Data Management and the Pandemic

**Issue:** Many state and local education agencies (SEAs and LEAs) are challenged by the current situation, given that education agency staff are not experts in pandemic data management and do not have prior experience with similar situations. Also, more pressing needs, such as providing students with food and technology support, have taken precedence over data-related matters.

**Discussion Questions:** How is your agency approaching data management and ensuring that essential data are collected during the pandemic?

SEA members shared the following data management challenges and strategies for managing data during the pandemic:

- SEAs are curtailing data collections, waiving requirements, and modifying reporting requirements so LEAs can focus on current challenges at the local level. Even though SEAs are scaling back on data collections, agencies know that some required data collections must continue for federal and state funding. SEAs are trying to balance the need for timely data and the needs of LEAs for additional time to collect and report data. Specific modifications, waivers, and changes include:
  - waiving 180-day school term requirements;
  - waiving business rules for membership days;
  - waiving instructional day and hour requirements;
  - waiving a requirement that students be dropped after 10 days of absences;
  - prorating counts based on in-person instruction days;
  - making sure that LEAs were held harmless for any missed days after schools were closed; and
  - determining what changes incurred the least harm on data systems and collections.

- SEAs are modifying reporting requirements due to the pandemic. However, because any changes will only be applicable on a temporary basis, data collection systems are not subject to such modification.

- SEAs are taking different approaches towards data (such as attendance, enrollment, and seat time) that are required for funding decisions. These data may be collected without being used for funding decisions; in other cases, SEAs may use the data collected from SEAs through conference calls, surveys, and other means to make decisions about allocation of funds.
Some data, such as assessment scores, are not available for school year (SY) 2019-20. One concern is stakeholders requesting data that SEAs do not have.

LEA members shared the following data management challenges and strategies for managing data during the pandemic:

- LEAs are focused on data challenges related to attendance and grades. Different approaches include
  - collecting grades for the last quarter to make decisions;
  - collecting attendance based on assignment completion, rather than seat time;
  - developing clear data definitions for common measures, such as measuring attendance during virtual learning time based on instructional minutes; and
  - providing students in grades 9-11 the option of choosing between a grade of pass/no credit or a numeric grade for spring 2020 semester courses (many students opted to take the grade they would’ve received on the last day of in-person instruction, which can complicate attendance).

- Low-income data has also been a challenge.

Student progression has been hindered during extended school closures. LEAs are supporting teaching and learning by

- providing an online learning management system (LMS);
- implementing an assessment for measuring achievement and growth to identify individual student learning gaps;
- developing training expectations for online teaching; and
- training teachers on the new norms for distance learning.

**Data Quality**

**Issue:** Given the lack of time, planning, and infrastructure necessary to effectively transition to remote learning and working, data that are currently being collected may have quality issues and poor data quality could compromise the future use of data.

**Discussion Questions:** What strategies and policies can help agencies ensure that data quality is maintained during the pandemic? Has your agency implemented any new data policies or procedures to help maintain data quality while working remotely? How can data-informed decisionmaking account for potential variances in data quality?

Members shared the following data quality challenges:

- While end-of-year data reporting is not particularly time-sensitive, it has become an issue now that staff are out of the office for summer vacation.
- There is some concern regarding whether parents are completing work on behalf of their students. Academic integrity could be an issue during the next school year if students complete assessments virtually.

SEA members shared the following strategies for maintaining data quality during the pandemic:

- Concentrate on data elements that are required by law.
• Communication and follow-up are critical to ensuring data quality.
• Proactively contact LEAs about required data, including data required by federal and state law and financial information data.
• SEAs may hold virtual data conferences with LEAs to discuss data requirements and answer questions.
• Lengthen LEA deadlines for data submissions and extensions.
• Continue using past data processes while working remotely.
• SEAs may opt to make no changes to official documentation to keep LEAs from making long-term changes to their data systems that will only be applicable on a temporary basis.
• Ensure that all data tools, including validation checks, work correctly.
• SEAs can maintain LEA data quality review processes. For example, LEAs can share data with the SEA for review, the SEA can review the aggregate LEA data, then the SEA can share feedback with LEA so any potential issues can be corrected before the LEA submits the data.
• SEAs can proactively contact LEAs to provide timely feedback if data quality issues are present.
• Use data collections for multiple purposes; for example, subsidy data from an April data collection might be used in place of data that would have normally been collected in May as part of an assessment data collection.
• Set up a comprehensive webpage with resources for school communities during COVID-19 that includes information for data collection and reporting during the pandemic.
• Implement data quality strategies for SY 2020-21 to prepare for the pandemic’s potential impact on schools.

LEA members shared the following strategies for maintaining data quality during the pandemic:
• Use all available methods to validate and cross-validate data.
• A proctoring service could be used for students whose academic integrity has been identified as an issue.

