U-Turn: Surge of COVID Cases Reverses Reopening Progress in America's School Districts

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Despite modest movement toward in-person learning earlier this fall, the latest update of our nationally representative sample of 477 school districts indicates that many school districts have moved back to remote learning amid a mounting surge of COVID-19 cases.

As the incoming Biden-Harris Administration laid out the goal of reopening most schools within the first 100 days of its term, school districts were moving in the opposite direction. In December 2020, 31 percent of school districts were operating with a fully remote learning model—10 more percentage points than reported in early November, and more than at any other point during the fall semester.

This trend was most pronounced in urban school districts. Many that had made incremental steps toward in-person learning in some grade levels or through a hybrid model moved back to fully remote learning. But the shift toward remote learning can be seen across all locales.

High case rates, parent and teacher concerns, the rise of a new and more contagious variant of the virus, and a slower than expected vaccine rollout threaten the return to in-person learning in the short term. But school districts can continue to push to provide more intensive support to students wherever learning happens right now.

Districts take two steps back after incremental movement toward in-person learning earlier this fall

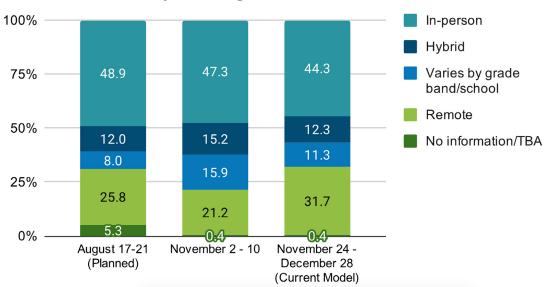
As of December, only 44 percent of school districts were offering fully in-person instruction. While this still represents the largest proportion of school districts, it is the least so far this school year, and 4 percentage points fewer than had planned to offer in-person instruction in mid-August.

Since our analysis in early November, remote learning increased by 7 percentage points in suburban districts, 10 percentage points in rural school districts, and, strikingly, by over 20 percentage points in urban school districts.



Almost three quarters of urban school districts were operating fully remote models, and 11 percent had some sort of variance across grade bands—typically in-person opportunities for the youngest grades, while older students remained in remote learning. Suburban districts were more evenly distributed across in-person, remote, hybrid, and varied models. Most rural school districts were still operating primarily in person, but almost a third were operating remotely—again, the most at any point during this school year.

Figure 1. While Most School Districts Were Still Operating In Person as of December, More School Districts Were in a Remote Learning Model Than at Any Point During This Fall



Percent of Districts by Learning Model and Time of Year

Figure 2. District Learning Models Vary Widely Across Locales

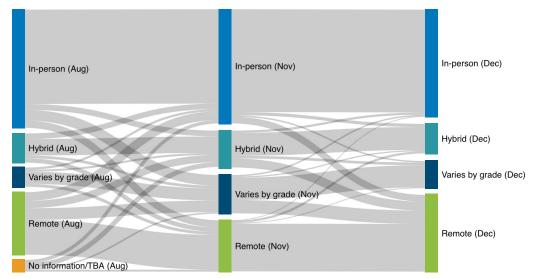


Percent of Districts by Learning Model and Locale



Digging deeper into the data, we can see that most of the change in learning models from early November to December was driven by school districts that reversed course after attempting more in-person learning earlier in the fall. A small share of districts (2.8 percent) went from fully in-person to fully remote. More commonly, however, districts pulled back from varied models, such as having only elementary students learn in person, to all remote (5.5 percent), or only some days per week in person to all remote (4 percent).

Perhaps surprisingly, it was more common for districts that offered fully in-person instruction to move all the way to a remote model than to adopt a varied or hybrid model: 2.8 percent of districts made the switch from fully in-person to fully remote, compared with just under 2 percent completely switching from in-person to either a hybrid or varied model.



- 3 ----

Figure 4. Fewer School Districts Changed Their Model from November to December, But Those That Did Were More Likely to Move to Remote Learning



City districts were more likely to change their learning model: 31 percent of urban districts made a change, compared to about 19 percent of districts overall. As COVID-19 spreads across communities of all types, this may reflect the amplified political pressure that many large districts face in school reopening.

