FORUM GUIDE TO
ELEMENTARY/SECONDARY
VIRTUAL EDUCATION

National Cooperative Education Statistics System

The National Center for Education Statistics established the National Cooperative Education Statistics System (Cooperative System) to assist in producing and maintaining comparable and uniform information and data on early childhood education and elementary and secondary education. These data are intended to be useful for policymaking at the federal, state, and local levels.

The National Forum on Education Statistics, among other activities, proposes principles of good practice to assist state and local education agencies in meeting this purpose. The Cooperative System and the National Forum on Education Statistics are supported in these endeavors by resources from the National Center for Education Statistics.

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Task force members review all products iteratively throughout the development process. Documents prepared, reviewed, and approved by task force members undergo a formal public review. This public review may consist of focus groups (of representatives of the product's intended audience), review sessions at relevant regional or national conferences, or technical reviews by acknowledged experts in the field. In addition, draft documents are posted on the Forum website prior to publication so that other interested individuals or organizations can provide feedback. After task force members oversee the integration of public review comments and review the document a final time, all publications are subject to examination by members of the Forum standing committee sponsoring the task force. Finally, the entire Forum (approximately 120 members) must review and vote to formally approve a document prior to final publication.

ACKNOWLEDGMENTS

PREFACE

Dear reader:

As the members and staff of the State Educational Technology Directors Association (SETDA) surely know, technology is changing the face of education. Virtual education, for example, offers opportunities and possibilities unknown to educators even a decade ago—but it also presents challenges, particularly in terms of the quality of information collected and reported about this new and exciting instructional pathway. Put simply, traditional education data systems were built for traditional schools, and they will need to be modified to produce accurate and useful information about activities not constrained by a brick-and-mortar setting or a seven-period class day.

The National Forum on Education Statistics traditionally responds to such a need in the education community by convening a group of experts, including local practitioners and state and national policy leaders, to develop a resource that provides "best practice" guidance for education decisionmakers. The *Forum Guide to Elementary/Secondary Virtual Education* certainly follows this model in terms of meeting a need and reflecting the expertise of local, state, and national leaders in the field. This publication, however, extends far beyond the current needs of practitioners by anticipating how virtual education will affect future data collection, reporting, and policymaking. It provides guidance for education organizations deciding how to maintain information about students and teachers engaged in virtual education—and links these data issues to policy issues that should be addressed prior to managing, operating, and evaluating virtual education initiatives. Thus, by adopting recommendations in the document, education organizations can improve the quality of both their data and their efforts to effectively manage virtual education services.

I encourage you to read and implement guidance presented in this resource, then pass it along to colleagues in your school, district, or state. This will most certainly help improve the quality of virtual education data and policymaking, now and in the future.

Sincerely,

Mary Ann Wolf
Executive Director
State Educational Technology Directors Association (SETDA)

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FOREWORD

The National Forum on Education Statistics is pleased to introduce the *Forum Guide to Elementary/Secondary Virtual Education.* This guide provides recommendations for collecting accurate, comparable, and useful data about virtual education in an elementary/secondary education setting. Its goals are to:

• identify components common to many education information systems that are necessary to meet the information needs of policymakers, administrators, instructors, and parents involved in virtual education;

• highlight specific data elements relevant to the delivery, management, and oversight of virtual education;

• identify commonly accepted data element definitions that may need to be modified to more accurately reflect the unique circumstances and information needs of virtual education;

• present policy considerations related to managing information about virtual education; and

• illustrate how complex issues related to virtual education data may play out in a real-world setting.

Realizations about Traditional Education Data in a Virtual World

• Some conventional data elements cannot be applied to a virtual education setting without modification (e.g., seat time, instructional minutes, location of services).

• Some conventional data collection practices need to be reconsidered to accurately portray virtual education (e.g., student enrollment counts based on physical presence in school on a single day).

• Some common policy choices have significant implications for virtual education practices (e.g., recognizing teaching licenses across jurisdictions may affect whether virtual classes are taught by "highly qualified" teachers).

• Some education data systems are not yet able to accommodate virtual education in its various models (public, private, and charter schools) and modes (mixed virtual and traditional classes versus a completely virtual setting), or distinguish between students enrolled in virtual schools, programs, and courses.

Who Developed this Guide?

The *Forum Guide to Elementary/Secondary Virtual Education* is the product of a collaborative effort between members of the National Forum on Education Statistics (the Forum), the State Educational Technology Directors Association (SETDA), and the Schools Interoperability Framework Association (SIFA). The local, state, and federal education agency representatives who are members of these organizations recognize that investing in the accurate collection, maintenance, and reporting of virtual education data is both a sound pedagogical and wise management decision.

• *National Forum on Education Statistics:* The National Forum on Education Statistics is comprised of representatives of state and local education agencies, offices of the U.S. Department of Education, other federal agencies, and national associations with an interest in education data. The Forum's mission is to develop and recommend strategies for building an education data system that will support local, state, and national efforts to improve public and private education throughout the United States. Visit *http://nces.ed.gov/forum* for more information about the Forum.

• *State Educational Technology Directors Association:* The State Educational Technology Directors Association (SETDA) is the principal national association representing state directors for educational technology. It promotes national leadership in educational technology, encourages lifelong learning, provides professional development for state education technology directors, and builds partnerships that advance learning opportunities—all with an ultimate goal of improving student achievement through technology. Visit *http://www.setda.org* for more information about SETDA.

- *Schools Interoperability Framework Association:* The Schools Interoperability Framework Association (SIFA) is a nonprofit membership organization comprised of over 300 school districts, state education agencies, software companies, and other organizations—all collaborating to create a set of rules and definitions that enable software programs from different vendors to share information. Implementing products that conform to the "SIF Implementation Specification" makes it possible to share data without additional programming by local schools, districts, or states. SIFA's goal is to make it possible for school administrators, teachers, and other school staff to have secure access to the most current and accurate education data available. Visit *http://www.sifinfo.org* for more information about SIFA.

Who Should Read this Guide?

This publication was written primarily for staff in state and local education agencies, including policymakers, data management professionals, curriculum coordinators, and technology coordinators. Software developers and other vendors, staff in private schools, and the parents of children schooled at home may also find it useful. In addition, any organization or individual incorporating virtual education into an education data system will find this information valuable.

This guide is a reference tool. It does not represent a federal mandate and is not a data collection instrument. Readers may modify recommendations to meet their needs, including customizing content for state and local education data systems.

Document Organization

This guide is organized into two chapters and three appendices, as described below.

Chapter 1. Virtual Education: Changing Education and Education Data
This chapter examines the role of virtual education in the changing world of elementary and secondary education. It also reviews commonly used virtual education terminology, discusses the importance of high quality data for informing policy, and recommends modifying traditional education data definitions and systems to better reflect a virtual education setting.

Chapter 2. Recommendations for Virtual Education Data Elements
This chapter provides detailed information about organizing and updating data systems and data elements to meet the information demands of the virtual education environment. Data elements are categorized by domain and topic area. Additional guidance is provided in the form of policy considerations, usage recommendations, and examples of real world application.

Appendix A. Data Element Definitions
Appendix A presents names, definitions, and code lists for data elements referenced throughout this publication, as originally available in the *NCES Handbooks Online,* Version 4.0 *(http://nces.ed.gov/programs/handbook/index.asp).*

Appendix B. Data Elements Related to Student Services and Security in a Virtual Environment
Appendix B summarizes legal and security issues related to ensuring and improving student services and safety in a virtual setting.

Appendix C. References and Other Resources
Appendix C lists other resources related to virtual education and education data quality, including materials available from the National Forum on Education Statistics, the National Center for Education Statistics (NCES), and other organizations.

Glossary

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Disclaimer: Virtual education is an evolving enterprise.
Therefore, recommendations presented here may change over time.

CHAPTER 1.
Virtual Education: Changing Education and Education Data

This chapter examines the role of virtual education in the changing world of elementary and secondary education. It also reviews commonly used virtual education terminology, discusses the importance of high quality data for informing policy, and recommends modifying traditional education data definitions and systems to better reflect a virtual education setting.

Introduction

The Internet has revolutionized all facets of our society, including education. By 2004, 91 percent of public schools had Internet access in one or more classrooms,[1] and 77 percent reported that at least half of their teachers used the Internet for instruction.[2] During the 2002–03 school year, 36 percent of public school districts enrolled a total of more than 328,000 students in technology-based distance education courses.[3] Most reviews of education trends show a dramatic increase in both the capacity and use of technology in our schools. In fact, at least 22 states had established "virtual" schools by the 2004–05 school year.[4]

"Virtual education" is defined as instruction during which students and teachers are separated by time and/or location and interact via computers and/or telecommunications technologies. Virtual education ranges from straightforward coursework presented online for students to view at their own pace; to interactive, real-time instruction between teachers and students over an electronic medium unconstrained by geographic or temporal boundaries. When properly employed by skilled instructors, technology can make many learning opportunities available to any student, at any location, and at any time. However, determining which instructional methods are best for a specific group of students, community, or circumstance demands that high quality data be available to the instructors, administrators, and policymakers who will study these issues and lead our schools through the coming decades and beyond.

Organizational Structure

"Virtual education" may be delivered by "virtual schools" or by traditional, "brick-and-mortar" schools. "Virtual schools" are defined as public or private schools that offer only virtual courses and generally do not have a physical facility that allows students to attend classes on site. Alternatively, "brick-and-mortar schools" may provide both conventional and virtual education programs. One difference between the two types of schools is that many virtual schools register students regardless of traditional administrative boundaries— in other words, students need not reside in a particular geographic area to take a class.

Brick-and-mortar schools with virtual programs have the same capacity, but are sometimes limited by policy to established attendance areas and geographic boundaries.

In a virtual setting, for example, a student in Idaho may take a course from a teacher in Vermont through a virtual school in Pennsylvania, and have classmates in Maine, Mississippi, and Oregon. These students might attend public schools, private schools, or even home schools. Some might be enrolled in the virtual school as a degree-granting institution, others might attend a traditional school and take the class to complement or supplement their local school's curriculum, while others may intend to transfer credit to a college or university.

Because the technology driving virtual education permits participation regardless of administrative boundaries—attendance areas, county lines, and state borders—restrictions on participation have largely become administrative and policy issues. These policy decisions are often constrained by overarching rules and regulations, such as local or state laws limiting the transfer of funds across administrative boundaries or regulations requiring specific academic credentials to teach within a particular state or school district.

According to the North Central Regional Education Laboratory publication, *Keeping Pace with K–12 Online Learning* (NCREL® 2004), public virtual education arises in five basic types of administrative structures: *statewide supplemental programs, district-level supplemental programs, single-district cyberschools, multidistrict cyberschools,* and *cyber charter schools.* While a wide range of configurations exist within these basic categories (such as exclusively virtual schools versus schools that mix virtual and traditional offerings), some features are common to each category and help describe the range of public virtual education programs:

- *Statewide supplemental programs* offer courses to students enrolled in a traditional school or a cyberschool anywhere in the state. These programs are authorized in some way by state-level authority (for example, a state education agency regulation or a state law) to operate on a statewide basis.

- *District-level supplemental programs* offer courses to students enrolled in a traditional school within a single district. These programs exist in many states, but they are not always monitored by state education agencies because they are operated within autonomous districts.

- *Single-district cyberschools* are run as stand-alone schools by individual school districts for district residents seeking an alternative to the physical school environment. They are often housed within one of the district's physical schools. In most states, the number of students enrolled in single-district cyberschools is quite small, but the these programs are growing rapidly in size and number as school districts seek to retain students they may otherwise lose to multidistrict cyberschools.

- *Multidistrict cyberschools* are operated by, or chartered within, individual school districts, but they enroll students from several or many school districts throughout a state. These programs represent the largest growth sector in elementary/secondary online learning.

- *Cyber charter schools* exist in many states that allow charter schools. They are chartered within a single district but usually operate as multidistrict cyberschools. Cyber charter schools are sometimes operated by commercial vendors. Some states have enacted legislation specifying expectations for these schools with regard to program quality and accessibility. Other states apply general charter school laws and regulations to cyber charter schools.

Virtual Education: Schools, Courses, Classes, and Programs

The term "virtual education" is often used interchangeably with "distance education," "distributed learning," "open learning," "networked learning," "web-based education." "online learning," "cyber education," "net education," "computer learning," and other similar terms. Some of these phrases focus on the concept of overcoming the physical boundaries of traditional face-to-face, teacher-student learning environments. Others emphasize the use of technology as a tool for accessing information unavailable locally. The bottom line, however, is that virtual education uses information and communications technologies to offer educational opportunities in a manner that transcends traditional limitations of time and space with respect to students' relationships with teachers, peers, and instructional materials.

As discussed above, sometimes an entire curriculum is offered in a virtual setting; in other cases only individual classes are available online; and in still other circumstances a series of courses in a program are available electronically. This document makes the following distinctions between *schools, courses, classes,* and *programs:*

- *School.* An institution that provides preschool, elementary, and/or secondary instruction and may provide other education-related services to students; has one or more teachers; is located in one or more buildings; and has an assigned administrator. A *virtual school* is defined as a school that focuses primarily on instruction in which students and teachers are separated by time and/or location, and interaction occurs via computers and/or telecommunications technologies. Virtual schools generally do not have a physical facility that allows students to attend classes on site.

- *Course.* The organization of subject matter and related learning experiences for the instruction of students on a regular or systematic basis. Courses are usually offered to an individual or group of students (e.g., a class) for a predetermined period of time (e.g., a semester, two weeks), although pacing may vary in a virtual setting.

- *Class.* A setting in which organized instruction of course content is provided to one or more students. One or more teachers may provide class instruction, in person or via a different medium, as in the case of virtual education. Some institutions use the expression *"e-class"* for subject matter primarily delivered electronically and guided by a course of study.

- *Program.* A series of courses that build upon one another to provide either depth or breath within a subject matter area. A virtual or traditional school may offer a virtual program that consists of a series of related courses offered virtually.

Thus, the term *"course"* refers to subject matter content, whereas the term *"class"* refers to the setting in which a *course* is offered to one or more students. Within a given *school* and mathematics *program,* there might be several *classes* for the same algebra II *course.* All of the classes would cover the same subject matter, but they might meet at different times (e.g., 1st period, 7:00 p.m., or "student-paced and not at a specific time"), attract different groups of students (e.g., 10th grade students or adult students), rely upon different instructional approaches (e.g., instructor-led or self-taught), and use various media for communication between students and instructors (e.g., face-to-face or online).

Class Pace and Virtual Education Technologies

With respect to class management, class pace measures the rate of advancement or progress through academic content. Virtual education provides an approach to class pace that, although not entirely new to public education, is innovative and available to large numbers of students for the first time. Indeed, virtual classes may be taught to a group of students who log in, tune in, or otherwise participate in class at a specified time and learn *synchronously,* as in a traditional class but without a shared physical presence. Alternatively, a virtual class may be self-paced and students access class instruction, materials, and assignments at their convenience as long as work is completed by agreed-upon deadlines (paced *asynchronous*). A third alternative for class pace combines asynchronous activities with periodic synchonous activities such as online discussions, "webinars" (web-based seminars), or phone conferences.

Virtual education programs, courses, and classes are delivered through a host of available technologies. According to the *2005 SETDA National Leadership Institute Toolkit on Virtual Learning,* these options include two-way interactive television (I-TV), web-based or online, satellite, and video-conferencing. In most cases, a single virtual education class relies upon a combination of these delivery systems. Such "blended technologies" might include satellite and web-based communications; I-TV, web-based instruction, and on-site interaction; and I-TV courses with web components. Other common mechanisms include the use of videotapes, compact disks (CDs), digital video disks (DVDs), broadcast television, cable television, telephone conferencing, radio, and prerecorded audiotapes.

In both traditional and virtual settings, education leaders must select the type or types of class pace and educational technologies to offer and support. They must also consider many other instructional and administrative issues that arise when operating any education institution, be it traditional or virtual in nature. These policy decisions will have a profound impact on the types and effectiveness of learning environments they will be able to establish in their school, systems, and states.

Data and Policy Implications

The implications of policymaking on virtual education are many and varied. Relevant policy issues (see box) are both administrative and instructional in nature, and arise at the state, local, school, and classroom levels. At the state level, for example, teacher credentialing policies within and across state boundaries may disqualify some individuals from teaching virtual classes within one state even though they may be considered qualified in another. At the district level, policymakers have the authority to determine which technologies are available for virtual education in schools and classrooms. At the school level, standards may (or may not) be established to limit the number of students and teachers participating in virtual coursework or to determine the time of day best suited for such courses. Finally, at the classroom level, decisions to adapt online materials to accommodate the needs of special populations might affect access to and, therefore, the equity of, resources for individuals with disabilities (accommodations might include using specific text colors, font sizes, and other web browser modifications).

Given the breadth and depth of issues that affect, and are affected by, virtual education, policymakers must simultaneously demonstrate foresight and caution as they grapple with important pedagogical and policy choices. In many circumstances, virtual education can be a powerful tool that allows students and teachers to access otherwise unavailable expertise,

Policy concerns related to virtual education

School accreditation	Testing and assessment	Credits and credit transferability
Teacher qualifications	Technology access	Instructional quality
Participation criteria	Access to individuals with disabilities	Fees/tuition payment
Student enrollment	Resource equity	Funding formulas

information, and experience. Virtual education is especially useful when decisionmakers choose to:

- offer coursework not otherwise possible (e.g., when offering a class is not feasible because too few students have enrolled);

- access instructional expertise or materials not otherwise available;

- present instructional material in a format better suited to some students' learning needs;

- introduce supplementary experiences otherwise impractical to offer in real time and space, such as virtual field trips (e-trips);

- maximize educational opportunities beyond traditional school hours;

- eliminate travel time between instructional locations;

- permit students to set their own learning pace;

- offer instruction to hospitalized, incarcerated, homebound, and other students physically unable to travel to a school site;

- offer services to homeschooled students and their parents;

- provide services to students who may prefer alternative settings (for example, to avoid bullying or because they do not function well in a social setting); and/or

- ensure equity of instructional opportunity for all students regardless of school assignment (for example, to equalize options in urban, suburban, and rural settings).

To evaluate whether virtual education is effectively and efficiently serving these functions, decisionmakers must have access to high quality data. The National Forum on Education Statistics has produced a host of publications designed to improve data quality in elementary and secondary education agencies (see appendix C). These resources emphasize that high quality data are a product of well-trained data management specialists who:

- understand how their education organization operates;

- recognize the information needs of their constituents (e.g., teachers, principals, superintendents, school board members, and parents and community members);

- have the support of high-level policymakers in the organization; and

- develop information systems based on commonly accepted standards for elementary and secondary education data.

When data systems are built to reflect these best practices, they can produce information that accurately, reliably, and cost-effectively portrays the operational and academic status of an organization. This type of system generates high quality and timely data

that can be used to plan a budget, individualize instruction, create a lesson plan, manage a school, assess student performance, and, ultimately, support the greater goals of the education institution.

Many well developed data systems that generate high quality data for traditional educational endeavors are, as yet, unable to accomplish the same for virtual education. This may be attributable to the fact that virtual education is a relatively new phenomenon for which best practice data collection and reporting standards are only now being proposed (i.e., with the publication of this guide). Although virtual education should be a component of any comprehensive education data system, commonly accepted definitions for student attendance, class location, and even school address can be difficult to apply in virtual settings. Thus, if policymakers are to have access to high quality data about virtual education, data collectors must carefully consider how to improve existing data systems—what type of information is to be maintained about virtual education, how data elements are to be defined, how existing standards may need to be modified, and when data are to be collected.

To accurately portray the quality, effectiveness, and efficiency of virtual education activities, data systems must address the following areas of divergence:

- *School/course organization*—virtual schools and classes may be organized and operated quite differently than the traditional, face-to-face paradigm.
- *Schedule*—virtual courses may not be constrained by a seven-period school day or five-day school week.
- *Pace (synchronous or asynchronous)*—the concept of students and teachers possibly working at different times is largely new to our elementary/secondary education system.
- *"Face time"*—in a virtual setting, students may be geographically separated from their peers and their teachers.
- *Medium of instruction*—virtual course materials are not limited to paper textbooks.
- *Teacher quality*—virtual course instructors may be located beyond local or state borders and, therefore, may not possess the same credentials as in-state faculty.
- *Assessment*—staff responsible for virtual student instruction may be beyond the administrative control of state or local entities accountable for student achievement.

Summary

Despite its limited history as an instructional path, virtual education is a promising and inevitable part of any future education system. This paradox of uncertainty and promise demands that policymakers use high quality data about virtual education to assess its past performance and determine its future direction. This guide proposes data management practices to help states, school districts, and schools gather, maintain, and use high quality data to manage virtual education initiatives.

Unless these issues are addressed, the non-existent or inconsistent collection and reporting of virtual education information will have negative effects on the quality of data and decisionmaking at the classroom, school, district, state, and national levels. Data that inform accountability systems will be less reliable when states cannot identify virtual schools from brick-and-mortar entities, or virtual education students from regular students. As a result, the quality of the decisionmaking will also be compromised.

Updating education data systems to reflect the unique needs and circumstances of virtual education will improve the quality of policy and instructional choices in the 21st century.

NOTES

[1] *Distance Education Courses for Public Elementary and Secondary School Students: 2002–03* (NCES 2005–010). (See appendix C.)

[2] *Technology Counts,* 2005. (See appendix C.)

[3] *Distance Education Courses for Public Elementary and Secondary School Students: 2002–03* (NCES 2005–010).

