

Online Supplement to
Michel, Révész, Lu, Kourtali, Lee, & Borges (2020) Investigating L2 writing processes across independent and integrated tasks: A
mixed methods study. *Second Language Research*

Table S1. Mean blink count

Task type	Blink count per minute		Average blink duration		Average blink duration per total writing time	
	Mean	SD	Mean	SD	Mean	SD
Independent	26.86	9.26	751.46	682.86	0.29	0.19
Integrated	24.36	7.76	956.06	704.24	0.34	0.18

Table S2. Fluency Measures by Task Type, Stage, and Pause Location (n=60)

Stage	Independent								Integrated							
	Characters per P-burst				Active writing time per character (min)				Characters per P-burst				Active writing time per character (min)			
	M	SD	95%		M	SD	95%		M	SD	95%		M	SD	95%	
			Low	Up			Low	Up			Low	Up			Low	Up
1	1.53	.44	1.46	1.61	.21	.15	.18	.23	1.55	.51	1.45	1.64	.42	3.14	-.15	.99
2	1.56	.47	1.48	1.65	.12	.04	.11	.13	1.64	.49	1.55	1.73	.11	.06	.10	.12
3	1.56	.44	1.48	1.64	.11	.04	.10	.12	1.57	.45	1.49	1.65	.26	1.36	.01	.51
4	1.57	.45	1.49	1.65	.11	.03	.10	.12	1.53	.46	1.45	1.62	.15	.11	.14	.17
5	1.45	.42	1.37	1.52	.18	.18	.15	.21	1.26	.43	1.18	1.33	.37	.48	.28	.45
Tot	1.53	.44	1.50	1.57	.15	.11	.14	.15	1.52	.48	1.48	1.57	.20	.66	.17	.28

Table S3. Pausing Measures by Task Type, Stage, and Pause Location (n=60)

Stage	Pause location	Independent								Integrated							
		Pause number per minute				Median pause length (ms)				Pause number per minute				Median pause length (ms)			
		M	SD	95% CI Low	95% CI Up	M	SD	95% CI Low	95% CI Up	M	SD	95% CI Low	95% CI Up	M	SD	95% CI Low	95% CI Up
1	Ww	22.05	8.13	20.61	23.51	.30	.04	.29	.31	25.71	8.91	24.11	27.21	.30	.04	.30	.31
1	Bw	12.25	4.56	11.46	13.08	.80	.30	.75	.87	14.12	4.71	13.38	14.96	.81	.34	.76	.87
1	Bs	.55	.38	.48	.62	11.03	25.59	6.40	15.65	.70	.41	.63	.78	6.49	8.32	4.91	8.06
1	Tot	50.25	15.60	47.52	53.03	.39	.06	.37	.40	56.88	14.10	54.52	59.38	.39	.07	.39	.40
2	Ww	24.55	7.72	23.21	26.01	.30	.04	.29	.31	26.93	9.01	25.34	28.56	.30	.05	.29	.31
2	Bw	14.58	4.58	13.75	15.43	.79	.32	.74	.83	16.43	5.27	15.52	17.37	.78	.28	.73	.83
2	Bs	.65	.37	.58	.71	3.00	3.66	2.33	3.66	0.82	.59	.72	.93	6.84	43.26	-.98	14.66
2	Tot	58.60	12.79	56.29	60.91	.39	.06	.38	.39	61.39	14.45	58.78	64.00	.38	.06	.37	.39
3	Ww	26.07	7.96	24.68	27.49	.30	.04	.29	.30	25.54	8.78	23.97	27.12	.31	.08	.29	.32
3	Bw	15.23	4.64	14.38	16.07	.78	.31	.72	.84	15.51	5.60	14.49	16.50	.79	.31	.73	.84
3	Bs	.65	.39	.58	.72	2.57	2.55	2.11	3.03	.76	.52	.67	.85	4.36	9.54	2.64	6.09
3	Tot	61.03	12.23	58.82	63.24	.38	.06	.37	.40	59.69	14.47	57.07	62.30	.40	.09	.38	.41
4	Ww	26.55	8.70	24.98	28.09	.29	.04	.29	.30	22.75	9.64	21.01	24.44	.30	.04	.29	.31
4	Bw	15.67	4.60	14.86	16.49	.79	.33	.73	.85	13.78	5.12	12.87	14.71	.82	.42	.75	.90
4	Bs	.68	.47	.60	.77	3.19	5.24	2.25	4.14	0.63	.49	.54	.72	2.60	3.69	1.92	3.25
4	Tot	62.71	13.33	60.30	65.03	.39	.06	.37	.39	55.65	15.79	52.83	58.51	.40	.07	.39	.41
5	Ww	25.96	20.15	22.59	29.85	.30	.04	.29	.30	17.98	10.37	16.16	19.99	.31	.05	.30	.32
5	Bw	14.60	10.06	12.97	16.47	.76	.27	.72	.81	10.01	5.77	9.04	11.13	.83	.41	.76	.90
5	Bs	.60	.50	.52	.69	2.43	3.12	1.82	3.04	.48	.42	.40	.55	2.13	2.53	1.61	2.65
5	Tot	62.32	40.44	55.73	69.85	.40	.07	.39	.41	47.24	18.25	44.08	50.45	.43	.09	.42	.45
Tot	Ww	25.04	11.65	24.16	26.00	.30	.04	.29	.30	23.78	9.87	22.66	24.60	.30	.05	.30	.31
Tot	Bw	14.46	6.18	13.97	14.98	.78	.31	.76	.81	13.99	5.73	13.49	14.46	.80	.36	.78	.82
Tot	Bs	.63	.43	.59	.66	4.46	12.37	3.43	5.50	.68	.50	.64	.74	4.59	20.75	2.81	6.37
Tot	Tot	58.98	22.18	57.31	60.96	.39	.06	.38	.39	56.18	16.20	54.47	58.12	.40	.08	.39	.41