Aside from the rate of change in city districts, the pattern of movement toward more remote learning held across locales. Rural school districts saw more equal movement from in-person, hybrid, and varied learning models to remote: each move represented about 3 percent of rural districts. Suburban districts, which are more likely to be in a hybrid model than other locales, made the bulk of their changes from a hybrid model to either variation by grade level (3 percent of districts) or fully remote (6 percent of districts). However, 7 percent of suburban districts also moved toward models with more in-person learning between early November and December.

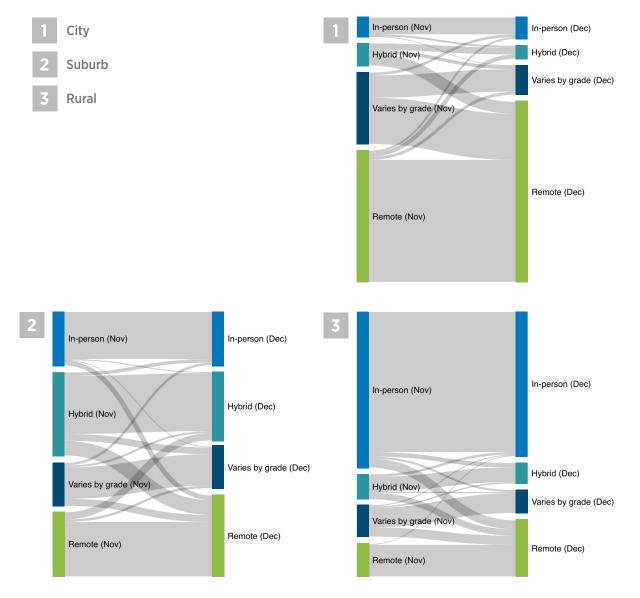


Figure 5. Movement Patterns between Early November and December Vary across Locales



Gaps in understanding student learning and supporting their experiences during the pandemic

The chaos and disruption of school closures last spring continue even now, heading into the tenth month of the pandemic. It is critical for school systems to assess student progress and provide families with the support they need for their children to engage in learning. To gain a small window into the extent to which assessment and family support are available across the country, we looked for signs that school districts were using assessment systems (e.g., MAP, i-Ready, DIBELS, etc.) to systematically identify students' need for support and then offering childcare or learning hub-style support for students and families.

We found that a little over one-third of the districts in our sample made explicit mention of using assessments to understand student learning at the start of the year. Fewer made mention of using these assessments on an ongoing basis as part of their COVID-19 response plan—just 20 percent total. City or suburban COVID-19 response plans more frequently mentioned the use of assessments than did rural districts' plans. This may be a function of different communication capacity between large and small districts and the fact that rural districts, as noted above, were far more likely to return to full in-person instruction—lessening the need to be explicit about pandemic response plans on their websites or in public communications. Districts that were fully remote in December were slightly more likely to mention the use of assessments: 43 percent of remote districts mentioned use of assessment data as part of their COVID-19 response, compared with 37 percent of all districts.

While use of assessments is not a panacea, this suggests many school districts may not be fully utilizing an important tool to understand student learning needs to provide responsive, targeted instruction to students who have vastly different learning experiences this school year.

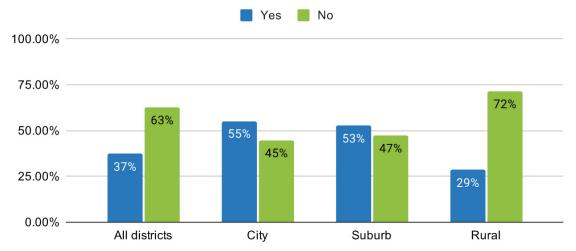


Figure 6. Less than Half of School Districts Mention the Use of Assessments to Help Tailor Instruction and Resources to Student Needs

Use of assessments as part of COVID-19 response



- 5 ----

We found that 30 percent of the school districts that are not fully in-person (remote, hybrid, and varied models) share information about family access to childcare or district-led or sponsored learning hubs. This may underestimate the number of districts providing in-person childcare and learning support to students if some of these efforts are targeted at specific high-need groups—such as students experiencing homelessness—and not communicated widely. Similar to the diagnostic data, city school districts were most likely to share information on district-led learning hubs or childcare, with 46 percent of urban districts that operate fully or partially remote communicating such opportunities.

While there is no doubt that many families are supplementing district offerings with selforganized learning pods or hubs led by community-based organizations such as the YMCA or Boys & Girls Clubs, the full closure of district buildings continues to place burdens on families and communities to fill in the gaps and take on risks during the pandemic.

