What is the average daily attendance at your (virtual) school? Understanding data from schools, principals, and teachers during a pandemic

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#### National Teacher and Principal Survey (NTPS)

- Coordinated surveys of schools, principals, and teachers
  - Directed by the National Center for Education Statistics in the U.S. Department of Education's (ED) Institute of Education Sciences
  - Relies on operations and design input from the U.S. Census Bureau
- Conducted every 2 or 3 years, beginning in the 2015-16 school year
  - Includes follow-up surveys of principals and teachers in selected collections
- Data allow analysis of trends over time
  - Collected beginning in 1987-1988 school year as Schools and Staffing Survey
  - Questions repeated over multiple administrations
- ED's primary source of information on K-12 schools from the perspectives of teachers and administrators
- Supports estimates for public and private schools, nationally and for subgroups (e.g., state estimates for public schools, principals, and teachers)



#### Item development for 2020-21 NTPS

- Data collection in 2020-21 school year
- Questionnaires primarily comprise repeated questions on school staff and resources, instructional time, principal and teacher working conditions, training and support
  - Previously fielded in multiple survey administrations, but not during a pandemic!
- In early 2020, cognitive interviews conducted with school administrators about virtual classes
  - Before COVID-19, this may have been interpreted as classes with an online component
  - Starting in the spring of 2020, there was yet another interpretation!
  - Interviews pivoted to ask about current and planned adjustments for remote learning
- Questions added to Principal, School, and Teacher questionnaires in the summer of 2020 about
  - changes in instructional practices
  - student access to electronic devices and internet access
  - support for principals and teachers



#### Concurrent cognitive testing

- Main data collection for 2020-21 NTPS from September 2020 through June 2021
- Cognitive interviews from December 2020 through February 2021
- Conducted remotely with 14 school administrators and 26 teachers via videoconference (Skype and Microsoft Teams)
- Participants recruited by a combination of personal connections, social media, Craigslist, and a broadcast e-mail sent to Census Bureau staff
- Participants from public and private schools in 20 states



#### School questionnaire (items)

- For this school year (2020-21) what is the Average Daily Attendance (ADA) percentage at this school?
- What is the official start and end time for MOST students at this school?
- Around October 1, 2020, how many staff held full-time or part-time positions or assignments in this school in each of the following categories?
- How many students with IEPs or formally recognized disabilities are in each of the following instructional settings?



## For this school year (2020-21) what is the Average Daily Attendance (ADA) percentage at this school?

- "Attendance" may be logging in, participating in live lessons, or turning in an assignment
- Daily attendance captured once per day or for each class
- Excused absences due to quarantine or lack of device or internet access
- Question may be considered sensitive due to decrease



### What is the official start and end time for MOST students at this school?

- School days 5 to 7 hours long
- Responses did not vary by school operating status OR duration of live instruction



#### Teacher questionnaire (items)

- During your most recent FULL WEEK of teaching, approximately how many minutes do you spend teaching each of the following subjects at THIS school?
- For EACH of the class periods or sections that you reported in [previous item], record the subject name, grade level, and number of students.
- Of the hours you are CONTRACTED to work, excluding time spent on planning, lunch, break/recess, arrival/dismissal of students, and otherwise NOT delivering instruction, how many hours during a typical full week do you DELIVER INSTRUCTION to students in THIS school?



# During your most recent FULL WEEK of teaching, approximately how many minutes do you spend teaching each of the following subjects at THIS school?

- Applicable to teachers who instruct the same group of students in multiple subjects (classroom teachers)
- Teachers typically reported less instructional time by subject when teaching in a hybrid or virtual environment
- A few teachers incorrectly answered for in-person instruction, either accidentally or deliberately



For EACH of the class periods or sections that you reported in [previous item], record the subject name, grade level, and number of students.

- Applicable to teachers who instruct different groups of students (departmentalized instruction)
- Class periods or sections may be combined (for example, 4 sections with 30 students converted to a single section with 120 remote students)
- Most teachers reported changes to class structure or size
- Valid ranges must be expanded to account for changes in classroom organization



Of the hours you are CONTRACTED to work, excluding time spent on planning, lunch, break/recess, arrival/dismissal of students, and otherwise NOT delivering instruction, how many hours during a typical full week do you DELIVER INSTRUCTION to students in THIS school?

- About one third of teachers reported no change in instructional time compared to a typical school year
- Most teachers reported decreased instructional time with shortened classes or school days
- Reported increases were driven by increased teaching time due to teaching more sections, or because non-instructional time (such as asynchronous instruction) was included



#### Contextualizing results (schools and principals)

Each questionnaire included a contextual question on the impact of COVID at the time the respondent was completing the questionnaire

The coronavirus pandemic has affected the way many schools provide instruction. To help us understand your responses to this survey, please select the option that best describes the current effect of the coronavirus pandemic on instruction at THIS school:					
	We are currently offering only distance-learning instruction because of the coronavirus pandemic.				
	We are currently offering a hybrid of in-person and distance-learning instruction (some students or classes may be remote while others are in person) because of the coronavirus pandemic.				
	We are currently offering only in-person instruction with additional safety precautions because of the coronavirus pandemic.				
	There is currently no effect on the instruction we offer because of the coronavirus pandemic.				



