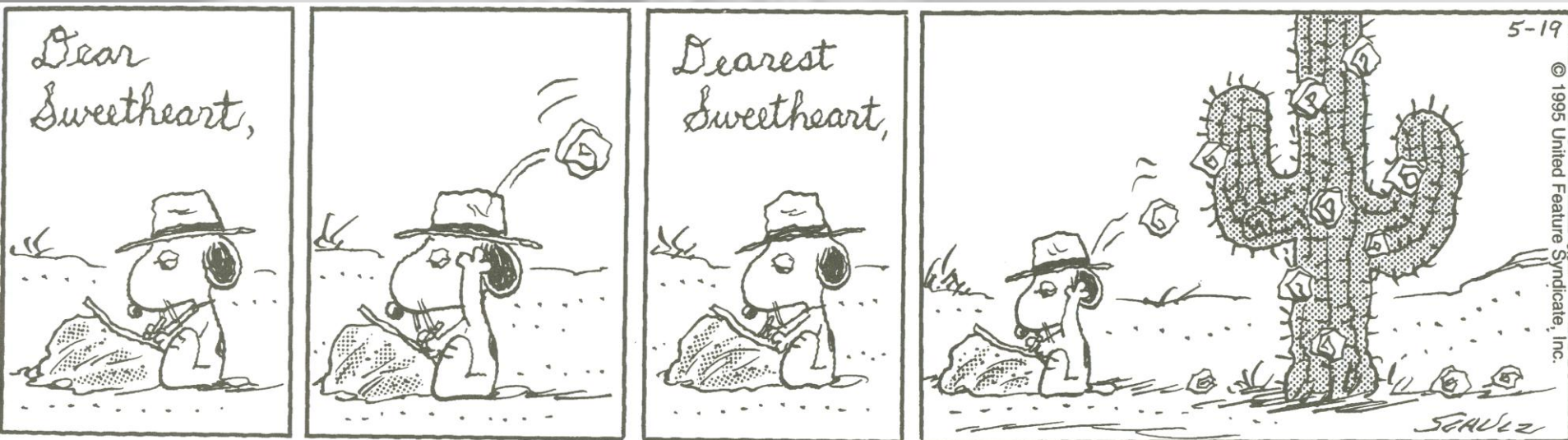


**“The Magna Carta Provided That No Free Man  
Should be Hanged Twice for the Same Offense”:  
Self-Regulated Strategy Development for  
Writing: Initial Research on Classroom Teacher  
Implementation**

**Karen R. Harris  
Vanderbilt University**



# SRSD: What We're After

- **Mastery of higher-level cognitive processes involved in composing.**
- **Autonomous, self-reflective, self-regulated use of effective writing strategies.**
- **Knowledge of the characteristics of good writing.**
- **Positive attitudes about writing and ones' own capabilities as a writer.**

# SRSD: The Data Base

- SRSD significantly and meaningfully changes how students with LD, and their NA peers, write.
- SRSD significantly and meaningfully changes what students with LD, and their NA 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).
- Generalization to differing genres or writing tasks may need support/scaffolding.
- The most meaningful gains are achieved among students with LD when all components (self-regulation and composing strategies) and all stages of instruction (typically 6) are included.


## Meta-Analysis

Graham & Harris, 2003; Writing Next, 2006

- **Does Strategies Instruction Work in the Area of Writing?**
- **Effect Size: Strategy Instruction in General, across grades and genres: .82**
- **Effect Size: Strategy Instruction that is NOT SRSD: .62**
- **Effect Size: SRSD: 1.14**

**SRSD Effect sizes below are averaged across 18 studies;  
over 25 studies reported, single subject design included;  
grades 2-12.**

- **Effect Sizes for Writing QUALITY:**
  - **Grades 2-6: 1.69**
  - **Grades 7-8 1.21**
  - **Narrative: 1.52**
  - **Expository: 1.44**
- **Effect Sizes for Writing ELEMENTS (components of writing):**
  - **Grades 2-6: 1.38**
  - **Grades 7-8 2.15**
  - **Narrative: 1.76**
  - **Expository: 1.99**