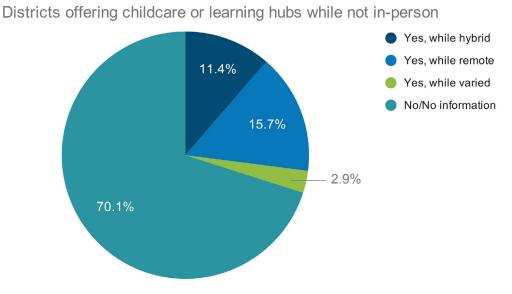


Figure 7. Less than One-Third of School Districts Offer Childcare or Learning Hubs for Students While Not In-Person

School districts must continue to create opportunities to support students where they are now

The pressure to open schools is mounting. The incoming federal administration has called for it. Early reports on slow academic progress and the sharp uptick in failing grades issued this past fall show just how costly the closure of school buildings has been for students and families—especially those who lack access to childcare or reliable internet connections.

Several states, including California, Oregon and Washington, have adopted new public health metrics that would allow schools to reopen sooner. But climbing rates of COVID infections mean reopening, even under these revised guidelines, will require dramatically lower case rates than these states currently have. There is simply no school reopening policy more powerful than reducing community case rates.



In the meantime, school systems must do their best to support educators and families in any way they can. Measuring learning and providing opportunities for supervised instruction to families most in need are two essential efforts. Our data suggest these supports likely need to be expanded in many school systems. As Congress and states continue to contemplate new financial resources to assist school systems throughout and after the pandemic, resources to support quality assessments and provide students safe supervision and meaningful support—wherever their learning happens for the rest of this school year—must be high on the priority list.



Appendix A. Full Data Tables

					By percent poverty	y quartile			locale ee note 2)	
			All (C	Quartile 1) - 9.7% poverty) (9.7 Weig		Quartile 3 - 22.7% poverty	Quartile 4 (22.7+% poverty)	City 12.6% Weight	Rural 65.2% ed Percentage	Suburb 22.2%
Learning Model	Overall learning	All in-person	44.3	31.7	46.0	44.6	51.1	8.7	58.9	21.7
•	model	All hybrid	12.3	15.3	14.6	7.9	10.6	5.2	8.2	28.2
		All remote	31.7	29.4	29.9	35.2	34.4	74.2	23.0	33.4
		Varies by grade								
		band/school	11.3	23.5	9.5	12.4	3.9	11.9	9.3	16.7
		No information	0.4	0.0	0.0	0.0	0.0	0.0	0.6	0.0
	Change in overall learning model	More in-person	3.6	3.1	3.3	3.4	1.7	4.7	2.2	7.1
	from November	More remote	15.0	14.2	11.4	23.6	12.6	26.2	13.1	14.4
	to December	No change	81.4	82.7	85.3	73.1	85.6	69.1	84.7	78.5
	Current model	In norcon	53.3	F2.4	F1 1	54.2	545	17.0	66 F	20.2
	for elementary	In-person Hybrid	52.2 13.1	52.1 16.0	51.1 17.3	54.3 10.0	54.5 9.8	17.0 6.8	66.5 8.6	30.3 30.0
	school students	Remote	31.3	26.3	31.1	34.1	9.8 34.4	6.8 73.8	23.5	30.0 29.8
		Varies by school	0.5	0.6	0.5	0.6	0.5	2.1	0.3	0.4
		No information	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.4
		N/A (district doesn't have this								
		grade band)	2.5	5.0	0.0	1.0	0.7	0.4	0.5	9.5
	Comment and del	1	45.4	22.0	47.5	10.1	54.7	12.4	50.0	24.4
	Current model for middle school	In-person	45.4	32.8	47.5	49.1	51.7	13.1	59.9	21.1
	students	Hybrid	17.9	31.9 30.7	21.8 29.6	9.9 39.4	12.6 35.0	6.5 79.3	13.2	38.4 30.1
		Remote Varies by school	33.1 0.4	30.7	29.6	39.4 0.6	0.0	79.3 1.1	25.3 0.3	0.3
		No information	0.4	0.0	0.3	0.0	0.0	0.0	0.5	0.3
		N/A (district doesn't have this								
		grade band)	2.8	4.1	0.7	1.0	0.7	0.0	0.8	10.1
	Current model	In-person	43.6	30.4	47.3	43.2	50.2	8.1	58.2	21.0
	for high school students	Hybrid	19.3	33.3	19.7	13.3	13.8	13.0	13.7	39.1
		Remote	34.7	34.1	31.5	41.0	34.9	76.6	25.9	36.8
		Varies by school	0.3	0.0	0.5	0.6	0.0	1.1	0.1	0.3
		No information N/A (district doesn't have this	0.4	0.0	0.0	0.0	0.0	0.0	0.6	0.0
		grade band)	1.7	2.3	1.0	1.8	1.1	1.1	1.4	2.7
Learning Pods	District provides access to childcare or	Yes, while in hybrid model	6.3	9.5	7.0	4.2	5.4	7.9	4.5	10.7
	learning hub support during	Yes, while in remote model Yes, while in	8.7	4.5	5.6	12.1	11.7	33.2	4.0	8.8
	remote learning.	varied model	1.6	6.1	0.0	1.2	0.9	2.4	0.9	3.3
		No N/A (district is 100% in-person	38.9	48.2	41.4	39.1	31.0	47.8	31.5	55.6
		or no information)	44.4	31.7	46.0	43.4	51.1	8.7	59.0	21.7