[4] *Technology Counts,* 2005.
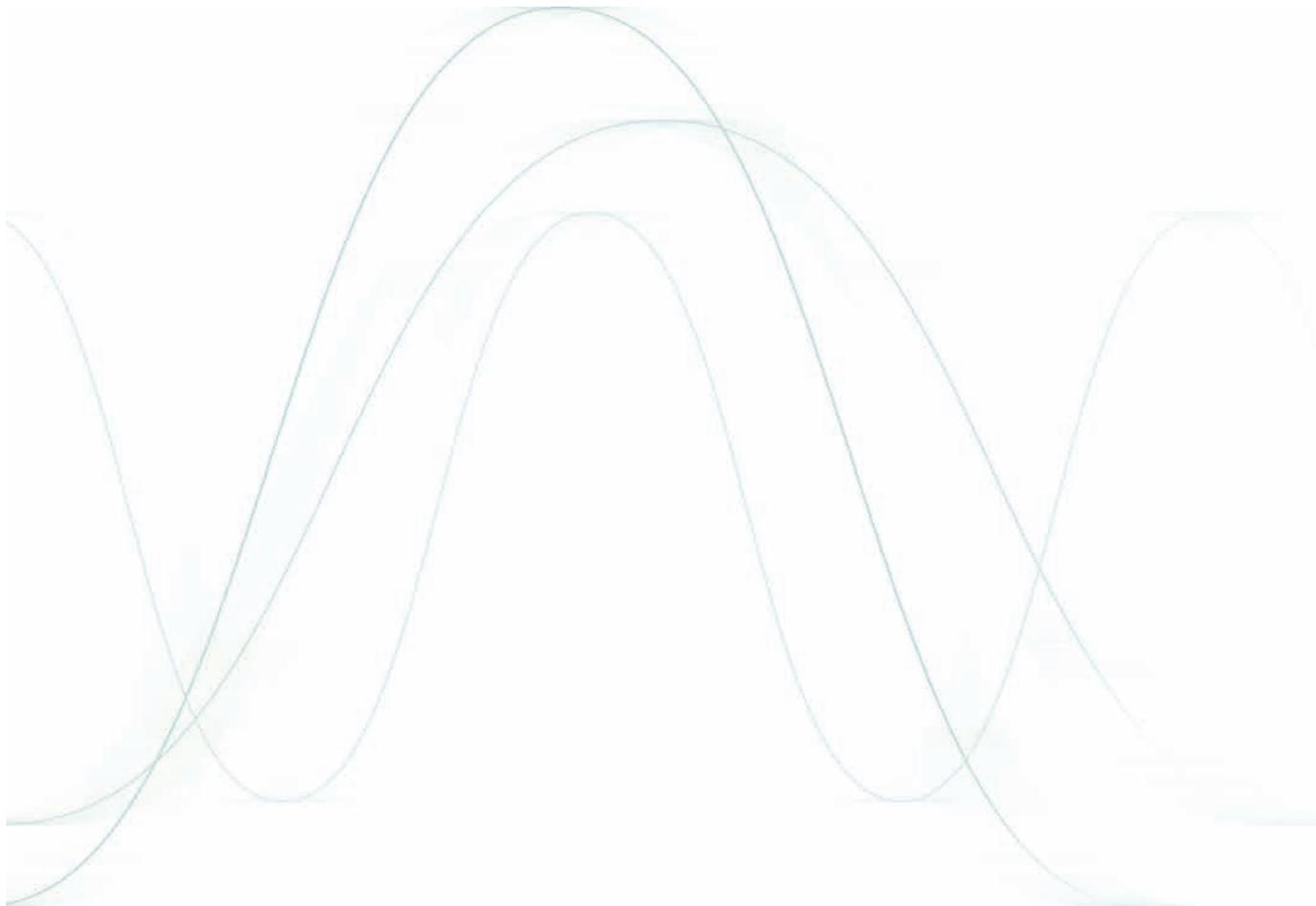
CHAPTER 2.
Recommendations for Virtual Education Data Elements

This chapter provides detailed information about organizing and updating data systems and data elements to meet the information demands of the virtual education environment. Data elements are categorized by domain and topic area. Additional guidance is provided in the form of policy considerations, usage recommendations, and examples of real world application.

Education data are usually collected in schools and school districts, stored in school or district information systems, and reported upon request by state education agencies and the federal government (see figure 1).

Within an education information system, the basic unit of information is the "data element." A data element is a specific piece of information that can be defined and measured. For example, the *NCES Handbooks Online* (see appendix C) defines data element number 0187, *Name of Institution,* as "The full, legally accepted or popularly accepted name of an organization (e.g., a school, an association, or a company)." Similarly, data element number 0851, *Sex,* is defined as "A person's gender"; this element has been assigned additional coding options, *"Male"* and *"Female."* Data elements are the basic units of information—any less would not have meaning.

All data elements in this guide are categorized according to a hierarchy (see table 1). At the most general level, data elements are grouped by *"domain,"* a term used to indicate the source from which a data element, its definition, and attributes originate within the *NCES Handbooks Online.* In this guide, domains include "School," "Student," and "Staff Member."

Figure 1.

Data Systems capable of providing high quality data for accountability and decision making may not be able to accommodate a virtual education system that is not currently aligned along traditional administrative, intructional, and policy making channels.

National Data Collections

State Education Agencies

Local Education Agencies

Traditional Schools

Virtual Schools

Traditional Classes

Students & Teachers

Virtual Classes
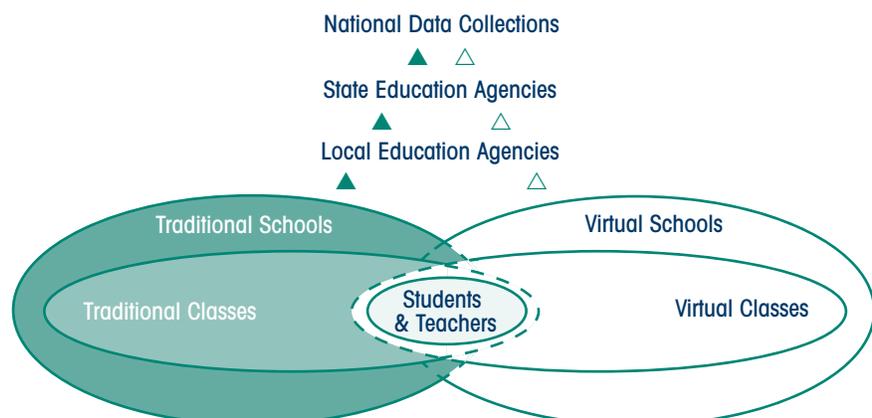
Table 1. Example to illustrate the format of chapter 2 recommendations

Organizing Concept: Domain

Definition: Indicates the source from which a data element, its definition, and attributes originate within the *NCES Handbooks Online* (e.g., school, student, and staff member)

Example: "School"

Organizing Concept: Topic Area

Definition: Divides, separates, or otherwise organizes related data elements.

Example: "School Identification"

Policy Issues

Questions to Consider
Issues that affect the interpretation or use of the data elements or the information collected and maintained in a topic area.

Example: "Is the virtual entity a school, a program, a course, or a class?"

It Really Happens…
Real world examples of how the data elements or topic area can be used (or misused) in schools, districts, and state education agencies.

Example: "A change from Lincoln High to Abraham Lincoln High School may affect data quality if not tracked accurately."

Data Issues

Data Elements
A specific piece of information that can be defined and measured. All data elements referenced in this guide are defined in appendix A.

Example: "0187   Name of Institution"

Guidance/Recommendations
Insight into why a data element is relevant or how it might be modified to better reflect the information and reporting needs unique to a virtual education setting.

Example: "These four data elements are central to the identification of any school in an education data system."

Each domain is divided into *topic areas,* which separate and organize related data elements. Examples of topic areas are "School Location" (within the "School" domain), "Student Attendance Information" (within the "Student" domain), and "Staff Member Employment Credentials" (within the "Staff Member" domain). These topic headings are descriptive in nature and constructed purely for the purpose of organizing data elements.

Table 1 displays the format used in chapter 2 to organize virtual education data elements for each of the three primary information domains: schools, students, and staff members. Within these domains, recommended data elements are categorized by the following topic areas.

I. School
1. School Identification
2. School Classification
3. School Governance
4. School Acreditation
5. School Contact Information
6. School Location
7. School Enrollment
8. School Calendar
9. Course Information
10. Class Information

11. Unit Information
12. Reporting Information
13. Safety and Discipline

II. Student

1. Student Identification
2. Student Demographics
3. Student Contact Information
4. Student Enrollment/Exit Information
5. Student Attendance Information
6. Student Participation/Performance Information
7. Student Progress Information
8. Student Health Information

III. Staff Member

1. Staff Member Identification
2. Staff Member Demographics
3. Staff Member Contact Information
4. Staff Member Employment Status
5. Staff Member Employment Credentials
6. Staff Member Assignment Information
7. Staff Member Attendance Information
8. Staff Member Health Information

A Note about Using Data Elements to Develop Data Systems

Data elements recommended in this guide may be used in many ways—to design a collection instrument or survey, for example. More broadly, however, these data elements will likely become components of a school, school district, or state education agency's education data system (sometimes referred to as an education management information system).

Many education information systems are designed as databases. When designing such a database, accommodating the possibility of "multiple entries" is often useful. These are entries likely to be repeated within the data system. For example, most students take more than one class during a grading period; therefore, the entity "class" must accommodate multiple data elements (one for each class on a student's transcript).

Classes taken by a student this grading period

Math Class	Reading Class	History Class
Class Organization	Class Organization	Class Organization
Class Pace	Class Pace	Class Pace
Medium of Instruction	Medium of Instruction	Medium of Instruction
Class Period	Class Period	Class Period
Etc...	Etc...	Etc...

Within a data system, replicating the same data elements for each occurrence within a multiple entry is referred to as a "data loop" or an "information loop." Thus, "data loops" consist of one or more data elements repeated as necessary to fully describe multiple entries. Because this guide focuses on data elements and policymaking rather than data system development, specific instances in which data loops might be used by data system designers are not identified. However, given how critical the technique is for efficient and effective data systems, data elements in the *NCES Handbooks Online* (see appendix C) are designed to accommodate data looping.

Figure 2. Data element "looping"

"Data loops" consist of one or more data elements repeated as necessary to fully describe entries that are likely to be repeated within a data system. For example, a student may have more than one address, as captured by the data element "**Address Type**" with the options "**Mailing Address,**" "**Other Home Address,**" and "**Physical Location Address**".

The following data elements would be maintained for each of those address types within a data system (i.e., they would be in a "data loop").

Loop 1
Mailing Address
Street Number/Name
Apt/Room/Suite Number
Building/Site Number
City
State Abbreviation
Zip Code

Loop 2
Other Home Address
Street Number/Name
Apt/Room/Suite Number
Building/Site Number
City
State Abbreviation
Zip Code

Loop 3
Physical Location Address
Street Number/Name
Apt/Room/Suite Number
Building/Site Number
City
State Abbreviation
Zip Code

Etc.

Disclaimers

- This document presents a broad range of data elements that may be useful in a robust education data system; however, some organizations may not find it necessary to maintain all of these elements for their basic operational, management, and reporting purposes.

- Any record system that collects information about individual students and staff members should comply with regulations and professional standards intended to protect the privacy and confidentiality of students, staff, and parents. For more information about relevant privacy issues, see the *Forum Guide to Protecting the Privacy of Student Information: State and Local Education Agencies* (see appendix C), *Privacy Issues in Education Staff Records* (see appendix C), and other privacy-related web resources available from the National Forum on Education Statistics *(http://nces.ed.gov/forum/ferpa_links.asp).*

I. Domain: School

A major role of traditional education data systems is to record the status of, and changes in, schools. This requires the collection, maintenance, and reporting of information about the topic areas listed below. While most of this information can and, in fact, should be collected about virtual schools as well as traditional ones, differences in the physical characteristics of some virtual schools (e.g., those without buildings) and the administrative boundaries of some virtual schools (e.g., those without geographic or government borders) suggest that some data elements in traditional education systems be adjusted. Similarly, accounting for differences in time-based school management (e.g., for a virtual school that offers courses outside the hours of the traditional school day or beyond the timeframe of the traditional school calendar year) requires adjustments as well.

Topic Areas

1. School Identification
2. School Classification
3. School Governance
4. School Accreditation
5. School Contact Information
6. School Location
7. School Enrollment
8. School Calendar
9. Course Information
10. Class Information
11. Unit Information
12. Reporting Information
13. Safety and Discipline

1. School Identification

Descriptive elements used to identify a school, education institution, agency, or organization providing an educational experience to an individual.

Policy Issues

Questions to Consider

- Is the virtual entity a school, a program, a course, or a class?

- Is the name of the school unique within the education data system?

- How is a school that is geographically outside of the district or state identified (i.e., flagged in the education data system)? Does it require a separate address data element?

- If an existing school changes its name, can the system accommodate the change or would the new name generate a file for a "new" school?

It Really Happens…

Advanced coursework is offered to students statewide through a state's "virtual school" but when local schools attempt to register students in the virtual school, they cannot find a school identification number in the state data system. After much research, school staff determine that the state runs its virtual school as a program rather than as a school, even though the program's name suggests the opposite.

Data Issues

Data Elements

0187 Name of Institution
0313 Former Name of Institution
0146 Identification Code
0147 Identification System

Guidance/Recommendations

- These four data elements are central to the identification of any school in an education data system. The presence of data in the field for element number 0187, Name of Institution, may help distinguish between a virtual school and a virtual program.

- An existing school that changes its name may or may not be considered "new," depending on other factors involved in its reconstitution. Creating a "new school" file for an existing school that has only changed its name may have serious implications on management and recordkeeping, including the determination of Annual Yearly Progress (AYP) status under the No Child Left Behind Act of 2001 (NCLB).

- School names that reference school classification (e.g., Rosa Parks Magnet School or George Washington Alternative School) may simplify communications and recordkeeping.

- In the absence of element number 0146, Identification Code, school names that differ slightly (e.g., Martin Luther King Middle School, MLK Middle School, and ML King School) may represent different schools or a single school called by different names.

2. School Classification

Virtual courses are offered by a wide range of school types, organizational structures, and funding sources.

Policy Issues

Questions to Consider

- Is the virtual entity a school, a program, a course, or a class?

- What criteria are used to establish or recognize a school in your state or locality?

- Does your definition of a school accommodate virtual schools?

- Does your organization define virtual schools differently than regular schools?

- Are out-of-district and out-of-state schools recognized by the same criteria?

- How is a "virtual school" identified (i.e., flagged in the education data system)? Would it require a separate, Virtual School, data element?

- Can your data system identify (i.e., flag) a school classified in several categories (for example, if a school is simultaneously alternative, magnet, charter, and virtual)?

It Really Happens…

The county high school had changed its classification many times: originally a regular high school, it became a magnet school, then a charter school and eventually an alternative school. In its final reconstitution, a separate, virtual school was housed in the school's technology center. State auditors called the district several times to confirm that both the alternative school and the virtual school had the same street address, and only released supplemental funding after verifying that the school classifications had been reported correctly.

Data Issues

Data Elements

0029 Administrative Funding Control
0316 Regular School
0036 Alternative School
0840 Special Education/Ungraded School
0174 Magnet/Special Program Emphasis School
0089 Charter School Status
1120 Virtual School

Guidance/Recommendations

- Many education data system managers have determined that it is necessary to collect classification information for each school within their jurisdiction, as well as for schools in other jurisdictions attended by any of their students, either virtually or in person.

- Element 1120, Virtual School, serves as a flag to identify a virtual school.

- A school may belong to more than one category (e.g., a single institution may simultaneously be an alternative school, a magnet school, and a virtual school). Systems that maintain these data element flags separately are able to identify these schools.

- Although a virtual school may not be housed in a building, the current NCES definition of a "school" is: *An institution that provides educational services, has one or more grade groups (PreK through 12) or is ungraded, has one or more teachers, is located in one or more buildings, and has assigned administrator(s).*

- School names that reference school classification (e.g., Rosa Parks Magnet School or George Washington Alternative School) may simplify communications and recordkeeping about institutions.

3. School Governance

School governance refers to the entity or institution responsible for oversight and policy decisions for an education organization. Because virtual schools may be beyond the control of local and state authority, school leaders should identify the governance structure of any entity providing virtual education services to local students.

Policy Issues

Questions to Consider
- Does your organization have a process to determine the governance structure of a virtual school located beyond your administrative boundaries?

- Does your organization recognize the governance structure of the virtual school?

- Do other governing bodies, such as a local or state education agency, need to recognize the governance structure of the virtual school? If so, do they?

- Do you have accurate contact information for the virtual school's administrators so you can reach the appropriate authorities as needed?

- Which administrative or legal entity will resolve conflicts?

It Really Happens...

The Bureau of Indian Affairs (BIA), of the U.S. Department of the Interior, supports several local public schools serving Native American student populations in Maine. Thus, these schools operate simultaneously under local, state, and federal authority: the BIA (federal) owns the school buildings, the local education agency operates the schools, and the Maine Department of Education governs all local education agencies within its geographical borders.

Data Issues

Data Elements
0187 Name of Institution
0029 Administrative Funding Control
0271 Statute Title
0238 Regulation Title
0234 Regulation Description

Guidance/Recommendations
- Several governing bodies (e.g., a local or state education agency) may need to recognize a virtual school's governance structure before credit can be transferred or funds expended.

- Some organizations have both public and private governance structures (for example, a private organization receiving public funds to operate public schools).

- Some organizations have governance structures beyond the traditional elementary/secondary education setting, such as universities offering courses to high school students.

- Some organizations' governance structures cross traditional administrative boundaries in the public sector (e.g., national and regional virtual schools).

4. School Accreditation

Because virtual schools may be beyond the control of local and state authority, school leaders should determine the accreditation status (and accrediting institution) of any entity offering virtual education services to local students.

Policy Issues

Questions to Consider

- Does your organization have a process to determine the accreditation status of a virtual school located beyond your administrative boundaries?

- Does an existing reciprocity agreement mean your organization must recognize a virtual school's accreditation if another entity recognizes it (for example, if your state and a neighboring state have agreed to recognize each other's schools)?

- Does your organization recognize the accreditation status of all virtual schools in which your students are enrolled?

- Do other governing bodies, such as a state education agency or institute of higher education, need to recognize the accreditation status of the virtual school? If so, do they?

- Do you have accurate contact information for the accrediting organization so you can reach the appropriate authorities as needed?

It Really Happens…

A national news show exposed an accreditation organization that never conducted site visits, financial audits, or program reviews as a part of its accreditation process. Instead, any organization that paid its $1,495 annual fee in a timely manner was labeled "accredited." The school district realized that its supplemental services partner boasted that very same, "prestigious" credential discussed in the show. Clearly, accreditation was only meaningful relative to the standards set by, and the integrity of, the institution issuing the credentials.

Data Issues

Data Elements

0187 Name of Institution
0076 Authorizing Entity Type
1121 Accreditation Status

Guidance/Recommendations

- An accreditation organization is an authority that reviews an organization's educational program and staff for quality, and certifies whether the organization meets a minimal set of standards.

- Other governing bodies, such as local or state education agencies, may need to recognize the accreditation status of a virtual school before credit can be transferred or funds expended.

- The meaning of the label "accredited" varies based on the standards used to measure a school, program, or staff. A virtual school's "accreditation" is significant only when granted by an agency whose review process conforms to standards deemed acceptable by local authorities.

- The process for determining whether to recognize a virtual school's accreditation is often identical to the one used for traditional schools (e.g., when credits are transferred from an out-of-state brick and mortar school).

5. School Contact Information

Information used to communicate directly with an individual, organization, or institution

Policy Issues

Questions to Consider

- How do you contact a school when it is truly virtual (i.e., it has no brick-and-mortar school building)? How do you handle routine correspondence? Payment? Instructional and administrative issues? Technical problems? Emergencies?

- Can the virtual provider guarantee accessibility during standard or "routine" business hours? If technical problems occur, such as a server going down, how is communication handled during off-hours?

- Have planners accommodated differences in time zones when negotiating "routine" business hours and other contact periods?

- Are proposed constraints on the use of contact information acceptable? For examples, may a virtual school respond to messages only during its local business hours? May messages be returned within 48 hours but not necessarily sooner, even in an emergency?

It Really Happens...

The server is down on a Monday morning and students cannot access their coursework—and the virtual school only checks e-mail once every 48 hours. Will students be without access for two days? How can the local school contact the provider to have the system repaired immediately?

Data Issues

Data Elements*

0281 Telephone Status
0280 Telephone Number Type (e.g., main number, answering service, beeper number, fax, etc.)
0279 Telephone Number
0121 Electronic Mail Address Type
0120 Electronic Mail Address
0304 Web Site Address (URL)

*Contact information for a school's physical location is included under **School Location.**

Guidance/Recommendations

- Maintaining accurate contact information about virtual schools is imperative because they operate from locations across the globe. Electronic mail (e-mail) addresses and websites are especially relevant, and telephone numbers should include international (country) codes for sites outside of the United States.

- As legal entities, even virtual organizations have a formal business address. This official address (and telephone number) is a logical starting place for contact information.

- A virtual school's only physical presence may be that of a server, while its students, teachers, and administrators may all be geographically separated. When this is the case, a business address or primary contact address should be secured.

- Different contact information may be necessary for routine correspondence, payment, instructional matters, administrative concerns, technical problems (i.e., a help desk), and emergencies.

- Many organizations require that service providers maintain "routine" business hours, during which they must be accessible via the provided contact information.

6. School Location

By its very nature, a virtual school is not limited by the spatial constraints of traditional brick-and-mortar institutions. This is clear in two very real ways: a virtual school does not need to have a physical site where students receive education services, and a virtual school can serve students regardless of physical proximity and geographical parameters that traditionally define school assignments.

Policy Issues

Questions to Consider

- How do you determine a school's location when it is truly virtual (i.e., it has no brick-and-mortar school building)? How do you handle routine correspondence? Payment? Instructional and administrative issues? Technical problems? Emergencies?

- Does your organization or its governing authority require that service providers be located within certain geographical boundaries (e.g., within the state or district) if they are to be paid with state or local funds?

- Does your organization award or receive resources based on a school's geographic location? If this resource distribution is based on the assumption that a school serves its local population, consider that an out-of-state virtual school may, in fact, be serving your local students. At the same time, a virtual school headquartered within your geographic boundaries may receive funds without serving the targeted local population.

It Really Happens…

Rural enhancement grants, and other federal and state funds, are often allocated based on the geographic location of a school's mailing address (assuming the school is serving students in that region). This assumption is not necessarily valid for virtual schools, which might serve students from other counties, states, and even countries. Therefore, it may not be wise to allocate funding aimed at specific populations within a geographic area based solely on a school's mailing address.

