

Mode of Instruction During the Pandemic: An Analysis

CONSIDERATIONS

- **While Indiana's 2021 dataset is robust, mode of instruction information is incomplete.**
- **Indiana students experienced significant, widespread impacts to academic performance and learning outcomes.**
- **Mode of instruction data available is based on attendance records, and does not consider student engagement levels, synchronous v. asynchronous instruction, or instructional platforms.**

DATA

Data was provided by IDOE, including:

- **ILEARN** data in English/language arts and mathematics including student demographic data; NWEA; WIDA.
- **Mode of Instruction** data for students that was merged with **ILEARN** data. Mode of instruction indicated four types:
 - In-person
 - Remote or Virtual
 - Hybrid (a combination of in-person and remote)
 - Virtual School

SUMMARY OF INDIVIDUAL RESULTS

- **In-person was the predominant mode of instruction.**
- **In-person instruction was, on average, the uniformly best mode of instruction for students, consistently leading to less academic impact than hybrid and virtual.**
- **Growth rates associated with virtual/remote instruction were very poor, especially in mathematics.**
- **Racially and ethnically diverse students were much more likely to receive virtual/remote instruction than white students.**

SUMMARY OF SCHOOL RESULTS

- **The vast majority of schools in Indiana conducted in-person instruction.**
 - Nearly 50% of schools had greater than 90% of students in person all year.
 - Nearly 80% of schools had greater than 60% of students in person all year.
- **Conversely, there was a small minority of schools in Indiana who were mostly virtual.**
 - About 5% of schools had greater than 50% of students whose mode of education was virtual.

SUMMARY OF SCHOOL RESULTS

- **As the following charts show, the 5% of schools with greater than 50% of students learning virtually tended to be larger schools serving lower-achieving students.**

STUDENT PARTICIPATION BY MODE OF INSTRUCTION

Mode of Instruction	ELA		Mathematics	
	Count	Percentage	Count	Percentage
In-Person	325,608	66.8%	325,415	66.8%
Remote	65,619	13.5%	65,512	13.4%
Hybrid	20,828	4.3%	20,816	4.3%
Virtual School	4,078	0.8%	4,065	0.8%
Missing Information	70,948	14.6%	71,274	14.6%

STUDENT PARTICIPATION BY MODE OF INSTRUCTION

Mode of Instruction	Asian		Black		Hispanic		Multiracial		White	
	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
In-Person	14,731	54.2%	47,421	39.9%	76,559	57.7%	31,037	61.4%	479,750	77.7%
Remote	5,946	21.9%	40,593	34.2%	27,016	20.4%	8,100	16.0%	49,176	8.0%
Hybrid	2,951	10.9%	5,214	4.4%	6,144	4.6%	2,680	5.3%	2,680	0.4%
Virtual School	78	0.3%	1,079	0.9%	708	0.5%	543	1.1%	5,697	0.9%
Missing Information	3,489	12.8%	24,471	20.6%	22,251	16.8%	8,195	16.2%	80,468	13.0%

STUDENT PARTICIPATION BY MODE OF INSTRUCTION

Mode of Instruction	Grade 3		Grade 4		Grade 5		Grade 6		Grade 7		Grade 8	
	Count	Percent										
In-Person	119,720	75.3%	118,642	75.0%	118,735	73.8%	104,192	63.7%	97,186	58.3%	92,548	55.8%
Remote	18,696	11.8%	18,760	11.9%	20,717	12.9%	22,944	14.0%	24,733	14.8%	25,281	15.2%
Hybrid	657	0.4%	720	0.5%	2,157	1.3%	10,333	6.3%	14,123	8.5%	13,654	8.2%
Virtual School	1,042	0.7%	998	0.6%	1,179	0.7%	1,349	0.8%	1,686	1.0%	1,889	1.1%
Missing Information	18,856	11.9%	19,028	12.0%	18,078	11.2%	24,844	15.2%	28,891	17.3%	32,523	19.6%