Appendix A. Full Data Tables (cont.)

Diagnostic Distric Testing menti diagno		37.3 62.7	45.0 55.0	35.8 64.2	28.3 71.7	43.9 56.1	55.3 44.7	28.5 71.5	52.7 47.3
forma assess distric them	ostic or No tive N/A (district is sments, not using t is using diagnostic or		19.4 25.6 55.0	24.2 11.6 64.2	16.8 11.6 71.6	21.1 22.8 56.1	24.3 31.2 44.5	17.6 11.0 71.5	25.1 27.6 47.3

Sample includes 477 school districts weighted to provide nationally representative sample.

Results are reported as % of group and reflect weighted frequency.

Note on City, Rural, Suburban configuration:

All NCES codes for City (11 - Large, 12 - Midsize, and 13 - Small) are collapsed to "city."

All NCES codes for Suburban (21 - Large, 22 - Midsize, 23 - Small) are collapsed to "suburb."

All NCES codes for "Town" and "Rural" (31 - Town, Fringe; 32 - Town, Distant; 33 - Town, Remote; and 41 - Rural, Fringe; 42 - Rural, Distant; and 43 - Rural, Remote) are collapsed to "rural."

Note on "No closure information found":

We report a district as "no information found" when we fail to find any web-based public information on the district, or any reference to COVID-19 or coronavirus school closures on the district's website, Facebook page, or Twitter account. We chose to include "no information" districts in all of our analyses because we feel the lack of easy-to-access public information is a salient concern amid the closures.



Appendix B. Code Definitions

Variable	Variable values	Definitions	Examples		
Current learning model for elementary students	Hybrid	Hybrid = Schools use a combination of in- person and virtual/remote instruction.	Some students will be in-person in mornings, and remote in the afternoons, and will switch with the other students. Students move in smaller cohort groups, and will b in-person two days/week and remote three days/week. NOTE: If model varies within elementary grades,		
			code for third grade.		
	In-person	In-person = School uses only in-person instruction (no virtual/remote instruction) OR four-day/week model.	The district offers a full-time in-person model, but students can opt for a remote option if they prefer. District is using a "4-day week" model, with one da for remote intervention or independent work. All students are on the same schedule. There is no 'cohorting' of students.		
	Remote	Remote = Schools use only virtual/remote instruction (no in-person instruction).	All students are learning via remote instruction, or only a small group of students (e.g., special populations) may be learning in-person.		
	Varies by school	Varies by School = District explicitly delegates the choice of learning model (in- person, remote, hybrid) to each school, rather than a district-wide decision. This is a rare occurrence.	Varies by school: DO NOT COUNT examples of individual schools that have had to close due to COVID-19 cases; this is counted as a remote contingency. We are coding for the district-wide plan for the 'default' for most schools.		
	No information	No information = No information about COVID-19 related to fall 2020 can be found.			
Current learning model for middle school gades	Hybrid	Hybrid = Schools use a combination of in- person and virtual/remote instruction.	Some students will be in person in mornings, and remote in the afternoons, and will switch with the other students. Students move in smaller cohort groups, and will be in-person two days/week and remote three days/week.		
	In-person	In-person = School uses only in-person instruction (no virtual/remote instruction) OR four-day/week model.	The district offers a full-time in-person model, but students can opt for a remote option if they prefer. OR, district is in-person four days/week, with one day remote.		
	Remote	Remote = Schools use only virtual/remote instruction (no in-person instruction).	All students are learning via remote instruction, or only a small group of students (e.g., special populations) may be learning in-person.		
	Varies by school	Varies by School = District explicitly delegates the choice of learning model (in- person, remote, hybrid) to each school, rather than a district-wide decision. This is a rare occurrence.	Varies by school: DO NOT COUNT examples of individual schools that have had to close due to COVID-19 cases; this is counted as a remote contingency. We are coding for the district-wide plan for the 'default' for most schools.		
	No information	No information = No information about COVID-19 related to fall 2020 can be found.			



