



AUGUST 2022

ADDENDUM 1

LEARNING DURING THE PANDEMIC IN ILLINOIS SERIES

WRITTEN BY:

Sarah Cashdollar, Mariana Barragan Torres & Meg
Bates

Illinois Workforce and Education Research
Collaborative (IWERC)
Discovery Partners Institute
University of Illinois System



Illinois
State Board of
Education



PART OF THE UNIVERSITY OF ILLINOIS SYSTEM

Suggested Citation:

Cashdollar, S., Barragan Torres, M., & Bates, M. (2022). Addendum 1. *Learning During the Pandemic in Illinois Series*. Chicago, IL: Illinois Workforce and Education Research Collaborative (IWERC), Discovery Partners Institute, University of Illinois.
<https://dpi.uillinois.edu/applied-research/iwerc/current-projects/learning-modalities/>

Acknowledgments

We gratefully acknowledge the support of the Research Department and the Data Strategies and Analytics Department at ISBE, who provided support with accessing data, understanding data elements, and interpreting findings.

Last revised: 08/16/2022

Addendum

The original three reports for this project were created using data provided to IWERC on April 1, 2022 by ISBE's Data Strategies and Analytics Office (DSA). On July 27, 2022, DSA shared an updated file of data that included additional SY21 IAR test scores for students in the state for grades 3-8. Upon a careful review of the data, we observed no changes to the distribution of IAR test scores. However, to preserve the robustness and rigor of our analyses, we replicated our findings using the new IAR data. Overall, we observed negligible changes to our previous estimates. As such, our findings from the previous reports stand for this project. However, in the interest of full transparency, we present here the updated tables for Reports 2 and 3. There were no changes to Report 1.

Updated Tables for Report 2

Table 4.2

Updated Estimated Associations between Modality Pathways and IAR Scores with Difference-in-Differences Models Grades 3-5 (as compared to Remote all Year schools)

VARIABLES	Math			ELA		
	Estimate (SE)	Significance level	Effect size <i>D</i>	Estimate (SE)	Significance level	Effect size <i>d</i>
Substantially Remote	-3.11 (0.66)	***	-0.09 (0.02)	-1.56 (0.68)	*	-0.04 (0.02)
Mixed	-4.42 (0.97)	***	-0.13 (0.03)	-2.52 (1.00)	*	-0.07 (0.02)
Substantially In-person	-5.27 (0.80)	***	-0.15 (0.02)	-2.94 (0.83)	***	-0.08 (0.02)
Year (2021)	-22.03 (0.74)	***	-0.65 (0.02)	-17.72 (0.76)	***	-0.47 (0.02)
Year*Substantially Remote	7.02 (0.85)	***	0.21 (0.02)	3.02 (0.88)	***	0.08 (0.02)
Year*Mixed	9.96 (1.24)	***	0.29 (0.03)	4.83 (1.28)	***	0.13 (0.03)
Year*Substantially In-person	14.33 (0.89)	***	0.42 (0.02)	7.94 (0.92)	***	0.21 (0.02)
Constant	554.82 (13.99)	***	-5.28 (0.41)	547.21 (14.55)	***	-5.03 (0.39)
R-square		0.77			0.75	
Number of observations		2,157			2,157	

Standard errors in parentheses

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.1$

Note: Reference pathway was Remote All Year. Effect sizes are Cohen's *d*. Controls included the following school characteristics in SY19 and SY21: % White, % Black, % Hispanic/Latinx, % Two or more races, % Low-income, % Homeless, % English learners, % IEP, and enrollment. SY19 school characteristics that were controlled include: mean attendance rate, test participation rate, indicator for Evidence-Based Funding Tier 4, and scores on the *5Essentials* measures for Effective Leaders and Ambitious Instruction.

Table 5.2
Updated Estimated Associations between Modality Pathways and IAR Scores with Difference-in-Differences Models Grades 6-8 (as compared to Remote all Year schools)

VARIABLES	Math			ELA		
	Estimate (SE)	Significance level	Effect size <i>d</i>	Estimate (SE)	Significance level	Effect size <i>d</i>
Substantially Remote	-0.56 (0.63)		-0.02 (0.02)	0.68 (0.69)		0.02 (0.02)
Mixed	-0.72 (0.94)		-0.02 (0.03)	2.12 (1.02)	*	0.06 (0.03)
Substantially In-person	-0.84 (0.83)		-0.02 (0.02)	1.58 (0.90)	+	0.04 (0.03)
Year (2021)	-10.21 (0.71)	***	-0.30 (0.02)	-5.78 (0.77)	***	-0.16 (0.02)
Year*Substantially Remote	1.46 (0.83)	+	0.04 (0.02)	0.09 (0.91)		0.00 (0.03)
Year*Mixed	2.28 (1.16)	*	0.07 (0.03)	-2.12 (1.26)	+	-0.06 (0.04)
Year*Substantially In-person	3.68 (0.87)	***	0.11 (0.03)	-0.15 (0.95)		0.00 (0.03)
Constant	621.90 (12.02)	***	-3.15 (0.35)	613.29 (13.23)	***	-3.32 (0.36)
R-square		0.76			0.72	
Number of observations		1,612			1,612	

Standard errors in parentheses

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.1$

Note: Reference pathway was Remote All Year. Effect sizes are Cohen's *d*. Controls included the following school characteristics in SY19 and SY 21: % White, % Black, % Hispanic/Latinx, % Two or more races, % Low-income, % Homeless, % English learners, % IEP, and enrollment. SY19 school characteristics that were controlled include: mean attendance rate, test participation rate, indicator for Evidence-based Funding Tier 4, and scores on the *5Essentials* measures for Effective Leaders and Ambitious Instruction.

Updated Tables for Report 3

Table 4.2

Updated Estimated associations between percentage of SY21 in-person and IAR scale scores, grades 5-8

	ELA	Math
SY21 Scale Score	0.050*** (0.004)	0.072** (0.003)
Effect size	.0014 (.0001)	.0020 (.0001)
Constant	223.30 (11.39)	231.38 (10.07)
ICC	0.00 (0.00)	0.00 (0.00)
Random Effect Parameters (Variance)		
In-Person Instruction	0.008 (0.001)	0.007 (0.001)
SY19 Scores	0.000 (0.00)	0.000 (0.00)
School (constant)	0.000 (0.00)	0.000 (0.00)
Residual	469.17 (1.13)	394.22 (0.95)
N Schools		2,673
N Students		364,467

Standard errors in parentheses; *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Note: Effect sizes are Cohen's d . Controls included the following student characteristics: ELA/math IAR score in 2019, race/ethnicity, gender, eligibility for Free/Reduced-Price Lunch (FRPL), English learner (EL) status, Individualized Education Program (IEP) participation, Homelessness; and 2019 school characteristics: % White, % Black, % Hispanic/Latinx, % Two or more races, % Low-income, % Homeless, % ELs, % IEP, mean attendance rate, indicator for Evidence-based Funding Tier 4, and scores on the *5Essentials* measure for Involved Families.