Data Issues

Data Elements

0025	Address Type	0305	Zip Code
0272	Street Number/Name	0099	Country Code
0037	Apartment/Room/Suite Number	0185	Name of Country
0081	Building/Site Number	0306	Zone Number
0090	City	0183	Metropolitan Statistical Area (MSA) Federal Information Processing Standard (FIPS) Code
0186	Name of County		
0100	County FIPS (Federal Information Processing Standard) Code	0839	Locale Code
0268	State FIPS (Federal Information Processing Standard) Code	0158	Latitude
		0173	Longitude
0267	State Abbreviation	0202	Additional Geographical Designation
0188	Name of State		

Guidance/Recommendations

- Any entity with which a school or students interact will have either: a) a brick-and-mortar presence, b) a business mailing address, or c) a contact person at a physical location with official contact information.

- A traditional brick-and-mortar school offering virtual courses (within or beyond its administrative borders) will have an address associated with its physical site and to which traditional address-related data elements will apply without modification. In contrast, a virtual school may or may not have a physical location where students receive education services. In fact, a virtual school's only physical presence may be that of a server, while its students, teachers, and administrators may all be geographically separated. When this is the case, a business address or primary contact address should be listed as the school address.

- When physical location affects funding, concerns may arise about inconsistencies between a school's physical location and its business address. Some funding formulas consider a school's geographic location when determining need. For example, rural enhancement programs provide additional funding to schools in low population-density areas that, presumably, serve rural populations. The criteria for determining eligibility for such funds are often limited to zip codes, Federal Information Processing Standard (FIPS) codes, Metropolitan Statistical Area (MSA) codes, and other locale-based data. A virtual school headquartered in a rural location may receive these types of funds without, in fact, serving the local population whose needs are being targeted by the program. Funding agencies may wish to consider additional criteria, including student demographic data, when determining a school's eligibility for such programs (other examples include high poverty and enterprise zone locations).

- Some organizations have governance structures that cross traditional public sector boundaries (e.g., national and regional virtual schools).

7. School Enrollment

Elements used to describe a school's enrollment.

Policy Issues

Questions to Consider

- Will a point-in-time count accurately depict enrollment in both traditional and virtual schools?

- Do any rules and regulations limit student participation in virtual offerings based on attendance areas (e.g., for a district-level supplemental program, single-district cyberschool, or multidistrict cyberschool)?

- Have policymakers decided when students in a traditional school may enroll in virtual courses? Reasons might include enhanced course offerings, postsecondary credits, remedial support, homebound instruction, cultural outreach, and virtual field trips.

- How is funding allocated when a student is physically present in one school but enrolled in another, as may occur in virtual education (for example, when students use the technology at their local school to access a virtual school)?

It Really Happens...

A student in a local school building uses its equipment to access a virtual school. The local school believes it should receive some portion of the full-time equivalency (FTE) for pupil funding for providing facilities, equipment (computers, water fountains, and restrooms), and custodial support; the virtual school disagrees because it hires staff based on student to teacher ratios. Who will mediate this dispute and on what criteria will they base the decision?

Data Issues

Data Elements*

0615 Enrollment Status
0959 Service Population
0960 Attendance Area Code*
0961 School Attendance Area*

* May be applicable if a traditional school offers virtual services to local students (e.g., within a single jurisdiction).

Guidance/Recommendations

- Enrollment data for virtual and traditional schools may change if students begin but do not complete a virtual course, illustrating the limitations of point-in-time measurements.

- Enrollment counts based on physical presence may undercount virtual enrollments if students access their virtual coursework via computers in traditional schools.

8. School Calendar

Information about the days and times a school is accessible for student instruction.

Policy Issues

Questions to Consider

- What are the units of measure in your organization's instructional calendar (e.g., instructional minutes, days, weeks, performance, etc.)?

- What are the units of measure in the virtual provider's instructional calendar (e.g., instructional minutes, days, weeks, total days login-accessible, total days website-accessible, time online, time estimated to complete a course, performance, etc.)?

- Is the virtual school's instructional calendar compatible with your organization's, or can it be translated into compatible units?

- Will you have to adjust your calendar for students participating in virtual coursework?

- How will one school account for the other's snow days, teacher work days, and standardized testing days? For example, will students be counted absent by their virtual school if their home school closes because of bad weather?

- Does your organization measure course credit based solely on traditional seat time, or does it accept other measures more applicable to the virtual environment (e.g., total days login-accessible, total days website-accessible, time online, time estimated to complete a course, performance, etc.)?

It Really Happens…

A student enrolled in a traditional school is taking a virtual course from its media center. When the local school goes on spring break, the student cannot access the virtual class for ten days even though the virtual school is in session. Policymakers at the local school soon realize that they may need to open their campus and buildings to accommodate the needs of students enrolled in these virtual classes.

Data Issues

Data Elements

0266 Session Type
0264 Session Beginning Date
0265 Session Ending Date
0285 Total Days in Session
0150 Instructional Minutes

Guidance/Recommendations

- If a student is enrolled in only one school, that school's calendar is the only one that will affect the student. However, when a student is enrolled in one school and enrolled in a course at another (traditional or virtual), comparing instructional calendars is probably necessary to provide appropriate logistical support and accurately credit coursework.

- Assessing a virtual school's instructional calendar is no different than evaluating an instructional calendar for a brick-and-mortar school when students take a course outside of their school of enrollment. However, some translation may be necessary from traditional time-based measures to units more applicable to the virtual setting (e.g., total days login-accessible, total days website-accessible, time online, time estimated to complete a course, performance, etc.).

- Many schools assess course credit based on traditional seat time, although this is changing. In a virtual setting, these time-based measures may need to be translated into measures more applicable to the virtual environment (e.g., total days login-accessible, total days website-accessible, time online, time estimated to complete a course, performance, etc.).

9. Course Information

The organization of instructional subject matter and related learning experiences provided on a regular or systematic basis, usually for a predetermined period of time (e.g., a semester), to individuals or groups of students. Note that the term "course" refers to subject matter content, whereas "class" refers to the setting in which course content is offered to one or more students.

Policy Issues

Questions to Consider

- 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 credits to your organization's course classification system?

It Really Happens…

A student took English I in 9th grade at a virtual school, so her guidance counselor assumed she would be prepared for English II when she enrolled, in 12th grade, at the local high school. Unfortunately, the virtual school curriculum was not aligned to the state standards and some of the content expected on the statewide graduation exam was not covered. The guidance counselor realized that courses with identical names may not teach identical content and, in the absence of a standard course classification system, there was no way of knowing how similar or different such courses might be.

Data Issues

Data Elements (See also Class Information)

0102 Course Code
0103 Course Code System
0107 Course Title
0104 Course Description
0145 High School Course Requirement
0110 Curriculum Framework
0109 Curriculum Framework Name
0246 Resource Author
0034 Aligned with State Standards

Guidance/Recommendations

- Course names may vary between organizations (and different subject matter areas may have the same, or apparently similar, course name). Whenever credits are transferred, course codes and coding systems need to be coordinated between institutions for the data to be meaningful.

- In response to the above need, national course classification standards are being developed by the National Center for Education Statistics (NCES).

- Terminology regarding frameworks, standards, benchmarks, grade-level expectations, etc., may vary between organizations.

10. Class Information

A setting for providing organized instruction of course content to one or more students (including cross-age groupings) for a set period of time. Note that more than one "class" may be offered the same "course."

Policy Issues

Questions to Consider

- Class pace issues:

  - Are policies and procedures in place to allow a student to participate in a self-paced course?

  - Are students allowed to begin a new course if they complete a self-paced course prior to the end of the normal grading period?

  - Is there a maximum number of credits a student may earn per unit time (e.g., per grading period or per year), and does this limit conflict with self-paced acceleration of academic progress?

- Class timing issues:

  - Does your organization's scheduling system accommodate asynchronous (see below) class settings that do not have traditional class periods, beginning and ending times, and meeting days?

  - Can your organization's attendance system accommodate asynchronous (see below) class settings that may not employ traditional time-based attendance measures such as "school days"?

  - Do established policies clarify permissible rates of advancement from course to course (e.g., is a student permitted to complete self-paced algebra I, geometry, and trigonometry in a single academic year?).

It Really Happens…

A student advances through a self-paced algebra I course and easily passes the end-of-course assessment in the third month of the school year. He completes an online geometry course two months later. As he enrolls in trigonometry, his guidance counselor realizes that the school district has never awarded so much credit to a student in a single academic year. The administration and school board want to encourage the student, but realize they must consider the consequences of such rapid academic progress and establish policies to guide future decisionmaking.

Data Issues

Data Elements (See also **Course Information**)

0094	Class Organization	1125	Originating Location of Instruction/Service
1146	Class Pace		
0209	Medium of Instruction	0124	Originating Location of Instruction/Service Description
0204	Percentage of Time by Medium of Instruction		
0095	Class Period	0171	Receiving Location of Instruction/Service
0091	Class Beginning Time*		
0092	Class Ending Time*	0172	Receiving Location of Instruction/Service Description
0093	Class Meeting Days*		
0283	Timetable Day*	0282	Estimated Time Element
1147	Same Physical Location of Instruction	1122	Course Attendance Requirement
		1123	Course Attendance Frequency Requirement
		0857	Number of Students in Class

*This data element may or may not apply depending on whether the class is offered as a separate part of the regular school day.

Guidance/Recommendations

- In performance-based instruction, students advance from one instructional level to the next based on mastery of subject matter and skill sets. In asynchronous virtual courses, where communication between participants occurs at different times, students often advance through course material at their own pace as long as they meet minimum contact requirements to demonstrate participation. Students may thus complete a virtual course in less—or more—time than is allotted during a normal grading period.

- In a synchronous virtual environment, attendance is relatively straightforward to measure—either the student is present and on time for class or not, just as in face-to-face coursework. For asynchronous classes, however, some schools, districts, and states have established a minimum number of online interactions to measure student attendance; others count logins, time online, or the number of keystrokes per unit time.

  - *Asynchronous:* Not occurring at the same time. In virtual courses, "asynchronous" means that communication between participants (e.g., students and teachers) occurs at different times. For example, students submit questions via e-mail for teachers to answer a later time; or discussions occur over several days in an online, threaded discussion board setting.

  - *Synchronous:* Occurring at the same time. In virtual courses, "synchronous" means that communication between participants (e.g., students and teachers) occurs at the same time despite any physical separation. For example, students and teachers are online at the same time so that questions can be answered immediately, or (virtual) discussions occur with all participants online at the same time.

11. Unit Information

Within a class, information used to describe a topic or theme taught during a specified period of time.

Policy Issues

Questions to Consider

- Does your organization maintain unit-level information for coursework in a traditional school? If so, should you maintain similar information for coursework offered by virtual providers?

- Do required learning standards apply to virtual coursework?

- Are procedures in place for acquiring exceptions to learning standards requirements (e.g., for transferred coursework)?

- Can you map learning standards from transferred coursework to your organization's learning standards requirements?

It Really Happens…

An online course has lesson activities and assignments due at periodic points throughout the grading period. Rather than work at an even pace between due dates, some students ignore their coursework for long periods of time and complete their assignments at the last minute. Administrators recognize that this is not the best way to encourage sound study habits and student behavior, so they develop policies to structure expectations more evenly throughout the course. Unfortunately, this leads to the creation of "busy work" in some courses not well-suited for frequent assignments or assessment (e.g., reading-intensive history courses). School leaders are then forced to reconsider blanket policies about online course management.

Data Issues

Data Elements

0294 Unit Name
0293 Unit Duration
0159 Learning Standards Documents
0239 Related Learning Standards
0167 Lesson Name
0166 Lesson Duration
0169 Lesson Plan
0160 Lesson Activity Begin Date
0163 Lesson Activity End Date
0162 Lesson Activity Duration
0074 Assignment Start Date
0071 Assignment Finish Date
0070 Assignment Due Date

Guidance/Recommendations

- Terminology regarding frameworks, standards, benchmarks, grade-level expectations, etc., may vary between organizations.

- Many schools assess course credits based on traditional classroom time, although this is changing. In a virtual setting, these time-based measures may need to be translated into units more applicable to the virtual environment (e.g., total days login-accessible, total days website-accessible, time online, time estimated to complete a course, performance, etc.).

12. Reporting Information

Information used to describe academic performance.

Policy Issues

Questions to Consider

- Can a student receive a grade from an instructor not employed by your organization (e.g., for a virtual class)?

- Can you crosswalk grading systems when coursework is transferred in from another organization?

- Who may access online information about individual student performance (e.g., what are the security rules for online report cards)?

- Who may supervise assessments and other student work? For example, is it acceptable for a student's parents/guardians to supervise homework and assessments when a student accesses virtual coursework from home?

It Really Happens…

A local school issues report cards on a quarterly basis, but the virtual school several local students "attend" generates academic progress reports on a monthly basis. Local school administrators do not have an existing mechanism for communicating these monthly reports to parents, but decide to establish electronic means for doing so rather than squander the useful information made available by the virtual service provider.

Data Issues

Data Elements

0244 Reporting Means
0245 Reporting Method
0143 Grading Period Beginning Date
0144 Grading Period Ending Date
0284 Total Days in Grading Period
0065 Assessment Content Standard
0046 Assessment Duration
0190 Standardization Group

Guidance/Recommendation

- Many schools measure grading periods based on traditional classroom time, although this is changing. In a virtual setting, these time-based measures may need to be translated into units more applicable to the virtual environment (e.g., total days login-accessible, total days website-accessible, time online, time estimated to complete a course, performance, etc.).

13. Safety and Discipline

Information used to document the occurrence of safety and discipline incidents.

Policy Issues

Questions to Consider

- Does your organization have student-conduct regulations and appropriate-use policies?

- If so, do these policies apply to students participating in virtual courses?

- Do policies incorporate provisions of the Children's Online Privacy Protection Act of 1998 (COPPA)? (See appendix C.)

- Are virtual providers expected to have comparable or identical student-conduct regulations and appropriate-use policies?

- Are virtual providers required to report violations of these regulations and policies to you and/or to law enforcement authorities?

- Are filters required on web-accessible technologies?

- Is internet safety training provided to student users?

It Really Happens...

A student uses a school computer to participate in a virtual course, but then sends another student a harassing e-mail, views inappropriate content on the Internet, or hacks into other files on the network. The school's acceptable use policy clearly states that such offenses are punishable by loss of technology privileges. However, the principal realizes that if the student loses access to the school's technology, it would effectively suspend him from his virtual coursework, which was not the intention of the disciplinary action.

Data Issues

Data Elements

1037 Incident Identifier
1039 Incident Time
1040 Incident Location
1041 Facilities Code
1043 Reporter Description
1126 Incident Recording Mechanism
1148 Rule/Regulation Violated
0894 Security System
1050 Perpetrator Description
1052 Victim Description
1054 Disciplinary Action
1057 Duration of Disciplinary Action

Guidance/Recommendations

- A fee-based virtual provider may have a financial disincentive to expel a student.

- The No Child Left Behind Act of 2001 (NCLB) applies to all public schools throughout the nation. Thus, as would any public school, public virtual schools must report whether they have been designated "persistently dangerous."

II. Domain: Student

Another major role of traditional education data systems is to record the status of, and changes in, each student's school participation and performance. This requires collecting, maintaining, and reporting information about the topics listed below. While most of this data can, and, should, be collected for students taking virtual courses, differences in the spatial and temporal relationships of students, instructors, and administrators (within the virtual school setting as well as between virtual and traditional schools) pose challenges to many education data systems.

Although most policies about transferring credits among traditional schools should apply to the transfer of credit from virtual schools, some operational and management differences require changes in traditional data element use. These adjustments often focus on differences in time-based school management (for virtual schools offering courses outside the hours of the traditional school day, whether synchronously or asynchronously).

Policies should also be developed to regulate the transfer of student records to virtual providers not subject to the same administrative and legal rules as the student's local school. Depending on local policies, most schools have the authority to transfer student demographic, academic, and personal information to staff at a virtual school who provide educational services to students; usually the service provider must agree, in writing, to adhere to all relevant privacy laws. Thus, policymakers and other school leaders should prepare legal agreements that adequately describe their privacy policies concerning individual student records, and require that virtual providers affirm their intentions and capabilities with respect to this critical issue. Additionally, any exchange of confidential student information should be conducted in an encrypted format and over secure lines. Local school leaders may also negotiate agreements with virtual providers concerning student attendance (what constitutes "in attendance" in a virtual setting), prorated enrollment (whether and how to prorate a student's full-time equivalency between the two schools for funding), accountability responsibilities (which institution is accountable for the student's performance), and academic record maintenance (which institution will maintain the student's permanent academic record).

Topic Areas
1. **Student Identification**
2. **Student Demographics**
3. **Student Contact Information**
4. **Student Enrollment/Exit Information**
5. **Student Attendance Information**
6. **Course Participation/Performance Information**
7. **Student Progress Information**
8. **Student Health Information**

1. Student Identification

Descriptive elements used to identify a student participating in an educational experience, including the student's name and other identifying information.

Policy Issues

Questions to Consider
- Does your organization (or its governing authorities) require that each student be assigned a unique identifier?

- Do these student identifiers need to be unique across institutions within the state?

- Are virtual providers required to use the same unique student identifier system, or may they use their own?

- How will your organization and the virtual provider match student identification numbers to ensure that student records are accurate?

It Really Happens...

Without a unique student identifier system, record matching between a virtual and a traditional school (or any two institutions) can be very tricky. For example, different records might be maintained for a single student under the names, "Joseph Smith," "Joe Smith," and "J. Smith." In addition, individuals with similar name may also lead to errors. For example, if "James Jones," "Jamie Jones," and "J.J. Jones" are different students in a single school, their records could inadvertently be confused.

Data Issues

Data Elements
0131 First Name
0184 Middle Name
0156 Last/Surname
0135 Generation Code/Suffix
0157 Last/Surname at Birth
0189 Nickname
0146 Identification Code
0147 Identification System

Guidance/Recommendations
- In some jurisdictions, students are not assigned unique identification numbers; in others, they are assigned such numbers at the district level. An increasing number of states are now assigning statewide unique identifiers to facilitate student tracking.

- In the absence of a unique identifier, common derivations of a single name may result in multiple records for the same student.

2. Student Demographics

Elements used to describe a student's background and other vital, descriptive information.

Policy Issues

Questions to Consider

- What demographic information is required for state and federal public reporting? For example, student subgroups are required under the No Child Left Behind Act of 2001 (NCLB).

- What demographic information is necessary to ensure equitable access to virtual education for all students?

It Really Happens…

A student becomes homeless and is no longer able to use her home computer to participate in a virtual class on a regular basis. Because demographic information is regularly updated in the student record system, the instructor at the virtual school is aware of this and handles the student's changing attendance and performance patterns by offering support services rather than dealing with it as a discipline issue.

Data Issues

Data Elements

0310	Hispanic or Latino Ethnicity	0328	Language Code
0849	Race	0588	Minor/Adult Status
0851	Sex	0589	Homelessness Status
0314	Birth Date	0590	Migratory Status
0852	City of Birth	0605	Economic Disadvantage Status
0317	County of Birth	0606	Eligibility Status for School Food Service Programs*
0319	Name of State of Birth		
0320	Country of Birth Code	0607	Participation in School Food Service Programs*
0325	First Entry Date (into the United States)		
		0608	Family Public Assistance Status
0322	Citizenship Status	0330	Marital Status
0323	Country of Citizenship Code	0306	Zone Number
0585	English Proficiency	0597	Residence Block Number
0327	Language Type	0202	Additional Geographical Designation

*Virtual schools might not serve meals, but they could still collect free- and reduced-price meal eligibility as a measure of economic need.

Guidance/Recommendations

- The No Child Left Behind Act of 2001 (NCLB) applies to all public schools throughout the nation. Thus, as would any public school, public virtual schools must report academic proficiency by required student subgroups.

- Accurate demographic information about enrolled students is required by many federal, state, and local funding formulas.

- To make informed instructional and service decisions, instructors may need to know students' demographic information (e.g., if a student's behavior and performance changes abruptly, his teacher may benefit from understanding that his family situation has also recently changed).

- Technical staff may need to know when special adaptive and assistive technologies (e.g., language translation software) are required for a student to equitably participate in virtual education, even though access to the student's personal information might otherwise be restricted.

- Data systems should be able to report all demographic information required for state and federal public reporting (e.g., NCLB and equity of access subgroup populations).

3. Student Contact Information

Information used to communicate directly with an individual.

Policy Issues

Questions to Consider

- Before releasing student information, has your organization assessed its responsibilities under the Family Educational Rights and Privacy Act (FERPA)? (See appendix C.)

- Do you have a legal agreement that adequately describes all privacy policies relating to student contact information, and are virtual providers required to sign it?

It Really Happens…

A student submits personal contact information when registering to take a course from a virtual provider. Shortly thereafter, he begins to receive unwanted (junk) mail in both his e-mail account and through the post. The student's family complains to the principal at the local school, and an investigation reveals that the virtual provider sold its mailing list to a marketing company or otherwise failed to maintain agreed-upon privacy expectations.

Data Issues

Data Elements

0025	Address Type	0267	State Abbreviation
0272	Street Number/Name	0305	Zip Code
0037	Apartment/Room/Suite Number	0099	Country Code
0081	Building/Site Number	0281	Telephone Status
0090	City	0280	Telephone Number Type
0186	Name of County	0151	International Code Number
0100	County FIPS (Federal Information Processing Standards) Code	0279	Telephone Number
		0121	Electronic Mail Address Type
0268	State FIPS (Federal Information Processing Standards) Code	0120	Electronic Mail Address

Guidance/Recommendations

- Because virtual courses are offered to students around the globe, maintaining accurate contact information is imperative. Information about electronic mail (e-mail) addresses and web sites is especially important for virtual communications. Telephone numbers should include international (country) codes as applicable for students outside of the United States.

- An education institution not only has the right to require that information about its students be protected from improper release, but also the responsibility to do so.

- Any education institution that shares information about its students on a need-to-know basis should, as required by the Family Educational Rights and Privacy Act (FERPA), require that recipients of the information sign a written agreement promising adherence to all relevant privacy laws.

- Any electronic exchange of confidential student information should be conducted in an encrypted format and over secure lines.

- New resources about FERPA guidance are under development by the National Forum on Education Statistics (see appendix C).