Ww= within words, Bw: between words, Bs: between sentences

Table S4. Eye-fixation Measures by Task Type and Stage (n=60)

Stage		Total fixation duration (ms)			Fixation count				Mean fixation length (ms)			
		95%			95%				95%			
		Mean	SD	CI	Mean	SD	CI	CI	Mean	SD	CI	CI
				Low				Up			Low	Up
<i>Independent</i>												
1	25121.91	1040.87	24935.68	25308.15	61.39	6.83	60.17	62.61	413.13	2.14	412.75	413.52
2	33417.59	459.41	33335.39	33499.79	85.96	8.66	84.41	87.51	392.42	18.36	389.14	395.71
3	33089.21	1455.67	32828.75	33349.66	87.09	9.78	85.34	88.84	380.77	3.58	380.13	381.41
4	31565.69	1461.53	31304.19	31827.19	83.46	10.04	81.66	85.25	373.27	5.89	372.22	374.33
5	30570.49	962.71	30398.24	30742.74	90.87	7.21	89.58	92.16	331.44	29.84	326.10	336.78
Tot	31894.38	8050.13	30454.02	33334.73	84.55	24.53	80.16	88.94	374.43	8.87	372.84	376.02
<i>Integrated</i>												
1	20875.66	729.78	20745.09	21006.24	53.28	10.98	51.31	55.24	397.73	18.10	394.49	400.97
2	25974.96	832.35	25826.03	26123.89	66.23	7.69	64.85	67.60	397.77	13.04	395.43	400.10
3	26262.22	3274.49	25676.34	26848.10	70.27	11.94	68.13	72.41	377.77	9.25	376.12	379.43
4	26389.03	2289.52	25979.39	26798.68	77.30	8.72	75.74	78.86	351.09	5.99	350.02	352.16
5	29859.26	1047.36	29671.87	30046.66	94.02	6.51	92.85	95.18	324.09	6.51	322.93	325.26
Tot	25680.93	751.62	25546.45	25815.41	71.62	6.58	70.44	72.79	363.00	1.20	362.79	363.22

Table S5. Saccade Measures by Task Type and Task Stage (n = 60)

	Backward Saccade					Backward Saccade					Forward Saccade					Forward Saccade					Proportion of Backward				
	Number					Median Length					Number					Median Length					Saccades				
	Mean	SD	Lower	Upper 95% CI	95% CI	Mean	SD	Lower	Upper 95% CI	95% CI	Mean	SD	Lower	Upper 95% CI	95% CI	Mean	SD	Lower	Upper 95% CI	95% CI	Mean	SD	Lower	Upper 95% CI	95% CI
<i>Independent</i>																									
1	54.20	2.07	53.83	54.57	2.60	0.17	2.57	2.63	59.29	2.16	58.91	59.68	2.41	0.15	2.38	2.43	0.48	0.00	0.48	0.48					
2	48.98	3.00	48.45	49.52	2.57	1.43	2.31	2.83	54.74	1.50	54.47	55.01	2.26	0.41	2.19	2.34	0.47	0.01	0.47	0.47					
3	48.55	4.07	47.83	49.28	2.54	1.24	2.32	2.76	52.95	4.35	52.17	53.73	2.42	1.06	2.23	2.61	0.48	0.01	0.48	0.48					
4	45.83	4.59	45.01	46.65	2.32	0.32	2.26	2.38	50.21	4.47	49.41	51.01	2.16	0.14	2.14	2.18	0.48	0.02	0.47	0.48					
5	52.13	7.47	50.80	53.47	2.36	0.87	2.21	2.52	56.34	5.83	55.29	57.38	2.29	1.08	2.10	2.49	0.48	0.03	0.47	0.48					
Tot	51.68	16.35	48.76	54.61	2.46	0.58	2.36	2.56	56.35	17.37	53.24	59.46	2.26	0.41	2.19	2.33	0.48	0.00	0.48	0.48					
<i>Integrated</i>																									
1	28.32	10.27	26.48	30.16	2.12	0.41	2.05	2.20	32.71	9.41	31.03	34.39	1.99	0.30	1.94	2.04	0.46	0.01	0.46	0.46					
2	30.38	5.34	29.42	31.34	2.13	0.38	2.06	2.20	35.76	3.12	35.20	36.32	2.00	0.30	1.95	2.06	0.46	0.02	0.46	0.46					
3	33.50	3.10	32.94	34.05	2.14	0.35	2.08	2.20	38.84	3.13	38.28	39.40	2.07	0.35	2.00	2.13	0.46	0.01	0.46	0.47					
4	37.37	2.22	36.97	37.77	2.15	0.19	2.12	2.19	41.73	1.42	41.47	41.98	2.10	0.26	2.06	2.15	0.47	0.01	0.47	0.47					
5	48.79	3.69	48.13	49.45	2.26	0.30	2.21	2.31	52.13	2.53	51.68	52.58	2.16	0.27	2.11	2.21	0.48	0.01	0.48	0.48					
Tot	35.31	4.50	34.50	36.11	2.14	0.30	2.08	2.19	39.63	3.42	39.02	40.24	2.02	0.30	1.97	2.07	0.47	0.01	0.47	0.47					