- 
- **Effect Sizes for LENGTH:**
  - **Grades 2-6: 2.02**
  - **Grades 7-8: 2.10**
  - **Narrative: 2.21**
  - **Expository: 2.04**

# Unique Features of SRSD

- Explicitly teach and support development of self-regulation with academic strategies.
- Explicitly support the development of attributions for effort, positive attitudes, adaptive beliefs, and self-efficacy for writing.
- Instruction is criterion based.
- Initially developed for students with LD, found to be effective across range of students
- Development based on integrating theoretical and research bases.

- “Cognitive-behavior modification typically involves children learning to control their own behavior through (SR) processes such as goal-setting, self-instruction, self-assessment and self-reinforcement; modeling is common and effective; students must understand the importance of what they are learning; CBM emphasizes the importance of the student playing an active and collaborative role in the design, implementation, and evaluation of training regimens; the instructor should gradually fade support and engage in Socratic dialogue; training should not be viewed as regimented or austere but, rather, individually tailored and highly responsive to each child ... and should occur long-term, across tasks of graduated difficulty and in different settings.”

Meichenbaum, 1977



# Prominent Theoretical Perspectives on Motivation and Self-Regulated Learning

- Operant
- Cognitive-Behavioral (CBM)
- Vygotskian
- Social-Cognitive
- Constructivist & Sociocultural
- Phenomenological
- Volitional

# Some Critical Authors; 1979-1982

- Meichenbaum
- Flavell
- Kanfer and Karoly
- Carroll
- Bandura
- Brown and colleagues
- Zimmerman
- Pressley and colleagues
- John Carroll

# Theoretical Integration and SRSD

## Selected Characteristics and Theoretical Links

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

# Theoretical Integration and SRSD

## Selected Characteristics, Continued

- **3. Scaffolding**
  - -behavioral theory
  - -cognitive-behavioral theory
  - -constructivism
  - -social cognitive theory
- **4. Explicit Development of Self-Regulation**
  - -behavioral theory
  - -cognitive-behavior modification
  - -social cognitive theory