STUDENT PARTICIPATION BY MODE OF INSTRUCTION

Mode of Instruction	Free Meals		Reduced Price Meals		Paid Meals	
	Count	Percentage	Count	Percentage	Count	Percentage
In-Person	244,947	61.6%	40,215	70.6%	361,765	71.9%
Remote	74,093	18.6%	6,964	12.2%	49,460	9.8%
Hybrid	15,546	3.9%	2,115	3.7%	23,771	4.7%
Virtual School	3,977	1.0%	965	1.7%	3,177	0.6%
Missing Information	59,197	14.9%	6,691	11.7%	64,658	12.9%

STUDENT PARTICIPATION BY MODE OF INSTRUCTION

Mode of Instruction	Special Education		General Education	
	Count	Percentage	Count	Percentage
In-Person	101,007	69.1%	546,521	67.3%
Remote	18,885	12.9%	111,693	13.8%
Hybrid	5,339	3.7%	36,119	4.4%
Virtual School	1,545	1.1%	6,576	0.8%
Missing Information	19,495	13.3%	111,260	13.7%

STUDENT PARTICIPATION BY MODE OF INSTRUCTION

Mode of Instruction	Limited English Proficient		Fluent English Proficient		Not an ELL	
	Count	Percentage	Count	Percentage	Count	Percentage
In-Person	44,733	63.7%	27,600	53.1%	574,712	68.8%
Remote	12,252	17.4%	11,561	22.2%	106,650	12.8%
Hybrid	3,470	4.9%	4,375	8.4%	33,597	4.0%
Virtual School	121	0.2%	164	0.3%	7,836	0.9%
Missing Information	9,651	13.7%	8,316	16.0%	112,680	13.5%

ELA PERFORMANCE BY MODE OF INSTRUCTION

Mode of Instruction	Grade 3		Grade 4		Grade 5		Grade 6		Grade 7		Grade 8	
	% Prof/ Mean SS	Median SGP										
In-Person	41.3%/ 5441	---	42.3%/ 5475	---	42.0%/ 5503	41	43.0%/ 5527	42	44.1%/ 5550	42	46.9%/ 5566	43
Remote	26.3%/ 5413	---	26.1%/ 5441	---	27.4%/ 5474	28	29.8%/ 5501	31	32.7%/ 5527	34	35.9%/ 5544	36
Hybrid	29.2%/ 5421	---	26.4%/ 5446	---	40.1%/ 5493	34	43.9%/ 5526	37	45.4%/ 5550	39	47.9%/ 5565	41
Virtual School	27.9%/ 5411	---	28.5%/ 5444	---	30.3%/ 5474	29	32.5%/ 5507	30	34.6%/ 5531.7	39	39.7%/ 5554	45
Missing Information	35.6%/ 5429	---	36.7%/ 5462	---	37.8%/ 5493	37	34.6%/ 5509	34	36.3/ 5532.4	35	39.9%/ 5550	37

MATH PERFORMANCE BY MODE OF INSTRUCTION

Mode of Instruction	Grade 3		Grade 4		Grade 5		Grade 6		Grade 7		Grade 8	
	% Prof/ Mean SS	Median SGP										
In-Person	52.7%/ 6427	---	47.7%/ 6465	---	42.4%/ 6488	35	38.2%/ 6513	34	34.6%/ 6524	36	32.3%/ 6539	38
Remote	29.2%/ 6381	---	24.5%/ 6416	---	21.1%/ 6440	14	17.4%/ 6458	15	18.3%/ 6482	23	15.1%/ 6483	21
Hybrid	38.1%/ 6401.6	---	26.9%/ 6429	---	34.9%/ 6471	18	34.8%/ 6505	23	34.7%/ 6522	31	31.8%/ 6532	30
Virtual School	38.8%/ 6381	---	26.6%/ 6413	---	19.5%/ 6437	12	16.5%/ 6452	14	16.4%/ 6477	22	12.1%/ 6473	22
Missing Information	43.8%/ 6409	---	39.4%/ 6445	---	35.5%/ 6471	25	25.7%/ 6480	21	25.7%/ 6498	27	23.9%/ 6509	29



THANK YOU!