Table S6. Significant Results for Post-hoc Tukey Tests Examining the Effects of Task Type and Stage of Writing on Writing Behaviours ($p < 0.01$)

Independent						Integrated							
Characters per P-burst													
Post-hoc						S1>S5	S2>S5	S3>S5	S4>S5				
SE						.06	.06	.06	.05				
t						5.10	6.13	5.56	5.88				
D						.60	.71	.61	.62				
Active writing time per characters													
Post-hoc	S1>S2	S1>S3	S1>S4	S3<S5	S4<S5								
SE	.02	.02	.02	.02	.02								
t	5.54	5.97	6.11	-3.88	-3.99								
D	.59	.21	.65	.39	.41								
Pause frequency total													
Post-hoc	S1<S2	S1<S3	S1<S4			S1>S5	S2>S5	S3>S5	S4<S5				
SE	2.06	2.08	2.10			2.00	1.99	1.99	1.99				
t	4.06	5.18	5.94			4.81	7.11	6.26	4.23				
D	.70	.81	.79			.42	.65	.61	.45				
Pause length total													
Post-hoc						S1<S5							
SE						.01							
t						-3.78							
D						.39							
Pause frequency within words													
Post-hoc	S1<S3	S1>S4				S1>S5	S2>S4	S2>S5	S3>S5	S4>S5			
SE	1.02	1.03				1.35	0.93	1.33	1.23	1.05			
t	3.95	4.38				5.84	4.51	6.84	6.25	4.61			
D	.61	.57				.62	.47	.76	.69	.46			
Pause frequency between words													
Post-hoc	S1<S2	S1<S3	S1<S4			S1<S2	S1>S5	S2>S4	S2>S5	S3>S5	S4>S5		
SE	0.58	0.59	0.60			.69	.69	.68	.68	.68	.69		
t	-4.02	-5.04	-5.69			-3.38	5.88	3.88	9.32	7.97	5.42		
D	.62	.71	.66			.63	.06	.47	.80	.69	.60		
Pause frequency between sentences													
Post-hoc						S1>S5	S2>S5	S3>S5					
SE						0.06	0.07	0.06					
t						4.03	-4.75	4.42					
D						.43	.48	.43					
Total fixation duration													
Post-hoc	S1<S2	S1<S3	S1<S4	S1<S5		S1<S2	S1<S3	S1<S4	S1<S5	S2<S5	S3<S5	S4<S5	
SE	1081.4	1133.7	1244.8	1288.3		999.6	1118.0	1114.2	1084.5	1100.3	1193.8	1023.5	
t	7.67	7.03	5.18	4.23		5.08	4.71	4.90	8.29	3.55	3.12	3.45	
D	1.00	.73	.55	.47		.66	.48	.51	.94	.40	.32	.38	
Fixation count													
Post-hoc	S1<S2	S1<S3	S1<S4	S1<S5		S1<S2	S1<S3	S1<S4	S1<S5	S2<S4	S2<S5	S3<S5	S4<S5
SE	2.96	2.96	2.96	2.96		3.26	3.26	3.26	3.26	3.26	3.26	3.26	3.26
t	-8.32	-8.70	-7.47	-9.98		3.95	5.09	7.29	12.45	3.34	8.50	7.36	5.16
D	1.14	1.00	.78	.89		.76	.57	.72	1.33	.33	.85	.67	.54
Number of backward saccades													
Post-hoc	S1>S4					S1<S4	S1<S5	S2<S4	S2<S5	S3<S5	S4<S5		
SE	1.76					2.04	2.31	1.79	2.03	1.86	1.55		
t	4.75					4.37	8.82	3.84	9.01	8.27	7.36		
D	.46					.45	.95	.42	1.01	.93	.81		
Number of forward saccades													
Post-hoc	S1>S4					S1<S3	S1<S4	S1<S5	S2<S4	S2<S5	S3<S5	S4<S5	
SE	1.70					1.68	1.68	1.68	1.68	1.68	1.68	1.68	
t	5.34					3.47	5.25	11.45	3.45	9.65	7.98	6.20	
D	.52					.32	.42	.95	.41	1.03	.78	.71	