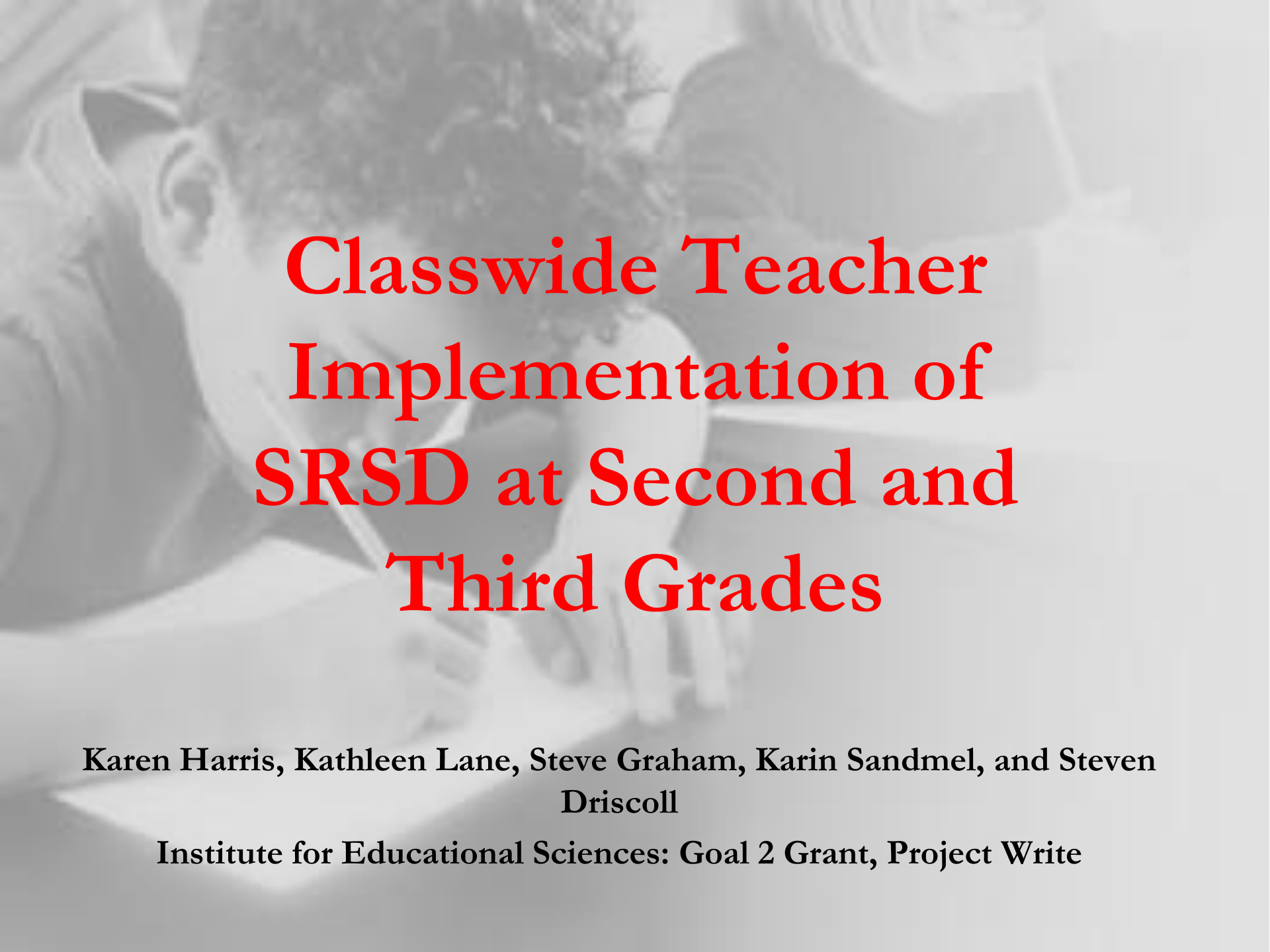
# Other Strategies Embedded in SRSD in Addition to Genre Strategies:

- 6+1 writing traits (*content, organization, voice, word choice, sentence fluency, conventions, & publication*)
- Use a “catchy” opening sentence
- Use million dollar words
- Use an ending that “wraps it up right”
- Use good transition words
- Use description..... and so on.

**Tailor these to individual students.**

# Basic Self-Regulation Components

- Goal Setting
- Self-Talk and Self-Instructions
- Self-Monitoring
  - Self-Assessment
  - Self-Recording
- Self-Reinforcement
- Also consider: managing the writing environment & imagery



# **Classwide Teacher Implementation of SRSD at Second and Third Grades**

**Karen Harris, Kathleen Lane, Steve Graham, Karin Sandmel, and Steven  
Driscoll**

**Institute for Educational Sciences: Goal 2 Grant, Project Write**

**Assessments:**

Persuasive Writing Prompt

Story Writing Prompt

Social Validity: Teacher

Social Validity: Student

21

second- and third-grade  
teachers  
randomly assigned

Persuasive Writing

n = 11

Story Writing

n = 10

\*one later withdrew

# **Intervention Description**

- **SRSD Implemented by General Ed Teachers**
- **Professional Development For Teachers:**  
small groups, in their schools and focused on their students; 12 hours total, paralleling SRSD instruction; support during instruction
- **Instruction: 3 days a week; 30-min sessions; maximum of 24 sessions**
- **Fidelity collected for more than 25% of sessions**

# Participant Characteristics

		Story <i>n</i> = 113	Persuasive <i>n</i> = 149
Gender <i>n</i> (%)	Male	55 (48.67%)	76 (51.01%)
	Female	58 (51.33%)	73 (48.99%)
Grade <i>n</i> (%)	Second	69 (61.06%)	67 (44.97%)
	Third	44 (38.94%)	82 (55.03%)
Ethnicity <i>n</i> (%)	White	109 (96.46%)	144 (96.64%)
	African American	1 (0.88%)	2 (1.34%)
	Hispanic	3 (2.65%)	2 (1.34%)
Age <i>M</i> ( <i>SD</i> )		7.97 (0.57)	8.14 (0.63)
IQ <i>M</i> ( <i>SD</i> )		99.97 (12.71)	98.05 (12.96)

