



## Classroom Action Research Report The **UNDERSTANDINGS™** instructional routine

*Writing to Win®* is a set of three routines for writing based learning. Schools have used them separately or together for over 20 years with significant results.

- UNDERSTANDINGS™**: short writing to learn core standards
- STRUCTURES™** for the extended writing process
- PATTERNS™**: teaching grammar through writing

Current data for **UNDERSTANDINGS™** appears here. While the hallmarks of implementation are in-class demonstrations and online monitoring of student and teacher practices, an **UNDERSTANDINGS™** routine includes:

- Five key practices of teaching and learning
- More than a dozen critical-thinking journal strategies
- Organizational wall charts and instructional tools

The writing is

- Short (5-10 sentences in 5-7 minutes)
- Frequent (minimum of three entries/week)
- Focused on accuracy and completeness of content

Average Learning Retention Rates established the primary of writing in solidify what students learn. The likelihood that learning new knowledge will solidify ranges from

Mode of Learning	Percent	
• Listening	05%	Passive Learning
• Reading	10%	
• Viewing a video	20%	
• Observing a demonstration	30%	
• Participating in a discussion	50%	Active Learning
• Writing a version of the knowledge	75%	
• Teachers others	90%	

### Why Writing to Win?

From the early 1990s, K-12 *Writing to Win* schools in nine states reported significant gains in student performance on independent tests of knowledge. There are two reasons why. First, *Writing to Win*® **UNDERSTANDINGS™** builds the vocabulary of the standards in all courses that teachers faithfully use the routine (three entries/week). Shrinking achievement gaps indicate that students are reading the tests they take with better comprehension. Second, the frequent short entries solidify the new knowledge students learn on the very day they learn it. A night’s sleep has no opportunity to wash away new knowledge that is not connected to prior knowledge in students’ minds. The writing solidified it. Rigorous **UNDERSTANDINGS™** routines insure 90% retention of new knowledge. It’s exciting to witness.

All results included here derive from controlled classroom action research reported by local school districts or in studies for doctoral dissertations. Independent tests include state competency or end-of-course tests.

### Senior High Schools

School	Course	Grade	Group	Prior to year one	Year one results	Change
Atkinson Co HS	ELA	11	Experiment	79%	91%	+12%
	Science	11	Experiment	82%	96%	+14%
	Social Studies	11	Experiment	70%	83%	+13%
Dublin HS	Physical Science	9	Control	64%	67%	+ 3%
			Experiment	63%	92%	+29%
Lakeview HS	Math I	9	Experiment	63%	81%	+18%
	Biology	10	Experiment	64%	82%	+18%
Madison Co HS	Physical Science	9	Control	81%	76%	- 5%
			Experiment	62%	89%	+27%
	Math II (meet)	10	Control	42%	38%	- 4%
	Math II (exceed)		Control	3%	1%	- 2%
	Math II (meet)		Experiment	72%	78%	+ 6%
Math II (exceed)	Experiment	10%	19%	+ 9%		
Valdosta HS	Math I	9	Experiment	41%	62%	+21%
	ELA	9	Experiment	69%	81%	+12%
	Biology	10	Experiment	51%	67%	+16%
Ware Co HS	Math (all)	11	Experiment	65%	88%	+23%
	(Black)		Experiment	45%	81%	+36%
	(Ed Dis)		Experiment	55%	84%	+29%
	(SWD)		Experiment	22%	53%	+31%
	(White)		Experiment	76%	94%	+18%

Note: Dublin and Valdosta student demographics are 80+% black; Lakeview and Madison are 95% white; Ware is 60-40% white, and Atkinson is 45-30-25% Hispanic, white and black.