Table S7. Stimulated recall comments for pausing by stage and pause location on independent task versions (n=60)

Stage	Pause loc	Planning				Translation						Monitoring		No recall of thoughts during writing		Other		Total	
		Con	Org	Total	Total %	Lex ret	Syn enc	Coh	Un-spec	Total	Total %	Total	Total %	Total	Total %	Total	Total %	Total	Total %
1	Ww	.30	.00	.30	2%	1.47	.53	.00	.00	2.00	11%	.03	0%	.07	0%	.47	3%	2.87	15%
1	Bw	1.92	.22	2.13	12%	1.77	1.52	.08	.03	3.40	17%	.48	3%	.15	1%	.63	3%	6.80	36%
1	Bs	.80	.20	1.00	5%	.17	.13	.07	.00	.37	2%	.53	3%	.03	0%	.10	1%	2.03	11%
1	Un	.10	.07	.17	1%	.07	.00	.00	.00	.07	0%	.10	1%	.00	0%	.00	0%	.33	2%
1	Tot	5.03	.70	5.73	31%	5.23	3.70	.23	.07	9.23	48%	1.63	9%	.40	2%	1.83	10%	18.83	100%
2	Ww	.17	.00	.17	1%	1.33	.47	.07	.00	1.87	9%	.10	0%	.03	0%	.17	1%	2.33	11%
2	Bw	1.80	.12	1.92	9%	2.07	1.23	.12	.07	3.48	15%	.60	3%	.15	1%	.50	2%	6.65	31%
2	Bs	1.70	.30	2.00	10%	.33	.30	.13	.00	.77	4%	1.23	6%	.23	1%	.20	1%	4.43	21%
2	Un	.37	.03	.40	2%	.10	.00	.00	.00	.10	1%	.50	2%	.03	0%	.10	0%	1.13	6%
2	Tot	5.83	.57	6.40	32%	5.90	3.23	.43	.13	9.70	44%	3.03	14%	.60	3%	1.47	7%	21.20	100%
3	Ww	.30	.00	.30	1%	.80	.30	.00	.00	1.10	6%	.03	0%	.10	1%	.37	2%	1.90	10%
3	Bw	1.67	.12	1.78	9%	1.82	1.17	.17	.23	3.38	16%	.62	3%	.13	1%	.60	3%	6.52	32%
3	Bs	1.53	.27	1.80	9%	.20	.10	.20	.10	.60	3%	1.33	7%	.17	1%	.33	2%	4.23	21%
3	Un	.37	.03	.40	2%	.00	.03	.00	.00	.03	0%	.47	3%	.03	0%	.13	1%	1.07	6%
3	Tot	5.53	.53	6.07	30%	4.63	2.77	.53	.57	8.50	41%	3.07	16%	.57	3%	2.03	11%	2.23	100%
4	Ww	.13	.00	.13	1%	1.13	.27	.03	.00	1.43	8%	.07	0%	.03	0%	.20	1%	1.87	10%
4	Bw	1.72	.08	1.80	9%	1.97	1.22	.08	.15	3.42	17%	.45	2%	.22	1%	.57	3%	6.45	32%
4	Bs	1.07	.27	1.33	7%	.27	.07	.10	.00	.43	2%	1.20	6%	.10	0%	.10	0%	3.17	16%
4	Un	.20	.03	.23	1%	.07	.03	.00	.03	.13	1%	1.10	6%	.03	0%	.00	0%	1.50	9%
4	Tot	4.83	.47	5.30	27%	5.40	2.80	.30	.33	8.83	46%	3.27	17%	.60	3%	1.43	7%	19.43	100%
5	Ww	.17	.00	.17	1%	.97	.23	.00	.00	1.20	6%	.00	0%	.07	0%	.10	0%	1.53	7%
5	Bw	1.57	.08	1.65	8%	1.68	.73	.13	.15	2.70	14%	.35	2%	.17	1%	.33	2%	5.18	26%
5	Bs	1.07	.23	1.30	6%	.10	.17	.07	.00	.33	2%	.83	4%	.20	1%	.14	1%	2.80	14%
5	Un	.10	.03	.13	1%	.23	.03	.07	.00	.33	2%	3.73	20%	.17	1%	.24	2%	4.60	26%
5	Tot	4.47	.43	4.90	25%	4.67	1.90	.40	.30	7.27	37%	5.27	27%	.77	4%	1.10	6%	19.30	100%
Tot	Ww	1.07	.00	1.07	1%	5.70	1.80	.10	.00	7.60	8%	.23	0%	.30	0%	1.30	1%	1.50	11%
Tot	Bw	8.67	.62	9.28	9%	9.30	5.87	.58	.63	16.38	16%	2.50	2%	.82	1%	2.62	3%	31.60	32%
Tot	Bs	6.17	1.27	7.43	8%	1.07	.77	.57	.10	2.50	2%	5.13	5%	.73	1%	.87	1%	16.67	17%
Tot	Un	1.13	.20	1.33	1%	.47	.10	.07	.03	.67	1%	5.90	6%	.27	0%	.47	1%	8.63	9%
Tot	Tot	25.70	2.70	28.40	29%	25.83	14.40	1.90	1.40	43.53	44%	16.27	16%	2.93	3%	7.87	8%	99.00	100%

