

Best Handwriting Practices: Proven, Practical, Curriculum-Based and Measurable

Easy concepts to Teach, Remediate & Graduate Students as Neat Printers

Beverly H. Moskowitz, DOT MS OTR/L FAOTA

The RESEARCH & EVIDENCE!

The Impact of the Size Matters Handwriting Program on Writing Legibility in K, 1st and 2nd Grade Students

Two Schools	Control & Intervention (n ea)	Baseline, Pretest, Post-test (6 scoreable states)
Urban, MA Standardized 87 students	• 2 Kindergarten • 2 1st Grade • 2 2nd Grade	• WI 1 - all 3 grades • Test of Handwriting Skills (THS) - all 3 grades • Minnesota Test of Handwriting only 1st and 2nd
Rural NY Convenience 98 students		
8-week Intervention Phase		

POST TESTS!

Differences between post- and pre-intervention scores

KINDERGARTEN

TEST OF HANDWRITING SKILLS

	Experimental			Control			T-Test		
	N	Mean ± SD	DF	N	Mean ± SD	DF	T-Value	P-Value	
Airplane	27	6.81 ± 3.48	29	1.94 ± 3.27	54	6.37	<.0001		
Butterfly	27	7.74 ± 2.32	29	1.41 ± 2.6	54	3.82	<.0001		
Tree	27	6.74 ± 5.9	29	1.76 ± 4.57	54	3.82	0.0003		

POST TESTS!

Differences between post- and pre-intervention scores

FIRST GRADE

MINNESOTA HANDWRITING ASSESSMENT

	Experimental			Control			T-Test		
	N	Mean ± SD	DF	N	Mean ± SD	DF	T-Value	P-Value	
Rate	39	-6.33 ± 7.81	26	-1.58 ± 6.62	63	-2.55	0.0032		
Legibility	39	1.38 ± 3.88	26	-0.81 ± 3.63	63	2.29	0.0256		
Form	39	4.21 ± 5.96	26	1.73 ± 5.60	63	1.68	0.0791		
Alignment	39	7.36 ± 7.10	26	1.81 ± 4.83	63	3.98	0.0001		
Size	39	0.79 ± 7.72	26	1.65 ± 4.70	63	5.1	<.0001		
Spacing	39	0.46 ± 4.70	26	0.46 ± 3.35	63	0	10.000		

POST TESTS!

Differences between post- and pre-intervention scores

FIRST GRADE

TEST OF HANDWRITING SKILLS

	Experimental			Control			T-Test		
	N	Mean ± SD	DF	N	Mean ± SD	DF	T-Value	P-Value	
Bus	39	4.31 ± 3.28	35	1.86 ± 2.75	72	3.16	0.0001		
Frog	39	4.10 ± 2.94	35	1.60 ± 2.53	72	3.9	0.0002		
Horse	39	4.56 ± 4.52	35	1.19 ± 5.17	72	2.35	0.024		
Truck	39	4.56 ± 5.25	35	1.57 ± 3.57	72	2.83	0.0059		
Book	39	5.26 ± 4.75	35	3.00 ± 4.04	72	2.18	0.0327		
Lion	39	6.08 ± 3.47	35	2.23 ± 4.15	72	4.94	<.0001		

POST TESTS!

Differences between post- and pre-intervention scores

SECOND GRADE

MINNESOTA HANDWRITING ASSESSMENT

	Experimental			Control			T-Test		
	N	Mean ± SD	DF	N	Mean ± SD	DF	T-Value	P-Value	
Rate	38	-0.21 ± 2.9	40	-0.10 ± 3.74	76	-0.15	0.8844		
Legibility	38	0.45 ± 2.2	40	-0.40 ± 2.24	76	3.07	0.0003		
Form	38	2.32 ± 4.23	40	-0.98 ± 4.94	76	3.17	0.0022		
Alignment	38	3.82 ± 5.43	40	-1.53 ± 4.94	76	4.81	<.0001		
Size	38	1.68 ± 7.93	40	-0.98 ± 4.25	76	6.47	<.0001		
Spacing	38	0.32 ± 3.00	40	-1.63 ± 3.26	76	2.74	0.0078		

POST TESTS!

Differences between post- and pre-intervention scores

SECOND GRADE

TEST OF HANDWRITING SKILLS

	Experimental			Control			T-Test		
	N	Mean ± SD	DF	N	Mean ± SD	DF	T-Value	P-Value	
Airplane	38	3.42 ± 3.23	40	-1.16 ± 2.60	76	5.26	<.0001		
Bus	38	2.34 ± 3.42	40	-1.13 ± 2.65	76	5.17	<.0001		
Butterfly	38	3.61 ± 2.8	40	-0.70 ± 2.90	76	6.65	<.0001		
Frog	38	1.26 ± 3.40	40	-1.30 ± 2.88	76	3.6	0.0006		
Tree	38	2.37 ± 3.66	40	-1.40 ± 3.54	76	4.63	<.0001		
Horse	38	3.8 ± 4.21	40	-1.55 ± 5.28	76	4.29	<.0001		
Truck	38	4.85 ± 5.04	40	-1.70 ± 3.56	76	4.9	<.0001		
Book	38	1.63 ± 3.32	40	-2.30 ± 3.24	76	5.25	<.0001		
Lion	38	2.82 ± 2.62	40	-1.80 ± 3.65	76	6.38	<.0001		

8 KEY CONCEPTS

SIZE ONE RULE

Letters - Have to touch the TOP LINE. Have to touch the BOTTOM LINE. Can't be higher than the TOP line. Can't be lower than the BOTTOM line. Can't rest in the middle.

All Upper Case letters are Size One

SIZE TWO RULE

Letters - Have to touch the TOP LINE. Have to touch the BOTTOM LINE. Can't be higher than the TOP line. Can't be lower than the BOTTOM line. Can't rest in the middle.

There are 14 Size Two lower case letters: a c e i m n o r s u v w x z

But not only...

SIZE THREE RULE

Letters - Have to touch the TOP LINE. Have to go below the BOTTOM line. Can't go higher. MUST go lower. The belly has to touch the BOTTOM line.

There are only 5: g j p q y

But not only...

How to Use the Size Matters Handwriting Program in PUSH-IN, PULLOUT, CURRICULUM, HANDWRITING CLUB, CENTER, HOME PROGRAM & RtI



Aa Bb Cc Dd Ee Ff



Count all the letters earning stars

Count all the letters printed



- Teach the Rules
- Print poorly sized letters
- Encourage children to critique, and score themselves and classmates
- Embed handwriting across the curriculum by graphing vocabulary and spelling words
- Issue adapted writing paper at various grade levels
- Award Star-Worthy letters

show plow know how grown snowy

Grade	Rulings	Skip Space
K	1"	5/8"
1st	3/4"	1/2"
2nd	1/2"	3/8"
3rd	3/8"	3/8"



Focus on Size. Form will Follow.

