Forum Guide to Virtual Education Data: A Resource for Education Agencies
National Forum on Education Statistics

**Mission:** To plan, recommend, and develop education data resources that support local, state, and national efforts to improve prekindergarten through secondary education throughout the United States.

**Members:**
- Representatives of state and local education agencies (SEAs and LEAs)
- Representatives of offices of the U.S. Department of Education and other federal agencies
- Associate members from U.S. territories, Regional Educational Laboratories (RELs), and national education associations
Virtual Education Working Group

Purpose of the working group

• Build upon the 2016 Forum Guide to Elementary/Secondary Virtual Education.

• Share lessons learned by SEAs and LEAs during the COVID-19 pandemic.

• Incorporates new content in this rapidly emerging area.
Chapters
1. Virtual Education
2. Virtual Education Data: Opportunities, Challenges, and Best Practices in States and Districts
3. Virtual Education Data Elements
4. Virtual Education Data Use
5. Policy Questions and Common Practices

Appendices
A. Examples of SEA and LEA Policies
B. SEA Virtual and Distance Learning Websites
Purpose of the Resource

To help agencies collect data in virtual education settings, incorporate the data into governance processes and policies, and use the data to improve virtual education offerings.
Chapter 1: Virtual Education

• Examines the role of virtual education in the changing world of elementary and secondary education.
• Reviews commonly used virtual education terminology.
• Discusses the importance of high-quality data for informing policy.
Virtual education is defined as instruction during which students and teachers are separated by time or location, or both, and interact via internet-connected computers, tablets, or other electronic devices.
• There is widespread use of education technology within many physical classroom settings.

• Online resources and access to technology devices have enabled the expansion of virtual education.

• Virtual education ranges from partially online coursework to 100 percent virtual programs and schools.

• Many schools adopted some form of virtual education to ensure learning continuity during extended school closures caused by the COVID-19 pandemic.
Access to devices and resources outside of the classroom is essential for virtual education.

**Technology equity**
Increasing all students’ access to the Internet and devices, with a focus on removing barriers that students face.

**Technology accessibility**
Ensuring that students with disabilities have equal opportunity to benefit from virtual education technology, as well as equal treatment in the use of such technology.
Organizational Structure of Virtual Education

• Virtual education may be delivered by virtual schools or by traditional in-person schools.

• SEAs and LEAs often must develop or clarify policies for virtual education, including
  • student data responsibilities;
  • teacher of record determinations and assignments;
  • teacher credentials requirements; and
  • funding allocations.
Policy Implications at Different Levels

• **State:** Credentialing policies boundaries may disqualify virtual education teachers within one state, even though they may be considered qualified in another.

• **District:** Policymakers determine which technologies are available for virtual education in schools and classrooms.

• **School:** Policies may limit the number of students and teachers participating in virtual coursework.

• **Classroom:** Decisions to adapt online materials for special populations might affect access to and equity of resources.
Chapter 2: Virtual Education Data: Opportunities, Challenges, and Best Practices in States and Districts

- Identifies opportunities available through virtual education data.
- Discusses some of the data challenges that have emerged during the widespread adoption of virtual education.
- Identifies best practices that address those challenges.
Opportunities Available Through Virtual Education Data

Virtual education data can provide

• precise information on student skills and knowledge;
• teachers with immediate feedback; and
• a better understanding of how a student arrived at a decision.
Best Practices for Collecting High-Quality Virtual Education Data

• Use voluntary data interoperability standards and codes.
• Establish internal governance and collaboration processes.
• Proactively identify priorities for data collection and create if-or-when scenarios.
• Prepare virtual education data elements for rapid deployment and timely implementation.
• Coordinate data collection requirements and timelines.
• Ensure that all grade levels have consistent expectations for student grades, attendance, and performance indicators.
Chapter 3: Virtual Education Data Elements

Offers an overview of commonly used elements to collect virtual education data.
**Categories of Virtual Education Data Elements**

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Chapter 4: Virtual Education Data Use
Policy Questions and Common Practices

Discusses policy questions and common practices that are intended to aid education agencies as they develop data elements and systems that will capture essential information on virtual education, improve the quality of data available on blended, or hybrid, learning, and provide information on the interaction between virtual and traditional learning environments.
1. **School Identification/Classification:** Information used to identify a public school or other education institution, agency, or organization providing teaching and learning or education services to students.