Table S8. Stimulated recall comments for pausing by stage and pause location on integrated task versions (n=60)

Writing stage	Pause loc	Planning				Translation						Resource use								Monitor.		No recall		Other		Total	
		Con	Org	Total	%	Lex ref	Syn enc	Coh	Unsp	Total	%	Con	Org	Lex rel	Syn enc	Mon	Other	Total	%	Total	%	Total	%	Total	%	Total	%
1	Ww	.17	.00	.17	1%	.80	.37	.00	.00	1.17	8%	.07	.00	.37	.03	.00	.00	.47	3%	.03	0%	.07	0%	.23	2%	2.13	14%
1	Bw	.55	.17	.72	5%	1.00	.63	.03	.03	1.7	12%	.97	.00	.78	.27	.05	.05	2.12	14%	.33	2%	.18	1%	.23	2%	5.28	35%
1	Bs	.27	.10	.37	3%	.17	.27	.10	.00	.53	3%	.37	.13	.03	.03	.03	.00	.6	4%	.47	3%	.13	1%	.03	0%	2.13	14%
1	Un	.00	.00	.00	0%	.00	.00	.00	.00	0	0%	.03	.00	.00	.00	.00	.00	.03	0%	.13	1%	.00	0%	.00	0%	.17	1%
1	Tot	1.53	.43	1.97	13%	2.97	1.90	.17	.07	5.1	35%	2.40	.13	1.97	.60	.13	.10	5.33	35%	1.30	9%	.57	3%	.73	5%	15.00	100%
2	Ww	.07	.00	.07	0%	.80	.20	.03	.00	1.03	7%	.17	.00	.50	.07	.00	.00	.73	5%	.00	0%	.00	0%	.13	1%	1.97	14%
2	Bw	.82	.05	.87	6%	.83	.72	.03	.00	1.58	11%	.93	.02	.45	.32	.03	.02	1.77	11%	.23	2%	.10	1%	.52	4%	5.07	33%
2	Bs	.37	.07	.43	3%	.13	.17	.10	.00	.4	3%	.77	.00	.00	.03	.00	.00	.8	6%	.63	4%	.10	1%	.13	1%	2.50	18%
2	Un	.03	.00	.03	0%	.00	.00	.03	.00	.03	0%	.00	.00	.00	.00	.00	.00	0	0%	.13	1%	.00	0%	.03	0%	.23	1%
2	Tot	2.10	.17	2.27	15%	2.60	1.80	.23	.00	4.63	31%	2.80	.03	1.40	.73	.07	.03	5.07	33%	1.23	8%	.30	2%	1.33	10%	14.83	100%
3	Ww	.10	.00	.10	1%	.80	.23	.00	.00	1.03	8%	.07	.00	.13	.03	.00	.00	.23	2%	.07	0%	.00	0%	.07	0%	1.50	11%
3	Bw	.68	.00	.68	5%	1.08	.60	.07	.05	1.8	12%	.88	.00	.37	.18	.03	.05	1.52	12%	.33	2%	.12	1%	.43	3%	4.88	35%
3	Bs	.73	.13	.87	6%	.17	.23	.10	.00	.50	3%	.27	.00	.00	.03	.03	.00	.33	2%	.43	3%	.13	1%	.07	1%	2.33	17%
3	Un	.03	.00	.03	0%	.00	.00	.00	.00	.00	0%	.10	.00	.00	.00	.00	.00	.1	1%	.17	1%	.00	0%	.00	0%	.30	2%
3	Tot	2.23	.13	2.37	17%	3.13	1.67	.23	.10	5.13	36%	2.20	.00	.87	.43	.10	.10	3.7	28%	1.33	9%	.37	3%	1.00	7%	13.90	100%
4	Ww	.13	.00	.13	1%	.47	.13	.07	.03	.70	5%	.03	.00	.27	.00	.00	.00	.30	2%	.07	0%	.00	0%	.00	0%	1.20	9%
4	Bw	.60	.00	.60	5%	.55	.53	.13	.05	1.27	10%	.77	.02	.37	.15	.02	.02	1.33	10%	.18	2%	.10	1%	.30	3%	3.78	30%
4	Bs	.47	.10	.57	4%	.10	.10	.10	.00	.30	2%	.43	.00	.00	.00	.07	.00	.50	4%	.30	2%	.17	1%	.00	0%	1.83	14%
4	Un	.30	.00	.30	2%	.07	.00	.00	.00	.07	1%	.23	.00	.03	.00	.03	.00	.30	2%	1.40	12%	.00	0%	.03	0%	2.10	17%
4	Tot	2.10	.10	2.20	17%	1.73	1.30	.43	.13	3.6	28%	2.23	.03	1.03	.30	.13	.03	3.77	29%	2.13	18%	.37	3%	.63	6%	12.70	100%
5	Ww	.10	.00	.10	1%	.53	.27	.00	.00	.8	6%	.03	.03	.20	.00	.03	.00	.3	2%	.03	0%	.00	0%	.10	1%	1.33	10%
5	Bw	.62	.02	.63	5%	.63	.28	.02	.07	1.00	8%	.30	.03	.22	.10	.03	.00	.68	5%	.18	1%	.05	0%	.13	1%	2.68	20%
5	Bs	.47	.07	.53	4%	.03	.13	.03	.00	.19	2%	.20	.00	.03	.03	.00	.00	.27	2%	.33	3%	.10	1%	.03	0%	1.47	12%
5	Un	.40	.07	.47	4%	.23	.17	.00	.00	.40	4%	.23	.00	.00	.00	.03	.03	.3	3%	2.33	23%	.17	2%	.17	2%	3.83	37%
5	Tot	2.20	.17	2.37	18%	2.07	1.13	.07	.13	3.4	28%	1.07	.10	.67	.23	.13	.03	2.23	18%	3.07	28%	.37	3%	.57	5%	12.00	100%
Tot	Ww	.57	.00	.57	1%	3.40	1.20	.10	.03	4.73	7%	.37	.03	1.47	.13	.03	.00	2.03	3%	.20	0%	.07	0%	.53	1%	8.13	12%
Tot	Bw	3.27	.23	3.50	5%	4.10	2.77	.28	.20	7.35	11%	3.85	.07	2.18	1.02	.17	.13	7.42	11%	1.27	2%	.55	1%	1.62	2%	21.70	32%
Tot	Bs	2.30	.47	2.77	4%	.60	.90	.43	.00	1.93	3%	2.03	.13	.07	.13	.13	.00	2.5	4%	2.17	3%	.63	1%	.27	0%	1.27	15%
Tot	Un	.77	.07	.83	1%	.30	.17	.03	.00	.50	1%	.60	.00	.03	.00	.07	.03	.73	1%	4.17	6%	.17	0%	.23	0%	6.63	10%
Tot	Tot	1.17	1.00	11.17	16%	12.50	7.80	1.13	.43	21.87	32%	1.70	.30	5.93	2.30	.57	.30	2.1	29%	9.07	13%	1.97	3%	4.27	7%	68.43	100%