4. 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.

Policy Issues

Questions to Consider

- What constitutes full-time/part-time status? Is it based on number of classes, minutes of instruction, credits taken, or some other measure?

- To ensure comparable data, has the virtual provider agreed to your organization's definition of "full-time/part-time" status?

- Is tuition charged and paid by the class, credit, term, or other basis?

- Is there a limit on the tuition your organization will pay for a student's virtual education (either by course, credit, term, or cumulative over time)? What if students repeatedly register for, but do not complete, virtual courses?

- Must service providers be located within established geographic boundaries (e.g., within the state) to receive public funds?

- How will you verify a student's enrollment/exit status when paying for students to attend virtual schools?

- If students are enrolled in virtual coursework, how will schools determine average daily membership and other statistics used in funding calculations?

It Really Happens…

A student is enrolled full-time in a virtual school that is paid by his local public school system. Two months into the school year, the student's family moves away but fails to formally withdraw from the old school district. Without accurate data about the student's current enrollment status, the first school system continues to pay for the student's virtual school costs even though her new local school system should now be covering the costs.

Data Issues

Data Elements

0615 Enrollment Status	0627 Total Cost of Education to Student
0616 Admission Date	
0617 Admission Status	0628 Tuition Status
0366 Entry Date	0629 Payment Source(s)
0619 Entry Type	0631 Financial Assistance Type
0620 Entry/Grade Level	0633 Financial Assistance Source
0621 Full-time/Part-time Status	0634 Financial Assistance Amount
0622 Full-time Equivalent (FTE) Status	0642 Exit/Withdrawal Date
0618 Cohort Year	0643 Exit/Withdrawal Status
0625 Tuition Payment Amount	0644 Exit/Withdrawal Type
0626 Fee Payment Type	0650 Discontinuing Schooling Reason
0853 Fee Amount	0673 Nonpromotion Reason

Guidance/Recommendations

- Virtual education funding is usually based on either enrollment or attendance. Either unit may be measured on a per class, per day, or per term basis, and translated to a full-time equivalency (FTE) standard. "FTE" is defined as the amount of time a student is enrolled in (attending) a school, stated as a proportion of full-time enrollment (attendance); or the number of courses/credits taken, stated as a proportion of full-time course load.

- At the high school level, the number of credits taken is generally most relevant when determining FTE. At the elementary school level, FTE is often stated in instructional minutes per full-time day.

- "Time enrolled in a school" may need to be translated into units that correspond to enrollment in a virtual setting.

- Because virtual education may be self-paced, tracking cohorts is difficult.

- In some virtual schools, students follow a grade-based chronology (e.g., they must complete grade 1 before enrolling in grade 2), but new concepts are introduced at different "grade levels" based on how much of a K–8 sequential curriculum they have completed.

- Enrollment and credit data may be compared to determine whether students are completing their virtual coursework.

- The No Child Left Behind Act of 2001 (NCLB) applies to all public schools throughout the nation, including public virtual schools. Student enrollment status (i.e., the school of enrollment) must be accurate to calculate a school's Adequate Yearly Progress (AYP).

5. Student Attendance Information

Information used to describe a student's presence, absence, and tardiness in class or school.

Policy Issues

Questions to Consider

- What constitutes "in attendance" status? Is it based on number of classes, minutes of instruction, number of keystrokes, time logged in, performance, or some other measure?

- Is attendance calculated the same way for all reporting purposes (e.g., local, state, and federal reporting)?

- Given the high stakes of attendance data (for instance, they are used in funding formulas), what definition of attendance must be used? Does this definition reasonably accommodate the virtual education setting?

- To ensure comparable data, has the virtual provider agreed to your organization's definition of "in attendance" status?

- Have you and the virtual provider determined which organization is responsible for a student missing class because of a technical problem? For example, will a student be marked absent if the server is down? Does it matter which school's server is not working (where the student logs in or where the course is broadcast)? What about when a student's internet connection from home is not working?

It Really Happens...

The server at a student's school is down and she cannot access a synchronous virtual class. She is upset to learn that the virtual school marked her as "absent" even though she was in the computer lab the entire time, waiting for the server to be fixed. A complaint to her principal results in a change to an "excused absence," but the student still is not satisfied given that she was ready and prepared for class.

Data Issues

Data Elements

0635 Number of Days of Membership
0638 Number of Days Absent
0639 Number of Tardies
0637 Number of Days in Attendance
0636 Daily Attendance Status
0640 Class Attendance Status*

*Relevant for synchronous classes; asynchronous programs require different criteria.

Guidance/Recommendations

- Attendance is an important issue on several fronts, including legally (many communities have attendance requirements), financially (many funding formulas are based on average daily attendance), and pedagogically (attendance is commonly accepted as a major factor in determining a student's opportunity to learn).

- Attendance in a virtual (especially asynchronous) setting may be most accurately measured by factors that are not time-based or do not otherwise apply to a traditional face-to-face setting; these might include number of keystrokes, time logged in, end-of-unit performance, etc.

- Whatever measure is used, attendance should be reported consistently and in a manner that reflects policy direction (based on reporting requirements and the information needs of decisionmakers).

- Attendance should incorporate after-hours (e.g., at-home) activities for all virtual evening classes.

6. Course Participation/Performance Information

Information about student involvement and achievement in organized subject matter and related learning experiences (i.e., programs, courses, and classes).

Policy Issues

Questions to Consider

- Can a student receive a grade from an instructor not employed by your organization (e.g., for credits taught virtually)?

- Who makes the final determination when a grade assigned in a course is questioned?

- Can you map grading systems when coursework is transferred from another organization?

- Does your organization need to monitor student completion of virtual coursework?

- Are virtual service providers systematically monitored and evaluated based on student outcomes such as participation and performance?

It Really Happens...

A high school student earned a C in a virtual course at a highly competitive college, but his local high school awarded him an A for the high school-credit equivalent. School administrators felt this policy was fair, but worried when another student was awarded an F by the college, yet claimed that, given the course's difficulty, he should receive a passing grade on his high school transcript. In addition to the immediate concern of awarding credit for a failing grade, administrators found themselves wondering how these somewhat subjective grade translations might influence the determination of class rank and other class honors (e.g., class valedictorian).

Data Issues

Data Elements

0366	Entry Date	0107	Course Title
0642	Exit/Withdrawal Date	0102	Course Code
0644	Exit/Withdrawal Type	0103	Course Code System
0187	Name of Institution	0292	Unique Course Code
0146	Identification Code (Institution)	0193	Number of Credits Attempted
0147	Identification System (Institution)	0656	Number of Credits Received
0794	Program Eligibility Indicator	0374	Grade Earned
0227	Program Name		

Guidance/Recommendations

- Depending on policy and agreements between local schools and virtual service providers, the institution that maintains an individual's permanent record often retains the right to determine (or change) final grade assignments.

- Student completion of, and performance in, virtual courses may vary based on a wide range of factors, including student readiness, curricular choices, content presentation, instructor–student interactions, local supervision and support, assignment and assessment rigor, and grading practices. Some students may perform better (i.e., complete a course with an acceptable grade) in courses offered by some providers than in courses offered by other providers. Local schools may wish to monitor student completion and performance for each provider to ensure that coursework is appropriately rigorous and verify that local investment in virtual courses is not squandered on enrollments that do not earn credits.

- Students fail to complete coursework for a wide range of reasons, including lack of interest, aptitude, and support. Some students may find virtual coursework adds another layer of difficulty, especially if they are uncomfortable using technology, have problems accessing instructional materials online, or are unfamiliar with online assessment procedures. Local schools may want to collect data about why students do not to complete virtual courses.

7. Student Progress Information

Information about credit earned and academic progress during a given grading period, session, school year, or career.

Policy Issues

Questions to Consider

- Must your organization recognize a virtual school's accreditation status prior to accepting the credit it awards?

- Does any other governing body (e.g., a state education agency or institute of higher education) need to recognize the virtual school's accreditation status? If so, do they?

- How does your organization measure course completion/credits (e.g., instructional minutes, competency, etc.)?

- How does the virtual provider measure course completion/credit (e.g., instructional minutes, competency, etc.)?

- Is virtual course content aligned with applicable content standards?

- How will your organization and the virtual provider compare course completion information to ensure that credits are accurately and reliably awarded?

- May students begin a new course if they complete a self-paced course prior to the end of your normal grading period?

- Is there a maximum number of credits a student may earn per unit time (e.g., per grading period or per year) that conflicts with self-paced acceleration of academic progress?

- Is there a limit to the number of credits a student is permitted transfer in for the calculation of grade point average, class rank, honors, etc?

- Is there a limit to the number of credits a student is permitted transfer in for graduation purposes?

- Does your organization's calendar need to be adjusted for students participating in virtual coursework (e.g., can credits be completed in a virtual school with an academic calendar that does not coincide exactly with yours)?

It Really Happens…

A student earns several credits from a virtual school he believes to be accredited. When he requests an exemption from instructional requirements at his local school, he discovers that the local school does not recognize the virtual school's accreditation. As the coursework was not approved in advance, the local school refuses to transfer the credit into the student's permanent record. This decision has substantial implications for the student's academic plans, including a missed opportunity to participate in advanced coursework and, perhaps, delayed graduation.

Data Issues

Data Elements

0672 Promotion Type
0673 Nonpromotion Reason
0657 Credits Attempted: Given Grading Period
0658 Credits Attempted: Given Session
0659 Credits Attempted: Given School Year
0660 Credits Attempted: Cumulative
0661 Credits Received: Given Grading Period
0662 Credits Received: Given Session
0663 Credits Received: Given School Year
0664 Credits Received: Cumulative
0665 Grade Points Received: Given Grading Period
0666 Grade Points Received: Given Session
0667 Grade Points Received: Given School Year
0668 Grade Points Received: Cumulative
0669 Grade Point Average (GPA): Given Grading Period
0670 Grade Point Average (GPA): Given Session
0671 Grade Point Average (GPA): Given School Year
0376 Grade Point Average (GPA): Cumulative
0676 Class Rank
0675 Honors Description
0688 Noncourse Graduation Requirement Scores/Results

Guidance/Recommendations

- The accreditation process generally includes a review of an organization's educational program and staff for quality, and certifies whether the school or program meets a minimum set of standards.

- The local school and, perhaps, other governing bodies (e.g., a local or state education agency) may need to recognize the accreditation status of a virtual school prior to accepting the credit it awards.

- Assuming a decision to award credit for virtual courses, such credit often can be transferred in the same way as any other transferable credits.

8. Student Health Information

Information about a student's health that is relevant to service, placement, or accommodations decisions.

Policy Issues

Questions to Consider

- What demographic information is required for your organization's state and federal public reporting? For example, student subgroups are required under the No Child Left Behind Act of 2001 (NCLB).

- What information about a student's special needs is necessary to ensure equitable access to virtual education?

- What information about a student's special needs is necessary for informed and appropriate decisions about services, placement, and accommodations?

- What other health-related information is necessary for appropriate curricular accommodations for students (e.g., adjusting "field work" requirements for a student hospitalized for an extended period)?

It Really Happens…

A student with partially-impaired vision enrolls in a virtual class. Without access to this information, the instructor has no way of knowing that the student needs curricular materials to be adapted to meet his physical needs. The absence of information about special needs may effectively deny equitable access to this student who requires adaptive or assistive technologies, or other modifications to which he is entitled.

Data Issues

Data Elements

0768 Primary Disability Type
0773 Secondary Disability Type
0774 Tertiary Disability Type
0346 Special Adaptation Requirements
0351 Additional Special Health Needs Information, or Instructions

Guidance/Recommendations

- NCLB applies to all public schools throughout the nation. Thus, as would any public school, public virtual schools must report academic proficiency by required student subgroups.

- Many federal, state, and local funding formulas require accurate information about students with disabilities enrolled in a school, program, or course (e.g., additional resources may be provided for students with disabilities).

- For informed decisionmaking, instructors may need to know about a student's disabilities, related individualized education plans (IEPs), and Section 504 plans.

- Technical staff may need to know when special adaptive and assistive technologies (e.g., large print monitors or script readers) are required for a student to equitably participate in virtual education, even though access to the student's disability status information may be restricted.

- Virtual education can be an adaptive technology in itself when students are not mobile or unable to attend a traditional school because they are, for example, home- or hospital-bound.

III. Domain: Staff Member

Finally, traditional education data systems record the status of, and changes to, individuals employed by, under contract to, or in another work-related relationship with a public or private education institution. This requires the collection, maintenance, and reporting of information about the topics listed below. The definition of "staff member" includes:

• an employee who works under the direction of the employing institution or agency, is paid by the employer, and is eligible for employee benefits and wage or salary tax withholdings;

• a contractor or consultant working for an agreed-upon fee, or an employee of an organization contracted to work on site;

• a volunteer who performs services on an uncompensated basis;

• an "in-kind" provider who offers goods or other benefits rather than direct service; and

• an independent contractor or businessperson working at a school site.

Topic Areas

1. **Staff Member Identification**
2. **Staff Member Demographics**
3. **Staff Member Contact Information**
4. **Staff Member Employment Status**
5. **Staff Member Employment Credentials**
6. **Staff Member Assignment Information**
7. **Staff Member Attendance Information**
8. **Staff Member Health Information**
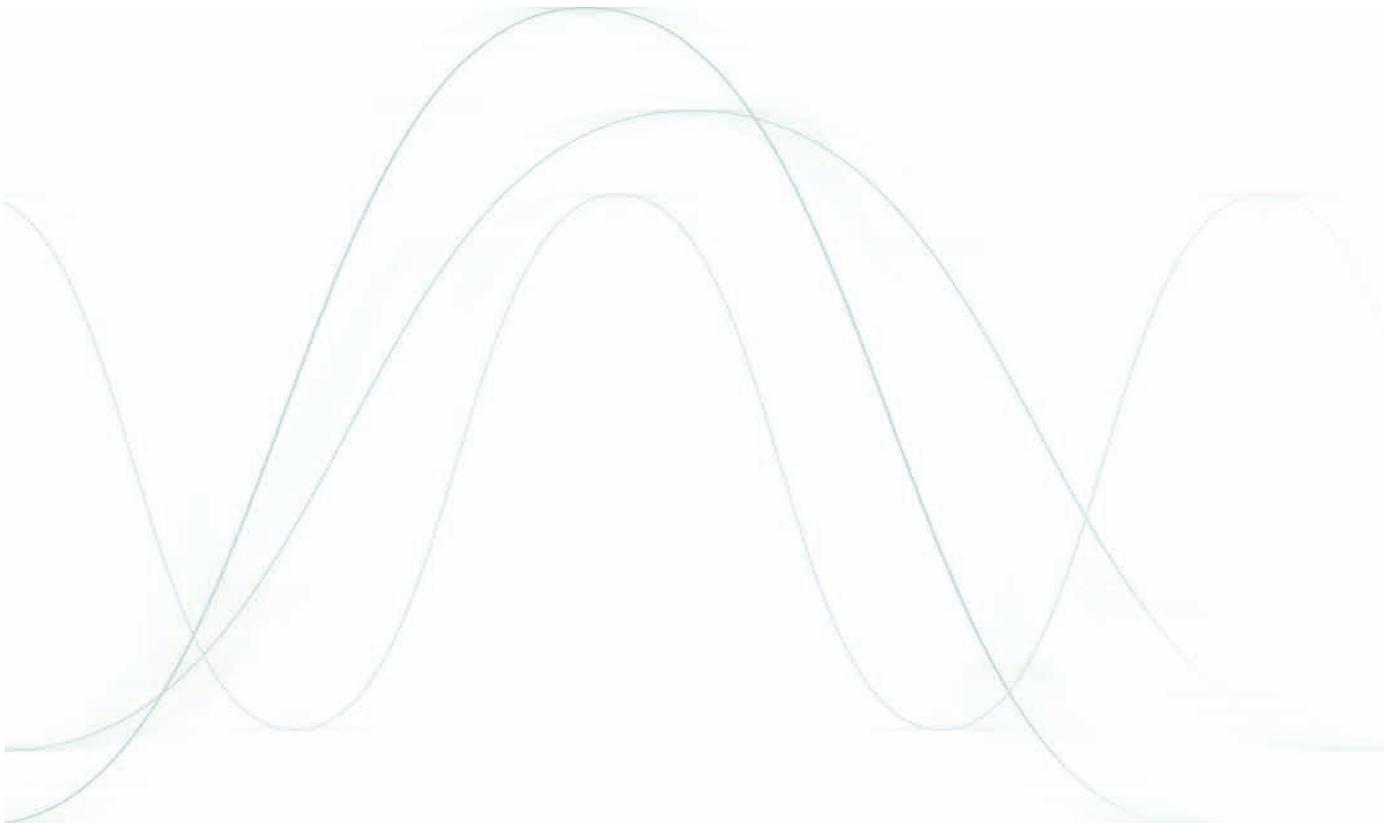
1. Staff Member Identification

Information that identifies individuals who perform services for any public or private education institution or agency that provides instructional and/or support services to students. Supported students may be at the early childhood through high school levels.

Policy Issues

Questions to Consider

- Do you maintain identification information about employees, contractors, consultants, volunteers, in-kind providers, independent contractors, businesspeople, and any other individual providing services at your school site(s)?

- Does your organization maintain identification information about staff who work at virtual schools, especially for individuals whose jobs put them in contact with students or confidential student information, either directly or indirectly?

- Can your data system distinguish between a teacher of record, an on-site facilitator, an instructional designer, and a technical support provider?

- Is each staff member, contractor, etc., assigned a unique identification number?

- Must these identifying numbers be unique across all institutions within the state?

- Is the virtual provider required to assign its staff members unique identification numbers?

- How will your organization and the virtual provider compare unique identification numbers to ensure that staff records are accurately matched?

It Really Happens...

A student complains about receiving harassing e-mail from "someone" at her virtual school. Without a robust technology security system that links to a staff identification system, neither the local nor the virtual school may be able to confirm the source of the allegedly harassing messages.

Data Issues

Data Elements

0131 First Name
0184 Middle Name
0156 Last/Surname
0135 Generation Code/Suffix
0207 Personal Title/Prefix
0033 Alias
0132 Former Legal Name
0157 Last/Surname at Birth
0189 Nickname
0146 Identification Code
0147 Identification System

Guidance/Recommendations

- Good data systems include identification information about employees, contractors, consultants, volunteers, in-kind providers, independent contractors, business-people, and any other individual providing services at a school site.

- Data systems should distinguish between a teacher of record, an on-site facilitator, an instructional designer, and a technical support provider.

- Data systems should allow users to calculate the size of virtual classes in which their students are enrolled, as well as whether contact between the virtual school and the student comes from the teacher of record or from a teacher's assistant.

- Any exchange of staff member information among virtual and local schools should include unique identification numbers in order to facilitate record-matching across data systems.

2. Staff Member Demographics

Elements used to describe a staff member's background and other vital, descriptive information.

Policy Issues

Questions to Consider

• What demographic information about virtual school staff members should your organization maintain, and what information about virtual school staff need only be available upon request?

• What do you need to know about a staff member's disabilities to ensure an accommodating work environment?

• Are background checks conducted by outside organizations acceptable?

• What virtual school staff will have access to data about your students? Is access to be limited by "need-to-know" and security clearance verification? Have all privacy expectations, based on Family Educational Rights and Privacy Act (FERPA) requirements (see appendix C), been formally communicated to the virtual school?

It Really Happens…

The school superintendent thought she was prepared to protect private staff information when she required all human resource employees to attend a professional development class about protecting confidential staff records. A few days later, she walked through the MIS office and saw staff health data on the database specialist's computer monitor. She quickly realized that many types of staff may be able to access private information and scheduled training for them as well.

Data Issues

Data Elements

0310	Hispanic or Latino Ethnicity	0327	Language Type
0849	Race	0328	Language Code
0850	National/Ethnic Origin Subgroup	0330	Marital Status
0851	Sex	0333	Military Service Type
0314	Birth Date	0334	Military Duty Status
0852	City of Birth	0337	Military Discharge Type
0317	County of Birth	0401	Background Check Type
0319	Name of State of Birth	0403	Background Check Completion Date
0320	Country of Birth Code	0768	Primary Disability Type
0325	First Entry Date (into the United States)	0773	Secondary Disability Type
		0774	Tertiary Disability Type
0322	Citizenship Status	0346	Special Adaptation Requirements
0323	Country of Citizenship Code	0351	Additional Special Health Needs, Information, or Instructions
0585	English Proficiency		

Guidance/Recommendations

• Depending on policies and reporting requirements, some organizations maintain detailed demographic information about employees and contractors.

• Technical staff may need to know when special adaptive and assistive technologies (e.g., large print monitors or script readers) are required for staff members to accomplish their job, even though access to staff disability status information may be restricted.

• Virtual education can be an adaptive technology in itself when staff members are not mobile or unable to attend a traditional school because they are, for example, home- or hospital-bound.

• Staff members capable of accessing student data may include administrators and instructors, as well as technical and research staff who maintain and operate data systems. Many institutions require that all staff with access to individual staff or student information be credentialed or licensed, receive a background check/security clearance, and have a "need-to-know" as defined by FERPA (see appendix C).

3. Staff Member Contact Information

Information used to communicate directly with an individual who works at an education institution.

Policy Issues

Questions to Consider

- Must staff members reside in a specified geographic region (e.g., in the community served by the school district)?

- Do you need to know where virtual school teachers are physically located to verify their credentials (e.g., relative to standards applicable in their home state)?

- Should you maintain contact information about virtual school teachers in case an administrator needs to call, e-mail, or otherwise contact them?

- Should contact information be maintained in case law enforcement officials need to locate a virtual school teacher?

- Should teacher contact information be posted in a publicly-accessible location or format?

It Really Happens…

A student who attends a local school also takes a virtual course. When he suddenly stops showing up at school, an alert administrator wants to ask his virtual school teacher whether the student is still participating in the virtual course. Without accurate contact information, the administrator may be unable to contact the virtual teacher in a timely manner.

