Forum Guide to Elementary/Secondary Virtual Education Data

Dean Folkers, Nebraska Department of Education
Allen Miedema, Northshore School District (WA)
Jay Pennington, Iowa Department of Education
Adrian L. Peoples, Delaware Department of Education
Dawn Gessel, Putnam County Schools (WV)
Presentation Outline

- National Forum on Education Statistics
- Forum Guide to Elementary/Secondary Virtual Education Data
- Practitioner Perspectives on Virtual Education
- Q&A
National Forum on Education Statistics

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

Members:

• Representatives of offices of the U.S. Department of Education and other federal agencies
• Representatives of state and local education agencies (SEAs and LEAs)
• Associate members from U.S. territories, Regional Educational Laboratories (RELs), and national education associations
Forum Resources

Forum resources are available online: http://nces.ed.gov/forum/

- Best-practice publications
- Online courses
- Videos
- Newsletters
- Outreach materials
Forum Virtual Education Working Group

Purpose of the working group

• Review the 2006 Forum publication

• Identify virtual education data collection challenges

• Explore data needs

• Develop a resource that offers best practices for building, modifying, and updating data systems to incorporate virtual education data
Forum Guide to Elementary/Secondary Virtual Education Data

Chapters
1. Virtual Education
2. Virtual Education Data
3. Virtual Education Data Use Policy Questions and Common Practices

Appendices
A. Examples of SEA and LEA Policies
B. SEA Virtual and Distance Learning Websites
C. Suggested Elements for Virtual Education Data System
Purpose of the document
To assist SEAs and LEAs as they
• consider the impact of virtual education on established data elements and methods of data collection; and
• address the scope of changes, the rapid pace of new technology development, and the proliferation of resources in virtual education.
Chapter 1: Virtual Education

• Examines the role of virtual education
• Reviews commonly used terms
• Discusses the importance of high-quality data
• Identifies challenges and opportunities
• Suggests methods for modifying traditional data definitions
What is Virtual Education?

There is no clear, uniform definition of “virtual education.” It may include:

- Remote education
- Distance learning
- Online learning
- Distributed learning
- Home-based virtual instruction
- Open learning
- Networked learning
- Online learning
- Cyber education
- Blended learning
- Digital learning
- Computer-based learning
- Web-based education
For our purposes, “virtual education” is defined as:

*instruction during which students and teachers are separated by time and/or location and interact via internet-connected computers or other electronic devices.*
Developments in Education Technology and Virtual Education

• 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% virtual programs and schools.

• Many schools are currently transitioning to virtual education to ensure learning continuity during extended school closures.
Organizational Structure of Virtual Education
Key Concepts and Terms

**Pacing:** The rate of advancement or progress through academic content.
- Synchronous Pacing
- Asynchronous Pacing
- Combined Synchronous/Asynchronous Pacing

**Instructional techniques:** Approaches to teaching and learning.
- Individualization
- Differentiation
- Personalization
Virtual Education Data

*Existing data systems* that are capable of providing high-quality data for accountability and decisionmaking *may not be able to accommodate virtual education data systems* that are not aligned along traditional administrative, instructional, and policymaking channels.
Challenges to Collecting High-Quality Virtual Education Data

- Variation among SEAs and LEAs
- Data management and governance challenges
- Variations in data collection timelines
- Tracking student progress and pace
- Flexibility in grade levels and school assignments
- Capturing relevant virtual education data
- Distinguishing instructional time from homework
- Traditional concepts of course duration or structure
- Lack of high-quality data for evaluation
- Established structures/cultures
- Integrating virtual education data and other data systems
Opportunities Available Through Virtual Education Data

- Easier implementation of tailored education
- Increased ability to award credit for subject mastery
- More precise information and new data on student learning
- Real-time feedback
Chapter 2: Virtual Education Data

• Identifies three categories of data elements commonly used in virtual education data systems:
  • K-12 virtual and blended data elements
  • Organizational responsibility data elements
  • Data elements applicable to both traditional and virtual education credit and achievement
Common elements that identify K-12 virtual and blended data include the following:

• Virtual Indicator
• Course Interaction Mode
• Blended Learning Model Type
• Course Section Instructional Delivery Mode
Organizational Responsibility Data Elements

Data elements that help to clarify organizational responsibilities include the following:

- Responsible Organization Identifier
- Responsible Organization Type
- Responsible Organization Name
- Responsible District Identifier
- Responsible District Type
- Responsible School Identifier
- Responsible School Type
Traditional and Virtual Course Credit and Achievement Data Elements

Data elements that help to accurately track both traditional and virtual education methods include the following:

• Course Credit Units
• Achievement Criteria
• Competency Set Completion Criteria
• Competency Set Completion Criteria Threshold
• Course Section Time Required for Completion
Chapter 3: Virtual Education Data Use Policy Questions and Common Practices

Provides

• a list of topic areas for consideration;
• real world examples;
• policy questions;
• common best practices; and
• links to data elements.
Topic Areas: Part I

School
1. School Identification/Classification
2. School Governance
3. School Accreditation
4. School Contact Information
5. School Location
6. School Enrollment
7. School Calendar

Curriculum and Learning Environment
8. Course Information
9. Course Section Information
10. Unit Information, Learner Activities, and Resources
11. Content Governance and Accountability
12. Reporting Information
13. Safety and Discipline
Topic Areas: Part II

**Students**
14. Student Information  
15. Student Enrollment/Exit Information  
16. Student Attendance Information  
17. Student Participation/Performance Information  
18. Student Progress Information  
19. Student Disability Information

**Staff**
20. Staff Member Information  
21. Staff Member Employment Status  
22. Staff Member Employment Credentials  
23. Staff Member Assignment Information  
24. Staff Member Attendance Information
Example: A student took English I in 9th grade at a virtual school... Unfortunately, the virtual school curriculum was not aligned to state standards.

Policy Questions:

• Does your curriculum framework or standard apply to virtual coursework?
• Do your organization’s required content assessments apply to virtual coursework?
• Can students acquire exceptions to curriculum framework and assessment requirements (e.g., for transferred coursework)?
• Can you map transferred course information, including credits, to your organization’s course classification system?
Common Practices:

- Course codes and coding systems need to be coordinated between institutions for transfer credit data to be meaningful.

- Organizations must be aware of differences in terminology and the effects on data when transferring information between organizations.

- School Courses for the Exchange of Data (SCED) is a voluntary, common classification system for prior-to-secondary and secondary school courses.
Appendices

• Examples of SEA and LEA Policies
• SEA Virtual and Distance Learning Websites
• Suggested Elements for Virtual Education Data System
Practitioner Perspectives

Allen Miedema, Northshore School District (WA)
March – April School Closures
Continuous Learning Options
• Voluntary
• Required
• Combination

Practitioner Perspectives

Jay Pennington, Iowa Department of Education
LEAs given two weeks to develop remote learning plans.

Key decision points affecting plan:

- One-to-one device access
- Internet access (rural areas)
- Synchronous vs. asynchronous instruction delivery
- Synchronous vs. asynchronous office hours
Practitioner Perspectives

Dawn Gessel, Putnam County Schools (WV)
Practitioner Perspectives

Dean Folkers, Nebraska Department of Education
Information and Resources

Forum Guide to Elementary/Secondary Virtual Education Data
https://nces.ed.gov/forum/pub_2016095.asp

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

For more questions about Forum publications and resources, contact Ghedam Bairu at ghedam.bairu@ed.gov.