# Participant Characteristics

		Story <i>n</i> = 113	Persuasive <i>n</i> = 149
Special Education <i>n</i> (%)	SLD	0 (0.00%)	1 (0.67%)
	Gifted	2 (1.77%)	0 (0.00%)
	SI	1 (0.88%)	1 (0.67%)
	LI	3 (2.65%)	1 (0.67%)
	OHI	1 (0.88%)	2 (1.34%)
	DD	1 (0.88%)	1 (0.67%)

*Note.* AA refers to African American. SLD refers to Specific Learning Disability; SI refers to Speech Impairment; LI refers to Language Impairment; OHI refers to Other Health Impairment; OI refers to Orthopedic Impairment; HI refers to hearing impairment; DD refers to developmental delay

# SRSD Stages & Modifications

- **Stages**
  - Develop Background Knowledge
  - Discuss It
  - Model It
  - Memorize It
  - Support It
  - Independent Performance
- **Modifications:**
  - Increased time and opportunities to master the first two stages
  - Instructional sequence: student self-evaluation and graphing of a pre-instruction story moved from Discuss It to Support It
  - Verbal reinforcement & opportunities to respond
  - PBS Tickets
  - Practice test

# SRSD Mnemonic Strategies

**POW**

Used for all styles of writing

**TREE**

Used for persuasive writing

**WWW**

What = 2

How = 2

Used for story writing

# Persuasive (Opinion Essay) Writing

1. **POW** for planning

2. **TREE**

**P**ick my idea

**O**rganize my notes

**W**rite and say more

**T**opic Sentence – Tell what I believe

**R**easons – 3 or more

**E**nding – Wrap it up right

**E**xamine – Do I have all my parts?

# Story Writing

1. **POW** for planning

**P**ick my idea

**O**rganize my notes

**W**rite and say more

2. **WWW, What=2, How=2**

**W**ho?

**W**hen?

**W**here?

**W**hat does main character do?

**W**hat happens then?

**H**ow does the story end?

**H**ow does the main character feel?


# Assessment

- **Writing probes**
  - **Story Writing Prompts**
  - **Persuasive Writing Prompts**
- **Social validity**
- **Treatment integrity**
- **Descriptive measures**



# Experimental Design & Statistical Analysis

- Randomized trial embedded in a three-tiered model of prevention.
- Student outcome data analyzed using hierarchical linear modeling
- Treatment integrity data analyzed using descriptive procedures.
- Focus groups with teachers at post.

A grayscale photograph of a young boy with curly hair, wearing a dark shirt, sitting at a desk and writing in a notebook with a pencil. His head is bowed, and he is focused on his work. In the background, another student is partially visible, also working at a desk. The overall scene is a classroom setting.

**Results**

# Student Performance at Instructor Level

## Story Writing Performance





Feature	Phase	Story Instruction <i>n</i> = 9		Persuasive Instruction <i>n</i> = 11
Element	Pre	3.85 (1.24)	1.09	3.46 (1.56)
	Post	5.62 (0.70)		3.69 (1.36)
	$\Delta$	1.77 (1.41)		0.22 (1.43)
Quality	Pre	3.05 (1.17)	0.77	2.82 (1.36)
	Post	3.99 (0.63)		3.01 (1.23)
	$\Delta$	0.94 (0.95)		0.20 (0.96)
Word Count	Pre	100.18 (28.48)	0.13	97.16 (37.41)
	Post	96.02 (20.84)		90.47 (31.96)
	$\Delta$	-4.16 (20.46)		-6.69 (17.27)
Transition Words	Pre	1.35 (0.89)	-0.64	1.03 (0.58)
	Post	1.24 (0.62)		1.54 (0.63)
	$\Delta$	-0.11 (1.07)		0.51 (0.87)