Data Issues

Data Elements

0025 Address Type
0272 Street Number/Name
0037 Apartment/Room/Suite Number
0081 Building/Site Number
0090 City
0186 Name of County
0100 County FIPS (Federal Information Processing Standards) Code
0268 State FIPS (Federal Information Processing Standards) Code
0267 State Abbreviation
0305 Zip Code
0099 Country Code
0281 Telephone Status
0280 Telephone Number Type
0151 International Code Number
0279 Telephone Number
0121 Electronic Mail Address Type
0120 Electronic Mail Address
0306 Zone Number
0597 Residence Block Number
0202 Additional Geographic Designation

Guidance/Recommendations

- Because virtual courses are offered from locations around the globe, maintaining accurate contact information about virtual school staff is imperative. Information about electronic mail (e-mail) addresses and websites is especially important for virtual communications. Telephone numbers should include international (country) codes as applicable for staff outside of the United States.

- A local school may choose to maintain both personal and business contact information for virtual education staff, including all instructional, administrative, and technical staff who have contact with the school's students or access to their confidential information.

4. Staff Member Employment Status

Information about the circumstances, conditions, and agreements pertaining to an individual's employment at an organization.

Policy Issues

Questions to Consider

- Do your contracts with service providers (such as virtual schools) clearly state that your organization does not assume an employment relationship with contracted staff?

- Should you maintain employment status information for contracted virtual service providers (e.g., how long teachers have been employed by the virtual school, employment history, etc.)?

It Really Happens...

Selecting a virtual school as the district's supplemental education partner was difficult. The school board was unable to break the tie between the competing service providers, until a perceptive board member noticed that one of the virtual schools had a much lower staff turnover rate than the other. The school board felt strongly that this indicator of stability differentiated the competitors and finally selected its new virtual service provider.

Data Issues

Data Elements

0613 Employment Status
0431 Employment Start Date
0432 Employment End Date
0434 Employment Separation Reason
0557 Job Classification
0208 Position Title
0436 Teaching Assignment
0437 Instructional Level
0467 Hire Date
0468 Contractual Term
0469 Contract Beginning Date
0470 Contract Ending Date
0473 Contract Days of Service Per Year
0474 Employment Time Annually
0475 Full-time Equivalency (FTE)
0476 Full-time Status
0492 Pay Grade
0495 Base Salary or Wage

Guidance/Recommendations

- Virtual school staff have privacy rights. Any information maintained by a local school about virtual service providers should be afforded standard privacy considerations, as specified by education and employment regulations.

- If an education institution is paying a virtual teacher or other staff member directly, it must verify employment eligibility based on standard, federally recognized criteria.

5. 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. Credentials may be issued by state agencies, post-secondary institutions, professional associations, or other organizations; and are based on education and training, experience, assessment, background verification, and/or other requirements.

Policy Issues

Questions to Consider

- Does your organization have credentialing requirements for staff members (e.g., teaching degrees or certificates)?

- Do these credentialing requirements apply to virtual education staff?

- Can staff acquire exceptions to these requirements (e.g., virtual staff who do not live in your state may not need to have taken a state history course)?

- Does any other governing body (e.g., a state education agency) need to approve these exceptions?

- Should you maintain experience information for contracted virtual service providers (e.g., how long teachers have been employed by the virtual school)?

It Really Happens…

Like all schools, the local high school had to report the number of "highly qualified" teachers who instructed their students. This status was based in part on state-certification, which required teachers to have completed a state history course in college. Administrators wondered how the school's virtual service providers could be expected to have taken such a course if they lived in other states. Inquiries to the state education agency revealed that other schools were facing the same issue but, in the absence of waivers, virtual school staff could not be granted "highly qualified" status without the certification.

Data Issues

Data Elements

0326	Employment Eligibility Verification	0396	Credential Description
0332	Highest Level of Education Completed	0398	Credential Issuance Date
		0399	Credential Expiration Date
0187	Name of Institution	0408	Credential Renewal Units Earned
0188	Name of State (Institution)	0414	Credential Assessment Standard Indicator
0372	Level of Specialization		
0373	Postsecondary Subject Matter Area	0410	Credential Renewal Date
0376	Grade Point Average (GPA): Cumulative	0419	Credential-Authorized Function
		0420	Authorized Instructional Level
0385	Degree/Certificate Title	0421	Teaching Field or Area Authorized
0386	Degree/Certificate Type	0435	Nature of Prior Employment
0388	Degree/Certificate Conferring Date	0438	Years of Prior Teaching Experience
0391	Credential Type	0439	Years of Prior Education Experience
0394	Teaching Credential Type	0440	Years of Prior Related Experience
0395	Teaching Credential Basis	1149	Years of Virtual Teaching Experience

Guidance/Recommendations

- Determinations about the adequacy of staff member credentials are often contingent on their assignment. For example, a math credential is relevant for an individual teaching an algebra class, but less relevant for a language arts teacher.

- Assessing virtual school staff credentials is no different than evaluating traditional staff credentials. However, because many credentialing requirements are based on local or state regulations not otherwise applicable to virtual staff (e.g., they may not have attended a college offering a required local state history course), policymakers may consider whether exceptions to some credentialing requirements are appropriate for virtual staff.

- Credentialing requirement exceptions may need to be approved by other governing bodies (e.g., a local or state education agency)

- The No Child Left Behind Act of 2001 (NCLB) applies to all public schools in the United States. Thus, public virtual school teachers instructing local students are included in "highly qualified teacher" collections and reporting.

- The terms "certification," "licensure," and "endorsement" are not used consistently across the nation. Care should be taken to verify meaning when using this terminology.

6. 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.

Policy Issues

Questions to Consider

- Does your organization have a required curriculum framework, content standard, class time, or instructional approach that applies to virtual coursework?

- Does your organization expect class size to be within a certain range?

- May class size limits be modified in the presence of online teaching assistants or other special circumstances?

- Can you map virtual coursework to your organization's course classification system?

It Really Happens...

A virtual school advertises a 12:1 student-to-instructor ratio for its middle school classes. However, the virtual provider includes online teaching assistants in its definition of "instructor." In reality, its student-to-certified teacher ratio is 36:1, which is not what contracting school districts had been led to expect.

Data Issues

Data Elements

0557	Job Classification	0103	Course Code System
0558	Assignment Description	0292	Unique Course Code
0436	Teaching Assignment	0222	Program Funding Source
0031	School Level	0154	Language of Instruction
0437	Instructional Level	0209	Medium of Instruction
0559	Scope of Assignment	0204	Percentage of Time by Medium of Instruction
0266	Session Type		
0828	Teaching Assignment Beginning Date	0095	Class Period
0829	Teaching Assignment Ending Date	0091	Class Beginning Time*
0285	Total Days in Session	0092	Class Ending Time*
0195	Number of Hours in School Day	0093	Class Meeting Days*
0129	Facility Type	1147	Same Physical Location of Instruction
0475	Full-time Equivalency (FTE)		
0480	Scheduled Work Time Daily	1125	Originating Location of Instruction/Service
0481	Scheduled Work Days Weekly		
0482	Scheduled Work Months Annually	0124	Originating Location of Instruction/Service Description
0107	Course Title		
0122	Elementary Subject/Course	0283	Timetable Day*
0102	Course Code	0857	Number of Students in Class

*This data element may or may not apply, depending on whether a class is offered as a part of the regular school day.

Guidance/Recommendations

- Course names may vary between organizations. As with any course information translated from other institutions, course codes and coding systems must be coordinated if data are to be meaningful.

- New national course classification standards are under development by the National Center for Education Statistics (NCES).

- Determinations about the adequacy of staff member credentials are often contingent upon assignment. For example, a math credential is relevant for an individual teaching an algebra class, but less relevant for a language arts teacher.

7. Staff Member Attendance Information

Information about an individual's absence from duty assignments.

Policy Issues

Questions to Consider

- Does your organization need to know when virtual school teachers, administrators, or other staff members are (and are not) expected to be available to your students?

- Do you need to know when virtual school staff are (and are not) expected to be available to your administrators and teachers?

- What specific attendance expectations apply to virtual school staff?

- How might virtual school staff schedules need to be adjusted to accommodate your school schedule (or vice versa)?

- Will time zone differences complicate this scheduling?

It Really Happens…

When a problem with student behavior arises, local administrators try to get a status report on the student's performance from his two virtual school teachers. Administrators then learn that, in addition to a barrier of two time zones, communication with virtual teachers is further complicated by the virtual school's poorly defined office hours and by e-mail inquiries that are guaranteed to be answered "within five days."

Data Issues

Data Elements

0477 Hours of Service Per Day
0478 Days of Service Per Week
0479 Hours of Service Per Week
0480 Scheduled Work Time Daily
0481 Scheduled Work Days Weekly
0482 Scheduled Work Months Annually
0543 Leave Type
0544 Leave Substitution Status
0549 Leave Beginning Date
0550 Leave Ending Date

Guidance/Recommendations

- Whatever the method, attendance should be reported consistently and in a manner that reflects policy direction (based on reporting requirement and the information needs of decisionmakers).

- Attendance should incorporate after-hours (e.g., at-home) activities for all virtual evening classes.

8. Staff Member Health Information

Information about an individual's health, including immunizations and injuries, as related to employment. [Public Law 101–336, the American with Disabilities Act (ADA), prohibits discrimination against individuals with disabilities as regards employment, public accommodations, and certain public services.]

Policy Issues

Question to Consider
- What do you need to know about a staff member's disabilities or other health-related incidents to ensure an accommodating work environment?

It Really Happens...

A local teacher develops a disability that limits her mobility. Rather than lose this gifted faculty member, the school district is able to allow her to work from home by assigning her to their virtual school.

Data Issues

Data Elements
0343 Emergency Factor
0344 Additional Health Data and Medical Condition
0346 Special Adaptation Requirements
0348 Health Care Plan
0349 Hospital Preference
0351 Additional Special Health Needs, Information, or Instructions
0353 Immunizations Mandated by State Law for Participation
0354 Immunization Date
0355 Immunization Status
0356 Injury Description
0357 Injury Circumstances
0358 Injury Occurrence Date
0359 Injury Occurrence Location

Guidance/Recommendations
- Technical staff may need to know when special adaptive and assistive technologies (e.g., large print monitors or script readers) are required for staff members to accomplish their job, even though access to staff disability status information may be restricted.

- Virtual education can be an adaptive technology in itself when staff members are not mobile or unable to work at a traditional school because they are, for example, home- or hospital-bound.

Summary

Virtual education is a growing phenomenon in our education system. This guide is intended to help education data users and data collectors take a first step toward accommodating this new reality in their education data systems. Policymakers and data management specialists should consider how this chapter's recommendations will affect the way education policies and data management practices will be developed and implemented in their organizations. They should also determine how policies and practices may need to be modified to better accommodate the growing number of schools administered electronically.

Since it is driven, at least procedurally if not pedagogically, by advances in technology, virtual education is likely to continue to evolve over the next decade and beyond as technology continues to progress at a seemingly exponential pace. Clearly, therefore, these recommendations are only provisionally valid, and will need to be reconsidered over time as virtual education technologies and practices continue to change.
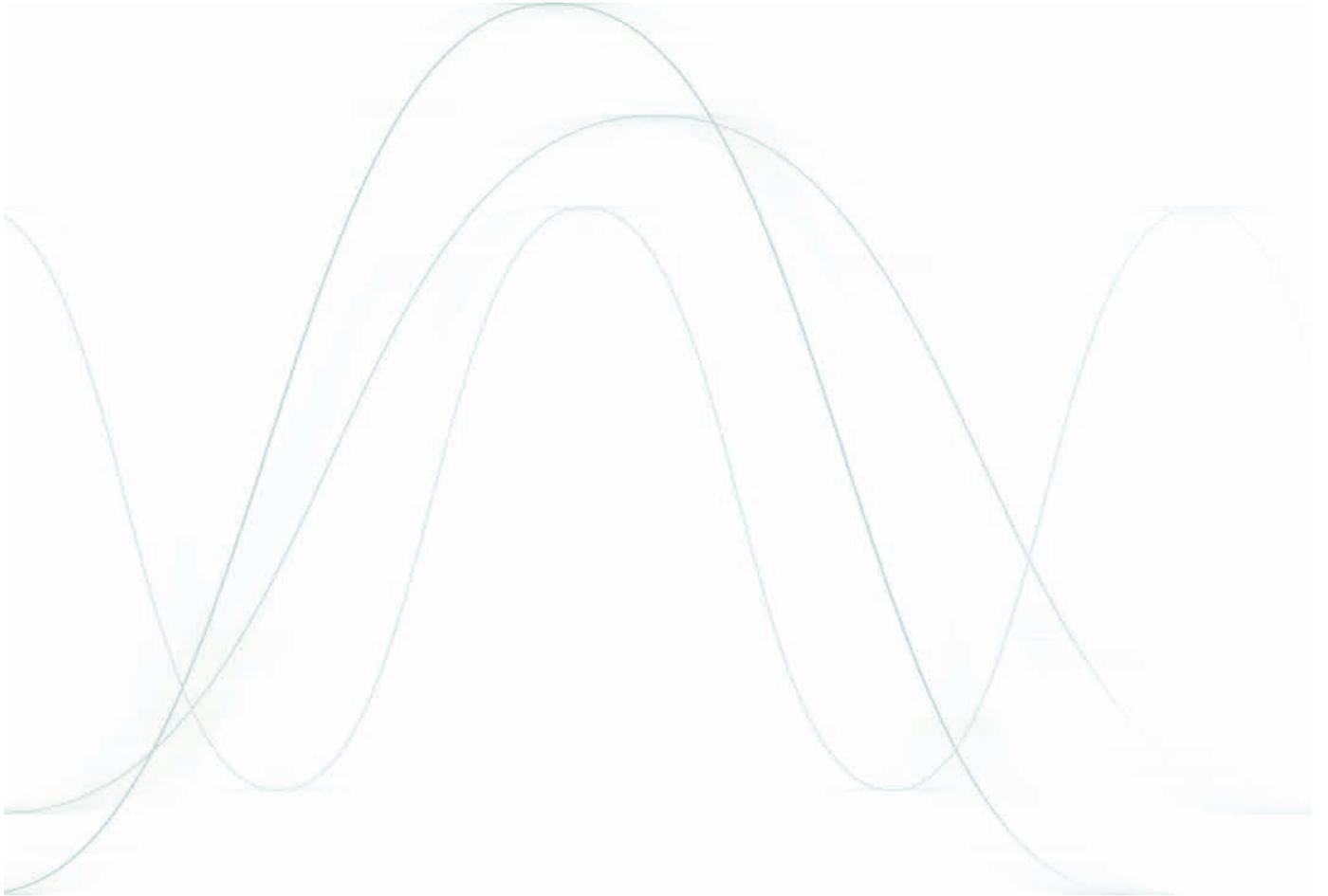
APPENDIX A.
Data Element Definitions

All data elements presented in this guide originated in the *NCES Handbooks Online,* Version 4.0, an online tool from the National Center for Education Statistics available at *http://nces.ed.gov/programs/handbook/index.asp.* This resource defines standard education terms for students, staff, schools, local education agencies, intermediate education agencies, and state education agencies. The *Handbooks* are intended to serve as reference documents for public and private education institutions and early childhood centers, as well as education researchers and other users of education data. This web-based tool allows users to view and download information about data elements via an electronic table of contents, a drill-down finder, element-name and first-letter searches, and advanced query options.

The format of the data element entries in appendix A is as follows:

Data Element Name The name of the data element as referred to in this document and the *NCES Handbooks Online.*

Definition: A description of the meaning of a word or concept.

Element Number: The four-digit number assigned to a data element for coding and organizational purposes in the *NCES Handbooks Online.*

Element Type: A description of the form or qualities (i.e., the "type") of the data that constitutes the element. Data element "types" include:

- *Alpha/Numeric (AN):* A data element for which any letter or number (or combination of letters and numbers) is appropriate. Generally, this data element type is used when no standard code list of related options (see below) exists, or where descriptive information is desired.
- *Date (DT):* A data element type that is specifically defined as a date. Generally, the format in the *NCES Handbooks Online* is MMDDYYYY (field length = 8), although this may vary.
- *Floating Decimal (R):* A data element type in which a decimal must be included in the numeric value. If it does not appear, the number is assumed to be whole. Floating Decimal (R) values might, for example, appear as 4.1 (signifying four digits to the left of the decimal and one digit to the right of the decimal) or 3.2 (signifying three digits to the left of the decimal and two digits to the right of the decimal).
- *Identifier (ID):* A data element defined by a code set of related options (see below). A code set is provided for most of the data elements identified as "ID" in the *NCES Handbooks Online.*
- *Numeric (N):* A data element that must be a numeric value. Decimals themselves are not included in the value [see Floating Decimal (R) above], although a decimal is implied in the right-most place to signify a whole number.

Field Length: The recommended maximum number of places the value of a data element would require in an automated record system. For example, a descriptive Alpha/Numeric (AN) element might require 60 letters or numbers for a response, whereas a Date (DT) would require 8 digits (MMDDYYYY). Only a maximum suggested field length has been included here. In designing a data collection system, a minimum length is also generally specified. All field length recommendations are illustrative and not mandated.

Related Options: A recommended code list that serves as a response for a data element. For example, "Female" and "Male" are options under the data element "Sex." Options are listed in either alphabetical order or in a logical sequence, and have assigned code numbers.

Accreditation Status

Definition: An indication as to whether the organization has been accredited by an outside accrediting agency. The accreditation process generally includes a review of an organization's educational program and staff for quality, and concludes with certification (or not) that the organization meets a minimum set of standards.
Element Number: 1121
Element Type: ID
Field Length: 4
Related Options:
- 0232 No
- 0002 Yes

Additional Geographic Designation

Definition: Any additional relevant description, beyond locale code or geo-coding, for a geographic location.
Element Number: 0202
Element Type: AN
Field Length: 60

Additional Health Data and Medical Condition

Definition: Additional information concerning an individual's health (e.g., consideration for healthy life choices, such as "nonsmoker").
Element Number: 0344
Element Type: AN
Field Length: 60

Additional Special Health Needs, Information, or Instructions

Definition: The description or detailed specific instructions (beyond what has already been included) regarding an individual's medical or dental treatment as directed by the individual or his or her parents/guardian, or health care provider.
Element Number: 0351
Element Type: AN
Field Length: 60

Address Type

Definition: The type of address listed for an individual or organization.
Element Number: 0025
Element Type: ID
Field Length: 4
Related Options:
- 1074 Employer's address
- 1075 Employment address
- 0123 Mailing address
- 1073 Other home address
- 2382 Other organization address
- 0765 Physical location address
- 0124 Shipping address

Administrative Funding Control

Definition: The type of education institution as classified by its funding source.
Element Number: 0029

Element Type: ID
Field Length: 4
Related Options:
    0776 Private school
    0778 Public school
    9999 Other

Admission Date

Definition: The month, day, and year a student is admitted to a school or an education institution.
Element Number: 0616
Element Type: DT
Field Length: 8

Admission Status

Definition: The status given to a student when he or she is admitted to a school or an education institution.
Element Number: 0617
Element Type: ID
Field Length: 4
Related Options:
    1819 Exchange student
    1820 Guest student
    1815 Probationary student (academic)
    1816 Probationary student (attendance)
    1817 Probationary student (behavioral)
    1818 Probationary student (other)
    1814 Regular student
    9999 Other

Alias

Definition: An assumed name, or a name by which an individual is otherwise known.
Element Number: 0033
Element Type: AN
Field Length: 35

Aligned with State Standards

Definition: An indication of whether a course is aligned with the state's standards.
Element Number: 0034
Element Type: ID
Field Length: 4
Related Options:
    0232 No
    0002 Yes

Alternative School

Definition: A school that: 1) addresses needs of students that cannot typically be met in a regular school; 2) provides nontraditional education; 3) falls outside of the categories of regular, magnet/special program emphasis, special, or vocational/ technical education.
Element Number: 0036

Element Type: ID
Field Length: 4
Related Options:
    0232 No
    0002 Yes

Apartment/Room/Suite Number

Definition: The apartment, room, or suite number of an address.
Element Number: 0037
Element Type: AN
Field Length: 10

Assessment Content Standard

Definition: An indication as to whether an assessment conforms to a standard.
Element Number: 0065
Element Type: ID
Field Length: 4
Related Options:
    0430 Local standard
    0431 Statewide standard
    0432 Regional standard
    0434 Association standard
    0435 School standard
    0438 Other standard
    9998 None
    9999 Other

Assignment Description

Definition: Further description of a staff assignment that fully defines the activity, as necessary. For example, a "teacher" assignment would be defined in terms of the grade levels taught or the types of duties involved (e.g., lead teacher for a class of third graders).
Element Number: 0558
Element Type: AN
Field Length: 80

Assignment Due Date

Definition: The month, day, and year that the assignment is due.
Element Number: 0070
Element Type: DT
Field Length: 8

Assessment Duration

Definition: The amount of time an individual is permitted to use in attempting to complete the assessment.
Element Number: 0046
Element Type: AN
Field Length: 10

Assignment Finish Date

Definition: The month, day, and year the assignment is finished by students.
Element Number: 0071
Element Type: DT
Field Length: 8

Assignment Start Date

Definition: The month, day, and year the assignment is started by students.
Element Number: 0074
Element Type: DT
Field Length: 8

Attendance Area Code

Definition: A unique number or alphanumeric code of an attendance area that the school or building serves, as assigned by a school, school system, state, or other agency or entity.
Element Number: 0960
Element Type: AN
Field Length: 30

Authorizing Entity Type

Definition: The type of organization that has ultimate responsibility for policy and operational decisions for an education institution.
Element Number: 0076
Element Type: ID
Field Length: 4
Related Options:
    0865 Charter board
    3167 Commercial or other for-profit firm
    0797 Federal government
    0862 Local (e.g., school board, city council)
    3166 Other nonprofit organization
    0864 Private/Religious
    0861 Regional [e.g., Intermediate Education Agency, Cooperatives, BOCES (Board Of Cooperative Educational Services), Cross-state agencies]
    0675 School
    0860 State Agency

Authorized Instructional Level

Definition: The instructional level or levels within which an individual is authorized to serve by an active credential.
Element Number: 0420
Element Type: ID
Field Length: 4
Related Options:
    0013 Adult
    1302 All levels
    1304 Elementary
    2402 High school
    0787 Infants/toddlers