— 10 —

Appendix B. Code Definitions (cont.)

District provides access to childcare or learning support during remote learning	Yes, while in hybrid model	District coordinates, sponsors, or otherwise facilitates access for students to receive childcare or in-person learning support during the school day, while students are in the hybrid learning model.	District directs families to sign up for daytime childcare with virtual learning support at Boys & Girls Clubs. District organizes small-group in-person learning "hubs" for students without home wifi. District provides childcare/a safe space for students to learn during remote school days.		
	Yes, while remote	District coordinates, sponsors, or otherwise facilitates access for students to receive childcare or in-person learning support during the school day, while students are in a fully remote learning model.			
	No	District provides no access for students to receive childcare or learning support during remote or hybrid learning, or provides no information.			
	N/A	District is fully in-person.			
District makes mention of diagnostic or formative assessments as part of their COVID-19 response plans	Yes	District indicates that teachers will use diagnostics tests to assess possible learning loss, or needed areas for intervention.	"Students in grades K-12 who are enrolled in ASD at School will take a reading and mathematics diagnostic assessment as part of the first few weeks of school. Reading: i-Ready - Grades K-9, Grades 10-12 Tier III Courses; Mathematics: i- Ready - Grades K-8, ALEKS PPL – Grades 9-12." Specific tool has not been named, but district says testing will occur at least three times a year and will be supplemented by short cycle formative assessments in ELA and math, and quarterly summative assessments in all content areas.		
	No	No mention of disagnostic tests or tools.			
District indicates that they will use diagnostic tests on an ongoing basis	Yes	District indicates that teachers will use diagnostic tests on a periodic basis through the year to assess possible learning loss, or needed areas for intervention.			
	No	District uses tests, but only at the start of a school year rather than ongoing, OR if the school is hybrid, code for in-school days. If district offers a "home choice" option, code for the default/primary option (often in-person, or hybrid).	"Students in grades K-12 who are enrolled in ASD at School will take reading and mathematics disgnostic assessment as part of the first few weeks of school."		
	N/A	District makes no mention of diagnostic tests or tools.	District says testing will occur at least three times a year and will be supplemented by short cycle formative assessments in ELA and math, and quarterly summative assessments in all content areas.		



— 11 —

Appendix C. Methodology

1. Description of the Project

The COVID-19 response database tracks how a nationally representative group of school districts is responding to the pandemic on an ongoing basis. The goal of this effort is to capture a national portrait of school district practices. Our sample includes 477 school districts, sampled and weighed to reflect a representative cross-section of school districts across the United States.

Prior analyses have tracked how these school districts provided remote instruction during the spring 2020 school closures, and how school districts planned for fall 2020 reopening. For this iteration of the project, we collected and coded publicly available information about each school district's current operating model, along with a few additional indicators on prevalence of learning hubs and use of diagnostic testing.

We merged the coded data with descriptive information on each district—such as percent of poverty in the school district, racial demographics, and locale description—from the National Center on Education Statistics Common Core of Data.

This project is a collaboration with the RAND Corporation, and stems from the ongoing American School District Panel project, a project intended to build a nationally representative panel of American School Districts.

2. Sources Accessed for Information

For each school district, we coded the indicators based on publicly available information. Primary sources were the school district website, local news reports, and social media (district Facebook pages or Twitter, YouTube). In this analysis, we found only one school district with no publicly available information on their current operating model. We coded this district as "no information." For all other school districts in the sample, school reopening information was typically centered on the district website, or referenced on local news.

However, school districts continue to rapidly shift their operating models as the COVID-19 pandemic evolves in each community, and information captured earlier in the coding cycle may no longer be accurate at the time of publication. This analysis is meant as a snapshot of district practices between November 24 and December 28, 2020.