LEA members discussed the quality of student attendance and engagement data:
• LEAs are trying to track several data elements for internal use at the local level, including attendance, behavior, and student and teacher engagement.
• It has been difficult to determine how to measure, track, record, and report out attendance and engagement data because these different measures are not easily comparable.

SEA members discussed the quality of student attendance and engagement data:
• LEA attendance definitions and reporting need to align to state attendance guidelines and policies for remote learning. SEAs may re-evaluate and adjust remote learning policies and procedures for continued use moving forward into 2020-21. In this event,
SEAs should keep LEAs abreast of all state-level changes, and advise that it may be necessary to make changes in turn at the local level.

- SEAs may attempt to lighten the burden on LEAs by stopping the collection of state-level data that cannot be easily collected at the local level when not all students can access remote learning, such as attendance and behavior. While these decisions to stop data collection are intended to be helpful, SEAs are then unable to respond to requests for information on student attendance and engagement.

Several SEAs shared how remote work is impacting themselves and their agencies:

- The transition to working remotely went well for SEA staff who had previous experience working remotely and agencies whose data systems are accessible online.
- Maintaining established processes and communication lines is critical. Working remotely doesn’t mean that communication suffers.

**Attendance Data**

**Issue:** Defining, collecting, and using attendance data has been challenging during extended school closures.

**Discussion Questions:** What guidance or recommendations on attendance data should SEAs or the federal government provide to LEAs?

SEA members shared their agencies’ approaches to tracking attendance during the pandemic:

- Agencies are focused on attendance and ways to collect attendance data with different learning models. Chronic absenteeism is also an issue.
- In some states, LEAs define and count attendance at the local level.
- Existing rules for attendance in online charter schools have served as models for some SEAs. For instance, such a rule may require at least two “check-ins” per week; under the terms of this rule, a student contacting the school would count as one check-in and the school responding would count as the second check-in. This rule does not create meaningful attendance reporting, and it’s unclear whether the rule applies to how public schools are tracking attendance during the pandemic.
- Some LEAs established digital learning plans several years before the pandemic. These plans address how to engage students in online or blended learning, and what to do if students aren’t engaged and/or don’t have internet access.

LEA members shared their agencies’ approaches to tracking attendance during the pandemic:

- Some states are trying to apply quarter-day attendance requirements (which count ¼, ½, ¾, and full-day attendance) to distance learning. However, the lack of flexibility in counting quarter-day attendance is difficult to implement. It is particularly challenging in asynchronous learning environments and smaller LEAs that don’t have a robust LMS with the ability to track minutes logged-in.
- Virtual learning attendance during the first semester of SY 2020-21 may be counted by SEAs for full-time equivalent (FTE) funding.

Members shared some of the challenges to and strategies for supporting student attendance in virtual learning environments:
• Bandwidth is an issue for certain states and districts. Home internet speeds, especially in rural areas and tribal areas, do not support the use of a webcam.

• Agencies are looking into or providing assistance to support student internet access, such as
  o expanding fiber-optic networks to communities without high-speed internet;
  o procuring internet hotspots for families to use;
  o using school buses as mobile hotspots; and
  o purchasing mobile Wi-Fi hotspots for families.

Members discussed the differences between attendance, engagement, and membership:

• Some SEAs and LEAs are tracking engagement instead of attendance, but these are two separate measures. Attendance measures the presence or absence of a student in a school setting, while engagement measures how much time and effort students are investing in learning tasks and activities.

• Attendance and membership are sometimes confused, as well as excused and unexcused absences.

• Remote proctoring services can help monitor engagement and protect academic integrity in online learning environments.

• Students can be physically present for in-person and online learning, but that doesn’t mean students are engaged. A disengaged student in-person may put their head down on their desk while in-class; similarly, a disengaged student online may turn off their webcam during a synchronous class session.

• There is also a concern about teacher engagement in online learning. Some teachers are more ambitious than others in what they provide to students online.

Members discussed the need for common definitions and guidance on attendance data:

• Funding is tied to attendance in a lot of states.

• A common definition of attendance is important because these data are needed to meet several federal requirements, including the Every Student Succeeds Act (ESSA), school report cards, and the Civil Rights Data Collection (CRDC).

• Members expressed interest in knowing whether chronic absenteeism will be required for SY 2019-20 and 2020-21 report cards.

• The *Forum Guide to Collecting and Using Attendance Data* is designed to help SEA and LEA staff improve their attendance data practices. An appendix or supplementary publication could discuss attendance in remote and virtual learning environments.

**Student Registration Information**

**Issue:** The pandemic has highlighted the need to collect and maintain more comprehensive student registration information.