# Student Performance at Instructor Level

## Persuasive Writing Performance





Feature	Phase	Story Instruction <i>n</i> = 9		Persuasive Instruction <i>n</i> = 11
Elements	Pre	5.12 (0.85)		4.74 (2.04)
	Post	4.99 (1.55)	2.02	7.76 (1.24)
	Δ	-0.13 (1.39)		3.02 (1.73)
Quality	Pre	1.34 (0.27)		1.20 (0.50)
	Post	1.82 (0.57)	4.00	3.62 (0.62)
	Δ	0.48 (0.52)		2.42 (0.45)
Word Count	Pre	78.37 (18.70)		82.86 (37.70)
	Post	71.99 (15.78)	-0.28	70.23 (18.83)
	Δ	-6.38 (17.71)		-12.68 (27.87)
Transition Words	Pre	0.41 (0.40)		0.51 (0.37)
	Post	0.35 (0.24)	3.78	3.22 (0.96)
	Δ	-0.06 (0.46)		2.70 (1.00)

## Student Performance at Student Level

Feature	Phase	Story Instruction <i>n</i> = 9		Persuasive Instruction <i>n</i> = 11
Elements	Pre	3.96 (2.48)		3.57 (2.57)
	Post	5.53 (1.93)		3.72 (2.61)
	Δ	1.57 (2.91)		0.15 (2.81)
Quality	Pre	3.18 (2.04)		2.91 (2.06)
	Post	3.88 (1.42)		3.07 (2.20)
	Δ	0.71 (2.00)		0.16 (2.07)
Word Count	Pre	102.86 (49.36)		97.50 (59.60)
	Post	92.88 (45.52)		90.97 (53.38)
	Δ	-9.97 (45.73)		-6.54 (48.84)
Transition Words	Pre	1.36 (1.73)		1.04 (1.63)
	Post	1.20 (1.46)		1.47 (2.06)
	Δ	-0.16 (2.19)		0.43 (2.59)

# Student Performance at Student Level

## Persuasive Writing Performance

Feature	Phase	Story Instruction <i>n</i> = 9		Persuasive Instruction <i>n</i> = 11
Elements	Pre	5.23 (3.30)		4.83 (3.59)
	Post	5.06 (5.07)		7.79 (2.73)
	Δ	-0.18 (5.04)		2.96 (3.97)
Quality	Pre	1.35 (0.74)		1.21 (0.85)
	Post	1.73 (1.09)		3.61 (1.14)
	Δ	0.38 (1.09)		2.40 (1.11)
Word Count	Pre	82.03 (54.78)		83.97 (50.65)
	Post	72.35 (46.98)		70.86 (32.59)
	Δ	-9.68 (46.12)		-13.32 (43.88)
Transition Words	Pre	0.44 (1.13)		0.53 (1.13)
	Post	0.37 (0.92)		3.15 (2.11)
	Δ	-0.07 (1.16)		2.62 (2.30)

# Results of Student Outcomes Using Hierarchical Linear Model

## Story Writing

Values	Elements	Quality	Word Count	Transition Words
Estimated Group Difference	1.52	0.69	0.06	-0.60
t value	2.29	1.53	0.01	-1.44
df	19.3	19.2	18.1	16.1
p value	0.0334	0.14113	0.9946	0.1691
Estimated mean for Persuasive Group	0.21	0.19	-6.74	0.47
Estimated mean for Story Group	1.73	0.87	-6.68	-0.13

# Results of Student Outcomes Using Hierarchical Linear Model

Persuasive Writing				
Values	Elements	Quality	Word Count	Transition Words
Estimated Group Difference	-3.1	-1.97	5.83	-2.75
t value	-4.14	-9.14	0.53	-7.40
df	19.8	17.1	18.8	18.4
p value	0.0005	<.0001	0.6030	<.0001
Estimated mean for Persuasive Group	2.98	2.4128	-12.79	2.68
Estimated mean for Story Group	-0.17	0.4430	-6.96	-0.066

# Treatment Integrity

Rater	Story <i>M (SD)</i> n = 9	Persuasive <i>M (SD)</i> n = 11
Teacher (all sessions)	94.20 (5.01)	97.06 (3.87)
Teacher (observation)	90.04 (11.49)	99.23 (1.72)
RA (observation)	91.54 (7.27)	88.63 (7.99)

A grayscale background image showing a person from the side, wearing a cap and writing in a notebook with a pen. The image is faded and serves as a backdrop for the text.