Table S9. Results for Models Examining the Effects of Task Type and Stage on Speed Fluency

Predictor	Est	SE	t	p	R ² m	R ² c
<i>Characters per P-burst</i>						
Intercept	1.53	.06	27.59	<.01	.04	.72
Stage2	.03	.03	.86	.39		
Stage3	.02	.03	.73	.46		
Stage4	.04	.03	1.16	.25		
Stage5	-.08	.03	-2.70	.01		
Task2	.04	.03	1.02	.32		
Stage2:Task2	.04	.04	.94	.35		
Stage3:Task2	-.02	.04	-.43	.67		
Stage4:Task2	-.07	.04	-1.58	.11		
Stage5:Task2	-.22	.04	-4.99	<.01		
<i>Active writing time per characters</i>						
Intercept	.21	.04	5.38	<.01	.03	.21
Stage2	-.08	.05	-1.57	.12		
Stage3	-.09	.08	-1.25	.21		
Stage4	-.10	.05	-1.79	.07		
Stage5	-.02	.05	-0.44	.66		
Task2	-.07	.06	-1.27	.20		
Stage2:Task2	.06	.08	.80	.43		
Stage3:Task2	.22	.08	2.89	<.01		
Stage4:Task2	.12	.08	1.58	.12		
Stage5:Task2	.26	.08	3.38	<.01		

* Task = Task type, R²m = R² marginal, R²c = R² conditional

Table S10. Results for Models Examining the Effects of Task Type and Stage on Pause Frequency