**Middle Schools**

School	Course	Grade	Group	Prior to year one	Year one results	Change
Jenkins Co MS	ELA	7	Experiment	81%	92%	+11%
	Math	7	Experiment	48%	77%	+29%
	Science	7	Experiment	47%	66%	+19%
Bacon Co MS	Social Studies – All	6	Experiment	68%	86%	+18%
	Social Studies – Black			54%	86%	+32%
	Social Studies – SWD			39%	62%	+23%
	Science – All	7		65%	85%	+20%
	Science – Black			44%	80%	+36%
	Science – SWD			15%	57%	+42%
	Science – All	8		54%	72%	+18%
	Science – Black			21%	64%	+43%
	Science – SWD			27%	44%	+17%
	Social Studies – All			47%	84%	+37%
	Social Studies – Black			29%	79%	+50%
	Social Studies - SWD			7%	54%	+47%
Pearson E/MS	Math	4	Control	55%	54%	- 1%
			Experiment	52%	82%	+30%
		5	Control	73%	63%	-10%
			Experiment	79%	90%	+11%
		6	Control	65%	56%	- 9%
		7	Experiment	46%	76%	+30%
Lakeview MS	ELA	6	Experiment	84%	95%	+11%
	Social Studies	8	Experiment	45%	69%	+24%
Ringgold MS	Social Studies	8	Experimental	68%	89%	+21%
Newbern MS	Math – All	6-8	Experiment	Control	55%	54%
	Math – SWD			Experiment	52%	82%
	ELA – All			Control	73%	63%
	ELA – SWD			Experiment	79%	90%
	Science – All			Control	65%	56%
	Science – SWD			Experiment	46%	76%
Gardner MS	Science – All	7	Experiment	72%	89%	+17%
	Science – SWD	7		26%	60%	+34%
	Math – All			8	76%	93%
	Math – SWD	10%			71%	+61%

Note: Jenkins and Newbern student demographics are majority black; Bacon, Gardner, Lakeview and Ringgold are majority white; Pearson is 45-30-25% Hispanic, white and black.

**Elementary Schools**

School	Course	Grade	Group	Prior to year one	Year one results	Change
Atkinson ES	ELA	3	Experiment	77%	90%	+13%
	Math	3		50%	76%	+26%
	ELA	4		63%	84%	+21%
	Math	4		43%	81%	+38%
	Science	4		24%	59%	+35%
	Social Studies	4		21%	49%	+28%
	ELA	5		71%	89%	+28%
	Math	5		73%	84%	+11%
Canby Lane ES	Math	2	Control	63%	54%	- 9%
			Experiment	63%	88%	+ 25%
		3	Control	80%	78%	- 2%
			Experiment	37%	89%	+ 52%
		4	Control	55%	28%	- 27%
			Experiment	66%	100%	+ 34%
5	Control	51%	61%	+ 10%		
	Experiment	55%	82%	+ 27%		
Cloud Springs ES	Math	4	Control 1	71%	73%	+ 2%
			Control 2	69%	78%	+ 9%
			Experiment	70%	89%	+19%
Pearson ES	Math	4	Control	55%	54%	- 1%
			Experiment	52%	82%	+30%
		5	Control	73%	63%	-10%
			Experiment	79%	90%	+11%
Waldo Pafford ES	ELA/Reading – Gen Ed	3	Experiment	96%	98%	+ 2%
	ELA/Reading – SWD	3		64%	92%	+28%
	Math – Female	3		92%	92%	-
	Math – Male	3		86%	92%	+ 6%
	ELA/Reading – Gen Ed	4		94%	96%	+ 2%
	ELA/Reading – SWD	4		69%	92%	+23%
	Math – Black	4		70%	87%	+17%
	Math – White	4		92%	92%	-
	Science – All	4		83%	94%	+11%
	Social Studies – All	4		79%	91%	+12%
	Reading/ELA – Black	5		98%	97%	- 1%
	Reading/ELA – White	5		89%	97%	+ 8%
	Science – General Ed	5		76%	85%	+ 9%
	Science – SWD	5		56%	77%	+21%
	Social Studies – Gen	5		68%	79%	+11%
	Social Studies - SWD	5		46%	72%	+26 %

Note: Atkinson and Canby Lane student demographics are majority black; Cloud Springs is majority white; Waldo Pafford is 20-40-40% and Pearson is 45-30-25% Hispanic, white and black.