlosky, & A. Graesser (Eds.), *Handbook of metacognition in education* (pp. 131-153). Mahwah, NJ: Erlbaum.
- Harris, K.R. (1982). Cognitive-behavior modification: Application with exceptional students. *Focus on Exceptional Children*, 15(2), 1–16.
- Santangelo, T., Harris, K.R., & Graham, S. (2016). Self-Regulation and Writing: An Overview and Meta-Analysis. In C. MacArthur, S. Graham, & J. Fitzgerald (Eds.), *Handbook of writing research* (Volume 2; pgs. 174-193). NY; Guilford.

#### Selected Resources for SRSD

- All of the stages of instruction can be seen in both elementary and middle school classrooms in the video by the Association for Supervision and Curriculum Development (2002): *Teaching students with learning disabilities in the regular classroom:* Using learning strategies [videotape 2]
- Free online interactive tutorials on SRSD for writing are available through IRIS at: <a href="http://iris.peabody.vanderbilt.edu/index.html">http://iris.peabody.vanderbilt.edu/index.html</a>
- Our website for a funded study of SRSD, Project Write, includes lesson plans and support materials for story and opinion essay writing strategies designed for the early elementary grades (1-3). Lesson plans and support materials are provided both for working individually with students having difficulties with behavior and writing, and for classwide SRSD instruction in general education classrooms: <a href="http://kc.vanderbilt.edu/projectwrite">http://kc.vanderbilt.edu/projectwrite</a>
- Additional videos and materials can be found on <a href="www.thinkSRSD.com">www.thinkSRSD.com</a> and on <a href="mailto:SRSDonline.org">SRSDonline.org</a>; these two sites are independent non-profits doing PD and working in schoosl (we have no financial ties to either).
- WATCH FOR A WEBSITE DEDICATED TO SRSD, HOSTED BY ASU, COMING IN 2016! Complete materials for newly validated strategies from multiple researchers will be posted here for free.

# Detailed Print Descriptions of SRSD (including lesson plans and materials):

- Harris, K. R., Graham, S., Mason, L. H., & Friedlander, B. (2008). *Powerful writing strategies for all students*. Baltimore, MD: Brookes. This book includes a discussion of how and why to use SRSD for writing, followed by lesson plans for all of the strategies we had developed for elementary through high school students by 2008. A 2<sup>nd</sup> Ed is in the works.
- Mason, L., Reid, R., Hagaman, J. (2012). Building comprehension in adolescents: Powerful strategies for improving reading and writing in content areas. This book, like the book above, comes complete with SRSD lesson plans and offers strategies proven to be effective in both reading and writing.
- Graham, S., & Harris, K. R. (2005). Writing better: Teaching writing processes and self-regulation to students with learning problems. Baltimore, MD: Brookes. This book provides detail on each strategy we have developed based on careful study of the genre and effective writing, how the strategies can be scaled down or scaled up for different students, how genre growth can be continued, and covers the SRSD approach. Strategies useful in elementary through high school are included.

# Detailed Print Descriptions of SRSD (including lesson plans and materials):

- Harris, K., & Graham, S. (1996). Making the writing process work: Strategies for composition and self-regulation (2nd Ed.). Cambridge: Brookline Books. Our original book, there is greater detail for teachers on how to implement SRSD, continue growth in genres, and develop the self-regulation components here than in either of the other two books we have written. There are detailed chapters on preparing, implementing, and evaluating SRSD instruction.
- Reid, R., Lienemann, T.O., & Hagaman, J. (2013). Strategy instruction for students with learning disabilities (2<sup>nd</sup> Ed.). NY: Guilford. This book covers a broad range of research on and application of strategies instruction, going beyond writing/reading. Although the title indicates students with LD, this book includes strategies that can be used will all students as needed.
- Sandmel, K, Brindle, M., Harris, K.R., Lane, K.L., Graham, S., Little, A., Nackel, J., & Mathias, R. (2009). *Making it work: Differentiating tier two writing instruction with Self-Regulated Strategy Development in tandem with schoolwide positive behavioral support for second graders.* This article details how instruction was differentiated for three second grade students with different behavioral and writing strengths and needs. *Teaching Exceptional Children*, 42, 22-33.