2399 Intermediate
2401 Junior high school
2400 Middle
0789 Prekindergarten
1981 Preschool/early childhood
2397 Primary
2403 Secondary

Background Check Completion Date

Definition: The month, day, and year the examination of the individual's employment and/or other records was completed. This examination is part of the requirements for this position or a credential.
Element Number: 0403
Element Type: DT
Field Length: 8

Background Check Type

Definition: An indication of the type of employment and/or other records investigated to determine whether the individual meets the basic and security requirements for employment or a credential.
Element Number: 0401
Element Type: ID
Field Length: 4
Related Options:
1423 Credentials
1420 Criminal records
1422 Personal references
1421 Previous employment records
9999 Other

Base Salary or Wage

Definition: The salary or wage an individual is paid before deductions (excluding differentials) but including annuities.
Element Number: 0495
Element Type: R
Field Length: 6.2

Birth Date

Definition: The month, day, and year an individual was born.
Element Number: 0314
Element Type: DT
Field Length: 8

Building/Site Number

Definition: The number of the building on the site, if more than one building share the same address.
Element Number: 0081
Element Type: N
Field Length: 4

Charter School Status

Definition: A school providing free public elementary or secondary education to eligible students under a specific charter granted by the state legislature or other appropriate authority, and designated by such authority to be a charter school.
Element Number: 0089
Element Type: ID
Field Length: 4
Related Options:
    0232 No
    0002 Yes

Citizenship Status

Definition: The description that best identifies the status of an individual's citizenship and/or residency in the United States.
Element Number: 0322
Element Type: ID
Field Length: 4
Related Options:
    1014 Dual national
    1015 Nonresident alien
    1016 Resident alien
    1017 United States citizen
    9999 Other

City

Definition: The name of the city in which an address is located.
Element Number: 0090
Element Type: AN
Field Length: 30

City of Birth

Definition: The name of the city in which an individual was born.
Element Number: 0852
Element Type: AN
Field Length: 30

Class Attendance Status

Definition: The status of a student's attendance at each class period while school is in session. (Note that this definition applies more readily to classes in which the pace is synchronous; asynchronous classes warrant different criteria.)
Element Number: 0640
Element Type: ID
Field Length: 4
Related Options:
    1904 Early departure
    1901 Excused absence
    1900 In attendance/present
    1903 Tardy
    1902 Unexcused absence

Class Beginning Time

Definition: An indication of the time of day the class begins.
Element Number: 0091
Element Type: AN
Field Length: 10

Class Ending Time

Definition: An indication of the time of day the class ends.
Element Number: 0092
Element Type: AN
Field Length: 10

Class Meeting Days

Definition: The day(s) of the week (e.g., Monday, Wednesday) the class meets or an indication that a class meets "out-of-school" or is "self-paced."
Element Number: 0093
Element Type: AN
Field Length: 30

Class Organization

Definition: The structure in which class instruction is arranged.
Element Number: 0094
Element Type: ID
Field Length: 4
Related Options:
  3170 Ability group class
  0580 Departmentalized instruction
  0582 Elementary enrichment class
  0003 Pull-out class
  0581 Self-contained class
  0472 Self-contained class (special education)
  0584 Team-taught class

Class Pace

Definition: The pace at which class instruction is arranged.
Element Number: 1146
Element Type: ID
Field Length: 4
Related Options:
  3484 Combination of self-paced and controlled-paced
  3483 Controlled-paced
  1860 Self-paced

Class Period

Definition: An indication of the portion of a typical daily session in which students receive instruction in a specified subject (e.g., morning, sixth period, block period, AB schedules).
Element Number: 0095
Element Type: AN
Field Length: 16

Class Rank

Definition: The academic rank of a student in relation to his or her graduating class (e.g., 1st, 2nd, 3rd).
Element Number: 0676
Element Type: AN
Field Length: 5

Cohort Year

Definition: The school year the student entered the baseline group used for computing completion rates (e.g., high school, program).
Element Number: 0618
Element Type: DT
Field Length: 4

Contract Beginning Date

Definition: The month, day, and year a contract between an individual and a governing authority specifies that employment is to begin (or the date on which the agreement is made valid).
Element Number: 0469
Element Type: DT
Field Length: 8

Contract Days of Service per Year

Definition: The number of days per year an individual is expected to work as outlined specifically in his or her employment agreement.
Element Number: 0473
Element Type: R
Field Length: 3.2

Contract Ending Date

Definition: The month, day, and year a contract between an individual and a governing authority specifies employment is to end (or the date on which the agreement is no longer valid).
Element Number: 0470
Element Type: DT
Field Length: 8

Contractual Term

Definition: The length of the contract under which an individual is employed by an employer.
Element Number: 0468
Element Type: ID
Field Length: 4
Related Options:
  0410 Annual year
  1440 Continuing
  1442 Multiyear
  1441 Renewable
  1439 Short-term
  9999 Other

Country Code

Definition: The code for the country in which an address is located. (Note: A list of countries and codes can be found in appendix C of the *NCES Handbooks Online.)*
Element Number: 0099
Element Type: ID
Field Length: 4
Related Options: Available at *http://nces.ed.gov/programs/handbook/data/pdf/appendices_c.pdf*

Country of Birth Code

Definition: The code for the name of the country in which an individual was born. (Note: A list of countries and codes can be found in appendix C of the *NCES Handbooks Online.)*
Element Number: 0320
Element Type: ID
Field Length: 4
Related Options: Available at *http://nces.ed.gov/programs/handbook/data/pdf/appendices_c.pdf*

Country of Citizenship Code

Definition: A unique number or alphanumeric code for the country to which an individual acknowledges citizenship. (Note: A list of countries and codes can be found in appendix C of the *NCES Handbooks Online).*
Element Number: 0323
Element Type: ID
Field Length: 4
Related Options: Available at *http://nces.ed.gov/programs/handbook/data/pdf/appendices_c.pdf*

County FIPS (Federal Information Processing Standards) Code

Definition: The Federal Information Processing Standards (FIPS) numeric code for the county. (Note: A 5-digit FIPS code that identifies counties across the United States can be accessed online by visiting the FIPS Home Page at *http://www.itl.nist.gov/fipspubs.* For additional information about FIPS codes, contact the Information Technology Laboratory, National Institute of Standards and Technology (NIST), 100 Bureau Drive, Stop 8900, Gaithersburg, MD 20899–8900. The phone number is 301–975–2832.)
Element Number: 0100
Element Type: ID
Field Length: 5
Related Options: See *http://www.itl.nist.gov/fipspubs*

County of Birth

Definition: The name of the county, parish, borough, or comparable unit (within a state) in which an individual was born.
Element Number: 0317
Element Type: AN
Field Length: 30

Course Attendance Frequency Requirement

Definition: A description of any synchronous attendance requirement (online or in person), or the number of times a student must log in and the length of the login time required for an asynchronous course.
Element Number: 1123
Element Type: AN
Field Length: 30

Course Attendance Requirement

Definition: An indication that course attendance is required during specific periods, at specific intervals, or for a specific student population.
Element Number: 1122
Element Type: ID
Field Length: 4
Related Options:
    0232 No
    0002 Yes

Course Code

Definition: The actual code that identifies the organization of subject matter and related learning experiences provided for the instruction of students. (Note: For courses at the secondary level only, a list of course codes and titles can be found in appendix N of the *NCES Handbooks Online.* New course code classification standards are under development by the National Center for Education Statistics.)
Element Number: 0102
Element Type: AN
Field Length: 10
Related Options: For courses at the secondary level only, a list of course codes and titles can be found at
    http://nces.ed.gov/programs/handbook/data/pdf/appendices_n.pdf

Course Code System

Definition: A system used to identify the organization of subject matter and related learning experiences provided for the instruction of students.
Element Number: 0103
Element Type: ID
Field Length: 4
Related Options:
    0538 Intermediate agency course code
    0535 LEA course code
    0533 NCES Pilot Standard National Course Classification System for Secondary Education Codes
    0536 School course code
    0534 State course code
    0537 University course code
    0305 SCED course code
    9999 Other

Course Description

Definition: A description of the content standards and goals covered in the course. Reference may be made to state or national content standards.
Element Number: 0104
Element Type: AN
Field Length: 45

Course Title

Definition: The descriptive name given to a course of study offered in a school or other institution or organization. In departmentalized classes at the elementary, secondary, and postsecondary levels (and for staff development activities), this refers to the name by which a course is identified (e.g., American history, English III). For elementary and other

nondepartmentalized classes, it refers to any portion of the instruction for which a grade or report is assigned (e.g., reading, composition, spelling, language arts).
Element Number: 0107
Element Type: AN
Field Length: 45

Credential Assessment Standard Indicator

Definition: An indication as to whether an assessment conforms to a standard.
Element Number: 0414
Element Type: ID
Field Length: 4
Related Options:
    0434 Association standard
    0430 Local standard
    0433 National Board for Professional Teaching Standards (NBPTS) standard
    9998 None
    0438 Other standard
    0432 Regional standard
    0435 School standard
    0431 Statewide standard

Credential-Authorized Function

Definition: A functional area within which an individual is authorized to serve by an active credential (e.g., English-teaching, vocational education, special education, career counseling, principal, superintendent, online teacher).
Element Number: 0419
Element Type: AN
Field Length: 30

Credential Description

Definition: An indication of the title or description of a credential an individual holds.
Element Number: 0396
Element Type: AN
Field Length: 60

Credential Expiration Date

Definition: The month, day, and year an active credential held by an individual will expire.
Element Number: 0399
Element Type: DT
Field Length: 8

Credential Issuance Date

Definition: The month, day, and year an active credential was issued to an individual.
Element Number: 0398
Element Type: DT
Field Length: 8

Credential Renewal Date

Definition: The month, day, and year the individual met the requirements necessary to renew a credential.
Element Number: 0410
Element Type: DT
Field Length: 8

Credential Renewal Units Earned

Definition: The number of professional development or recertification units earned by the individual.
Element Number: 0408
Element Type: N
Field Length: 3

Credential Type

Definition: An indication of the category of credential an individual holds. (Note: A list of regulated occupations and professions, except school teachers, can be found at *http://nces.ed.gov/programs/handbook/data/pdf/appendices_j.pdf.*)
Element Number: 0391
Element Type: ID
Field Length: 4
Related Options:

    1218 Certification
    1221 Endorsement
    1219 Licensure
    1220 Registration
    9999 Other

Credits Attempted: Cumulative

Definition: The cumulative number of credits an individual attempts to earn by taking courses during his or her enrollment in the current school, as well as those credits transferred from schools in which the individual was previously enrolled.
Element Number: 0660
Element Type: R
Field Length: 3.1

Credits Attempted: Given Grading Period

Definition: The number of credits an individual attempts to earn by taking courses during a given grading period.
Element Number: 0657
Element Type: R
Field Length: 2.1

Credits Attempted: Given School Year

Definition: The total number of credits an individual attempts to earn by taking courses during a given school year (e.g., 1999–2000).
Element Number: 0659
Element Type: R
Field Length: 2.1

Credits Attempted: Given Session

Definition: The total number of credits an individual attempts to earn by taking courses during a given grading period.
Element Number: 0658
Element Type: R
Field Length: 2.1

Credits Received: Cumulative

Definition: The cumulative number of credits an individual earns by completing courses or examinations during his or her enrollment in the current school, plus those credits transferred from schools in which the individual was previously enrolled.
Element Number: 0664
Element Type: R
Field Length: 3.1

Credits Received: Given Grading Period

Definition: The number of credits an individual earns by successfully completing courses or examinations during a given grading period.
Element Number: 0661
Element Type: R
Field Length: 2.1

Credits Received: Given School Year

Definition: The total number of credits an individual earns by successfully completing courses or examinations during a given school year.
Element Number: 0663
Element Type: R
Field Length: 2.1

Credits Received: Given Session

Definition: The total number of credits an individual earns by successfully completing courses or examinations during a given session.
Element Number: 0662
Element Type: R
Field Length: 2.1

Curriculum Framework

Definition: An indication of the standard curriculum used for a course.
Element Number: 0110
Element Type: ID
Field Length: 4
Related Options:

    0613 LEA curriculum framework
    3410 National curriculum standard
    0615 Private, religious curriculum
    0614 School curriculum framework
    0612 State curriculum framework
    9999 Other

Curriculum Framework Name

Definition: The name of the curriculum framework used for this course.
Element Number: 0109
Element Type: AN
Field Length: 45

Daily Attendance Status

Definition: The status of a student's attendance during a given day school is in session.
Element Number: 0636
Element Type: ID
Field Length: 4
Related Options:
    1900 In attendance/present
    1901 Excused absence
    1902 Unexcused absence
    1903 Tardy
    1904 Early departure

Days of Service Per Week

Definition: The average number of days per week an individual is expected to work, as outlined specifically in his or her employment agreement.
Element Number: 0478
Element Type: R
Field Length: 1.2

Degree/Certificate Conferring Date

Definition: The month, day, and year an individual received a degree or certificate.
Element Number: 0388
Element Type: DT
Field Length: 8

Degree/Certificate Title

Definition: The name of the degree or certificate earned by an individual. This includes honorary degrees conferred upon an individual.
Element Number: 0385
Element Type: AN
Field Length: 45

Degree/Certificate Type

Definition: The type of degree or certificate earned by an individual.
Element Number: 0386
Element Type: ID
Field Length: 4
Related Options:
    1046 Adult basic education diploma
    1050 Associate's degree (two years or more)
    1051 Bachelor's (Baccalaureate) degree

1057 Doctoral (Doctor's) degree
1053 First-professional degree
1047 Formal award, certificate or diploma (less than one year)
1048 Formal award, certificate or diploma (more than or equal to one year)
1052 Graduate certificate
1045 High school diploma or the equivalent (e.g., GED or recognized homeschool)
1054 Master's degree (e.g., M.A., M.S., M.Eng., M.Ed., M.S.W., M.B.A., M.L.S.)
1056 Postprofessional degree
1049 Some college but no degree
1055 Specialist's degree (e.g., Ed.S.)
0819 Vocational certificate
9999 Other

Disciplinary Action

Definition: Identifies the consequences of an incident for the student(s) involved in an incident as perpetrator(s).
Element Number: 1054
Element Type: ID
Field Length: 4
Related Options:
3071 Bus suspension
3072 Change of placement (long-term)
3073 Change of placement (reassignment), pending an expulsion hearing
3074 Change of placement (reassignment), resulting from an expulsion hearing
3075 Change of placement (reassignment), temporary
3076 Community service
3077 Conference with and warning to student
3078 Conference with and warning to student and parent/guardian
3079 Confiscation of contraband
3080 Conflict-resolution or anger-management services mandated
3081 Corporal punishment
3082 Counseling mandated
3083 Demerit
3084 Detention
3085 Expulsion recommendation
3086 Expulsion with services
3087 Expulsion without services
3088 Juvenile justice referral
3089 Law enforcement referral
3090 Letter of apology
3091 Loss of privileges
3105 No action
3092 Physical activity
3158 Removal by a hearing officer
3093 Reprimand
3094 Restitution
3095 Saturday school
3096 School probation
3097 Substance-abuse counseling mandated
3098 Substance-abuse treatment mandated
3099 Suspension after school

3100 Suspension, in-school
3154 Suspension, out-of-school, greater than 10 consecutive school days
3155 Suspension, out-of-school, separate days cumulating to more than 10 school days
3101 Suspension, out-of-school, with services
3102 Suspension, out-of-school, without services
3157 Unilateral removal—drug incident
3156 Unilateral removal—weapon incident
3103 Unsatisfactory behavior grade
3104 Work detail
9997 Unknown
9998 None
9999 Other

Discontinuing Schooling Reason

Definition: The primary reason for which a student discontinued schooling, or left school before graduation or matriculation.
Element Number: 0650
Element Type: ID
Field Length: 4
Related Options:
   2154 Academic difficulty
   1933 Behavioral difficulty
   1934 Dislike of school experience
   1935 Economic reasons
   1936 Employment
   1937 Entered criminal justice system
   1952 Failed graduation examination
   1938 Failed required test
   1939 Lack of appropriate curriculum
   1940 Lack of childcare
   1941 Lack of transportation
   1942 Language difficulty
   1943 Marriage
   1944 Military reason
   1945 Needed at home
   1946 Parent/guardian influence
   1947 Poor relationships with fellow students
   1948 Poor student–staff relationships
   1949 Pregnancy
   1950 Religious reason
   1951 Substance abuse
   3416 Technical difficulty
   2233 Unknown reason
   9999 Other

Duration of Disciplinary Action

Definition: The length, in school days, of the disciplinary action.
Element Number: 1057
Element Type: R
Field Length: 3.3

Economic Disadvantage Status

Definition: An indication of the inadequate financial condition of an individual's family, as determined by family income; number of family members/dependents; participation in public assistance programs; and/or other characteristics considered relevant by federal, state, and local policy.

Element Number: 0605
Element Type: ID
Field Length: 4
Related Options:

    0232 No
    0002 Yes

Electronic Mail Address

Definition: The numbers, letters, and symbols used to identify an electronic mail (e-mail) user within the network to which the individual or organization belongs.

Element Number: 0120
Element Type: AN
Field Length: 50

Electronic Mail Address Type

Definition: The type of electronic mail (e-mail) address listed for an individual or organization.

Element Number: 0121
Element Type: ID
Field Length: 4
Related Options:

    0507 Home/personal
    0767 Organization
    0518 Work
    9999 Other

Elementary Subject/Course

Definition: A classification of related subjects/courses or units of subjects/courses provided for students at the elementary school level.

Element Number: 0122
Element Type: ID
Field Length: 4
Related Options:

    0539 Computer science programming
    0540 Computer skills/literacy
    0541 Elective activities
    0256 English as a second language
    0542 Fine arts–art
    0543 Fine arts–dance
    0544 Fine arts–drama/theater
    0545 Fine arts–music
    2371 Foreign language and literature
    0547 Geography
    0548 Handwriting/penmanship
    0549 Health
    0550 History

0551 Home economics
0552 Industrial arts
0553 Keyboarding/typing
0554 Language arts
0555 Library skills
0556 Mathematics/arithmetic
0557 Military science
0558 Multi/interdisciplinary studies
0559 Physical education
0560 Reading
0561 Religious education and theology
0562 Science
0563 Social studies
0565 Spelling
0566 Study skills
0567 Test preparation
9999 Other

Eligibility Status for School Food Service Programs

Definition: An indication of a student's level of eligibility for breakfast, lunch, snack, supper, and milk programs.
Element Number: 0606
Element Type: ID
Field Length: 4
Related Options:

3119 Free
3121 Full price
3120 Reduced price
9997 Unknown

Emergency Factor

Definition: An identification of a physical or medical condition of potentially special significance during an emergency treatment.
Element Number: 0343
Element Type: ID
Field Length: 4
Related Options:

1084 Allergy, aspirin
1085 Allergy, insect bite
1086 Allergy, iodine
1089 Allergy, multiple
1087 Allergy, penicillin
1088 Allergy, sulfa
1090 Asthma
1091 Contact lenses worn
1092 Diabetes
1093 Drug dependency
1094 Epilepsy
1095 Hearing impaired
1096 Heart disease
1097 Hemophilia

1098 Rheumatic fever
1099 Speech-impaired
1100 Vision-impaired
9998 None
9999 Other

Employment Eligibility Verification

Definition: The documentation, in addition to an identification document with photograph (e.g., driver's license), furnished by an individual to prove his or her eligibility to be legally employed in the United States.
Element Number: 0326
Element Type: ID
Field Length: 4
Related Options:
   1022 Alien-registration receipt card with photograph (INS Form I–151 or I–155)
   1020 Certificate of naturalization (INS Form N–550 or N–570)
   1019 Certificate of U.S. citizenship (INS Form N–560 or N–561)
   1029 Certification of birth abroad issued by the Department of State (Form FS–545 or Form DS–1350)
   1033 ID card for use of resident citizen in the United States (INS Form I–179)
   1031 Native American tribal document
   1030 Original or certified copy of a birth certificate issued by a state, county, municipal authority, or outlying possession of the United States
   1032 U.S. citizen ID card (INS Form I–197)
   1018 U.S. passport
   1028 U.S. Social Security card issued by the Social Security Administration (other than a card stating it is not valid for employment)
   1024 Unexpired employment authorization card (INS Form I–688A)
   1034 Unexpired employment authorization document issued by the INS (other than those already listed)
   1025 Unexpired reentry permit (INS Form I–327)
   1026 Unexpired refugee travel document (INS Form I–571)
   1023 Unexpired temporary resident card (INS Form I–688)
   9999 Other

Employment End Date

Definition: The month, day, and year an individual ended a period of self-employment or employment with an organization or institution.
Element Number: 0432
Element Type: DT
Field Length: 8

Employment Separation Reason

Definition: The primary reason for the termination of the employment relationship.
Element Number: 0434
Element Type: ID
Field Length: 4
Related Options:
   1391 Change of assignment
   1404 Death
   1401 Discharge due to a falsified application form
   1400 Discharge due to continued absence or tardiness

1402 Discharge due to credential revoked or suspended
1399 Discharge due to misconduct
1403 Discharge due to unsatisfactory work performance
1398 Discharge due to unsuitability
1387 Employment in education
1388 Employment outside of education
1390 Family/personal relocation
1392 Formal study or research
1394 Homemaking/caring for a family member
1393 Illness/disability
1406 Layoff due to lack of funding
1395 Layoff due to budgetary reduction
1397 Layoff due to decreased workload
1396 Layoff due to organizational restructuring
1407 Lost credential
1405 Personal reason
1389 Retirement
9997 Unknown
9999 Other

Employment Start Date

Definition: The month, day, and year an individual began self-employment or employment with an organization or institution.
Element Number: 0431
Element Type: DT
Field Length: 8

Employment Status

Definition: The condition under which an individual has agreed to serve an employer.
Element Number: 0613
Element Type: ID
Field Length: 4
Related Options:
　　1384 Contingent upon funding
　　1379 Contractual
　　1383 Employed or affiliated with outside organization
　　1385 Noncontractual
　　1378 Probationary
　　1380 Substitute/temporary
　　1381 Tenured or permanent
　　1382 Volunteer
　　9999 Other

Employment Time Annually

Definition: The annual amount/unit of time an individual is employed to perform an assignment for an employer (e.g., 180 days, nine months, ten months, full year).
Element Number: 0474
Element Type: AN
Field Length: 16

English Proficiency

Definition: An individual's adeptness at English as indicated by: a) reading skills (the ability to comprehend and interpret text); b) listening skills (the ability to understand verbal expressions of the language); c) writing skills (the ability to produce written text with content and format); and d) speaking skills (the ability to use oral language appropriately and effectively).