#### Contextualizing results (teachers)

Each questionnaire included a contextual question on the impact of COVID at the time the respondent was completing the questionnaire

The coronavirus pandemic has affected the way many schools provide instruction. To help us understand your responses to this survey, please select the option that best describes the current effect of the coronavirus pandemic on your teaching at THIS school:					
	I am currently only teaching with distance-learning instruction because of the coronavirus pandemic.				
	I am currently teaching with a hybrid of in-person and distance-learning instruction (some students or classes may be remote, while others are in person) because of the coronavirus pandemic.				
	I am currently teaching only in person with additional safety precautions because of the coronavirus pandemic.				
	There is currently no effect on how I deliver instruction because of the coronavirus pandemic.				
	I am not currently teaching because of the coronavirus pandemic -> Please continue with the survey.				



Table 5. Number and percentage of public school teachers who are regular full-time teachers and average number of hours per week that regular full-time teachers spent on selected activities during a typical full week, by selected school characteristics: 2015–16

		Average hours during typical full week		
Number of regular full-time teachers	Percent of teachers who are regular full-time teachers	Required by contract to work	Of contracted hours, total hours spent delivering instruction to students <sup>1</sup>	Total hours spent on all teaching and other school-related activities <sup>2</sup>
3,111,900	92.9	38.2	27.4	53.3
2,941,300	93.0	38.1	27.4	53.2
170,600	91.3	39.8	27.6	54.4
918,000	93.4	38.1	27.6	53.5
1,188,500	92.5	37.9	26.9	52.9
372,400	93.3	38.9	27.9	53.6
633,000	92.9	38.6	28.0	53.3
1,464,900	90.8	38.1	28.0	52.9
571,400	95.2	38.2	26.7	52.9
889,800	95.3	38.2	26.8	54.0
185,800	91.9	38.8	27.8	53.5
44,400	85.8	38.2	27.9	50.4
92,300	87.0	38.5	28.3	52.9
878,400	90.9	38.1	27.8	52.8
872,200	92.9	38.3	27.6	53.4
461,100	94.1	38.2	27.2	53.2
763,500	95.9	38.3	26.9	53.8
	regular full-time teachers 3,111,900  2,941,300 170,600  918,000 1,188,500 372,400 633,000  1,464,900 571,400 889,800 185,800  44,400 92,300 878,400 872,200 461,100	regular full-time teachers  3,111,900  2,941,300 170,600  91.3  918,000 91.3  918,000 92.5 372,400 93.3 633,000  92.9  1,464,900 95.2 889,800 95.3 185,800  91.9  44,400 85.8 92,300 878,400 90.9 878,400 90.9 878,200 92.9  461,100  94.1	Number of regular full-time teachers         Percent of teachers who are regular full-time teachers         Required by contract to work           3,111,900         92.9         38.2           2,941,300         93.0         38.1           170,600         91.3         39.8           918,000         93.4         38.1           1,188,500         92.5         37.9           372,400         93.3         38.9           633,000         92.9         38.6           1,464,900         90.8         38.1           571,400         95.2         38.2           889,800         95.3         38.2           185,800         91.9         38.8           44,400         85.8         38.2           92,300         87.0         38.5           878,400         90.9         38.1           872,200         92.9         38.3           461,100         94.1         38.2	Number of regular full-time teachers who are regular full-time teachers full-time teachers full-time teachers to work to work to work to work and the teachers and the teachers to work to work and the teachers and the total points and the teachers to work to work and the teachers and the total points and the teachers to work to work and the teachers and the total points and the teachers to work to work and the total points and the teachers to work to work and the teachers and the total points and the teachers to work and the teachers and the teachers to work and the teachers to work and the teachers to work and the teachers and the teachers to work and the teachers and the teachers to work and the teachers and

<sup>1</sup> Excludes time spent planning and monitoring students outside of class.

NOTE: A regular full-time teacher is any teacher whose primary position in a school is not an itinerant teacher, a long-term substitute, a short-term substitute, a student teacher, a teacher aide, an administrator, a library media specialist or librarian, another type of professional staff (e.g., counselor, curriculum coordinator, social worker) or support staff (e.g., secretary), or part-time teacher. Detail may not sum to totals because of rounding and because some data are not shown.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Teacher and Principal Survey (NTPS), "Public School Teacher Data File," 2015–16. <a href="https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2017072rev2">https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2017072rev2</a>



<sup>2</sup> Includes hours spent during the school day, before and after school, and on weekends.

#### Conclusions

- Concurrent cognitive interviewing can contextualize survey data
  - Question sensitivity can change
  - Real trends may be shown or masked
  - "Extreme" values may be valid depending on changing context
- Collecting contextual information, whenever possible, is critical for reporting and analysis
  - Data can be compared by school context
  - Trends can compare past school years to the overall 2020-21 school year or subsets



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https://nces.ed.gov/surveys/ntps/