2. **School Governance:** The entity or institution responsible for oversight and policy decisions for an education organization.

3. **Accreditation:** Information on the accreditation status and accrediting institution of any entity offering virtual education services to local students.

4. **Contact Information:** Information used to communicate directly with an organization, institution, or person.

5. **School Location:** Information used to identify the physical location(s) and business address(es) of a virtual school.

6. **School Enrollment:** Information used to describe a school’s enrollment.

7. **School Calendar:** Information about the days and times a school is accessible for student instruction.
8. **Course Information:** Information on the organization of instructional subject matter and related learning experiences provided on a regular or systematic basis, usually for a predetermined period (such as a semester), to people or groups of students.

9. **Course Section Information:** A setting for providing organized instruction of course content to one or more students (including cross-age groupings) for a set period.

10. **Learner Activities and Resources:** Within a class, information that is used to describe a topic or theme taught during a specified period and the resources used to support learning.

11. **Academic Achievement and Accountability:** Information that is used to measure and report learning.

12. **Reporting Information:** Information used to describe academic performance of schools and districts.

13. **Safety and Discipline:** Information that is used to document the occurrence of safety and discipline incidents.
14. **Student Demographic Information:** Descriptive information that is used to identify a student participating in an educational experience, including the student’s name, background, and other vital identifying information.

15. **Student Enrollment/Exit Information:** Enrollment information concerns the entry or re-entry of students into a school, including their status and classification upon admission. Exit information concerns a student’s exit or withdrawal from a class, grade, or school.

16. **Student Attendance Information:** Information that is used to describe a student’s presence, absence, and tardiness in class or school.

17. **Student Participation/Performance Information:** Information about student involvement and achievement in organized subject matter and related learning experiences (including programs, courses, and classes).

18. **Student Progress Information:** Information about credit earned and academic progress during a given grading period, session, school year, or career.

19. **Student Disability Information:** Information about a student’s health or disability status that is relevant to service, placement, or accommodations decisions.
20. **Staff Member Information**: Information that identifies people who perform services for any public or private education institution or agency that provides instructional or support services to students, including name, background, and other vital information.

21. **Staff Member Employment Status**: Information about the circumstances, conditions, and agreements of a person’s employment at an organization.

22. **Staff Member Employment Credentials**: Information about any active certificates, licenses, permits, or other credentials that authorize a holder to perform certain functions or make certain claims about competence in an employment or assignment.

23. **Staff Member Assignment Information**: Information related to a staff member’s job classification, including the scope and timing of assignments, as well as their work location, schedule, and workload.

24. **Staff Member Attendance Information**: Information about a person’s absence from duty assignments.

25. **Staff Member Professional Development**: Information about a person’s training and professional development (PD).
Contributions From States and Districts

The guide includes short case studies and vignettes that address a variety of topics:

- District policies for online and distance learning
- Remote learning planning considerations
- Closing schools to avoid COVID-19 exposure
- Adapting to changing conditions
- Shifting to virtual learning
- Ensuring learning continuity
- Proctoring virtual assessments
- Using historical data modeling to inform grading policies
- Collecting digital learning data
- Closing the digital divide
- Distributing technology devices
- One-to-one computing
The Bottom Line

• In summary, as virtual education opportunities expand, there is a need for new and existing data on virtual education.

• Addressing policy questions and then implementing data best practices can help inform stakeholder decisionmaking about virtual education.

• Updating education data systems to reflect the current needs of virtual education will improve the quality of data available to inform decisionmaking.
Forum Resources

Forum Guide to Virtual Education Data: A Resource for Education Agencies
https://nces.ed.gov/forum/pub_2021078.asp

For more information about the Forum, please visit https://nces.ed.gov/forum/index.asp.

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