Element Number: 0585
Element Type: ID
Field Length: 4
Related Options:

    1634 Fluent English speaker
    2349 Limited English-proficient/English language learner
    1633 Native English speaker
    1635 Non-English speaking
    1636 Redesignated as fluent English-proficient
    9997 Unknown

Enrollment Status

Definition: An indication as to whether a student's name was, is, or will be officially registered on the roll of a school or schools.

Element Number: 0615
Element Type: ID
Field Length: 4
Related Options:

    1812 Concurrently enrolled
    1811 Currently enrolled
    1810 Previously enrolled
    1813 Transferring (will enroll)

Entry Date

Definition: The month, day, and year an individual enters and begins to receive instructional services in a school or an institution during a given session.

Element Number: 0366
Element Type: DT
Field Length: 8

Entry Type

Definition: The process by which a student enters a school during a given academic session.

Element Number: 0619
Element Type: ID
Field Length: 4
Related Options:

    1834 Matriculation from another school
    1838 Original entry into a United States school
    1840 Original entry into a United States school from a foreign country with an interruption in schooling
    1839 Original entry into a United States school from a foreign country with no interruption in schooling
    1836 Reentry after a voluntary withdrawal
    1837 Reentry after an involuntary withdrawal
    1835 Reentry from the same school with no interruption of schooling
    1832 Transfer from a charter school
    1825 Transfer from a private, nonreligiously-affiliated school in a different local education agency (LEA) in the same state

1826 Transfer from a private, nonreligiously-affiliated school in a different state
1824 Transfer from a private, nonreligiously-affiliated school in the same local education agency
1828 Transfer from a private, religiously-affiliated school in a different local education agency in the same state
1829 Transfer from a private, religiously-affiliated school in a different state
1827 Transfer from a private, religiously-affiliated school in the same local education agency
1822 Transfer from a public school in a different local education agency in the same state
1823 Transfer from a public school in a different state
1821 Transfer from a public school in the same local education agency
1830 Transfer from a school outside of the country
1831 Transfer from an institution
1833 Transfer from homeschooling
9999 Other

Entry/Grade Level

Definition: The grade level or primary instructional level at which a student enters and receives services in a school or an education institution during a given academic session.
Element Number: 0620
Element Type: ID
Field Length: 4
Related Options:

0013 Adult
0798 Eighth grade
0801 Eleventh Grade
0794 Fifth grade
0790 First grade
0793 Fourth grade
0803 Grade 13
0787 Infants/toddlers
0805 Kindergarten
0799 Ninth grade
2359 Postsecondary
0788 Preschool/Prekindergarten
0791 Second grade
0796 Seventh grade
0795 Sixth grade
0800 Tenth grade
0792 Third grade
3494 Transitional Kindergarten
0802 Twelfth grade
0804 Ungraded
9999 Other

Estimated Time Element

Definition: The actual or estimated number of clock hours or minutes required for class completion. This number is especially important for occupational or vocational classes and may represent the clock-hour requirement of the class, the number of minutes (or clock hours) of class time per week, and/or the number of equivalent weeks the class typically meets.
Element Number: 0282
Element Type: AN
Field Length: 4

Exit/Withdrawal Date

Definition: The month, day, and year of the first day after the date of an individual's last attendance in school (if known); the day on which an individual graduated; or the date on which it becomes known officially that an individual left school.
Element Number: 0642
Element Type: DT
Field Length: 8

Exit/Withdrawal Status

Definition: An indication as to whether an instance of student exit/withdrawal is considered to be of a permanent or temporary nature.
Element Number: 0643
Element Type: ID
Field Length: 4
Related Options:

1905   Permanent exit/withdrawal
1906   Temporary exit/withdrawal

Exit/Withdrawal Type

Definition: The circumstances under which the student exited from membership in an education institution.
Element Number: 0644
Element Type: ID
Field Length: 4
Related Options:

1907   Student is in a different public school in the same local education agency
3508   Student is in a charter school managed by the same local education agency
3499   Student is in the same local education agency and receiving education services, but not assigned to a particular school
1908   Transferred to a public school in a different local education agency in the same state
1917   Transferred to an institution
1919   Transferred to a charter school
1910   Transferred to a private, nonreligiously affiliated school in the same local education agency
1911   Transferred to a private, nonreligiously affiliated school in a different local education agency in the same state
1913   Transferred to a private, religiously affiliated school in the same local education agency
1914   Transferred to a private, religiously affiliated school in a different local education agency in the same state
1918   Transferred to homeschooling
1909   Transferred to a public school in a different state
1912   Transferred to a private, nonreligiously affiliated school in a different state
1915   Transferred to a private, religiously affiliated school in a different state
1916   Transferred to a school outside of the country
1927   Discontinued schooling
1926   Reached maximum age for services
1925   Expelled or involuntarily withdrawn
3500   Enrolled in an adult education or training program
1931   Not enrolled, status unknown
1921   Graduated with regular, advanced, International Baccalaureate (IB), or other type of diploma
1928   Completed grade 12, but did not meet all graduation requirements
1922   Completed school with other credentials
3501   Completed a state-recognized vocational education program
3509   Completed with a state-recognized equivalency certificate

3502 Not enrolled, eligible to return

1924 Withdrawn due to illness

3503 Enrolled in a foreign exchange program, eligible to return

1930 Enrolled in a postsecondary early admission program, eligible to return

3504 Withdrawn from school, under the age for compulsory attendance; eligible to return

1923 Died or permanently incapacitated

3505 Exited

9999 Other

Facilities Code

Definition: A locally assigned code used to capture precise information on locations specific to a school [e.g., class number, hall number, school bus number, computer station number, or internet protocol (IP) address].
Element Number: 1041
Element Type: AN
Field Length: 30

Facility Type

Definition: The functional or organizational classification of a function of a facility.
Element Number: 0129
Element Type: ID
Field Length: 4
Related Options:

0103 Administrative office

0101 Business facility

0752 Community facility

0098 Correction or detention facility

0758 Education facility (PreK–12)

0753 Home of student

0754 Hospital

0342 Postsecondary facility

0100 Religious facility

0756 Residential facility

0759 Shared education facility

0760 Support facility

0761 Vocational training center

9999 Other

Family Public Assistance Status

Definition: An indication of the type of public assistance received by an individual's household from a welfare agency, whether local, state, federal, or private.
Element Number: 0608
Element Type: ID
Field Length: 4
Related Options:

1718 Food stamps

1717 Temporary Assistance for Needy Families (TANF)

1719 Women, Infants, and Children (WIC) programs

9999 Other

Fee Amount

Definition: The amount charged a student for items not covered by tuition for a specified time period while in attendance.
Element Number: 0853
Element Type: R
Field Length: 5.2

Fee Payment Type

Definition: The type of charges required of a student for items not covered by tuition for a specified time period while in attendance.
Element Number: 0626
Element Type: ID
Field Length: 4
Related Options:

1871	Athletic events
1873	Boarding expenses
1874	Books
1866	Driver education (behind-the-wheel)
1875	Equipment
1484	Extracurricular activities
1868	Gym suits
1869	Musical instrument rental
1870	Musical instrument repair
1876	Publications
1865	Student transcripts
1877	Supplies
1867	Towel services
9999	Other

Financial Assistance Amount

Definition: The dollar value of financial assistance received by, or made available to, a student under the financial assistance program.
Element Number: 0634
Element Type: R
Field Length: 5.2

Financial Assistance Source

Definition: The funding source of financial assistance awarded to a student for his or her education.
Element Number: 0633
Element Type: ID
Field Length: 4
Related Options:

1886	A federal agency
1884	A school or school district outside the state
1885	A state agency
1883	Another school or school district within the state but outside the local education agency
1882	Another school within the local education agency
1888	Other financial assistance provider
1899	Parent/guardian's employer
1896	Resident school or local education agency
1887	The student or his or her family
9999	Other

Financial Assistance Type

Definition: A designation of the specific category of financial assistance awarded to a student.
Element Number: 0631
Element Type: ID
Field Length: 4
Related Options:
    1891 Assistantship
    1892 Grant/scholarship
    1893 Loan
    1895 Other tuition waiver/remittance
    1894 Work-study
    9999 Other

First Entry Date (into the United States)

Definition: The month, day, and year of an individual's initial arrival into the United States in order to establish residency.
Element Number: 0325
Element Type: DT
Field Length: 8

First Name

Definition: A name given to an individual at birth, baptism, or during another naming ceremony; or through legal change.
Element Number: 0131
Element Type: AN
Field Length: 12

Former Legal Name

Definition: A previously recognized legally accepted name that is no longer valid.
Element Number: 0132
Element Type: AN
Field Length: 35

Former Name of Institution

Definition: The previously recognized or legally accepted name of the education institution that is no longer valid.
Element Number: 0313
Element Type: AN
Field Length: 60

Full-time Equivalency (FTE)

Definition: The ratio between the hours of work expected in a position and the hours of work normally expected in a full-time position in the same setting.
Element Number: 0475
Element Type: R
Field Length: 1.2

Full-time Equivalent (FTE) Status

Definition: The actual full-time equivalent of a student's course load (e.g., 0.25, 0.50, 0.75, 1.00).
Element Number: 0622
Element Type: R
Field Length: 1.3

Full-time Status

Definition: An indication of whether an individual is employed for a standard number of hours (as determined by civil or organization policies) in a week, month, or other period of time.
Element Number: 0476
Element Type: ID
Field Length: 4
Related Options:

    2015 Full-time employment
    2016 Part-time employment

Full-time/Part-time Status

Definition: The status given to a student in relation to the course load that he or she is carrying.
Element Number: 0621
Element Type: ID
Field Length: 4
Related Options:

    1854 Full-time student
    1855 Part-time student

Generation Code/Suffix

Definition: An appendage, if any, used to denote an individual's generation in his family (e.g., Jr., Sr., III).
Element Number: 0135
Element Type: AN
Field Length: 3

Grade Earned

Definition: A final indicator of student performance in a class, as submitted by the instructor.
Element Number: 0374
Element Type: AN
Field Length: 15

Grade Point Average (GPA): Cumulative

Definition: A measure of average performance in all courses taken by an individual during his or her school career, as determined for recordkeeping purposes. This is obtained by dividing the total grade points received by the total number of credits attempted. This usually includes grade points received and credits attempted in his or her current school, as well as those transferred from schools in which the individual was previously enrolled.
Element Number: 0376
Element Type: R
Field Length: 1.4

Grade Point Average (GPA): Given Grading Period

Definition: A measure of average performance in all courses for which grade points are received by an individual during a given grading period. This is obtained by dividing the total grade points received by the number of credits attempted for the same grading period.
Element Number: 0669
Element Type: R
Field Length: 1.4

Grade Point Average (GPA): Given School Year

Definition: A measure of average performance in all courses taken by an individual during a given school year (e.g., 1999–2000). This is obtained by dividing the total grade points received by the number of credits attempted for the same school year.
Element Number: 0671
Element Type: R
Field Length: 1.4

Grade Point Average (GPA): Given Session

Definition: A measure of average performance in all courses taken by an individual during a given session. This is obtained by dividing the total grade points received by the number of credits attempted for the same session.
Element Number: 0670
Element Type: R
Field Length: 1.4

Grade Points Received: Cumulative

Definition: The cumulative number of grade points an individual earns by successfully completing courses or examinations during his or her enrollment in the current school, as well as those transferred from schools in which the individual had been previously enrolled.
Element Number: 0668
Element Type: R
Field Length: 3.2

Grade Points Received: Given Grading Period

Definition: The number of grade points an individual earns by successfully completing courses or examinations during a given grading period.
Element Number: 0665
Element Type: R
Field Length: 2.2

Grade Points Received: Given School Year

Definition: The total number of grade points an individual earns by successfully completing courses or examinations during a given school year (e.g., 1999–2000).
Element Number: 0667
Element Type: R
Field Length: 2.2

Grade Points Received: Given Session

Definition: The total number of grade points an individual earns by successfully completing courses or examinations during a given session.
Element Number: 0666
Element Type: R
Field Length: 2.2

Grading Period Beginning Date

Definition: The month, day, and year a grading period begins.
Element Number: 0143
Element Type: DT
Field Length: 8

Grading Period Ending Date

Definition: The month, day, and year a grading period ends.
Element Number: 0144
Element Type: DT
Field Length: 8

Health Care Plan

Definition: The description or title of the health care plan by which the individual is covered.
Element Number: 0348
Element Type: AN
Field Length: 35

High School Course Requirement

Definition: An indication that this course credit is required for a high school diploma.
Element Number: 0145
Element Type: ID
Field Length: 4
Related Options:
    0232 No
    0002 Yes

Highest Level of Education Completed

Definition: The extent of formal instruction an individual has received (e.g., the highest grade in school completed or its equivalent, the highest degree received).
Element Number: 0332
Element Type: ID
Field Length: 4
Related Options:
    1809 Twelfth grade, no diploma
    1046 Adult basic education diploma
    1050 Associate's degree (two years or more)
    1051 Bachelor's (Baccalaureate) degree
    1057 Doctoral (Doctor's) degree
    0798 Eighth grade
    0801 Eleventh Grade
    0794 Fifth grade
    0790 First grade
    1053 First-professional degree
    1047 Formal award, certificate or diploma (less than one year)
    1048 Formal award, certificate or diploma (more than or equal to one year)
    0793 Fourth grade
    1052 Graduate certificate
    2408 High school completers (e.g., certificate of attendance)
    1044 High school diploma
    2409 High school equivalency (e.g., GED)
    0805 Kindergarten
    1054 Master's degree (e.g., M.A., M.S., M.Eng., M.Ed., M.S.W., M.B.A., M.L.S.)
    0799 Ninth grade
    1043 No school completed

1056 Postprofessional degree

0791 Second grade

0796 Seventh grade

0795 Sixth grade

1049 Some college but no degree

1055 Specialist's degree (e.g., Ed.S.)

0800 Tenth grade

0792 Third grade

0819 Vocational certificate

9999 Other

Hire Date

Definition: The month, day, and year an individual was hired for a position.

Element Number: 0467

Element Type: DT

Field Length: 8

Hispanic or Latino Ethnicity

Definition: An indication that the individual traces his or her origin or descent to Mexico, Puerto Rico, Cuba, Central and South America, or other Spanish cultures, regardless of race. The term, "Spanish origin," may be used in addition to "Hispanic or Latino."

Element Number: 0310

Element Type: ID

Field Length: 4

Related Options:

2304 Hispanic or Latino

2305 Non-Hispanic/Latino

Homelessness Status

Definition: An indication that an individual lacks a fixed, regular, and adequate nighttime residence; and has a primary nighttime residence that is: 1) a supervised, publicly or privately operated shelter designed to provide temporary living accommodations (including welfare hotels, congregate shelters, and transitional housing for the mentally ill); 2) an institution that provides a temporary residence for individuals intended to be institutionalized; or 3) a public or private place not designed for, or ordinarily used as, a regular sleeping accommodation for human beings. (See Section 103 of the McKinney Act for a more detailed description of this data element.)

Element Number: 0589

Element Type: ID

Field Length: 4

Related Options:

0232 No

0002 Yes

Honors Description

Definition: A description of the type of academic distinctions earned by, or awarded to, the individual.

Element Number: 0675

Element Type: AN

Field Length: 60

Hospital Preference

Definition: The hospital to which an individual prefers to be taken under emergency conditions or, in the case of a minor, the hospital to which the parent/guardian prefers the individual to be taken.
Element Number: 0349
Element Type: AN
Field Length: 35

Hours of Service per Day

Definition: The average number of hours per work day that an individual is expected to work, as outlined specifically in his or her employment agreement.
Element Number: 0477
Element Type: R
Field Length: 2.2

Hours of Service per Week

Definition: The average number of hours per week that an individual is expected to work, as outlined specifically in his or her employment agreement.
Element Number: 0479
Element Type: R
Field Length: 2.2

Identification Code

Definition: A unique number or alphanumeric code assigned to a space, room, site, building, individual, organization, or institution by a school, school system, state, or other agency or entity.
Element Number: 0146
Element Type: AN
Field Length: 30

Identification System

Definition: A coding scheme used for identification and recordkeeping purposes by schools, social services, or other agencies to refer to an individual, organization, or institution.
Element Number: 0147
Element Type: ID
Field Length: 4
Related Options:

    0254 American College Testing (ACT) program number
    0243 College Board Admission Testing Program (ATP) number
    0175 College Board/ACT code set of PreK–12 institutions
    0593 District-assigned number
    0328 Driver's license number
    0276 Dun and Bradstreet number (DUNS number)
    0164 Family unit number
    0264 Federal identification number
    0339 Health record number
    0233 Integrated Postsecondary Education Data System (IPEDS) number
    0186 LEA number for school
    0338 Medicaid number
    0879 Migrant number
    0216 NCES number for LEA
    0208 NCES number for school

0222 Other agency number
0764 Other federally assigned number
0154 Personal identification number (PIN)
0399 Professional certificate or license number
0495 School-assigned number
0763 SEA number for LEA
0197 SEA number for school
0780 Selective Service number
0004 Social Security Administration number
0686 State-assigned number
0873 Statute number
0936 Sub-test number
0307 Test contractor-assigned assessment number
0113 U.S. government Visa number
9999 Other

Immunization Date

Definition: The month, day, and year an individual receives an immunization.
Element Number: 0354
Element Type: DT
Field Length: 8

Immunizations Mandated by State Law for Participation

Definition: An indication that an immunization is specifically required by an organization or governing body. Some diseases for which immunizations are most frequently required include: Diphtheria, Hepatitis B, Influenza, Mumps, Pertussis (whooping cough), Poliomyelitis, Rubella (German measles), Rubeola (measles), Smallpox, Tetanus, Tuberculosis (BCG), and Rh. Immune Globulin.
Element Number: 0353
Element Type: ID
Field Length: 4
Related Options:
    1103 Not required
    1102 Required

Immunization Status

Definition: An indication of circumstances or situations affecting the immunizations of an individual.
Element Number: 0355
Element Type: ID
Field Length: 4
Related Options:
    1104 First inoculation
    1105 Second inoculation
    1106 Third inoculation
    1107 Fourth inoculation
    1108 Fifth inoculation
    1109 Sixth inoculation
    1110 Seventh inoculation
    1111 Eighth inoculation
    1112 Ninth inoculation
    1113 Medical exemption

1114 Personal exemption
1115 Religious exemption
1116 Already had the disease
2392 Legal/state exemption

Incident Identifier

Definition: A locally assigned unique identifier (within the school or school district) to identify each specific incident or occurrence. The same identifier should be used to document the entire incident, even if it included multiple offenses and multiple offenders.
Element Number: 1037
Element Type: AN
Field Length: 30

Incident Location

Definition: Identifies where the incident occurred and whether or not it occurred on campus.
Element Number: 1040
Element Type: ID
Field Length: 4
Related Options:

    3012 Administrative offices area
    3022 Athletic field or playground
    3020 Auditorium
    3027 Bus stop
    3013 Cafeteria area
    3014 Classroom
    3019 Computer lab
    3015 Hallway or stairs
    3018 Library/media center
    3016 Locker room or gym areas
    3026 Off campus
    3030 Off campus at other school
    3031 Off campus at other school district facility
    3011 On campus
    3021 On campus, other inside area
    3025 On campus, other outside area
    3413 Online
    3024 Parking lot
    3017 Restroom
    3028 School bus
    3023 Stadium
    3029 Walking to or from school
    9997 Unknown

Incident Recording Mechanism

Definition: The mechanism by which evidence of an incident or offense may have been recorded (e.g., a hallway video camera, e-mail server, a police report).
Element Number: 1126
Element Type: AN
Field Length: 30

Incident Time

Definition: The time of day when an incident occurred.
Element Number: 1039
Element Type: AN
Field Length: 10

Injury Circumstances

Definition: A description of the circumstances surrounding the injury of an individual, including information collected from a witness.
Element Number: 0357
Element Type: AN
Field Length: 60

Injury Description

Definition: A description of an injury that was sustained that might, or does, affect an individual's performance.
Element Number: 0356
Element Type: AN
Field Length: 80

Injury Occurrence Date

Definition: The month, day, and year an individual was injured.
Element Number: 0358
Element Type: DT
Field Length: 8

Injury Occurrence Location

Definition: A designation or description of the site where the injury took place.
Element Number: 0359
Element Type: ID
Field Length: 4
Related Options:
    1117 At the workplace
    1118 Not at the workplace but performing job duties
    9999 Other

Instructional Level

Definition: An indication of the general nature of instruction provided throughout a course.
Element Number: 0437
Element Type: ID
Field Length: 4
Related Options:
    0579 Accepted as a high school equivalent
    0575 Advanced placement
    0570 Basic
    0576 College level
    0578 English language learner (ELL)
    0571 General
    0573 Gifted and talented level
    0572 Honors level

0574 International Baccalaureate program

0568 Remedial

0569 Special education course

0577 Untracked

9999 Other

Instructional Minutes

Definition: The total number of instruction minutes in a given session, as determined by time in class or time on task (e.g., engaged in a class), or as estimated by a qualified course designer.

Element Number: 0150

Element Type: N

Field Length: 5

International Code Number

Definition: The international code for the telephone number.

Element Number: 0151

Element Type: N

Field Length: 3

Job Classification

Definition: A description of the specific group of duties and responsibilities of a position. (Note: A list of options and their codes can be found in appendix H of the *NCES Handbooks Online).*

Element Number: 0557

Element Type: ID

Field Length: 4

Related Options: Available at *http://nces.ed.gov/programs/handbook/data/pdf/appendices_h.pdf*

Language Code

Definition: The code for the specific language or dialect an individual uses to communicate. (Note: A list of languages and dialects can be found in appendix D of the *NCES Handbooks Online).*

Element Number: 0328

Element Type: ID

Field Length: 4

Related Options: Available at *http://nces.ed.gov/programs/handbook/data/pdf/appendices_d.pdf*

Language of Instruction

Definition: The language used for presenting the instructional materials.