Predictor	Est	SE	t	P	R ² m	R ² c
<i>Total</i>						
Intercept	50.25	1.90	26.39	<.01	.07	.41
Stage2	8.35	1.95	4.29	<.01		
Stage3	10.78	1.95	5.53	<.01		
Stage4	12.46	2.02	6.16	<.01		
Stage5	12.07	2.87	4.21	<.01		
Task2	6.67	2.10	3.18	<.01		
Stage2:Task2	-3.88	2.75	-1.41	.16		
Stage3:Task2	-8.00	2.75	-2.91	<.01		
Stage4:Task2	-13.77	2.75	-5.00	<.01		
Stage5:Task2	-21.90	2.75	-7.95	<.01		
<i>Within words</i>						
Intercept	22.05	1.19	18.54	<.01	.06	.53
Stage2	2.51	.97	2.58	.01		
Stage3	4.03	.98	4.12	<.01		
Stage4	4.50	1.03	4.36	<.01		
Stage5	3.92	1.44	2.72	.01		
Task2	3.68	1.18	3.12	<.01		
Stage2:Task2	-1.30	1.37	-.95	.34		
Stage3:Task2	-4.21	1.37	-3.08	<.01		
Stage4:Task2	-7.50	1.37	-5.47	<.01		
Stage5:Task2	-11.74	1.37	-8.57	<.01		
<i>Between words</i>						
Intercept	12.25	.63	19.44	<.01	.09	.49
Stage2	2.33	.57	4.10	<.01		
Stage3	2.98	.57	5.20	<.01		
Stage4	3.42	.61	5.59	<.01		
Stage5	2.35	.89	2.63	.01		
Task2	1.83	.68	2.69	.01		
Stage2:Task2	.02	.79	.03	.98		
Stage3:Task2	-1.55	.79	-1.97	.05		
Stage4:Task2	-3.72	.79	-4.72	<.01		
Stage5:Task2	-6.41	.79	-8.14	<.01		
<i>Between sentences</i>						
Intercept	.55	.05	11.16	<.01	.04	.31
Stage2	.10	.05	1.78	.08		
Stage3	.10	.05	1.99	.05		
Stage4	.13	.05	2.39	.02		
Stage5	.05	.05	.99	.32		
Task2	.16	.06	2.50	.02		
Stage2:Task2	.02	.07	.26	.80		
Stage3:Task2	-.05	.07	-.72	.47		
Stage4:Task2	-.20	.07	-2.87	<.01		
Stage5:Task2	-.28	.07	-3.93	<.01		

* Task = Task type, R²m = R² marginal, R²c = R² conditional

Table S11. Results for Models Examining the Effects of Task Type and Stage on Median Pause Length

Predictor	Est	SE	T	p	R ² m	R ² c
<i>Total</i>						
Intercept	.39	.01	49.48	<.01	.04	.58
Stage2	<.01	.01	-.13	.90		
Stage3	<.01	.01	-.19	.85		
Stage4	<.01	.01	-.01	.99		
Stage5	.02	.01	2.16	.03		
Task2	.01	.01	1.09	.28		
Stage2:Task2	-.01	.01	-1.23	.22		
Stage3:Task2	<.01	.01	.53	.59		
Stage4:Task2	.01	.01	1.09	.28		
Stage5:Task2	.02	.01	2.38	.02		
<i>Within words</i>						
Intercept	.30	.01	51.79	<.01	<.01	.55
Stage2	<.01	<.01	-.20	.84		
Stage3	<.01	.01	-.75	.45		
Stage4	-.01	<.01	-1.49	.14		
Stage5	<.01	<.01	-.81	.42		
Task2	<.01	.01	.62	.54		
Stage2:Task2	<.01	.01	-.56	.57		
Stage3:Task2	.01	.01	.92	.36		
Stage4:Task2	<.01	.01	.13	.90		
Stage5:Task2	.01	.01	1.11	.27		
<i>Between words</i>						
Intercept	.80	.04	19.54	<.01	<.01	.75
Stage2	-.01	.02	-.50	.62		
Stage3	-.03	.02	-1.20	.23		
Stage4	-.02	.03	-.62	.54		
Stage5	-.04	.03	-1.39	.17		
Task2	.01	.03	.37	.72		
Stage2:Task2	-.02	.03	-.77	.44		
Stage3:Task2	<.01	.03	.03	.98		
Stage4:Task2	.02	.03	.71	.48		
Stage5:Task2	.05	.03	1.59	.11		
<i>Between sentences</i>						
Intercept	11.47	2.06	5.58	<.01	.03	.31
Stage2	-8.25	2.24	-3.69	<.01		
Stage3	-8.78	2.19	-4.01	<.01		
Stage4	-8.21	2.16	-3.80	<.01		
Stage5	-9.08	2.33	-3.90	<.01		
Task2	-3.45	2.62	-1.32	.20		
Stage2:Task2	7.08	2.77	2.56	.01		
Stage3:Task2	5.70	2.76	2.07	.04		
Stage4:Task2	3.92	2.78	1.41	.16		
Stage5:Task2	3.47	2.85	1.22	.22		

* Task = Task type, R²m = R² marginal, R²c = R² conditional

Table S12. Results for Models Examining the Effects of Task Type and Stage on Eye Fixation Measures