**Discussion Topic:** What methods can be used to review and update comprehensive registration data? What are the potential uses of student address data, and what are the privacy implications of using student address data?
LEA members shared their agencies’ approaches to student registration during the pandemic:

- To move the registration process online, LEAs need resources and an online platform for collecting comprehensive registration information.
- Many LEAs are providing a full-time distance learning option, which can influence the decision to use online registrations. Some LEAs have created virtual schools for students who reside within district boundaries and would prefer to opt-out of in-person instruction for SY 2020-21.
- Drive-through enrollment events in the summer months are an option embraced by some LEAs, even agencies with longstanding online registration systems.
- Rapid conversion from paper/PDF registration to online registration has its own set of challenges. LEAs where students may opt for online learning only are able to set up the needed online registration systems quickly; however, this does not leave enough time to link the system to the district’s student information system (SIS), or to build in data quality checks. LEAs that proceed in this way are aware of the effects on data quality and are planning steps to integrate and validate the data in the future.
- LEAs with multiple reopening options for families (in-person at the students enrolled school; online instruction through the student’s enrolled school; enrollment in a 100% online school) have found that an online registration process helps to maintain accurate data for all three options. The second option will keep the student connected and enrolled in their school, so these data will be important.
- Conversely, LEAs in which families must pay student fees may find in-person registration more suitable for collecting these fees.
- LEAs have encountered complications with Kindergarten registration, which typically occurs in the spring; the pandemic made its initial strong impact at the same time in 2020, resulting in low enrollment counts in some districts. In addition, Kindergarten students may be required by the state to complete a test in the first 30 days of the school year, making timely and accurate enrollment data all the more crucial.

Coronavirus Aid, Relief, and Economic Security (CARES) Act funds have provided means for SEAs to furnish all LEAs with an online registration platform for a set period of time. Some LEAs may not take advantage of this offer, potentially because they would need to pay for the service after this time has expired.

Several agencies have used address data to support student connectivity and food distribution:

- LEAs have used geographic information systems (GIS) and student address data to identify neighborhoods where Wi-Fi access is poor and distribute hotspots in those areas. They have also used address data to figure out where to set up food distribution sites.
- SEAs with missing or incomplete address data for a number of students enrolled in the state have still been able to use what address data they do have to tally the number of students in areas with poor internet connectivity. Some SEAs in this position have recently committed to share town-level information with other state agencies in order to provide CARES Act-funded Pandemic Electronic Benefits Transfer (P-EBT) to families.
E-mail addresses tend to stay consistent for longer than phone numbers or addresses.

**Post-Pandemic Data Needs**

**Issue:** There may be a need for information and support regarding data that will be needed once the pandemic is over.

**Discussion Topic:** What new data policies and procedures will be needed to help address post-pandemic data needs? What data will be needed to answer future questions? What bridges will be needed for longitudinal data?

Members identified the following types of data that will be needed during and after the pandemic, but cautioned that it is difficult to know what data will be important for future needs, including:

- data on learning gaps, including value-added and growth data, so teachers can accelerate (not remediate) learning;
- registration and enrollment data;
- information on students related to instructional format (in-person, online, or blended), including the percentage of student enrollment in-person versus online;
- translation services that might be needed for students who are learning online—this is particularly important data for English learner (EL) programs; and
- data on which online tools and apps teachers use (agencies will need this data to evaluate the use and effectiveness of new tools and apps that staff have started using since the pandemic began).

Members mentioned that some data that will be needed during and after the pandemic are missing or incomplete:

- Teacher/employee evaluation models that incorporate the last three years of data will be missing a year of data.
- Since waivers for SY 2020-21 are not being considered at this time, assessment and accountability data is a challenge since many students will still be learning at home, and data from end-of-year assessments are not available from SY 2019-20. Graduation data will also be impacted because many SEAs and LEAs waived end-of-year assessment requirements in graduation policies.
- LEAs may use new benchmark assessments at the beginning of the year to gauge learning gaps and address missing assessment data. Groups convened to address gaps in assessment data and skip year methods for its growth model are also viable options.
- Educations research centers have previously been helpful to LEAs needing to handle missing years of data in student growth calculations. Similar approaches could be helpful for assessment data that were not collected due to the pandemic.

Members also discussed reopening schools during SY 2020-21:

- Some SEAs are engaging research organizations to investigate how stakeholders feel about returning to school.
- Several SEAs are requiring LEAs to submit their plans for SY 2020-21, but these SEAs are not approving/denying plans or requiring LEAs to reopen.
Other Issues

Members shared the following:

- Forum members are interested in knowing what data will be required for upcoming federal collections, including EDFacts, so they can plan for upcoming changes that will need to be made.

- In response to the pandemic, NCES has created a webpage with a sampling of relevant data, resources, and tools to answer questions that students, parents, educators, and researchers might have (https://nces.ed.gov/programs/coronavirus/).