

**Supplemental Information 4 Eight Model Comparisons for Writing Speed as a Whole, and for Three Intervals Separately, for Creative and Argumentative Tasks**

**Table 1**

*Model Comparison for Writing Speed (winsored) as a Whole*

with CREATIVITY as learner characteristic

Models	X <sup>2</sup>	df	Comparison			
			Models	X <sup>2</sup>	df	p
<b>Creative tasks</b>						
(0) Y = C + [variances]	6292.921	3				
(1) (0) + time	6283.080	5	0 vs 1	9.841	2	.007
(2) (1) + condition	6282.951	6	1 vs 2	0.129	1	.719
(3) (2) + time * condition	6257.567	8	2 vs 3	25.384	2	< .001
(4) (3) + LV	6256.978	9	3 vs 4	0.589	1	.443
(5) (4) + LV * time	6247.378	11	4 vs 5	9.600	2	.008
(6) (5) + LV * condition	6246.374	12	5 vs 6	1.004	1	.316
(7) (6) + LV * time * condition	6214.503	14	6 vs 7	31.871	2	< .001
<b>Argumentative tasks</b>						
(0) Y = C + [variances]	6289.689	3				
(1) (0) + time	6268.291	5	0 vs 1	21.398	2	< .001
(2) (1) + condition	6266.627	6	1 vs 2	1.664	1	.197
(3) (2) + time * condition	6237.724	8	2 vs 3	28.903	2	< .001
(4) (3) + LV	6237.6	9	3 vs 4	0.124	1	.725
(5) (4) + LV * time	6230.471	11	4 vs 5	7.129	2	.028
(6) (5) + LV * condition	6220.143	12	5 vs 6	10.328	1	.001
(7) (6) + LV * time * condition	6204.478	14	6 vs 7	15.665	2	< .001

**Table 2***Model Comparison for Writing Speed Interval 1*

with CREATIVITY as learner characteristic

Models	X <sup>2</sup>	df	Comparison			
			Models	X <sup>2</sup>	df	p
<b>Creative tasks</b>						
(0) Y = C + [variances]	2464.813	3				
(1) (0) + time	2458.695	5	0 vs 1	6.118	2	.047
(2) (1) + condition	2458.468	6	1 vs 2	0.227	1	.634
(3) (2) + time * condition	2455.002	8	2 vs 3	3.466	2	.177
(4) (3) + LV	2454.838	9	3 vs 4	0.164	1	.686
(5) (4) + LV * time	2452.25	11	4 vs 5	2.588	2	.274
(6) (5) + LV * condition	2452.219	12	5 vs 6	0.031	1	.860
(7) (6) + LV * time * condition	2444.869	14	6 vs 7	6 vs 7	2	.025
<b>Argumentative tasks</b>						
(0) Y = C + [variances]	2441.605	3				
(1) (0) + time	2440.905	5	0 vs 1	0.700	2	.705
(2) (1) + condition	2440.904	6	1 vs 2	0.001	1	.975
(3) (2) + time * condition	2422.400	8	2 vs 3	18.504	2	< .001
(4) (3) + LV	2420.622	9	3 vs 4	1.778	1	.182
(5) (4) + LV * time	2413.897	11	4 vs 5	6.725	2	.035
(6) (5) + LV * condition	2413.792	12	5 vs 6	0.105	1	.746
(7) (6) + LV * time * condition	2413.178	14	6 vs 7	0.614	2	.736

**Table 3***Model Comparison for Writing Speed Interval 2*

with CREATIVITY as learner characteristic

Models	X <sup>2</sup>	df	Comparison			
			Models	X <sup>2</sup>	df	p
<b>Creative tasks</b>						
(0) Y = C + [variances]	2363.776	3				
(1) (0) + time	2362.928	5	0 vs 1	0.848	2	.654
(2) (1) + condition	2362.788	6	1 vs 2	0.140	1	.708
(3) (2) + time * condition	2362.335	8	2 vs 3	0.453	2	.797
(4) (3) + LV	2362.243	9	3 vs 4	0.092	1	.762
(5) (4) + LV * time	2358.671	11	4 vs 5	3.572	2	.168
(6) (5) + LV * condition	2358.281	12	5 vs 6	0.390	1	.532
(7) (6) + LV * time * condition	2354.017	14	6 vs 7	6 vs 7	2	.119
<b>Argumentative tasks</b>						
(0) Y = C + [variances]	2469.248	3				
(1) (0) + time	2452.762	5	0 vs 1	16.486	2	< .001
(2) (1) + condition	2452.28	6	1 vs 2	0.482	1	.488
(3) (2) + time * condition	2451.407	8	2 vs 3	0.873	2	.646
(4) (3) + LV	2451.407	9	3 vs 4	0.000	1	1.00
(5) (4) + LV * time	2450.939	11	4 vs 5	0.468	2	.791
(6) (5) + LV * condition	2450.913	12	5 vs 6	0.026	1	.872
(7) (6) + LV * time * condition	2448.111	14	6 vs 7	6 vs 7	2	.246

**Table 4***Model Comparison for Writing Speed Interval 3*

with CREATIVITY as learner characteristic

Models	X <sup>2</sup>	df	Comparison			
			Models	X <sup>2</sup>	df	p
<b>Creative tasks</b>						
(0) Y = C + [variances]	2452.268	3				
(1) (0) + time	2452.221	5	0 vs 1	0.047	2	.977
(2) (1) + condition	2452.040	6	1 vs 2	0.181	1	.671
(3) (2) + time * condition	2449.261	8	2 vs 3	2.779	2	.249
(4) (3) + LV	2448.275	9	3 vs 4	0.986	1	.321
(5) (4) + LV * time	2447.461	11	4 vs 5	0.814	2	.666
(6) (5) + LV * condition	2443.898	12	5 vs 6	3.563	1	.059
(7) (6) + LV * time * condition	2442.754	14	6 vs 7	6 vs 7	2	.564
<b>Argumentative tasks</b>						
(0) Y = C + [variances]	2518.195	3				
(1) (0) + time	2515.485	5	0 vs 1	2.710	2	.258
(2) (1) + condition	2507.016	6	1 vs 2	8.469	1	.004
(3) (2) + time * condition	2506.204	8	2 vs 3	0.812	2	.666
(4) (3) + LV	2506.201	9	3 vs 4	0.003	1	.956
(5) (4) + LV * time	2504.697	11	4 vs 5	1.504	2	.471
(6) (5) + LV * condition	2503.893	12	5 vs 6	0.804	1	.370
(7) (6) + LV * time * condition	2500.514	14	6 vs 7	6 vs 7	2	.185