Predictor	Est	SE	T	p	R ² m	R ² c
<i>Total fixation duration</i>						
Intercept	25121.91	1465.46	17.14	<.01	.09	.62
Stage2	8295.68	1041.57	7.96	<.01		
Stage3	7967.29	1078.29	7.39	<.01		
Stage4	6443.78	1141.93	5.64	<.01		
Stage5	5448.58	1172.65	4.65	<.01		
Task2	-4300.41	1377.25	-3.12	<.01		
Stage2:Task2	-3216.63	1434.06	-2.24	.03		
Stage3:Task2	-2703.31	1434.06	-1.89	.06		
Stage4:Task2	-987.87	1434.06	-.69	.49		
Stage5:Task2	3540.75	1434.06	2.47	.01		
<i>Fixation count</i>						
Intercept	61.39	3.32	18.49	<.01	.16	.49
Stage2	24.57	3.00	8.20	<.01		
Stage3	25.70	3.06	8.41	<.01		
Stage4	22.07	3.29	6.72	<.01		
Stage5	29.48	3.63	8.13	<.01		
Task2	-8.22	3.86	-2.13	.04		
Stage2:Task2	-11.68	4.20	-2.78	.01		
Stage3:Task2	-9.09	4.20	-2.17	.03		
Stage4:Task2	1.72	4.20	.41	.68		
Stage5:Task2	11.14	4.20	2.66	.01		
<i>Mean fixation duration</i>						
Intercept	413.13	18.20	22.70	<.01	.04	.76
Stage2	-20.71	8.98	-2.31	.02		
Stage3	-32.36	9.37	-3.45	<.01		
Stage4	-39.86	10.53	-3.79	<.01		
Stage5	-81.69	12.54	-6.51	<.01		
Task2	-15.74	10.45	-1.51	.13		
Stage2:Task2	20.74	12.43	1.67	.10		
Stage3:Task2	13.78	12.45	1.11	.27		
Stage4:Task2	-6.42	12.43	-.52	.61		
Stage5:Task2	8.73	12.43	.70	.48		

* Task = Task type, R²m = R² marginal, R²c = R² conditional

Table S13. Results for Models Examining the Effects of Task Type and Stage on Saccadic Measures

Predictor	Est	SE	t	p	R ² m	R ² c
<i>Backward Saccade Number</i>						
Intercept	54.20	1.85	29.29	<.01	.24	.58
Stage2	-5.22	1.62	-3.22	<.01		
Stage3	-5.65	1.69	-3.34	<.01		
Stage4	-8.37	1.88	-4.46	<.01		
Stage5	-2.07	2.20	-.94	.35		
Task2	-25.91	1.96	-13.22	<.01		
Stage2:Task2	7.25	2.25	3.22	<.01		
Stage3:Task2	10.62	2.25	4.71	<.01		
Stage4:Task2	17.29	2.25	7.67	<.01		
Stage5:Task2	22.43	2.25	9.95	<.01		
<i>Backward Saccade Median Length</i>						
Intercept	2.60	.14	19.17	<.01	.02	.39
Stage2	-.03	.12	-.29	.78		
Stage3	-.06	.12	-.54	.59		
Stage4	-.28	.12	-2.37	.02		
Stage5	-.24	.12	-2.01	.04		
Task2	-.48	.15	-3.33	<.01		
Stage2:Task2	.05	.17	.27	.78		
Stage3:Task2	.08	.17	.49	.63		
Stage4:Task2	.31	.17	1.83	.07		
Stage5:Task2	.38	.17	2.23	.03		
<i>Forward Saccade Number</i>						
Intercept	59.29	1.98	30.00	<.01	.22	.57
Stage2	-4.55	1.65	-2.76	.01		
Stage3	-6.34	1.73	-3.66	<.01		
Stage4	-9.08	1.87	-4.85	<.01		
Stage5	-2.96	2.11	-1.40	.16		
Task2	-26.59	2.17	-12.27	<.01		
Stage2:Task2	7.59	2.26	3.36	<.01		
Stage3:Task2	12.20	2.26	5.40	<.01		
Stage4:Task2	17.92	2.26	7.93	<.01		
Stage5:Task2	22.25	2.26	9.85	<.01		
<i>Forward Saccade Median Length</i>						
Intercept	2.41	.11	21.45	<.01	.02	.43
Stage2	-.14	.11	-1.31	.19		
Stage3	.06	.12	.48	.63		
Stage4	-.25	.11	-2.29	.02		
Stage5	-.11	.12	-.97	.33		
Task2	-.42	.13	-3.16	<.01		
Stage2:Task2	.16	.15	1.02	.31		
Stage3:Task2	.02	.15	.14	.88		
Stage4:Task2	.36	.15	2.36	.02		
Stage5:Task2	.28	.15	1.82	.07		
<i>Proportion of Backward Saccades</i>						
Intercept	.48	.01	62.89	<.01	.02	.51
Stage2	-.01	.01	-1.42	.16		
Stage3	<.01	.01	.58	.56		
Stage4	<.01	.01	-.14	.88		
Stage5	<.01	.01	.17	.87		
Task2	-.02	.01	-1.80	.08		
Stage2:Task2	.01	.01	.82	.41		
Stage3:Task2	.00	.01	.01	.99		
Stage4:Task2	.01	.01	1.21	.23		
Stage5:Task2	.02	.01	2.34	.02		

* Task = Task type, R²m = R² marginal, R²c = R² conditional