# Discussion

**-Implications for Professional  
Development and SRSD**

**-Limitations**

**-Directions for Future Research**

**-Focus Groups Analysis this  
Summer**

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

- **Post**
- **Explain and Model**
- **Expect**

**It just won't make a meaningful difference for the majority of students. Real improvement requires all six stages of instruction for most students; however some students move faster than others; some will not need SRSD at all. There is no magic in the mnemonics! Ownership of the strategies is the key. Teaching strategies as "formulas" is "PEE-ing" in the classroom.**

# **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 writing strategy is faster than learning the first one.**
- **Teachers get better maintenance and generalization than researchers – of course! Teachers can and do integrate these strategies across the day and the curriculum.**

# Caveats about SRSD:

- Not a panacea; academic and social competence are complex, no single approach can affect all aspects
- Not a complete writing program; we prefer to integrate it with a process approach to writing, which works very well and has for over 25 years – in spite of those who say this can't be done!
- Not necessarily the intervention of choice for all students or at all times
- Requires differentiation and individualization – not all students need all stages; some need more time in different places as they progress in owning these strategies; goals differ for students
- Strong professional development needed for teachers to own and use SRSD from a deep knowledge of writing and the writing process
- Teacher support enhances sustainability

# Online Resources

- online interactive tutorial on SRSD is available through Vanderbilt University at:

<http://iris.peabody.vanderbilt.edu/index.html>.

Includes all stages of instruction & video clips from the ASCD video. From the IRIS homepage, select Resources, then select Star Legacy Modules. Next, click on “Using Learning Strategies: Instruction to Enhance Learning.” There is also a module on the persuasive writing strategy POW + TREE for elementary students. To get to this one, locate the header “Differentiated Instruction,” then click on the module titled “Improving Writing Performance: A Strategy for Writing Expository Essays.”

# Online Resources, cont.

- information on using SRSD as well as other writing interventions and approaches:

[www.SchwabLearning.org](http://www.SchwabLearning.org)

- website devoted to strategies instruction at:  
[www.unl.edu/csi](http://www.unl.edu/csi)

- online discussion of writing instruction by LD Talk, NCLD:

<http://www.nclld.org/content/view/1255>

# Video

- ASCD, Video and Workshop Manual:  
*Teaching Students with LD in the  
Regular Classroom; Tape 2: Using  
Learning Strategies, 2002*

[http://shop.ascd.org/ProductDisplay.cfm?  
ProductID=402086](http://shop.ascd.org/ProductDisplay.cfm?ProductID=402086)

This video offers the most complete view of the process of SRSD, as two classes are followed throughout instruction.

# Print Resources

## *STRATEGIES AND STRATEGIES INSTRUCTION:*

- Graham, S., & Harris, K. R. (2005). Writing better: Teaching writing processes and self-regulation to students with learning problems. Baltimore, MD: Brookes.
- Harris, K., & Graham, S. (1996). Making the writing process work: Strategies for composition and self-regulation (2nd Ed.). Cambridge: Brookline Books.

# Print Resources, Cont.

- 2008, Harris, Graham, Mason, & Friedlander, Powerful writing strategies for all students (Brookes-Cole). Complete lesson plans and student and teacher materials for all of our writing strategies.
- Harris, K.R., Graham. S., & Mason, L. (2003). Self-regulated strategy development in the classroom: Part of a balanced approach to writing instruction for students with disabilities. Focus on Exceptional Children, 35, 1-16. This article gives a detailed description of teaching a writing strategy in one classroom, and SRSD guidelines.