We gathered descriptive information from the school districts (enrollment, racial demographics, percent of students receiving free or reduced-price lunch, locale code) from the National Center for Education Statistics, based on 2016 data.

We also categorized districts based on the percent of families in poverty in the surrounding community. This data was provided by Market Data Retrieval (MDR), and their data guide offers the following information on sourcing: "The poverty data is sourced from the U.S. Census Bureau's Small Area Income and Poverty Estimates program, which provides annual estimates of income and poverty statistics for all states, counties, and school districts. The poverty percentage identifies districts and public schools by the actual percentage of children in the district that come from families below the poverty line. The poverty line is determined by a formula (Orshansky Indicator) based on family income and size. The poverty percentage field was calculated by MDR by creating a ratio of the children in a district from families below the poverty line to all children in the district." (MDR Data Dictionary, 2020).



3. Coder Training

The team of analysts collecting and coding information participated in several training and norming activities, including: (1) all coders reviewed a codebook outlining definitions for codes in the various fields of interest and coding sample districts as a group, (2) all coders reviewed information from districts, then coded a common sample of four districts, then met to discuss alignment and misalignment, (3) coders participated in sessions in which they discussed coding questions and further aligned on code definitions.

4. Data Collection Timeline

We collected all data on the 477 districts between November 24 and December 28, 2020. We coded for the current operation of school districts during that time period, rather than any planned changes to come.

5. Code Definitions

Appendix B is the codebook used for this round of coding. For all indicators, codes were based only on publicly available information, and when there was no information available, were coded "no information."

We coded school districts by learning model for each grade band (elementary, middle, highschool), and used these grade-band codes to create an overall district indicator of full in-person, full-hybrid, full-remote, or varies by grade band. As school district grade bands vary, and many districts have only the youngest grades (PreK-2) in person, we coded elementary school as the model for 3rd grade students, and middle school as the model for 7th grade students, if there was variation.

For the indicator on changes to operating plans from August to the current operating model, we compared whether districts overall were allowing more or fewer students for in-person instruction than they planned for in late August. We coded this based on the changes in the overall district plans, including variations by grade bands, but were unable to account for prioritization for some small groups of students, such as students with disabilities, in this indicator. For example:

- If, in August, a school district planned to begin with a hybrid model for all students, and phased to elementary in-person and middle and high school hybrid (varies by grade band), this would be coded as "more in-person"
- If, in August, a school district planned to be fully remote, and is currently operating with only some small groups of the most vulnerable students in-person, with all other students remote, this would still be coded as "no change."

6. Explanation of the Sample and Sample Calibration

The Sample

The national sample includes two groups of districts.

Group 1 includes 399 districts and is a stratified random sample from a sample of 1,200 school districts. The 1,200 school districts represent the recruitment sample for the RAND-led American School District Panel project, a project intended to build a nationally representative panel of American School Districts. The sample of 399 districts is stratified by school location and includes 200 small-town and rural districts and 199 suburban and urban districts.



Group 2 includes the 82 urban districts CRPE began collecting district response data in March 2020. CRPE updated data on these districts weekly from March 28 through July 31, 2020. Data from this group was taken from the last update of this set on July 29, 2020.

Because 3 of the 82 large urban districts also appear among the 399 districts, and one is in Canada, the total national sample includes 477 U.S. school districts.

Calibration and Sample Weights

Excluding the duplicates, we combined the Group 1 and Group 2 districts and then calibrated to reflect the national population of school districts along 10 factors:

- Total enrollment in the district split into three groups: Small [0-800], medium [800-3000] and Large [3000+]
- Total number of schools in the district split into three groups: 1, [2-5], and [6+]
- Per-pupil expenditure on instructional materials
- Current expenditure dollar range code represents per-student current expenditures within ranges and are maintained on district (except Supervisory Union) and public school records
- Percentage of minority students in the district split into four groups [0-15 percent], [15-25 percent], [25-50 percent], and [50 percent+]
- Percentage of poverty-level students in the district split into four groups [0-10 percent], [10-15 percent], [15-25 percent], and [25 percent+]
- Percentage of students in the district eligible for free or reduced-price lunch split into four groups [0-25 percent], [25-50 percent], [50-75 percent], and [75 percent+]
- The specific level of instruction in the school district, Elementary, Secondary or Unified
- The percentage of special education students in the district split into three groups [0-12 percent], [12-17 percent], and [17 percent+]
- Bilingual Education Indicator that indicates if Bilingual Education is offered [Yes/No]