Element Number: 0154

Element Type: AN

Field Length: 10

Language Type

Definition: An indication of the function and context in which an individual uses a language to communicate.

Element Number: 0327

Element Type: ID

Field Length: 4

Related Options:

1035 Correspondence language

1036 Dominant language

1037 Home language
1038 Native language
1039 Other language proficiency
9999 Other

Last/Surname

Definition: The name borne in common by members of a family.
Element Number: 0156
Element Type: AN
Field Length: 20

Last/Surname at Birth

Definition: The original surname of an individual, as identified at birth before any subsequent changes.
Element Number: 0157
Element Type: AN
Field Length: 20

Latitude

Definition: The north or south angular distance from the equator that, when combined with longitude, reflects an estimation of where the school is physically situated.
Element Number: 0158
Element Type: AN
Field Length: 12

Learning Standards Document

Definition: The name of the learning standards document that describes the goals and standards of the instructional program.
Element Number: 0159
Element Type: AN
Field Length: 45

Leave Beginning Date

Definition: The month, day, and year the individual begins his or her leave.
Element Number: 0549
Element Type: DT
Field Length: 8

Leave Ending Date

Definition: The month, day, and year the individual ends his or her leave.
Element Number: 0550
Element Type: DT
Field Length: 8

Leave Substitution Status

Definition: An indication of the type of substitution provided for an individual's job assignment during his/her absence.
Element Number: 0544
Element Type: ID
Field Length: 4

Related Options:

    1608 No substitution

    1610 Substitution by an individual with proof of required credentials

    1609 Substitution by an individual without proof of required credentials

Leave Type

Definition: An indication of the class or kind of leave an employee is eligible to take with approval.

Element Number: 0543

Element Type: ID

Field Length: 4

Related Options:

    1596 Administrative

    1597 Annual leave

    1598 Bereavement

    1599 Compensatory leave time

    1600 Family and medical leave

    1601 Government-requested

    1602 Military leave

    1603 Personal

    1604 Release time

    1605 Sabbatical leave

    1606 Sick leave

    1607 Suspension

    9999 Other

Lesson Activity Begin Date

Definition: The first month, day, and year of the lesson activity.

Element Number: 0160

Element Type: DT

Field Length: 8

Lesson Activity Duration

Definition: An estimate of the duration of time for the lesson.

Element Number: 0162

Element Type: AN

Field Length: 10

Lesson Activity End Date

Definition: The last month, day, and year of the lesson activity.

Element Number: 0163

Element Type: DT

Field Length: 8

Lesson Duration

Definition: An estimate of the duration of time for the lesson.

Element Number: 0166

Element Type: AN

Field Length: 10

Lesson Name

Definition: The name of the lesson.
Element Number: 0167
Element Type: AN
Field Length: 45

Lesson Plan

Definition: A description of the lesson plan.
Element Number: 0169
Element Type: AN
Field Length: 80

Level of Specialization

Definition: The extent to which an individual concentrates on a particular subject matter area during his or her period of study at an education institution.
Element Number: 0372
Element Type: ID
Field Length: 4
Related Options:

    1143 Area of emphasis/concentration
    1145 Area of interest
    1141 Major
    1142 Minor
    1144 Postdegree study

Locale Code

Definition: The designation based on the institution's geographic location and population attributes such as density.
Element Number: 0839
Element Type: ID
Field Length: 4
Related Options:

    0768 Large city
    0773 Large town
    0769 Midsize city
    0014 Rural, inside CBSA (Core Based Statistical Area)
    2365 Rural, outside CBSA
    0774 Small town
    0770 Urban fringe of a large city
    0771 Urban fringe of a midsize city

Longitude

Definition: The east or west angular distance from the prime meridian that, when combined with latitude, reflects an estimation of where the school is physically situated.
Element Number: 0173
Element Type: AN
Field Length: 12

Magnet/Special Program Emphasis School

Definition: A school that has been designed: 1) to attract students of different racial/ethnic backgrounds for the purpose of reducing, preventing, or eliminating racial isolation; and/or 2) to provide an academic or social focus on a particular theme (e.g., science/math, performing arts, gifted/talented, or foreign language).

Element Number: 0174

Element Type: ID

Field Length: 4

Related Options:

    0232 No

    0002 Yes

Marital Status

Definition: The condition of an individual with regard to marriage.

Element Number: 0330

Element Type: ID

Field Length: 4

Related Options:

    1040 Legally separated

    1041 Married

    1042 Not married (never married, legally divorced, widowed, or marriage annulled)

Medium of Instruction

Definition: The medium through which teachers provide instruction to students, and students and teachers communicate about instructional matters.

Element Number: 0209

Element Type: ID

Field Length: 4

Related Options:

    0609 Center-based instruction

    0604 Correspondence instruction

    0605 Face-to-face instruction

    0610 Independent study

    0611 Internship

    0603 Technology-based instruction in classroom

    0608 Virtual/distance learning

    9999 Other

Metropolitan Statistical Area (MSA) Federal Information Processing Standards (FIPS) Code

Definition: The Federal Information Processing Standards (FIPS) numeric code for the Metropolitan Statistical Area (MSA). [Note: A four-digit FIPS code that identifies MSAs across the United States can be accessed online by visiting the FIPS Home Page at *http://www.itl.nist.gov/fipspubs.* For additional information about FIPS codes, contact the Information Technology Laboratory, National Institute of Standards and Technology (NIST), 100 Bureau Drive, Stop 8900, Gaithersburg, MD 20899–8900. The phone number is 301–975–2832.]

Element Number: 0183

Element Type: ID

Field Length: 4

Related Options: A four digit FIPS code that identifies MSAs across the United States can be accessed online by visiting the FIPS Home Page at *http://www.itl.nist.gov/fipspubs*

Middle Name
Definition: A secondary name given to an individual at birth, baptism, or during another naming ceremony.
Element Number: 0184
Element Type: AN
Field Length: 12

Migratory Status
Definition: An indication that an individual, or a parent/guardian accompanying an individual, maintains primary employment in one or more agricultural or fishing activities on a seasonal or other temporary basis, and establishes a temporary residence for the purposes of such employment.
Element Number: 0590
Element Type: ID
Field Length: 4
Related Options:
    0232 No
    0002 Yes

Military Discharge Type
Definition: The type of discharge an individual was granted upon leaving the Armed Forces.
Element Number: 0337
Element Type: ID
Field Length: 4
Related Options:
    1071 Dishonorable discharge
    1072 General discharge
    1070 Honorable discharge

Military Duty Status
Definition: The current military status of an individual.
Element Number: 0334
Element Type: ID
Field Length: 4
Related Options:
    1064 Active duty
    1067 Ready Reserve, Inactive National Guard (ING)
    1066 Ready Reserve, Individual Ready Reserve (IRR)
    1065 Ready Reserve, Selected Reserve
    1069 Retired Reserve
    1068 Standby Reserve
    9998 None

Military Service Type
Definition: The branch of the Armed Forces in which an individual serves/served.
Element Number: 0333
Element Type: ID
Field Length: 4
Related Options:
    1063 National Guard
    1058 United States Air Force

1059   United States Army
1060   United States Coast Guard
1061   United States Marine Corps
1062   United States Navy

Minor/Adult Status

Definition: A person's status in relation to legal adulthood, as specified by state law.
Element Number: 0588
Element Type: ID
Field Length: 4
Related Options:

1638   Emancipated minor
1639   Legal adult
1640   Legal minor

Name of Country

Definition: The name of the country in which an address is located.
Element Number: 0185
Element Type: AN
Field Length: 30

Name of County

Definition: The name of the county, parish, borough, or comparable unit (within a state) in which an address is located.
Element Number: 0186
Element Type: AN
Field Length: 30

Name of Institution

Definition: The full, legally or popularly accepted name of the institution.
Element Number: 0187
Element Type: AN
Field Length: 60

Name of State

Definition: The name of the state (within the United States) or outlying area in which an address is located.
Element Number: 0188
Element Type: AN
Field Length: 30

Name of State of Birth

Definition: The name of the state (within the United States) or extrastate jurisdiction in which an individual was born.
Element Number: 0319
Element Type: AN
Field Length: 30

National/Ethnic Origin Subgroup

Definition: The national or ethnic subgroup of a person other than "American." Examples for "Asian" include: Chinese, Japanese, Korean, Filipino, Vietnamese, or Asian Indian. For "Native Hawaiian or Other Pacific Islander," examples

include: Samoan, Hawaiian, or Guamanian. For "Hispanic," examples include: Puerto Rican, Mexican-American, Cuban, Argentinean, Dominican, Colombian, Nicaraguan, Salvadoran, or Spaniard. Tribal registration could be listed for "Alaska Native" or "American Indian" (e.g., Navajo).
Element Number: 0850
Element Type: AN
Field Length: 60

Nature of Prior Employment

Definition: The descriptive name (e.g., teaching, office/clerical, custodial) of the occupation or job duties performed by an individual.
Element Number: 0435
Element Type: AN
Field Length: 60

Nickname

Definition: A familiar form of a proper name, a descriptive name, or other colloquial name given instead of, or in addition to, an individual's formal name.
Element Number: 0189
Element Type: AN
Field Length: 20

Noncourse Graduation Requirement Scores/Results

Definition: The results from the student's completion of the noncourse graduation requirement (e.g., pass/fail, letter grade, percentage scale, rank).
Element Number: 0688
Element Type: AN
Field Length: 60

Nonpromotion Reason

Definition: The primary reason why a staff member determined that a student should not be promoted (or should be demoted).
Element Number: 0673
Element Type: ID
Field Length: 4
Related Options:

    1979 Failed to meet testing requirements
    1980 Illness
    1981 Immaturity
    1982 Inadequate performance
    1983 Insufficient credits
    1984 Prolonged absence
    9999 Other

Number of Credits Attempted

Definition: The number of credits a student can earn for enrolling in, and completing, a given course.
Element Number: 0193
Element Type: R
Field Length: 2.1

Number of Credits Received

Definition: The number of credits a student earned for completing a given course.
Element Number: 0656
Element Type: R
Field Length: 2.1

Number of Days Absent

Definition: The number of days an individual is absent when school is in session during a given reporting period.
Element Number: 0638
Element Type: R
Field Length: 3.1

Number of Days in Attendance

Definition: The number of days an individual is present when school is in session during a given reporting period.
Element Number: 0637
Element Type: R
Field Length: 3.1

Number of Days of Membership

Definition: The number of days a student is present plus the number of days absent when school is in session during a given reporting period.
Element Number: 0635
Element Type: R
Field Length: 3.1

Number of Hours in School Day

Definition: The number of hours (or portion of hours) in the day that the school is normally in session.
Element Number: 0195
Element Type: R
Field Length: 2.1

Number of Students in Class

Definition: The number of students for the classroom for which the individual is responsible for providing learning experiences and care during a particular time period or in a given discipline.
Element Number: 0857
Element Type: N
Field Length: 3

Number of Tardies

Definition: The number of instances an individual is late during a given reporting period.
Element Number: 0639
Element Type: N
Field Length: 3

Originating Location of Instruction/Service

Definition: The type of location from which the instruction or service originates.
Element Number: 1125
Element Type: ID

Field Length: 4
Related Options:

    0997 Business
    0752 Community facility
    2192 Home
    0754 Hospital
    0340 In school
    3018 Library/media center
    0341 Other K–12 education institution
    0342 Postsecondary facility
    3506 Mobile
    9999 Other

Originating Location of Instruction/Service Description

Definition: A description of the location from which instruction or service originates (e.g., room number, building site, campus designation, address).
Element Number: 1124
Element Type: AN
Field Length: 45

Participation in School Food Service Programs

Definition: An indication of a student's participation in free, reduced-price, or full-price breakfast, lunch, snack, supper, and milk programs.
Element Number: 0607
Element Type: ID
Field Length: 4
Related Options:

    1712 Free breakfast
    1714 Free lunch
    1716 Free milk
    3112 Free snack
    3115 Free supper
    3110 Full-price breakfast
    3111 Full-price lunch
    3118 Full-price milk
    3114 Full-price snack
    3117 Full-price supper
    1713 Reduced-price breakfast
    1715 Reduced-price lunch
    3113 Reduced-price snack
    3116 Reduced-price supper
    9997 Unknown
    9998 None

Pay Grade

Definition: Identification of the class of an individual's position, grouped by salary range.
Element Number: 0492
Element Type: AN
Field Length: 60

Payment Source(s)

Definition: The individual or organization responsible for paying the expenses for the student's education.
Element Number: 0629
Element Type: ID
Field Length: 4
Related Options:

    1886 A federal agency
    1884 A school or school district outside the state
    1885 A state agency
    1883 Another school or school district within the state but outside the local education agency
    1882 Another school within the local education agency
    1888 Other financial assistance provider
    1899 Parent/guardian's employer
    1896 Resident school or local education agency
    1887 The student or his or her family
    9999 Other

Percentage of Time by Medium of Instruction

Definition: The percentage of time that the medium of instruction is utilized by the teacher to instruct, and by which the student receives instructional communication from his or her teacher(s).
Element Number: 0204
Element Type: R
Field Length: 3.2

Perpetrator Description

Definition: Information on the type of individual who committed the incident. (When known and/or if useful, use a more specific option code; for example, use "Counselor" rather than "Professional Staff.")
Element Number: 1050
Element Type: ID
Field Length: 4
Related Options:

    3168 Former student
    3054 Law enforcement officer
    3059 Nonschool personnel
    3061 Other adult
    3062 Other nonstudent youth
    0850 Parent/guardian
    3060 Representative of visiting school
    3422 Staff member
    0126 Student
    9997 Unknown

Personal Title/Prefix

Definition: An appellation, if any, used to denote rank, placement, or status (e.g., Mr., Ms., Reverend, Sister, Dr., Colonel).
Element Number: 0207
Element Type: AN
Field Length: 8

Position Title

Definition: The descriptive name of an individual's position.
Element Number: 0208
Element Type: AN
Field Length: 45

Postsecondary Subject Matter Area

Definition: The descriptive name of an academic or vocational discipline studied by an individual in an educational program or staff development activity.
Element Number: 0373
Element Type: ID
Field Length: 13
Related Options:

    1146 Agricultural business and production
    1147 Agricultural sciences
    1149 Architecture and related programs
    1150 Area, ethnic, and cultural studies
    1170 Basic skills
    1165 Biological sciences/life sciences
    1191 Business management and administrative services
    1171 Citizenship activities
    1152 Communications
    1153 Communications technologies
    1154 Computer and information sciences
    1148 Conservation and renewable natural resources
    1185 Construction trades
    1156 Education
    1157 Engineering
    1158 Engineering-related technologies
    1162 English language and literature/letters
    2371 Foreign language and literature
    1190 Health professions and related sciences
    1172 Health-related knowledge and skills
    0551 Home economics
    1173 Interpersonal and social skills
    1161 Law and legal studies
    1174 Leisure and recreational activities
    1163 Liberal arts and sciences, general studies, and humanities
    1164 Library science
    1151 Marketing operations/marketing and distributing
    1166 Mathematics
    1186 Mechanics and repairers
    1168 Military technologies
    0558 Multi/interdisciplinary studies
    1176 Parks, recreation, leisure, and fitness studies
    1155 Personal and miscellaneous services
    1175 Personal awareness and self-improvement
    1177 Philosophy and religion
    1179 Physical sciences

1187 Precision production trades
1182 Protective services
1181 Psychology
1183 Public administration and services
1167 Reserve Officers' Training Corp (ROTC)
1180 Science technologies
1184 Social sciences and history
1160 Technology education/industrial arts
1178 Theological studies and religious vocations
1188 Transportation and materials moving workers
1189 Visual and performing arts
1159 Vocational home economics
9999 Other

Note: Refer to appendix G *(http://nces.ed.gov/programs/handbook/data/pdf/appendices_g.pdf)* and appendix L *(http://nces.ed.gov/programs/handbook/data/pdf/appendices_l.pdf)* of the *NCES Handbooks Online* for additional codes that can be used when the option "Education" has been selected (e.g., "1156–13.1315" for "Education—Reading Teacher Education").

Primary Disability Type

Definition: The major or overriding disability condition that best describes an individual's impairment.
Element Number: 0768
Element Type: ID
Field Length: 4
Related Options:
       2121 Autistic/autism
       2122 Deaf–blindness
       2133 Deafness
       2134 Developmental delay
       2127 Emotional disturbance
       2123 Hearing impairment
       2135 Infants and toddlers with disabilities
       2124 Mental retardation
       2125 Multiple disabilities
       2126 Orthopedic impairment
       2132 Other health impairment
       2128 Specific learning disability
       2129 Speech or language impairment
       2130 Traumatic brain injury
       2131 Visual impairment

Program Eligibility Indicator

Definition: An indication as to whether an individual is eligible to participate in a special program or receive support services, regardless of whether he or she is actually enrolled and participating. Eligibility is based on the specific requirements of a given program.
Element Number: 0794
Element Type: ID
Field Length: 4
Related Options:
       2568 Eligible to participate in program
       2569 Not eligible to participate in program

Program Funding Source

Definition: Ultimate and intermediate providers of funds for a particular educational or service program or activity, or for an individual's participation in the program or activity.

Element Number: 0222

Element Type: ID

Field Length: 4

Related Options:

    0997 Business
    0654 College/University
    0698 Community
    0797 Federal government
    0749 Foundations and other charitable organizations
    0219 Fraternal organization
    0739 Individuals (endowments)
    0786 Insurance
    0622 Local/community government
    0720 Parent/guardian in tuition and/or fees
    1899 Parent/guardian's employer
    0731 Parent/teacher organizations
    0218 Religious organization
    0675 School
    0709 Self in tuition and/or fees
    0617 State government
    0772 Unions
    9999 Other

Program Name

Definition: The name of the program of instruction, training, services, or benefits available through federal, state, or local agencies. (Note: A partial list of federally-funded educational programs is included in appendix M of the *NCES Handbooks Online* at *http://nces.ed.gov/programs/handbook/data/pdf/appendices_m.pdf.)*

Element Number: 0227

Element Type: AN

Field Length: 60

Promotion Type

Definition: The nature of the student's promotion or progress at the end of a given school term.

Element Number: 0672

Element Type: ID

Field Length: 4

Related Options:

    1974 Accelerated promotion
    1975 Continuous promotion
    1976 Probationary promotion
    1973 Regular promotion
    1977 Social promotion
    1978 Variable progress
    9999 Other

Race

Definition: The general racial category that most clearly reflects the individual's recognition of his or her community, or with which the individual most identifies. [The way this data element is listed, it must allow for multiple entries so that each individual can specify all appropriate races. An alternative would be to list the options as separate data elements and have a yes/no option for each one. (Note: Additional guidance can be found in appendix A of the *NCES Handbooks Online* at *http://nces.ed.gov/programs/handbook/data/pdf/appendices_a.pdf.*)]

Element Number: 0849
Element Type: ID
Field Length: 4
Related Options:

    0998 American Indian or Alaska Native
    0999 Asian
    1000 Black or African American
    1001 Native Hawaiian or Other Pacific Islander
    1002 White

Receiving Location of Instruction/Service

Definition: The type of location at which instruction or service takes place.
Element Number: 0171
Element Type: ID
Field Length: 4
Related Options:

    0997 Business
    0752 Community facility
    2192 Home
    0754 Hospital
    0340 In school
    3018 Library/media center
    0341 Other K–12 education institution
    0342 Postsecondary facility
    3506 Mobile
    9999 Other

Receiving Location of Instruction/Service Description

Definition: A description of the location at which an individual receives instruction or service (e.g., room number, building site, campus designation, address).
Element Number: 0172
Element Type: AN
Field Length: 45

Regular School

Definition: A school providing instruction and educational services that do not focus primarily on special education, vocational/technical education, alternative education, or on any of the particular themes associated with magnet/special program emphasis.
Element Number: 0316
Element Type: ID
Field Length: 4
Related Options:

    0232 No
    0002 Yes

Regulation Description

Definition: A description of the regulation.
Element Number: 0234
Element Type: AN
Field Length: 80

Regulation Title

Definition: The full, legally accepted or popularly accepted name or title of a regulation, including nonregulatory guidance.
Element Number: 0238
Element Type: AN
Field Length: 45

Related Learning Standards

Definition: An indication of the state or local standard(s) addressed in the lesson.
Element Number: 0239
Element Type: AN
Field Length: 60

Reporter Description

Definition: Information on the type of individual who reported the incident. (When known and/or if useful, use a more specific option code; for example, "Counselor" rather than "Professional Staff.")
Element Number: 1043
Element Type: ID
Field Length: 4
Related Options:

    3168 Former student
    3054 Law enforcement officer
    3059 Nonschool personnel
    3061 Other adult
    3062 Other nonstudent youth
    0850 Parent/guardian
    3060 Representative of visiting school
    3422 Staff member
    0126 Student
    9997 Unknown

Reporting Means

Definition: The means by which routine information about a student's achievement or progress is communicated to the student and his or her parent/guardian for each grading period.
Element Number: 0244
Element Type: ID
Field Length: 4
Related Options:

    0624 Letter or note
    0625 Parent/guardian conference
    0626 Report card/evaluation
    3485 Progress report
    9999 Other

Reporting Method

Definition: The method the instructor of the class uses to report the performance and achievement of all students. It may be a qualitative method such as individualized teacher comments, or a quantitative method such as a letter or numerical grade. In some cases, more than one type of reporting method may be used.
Element Number: 0245
Element Type: ID
Field Length: 4
Related Options:

    0930 Developmental scale
    0144 Letter grade/mark
    0931 Mastery/nonmastery of standards
    0925 Number grade
    0926 Percentage
    3412 Rubric
    0927 Standard words or phrases
    0928 Teacher's comments
    0929 Two-word scale
    9999 Other

Residence Block Number

Definition: A number assigned to a particular block of residences.
Element Number: 0597
Element Type: AN
Field Length: 15

Resource Author

Definition: The name of the author of the resource.
Element Number: 0246
Element Type: AN
Field Length: 35

Rule/Regulation Violated

Definition: A description of the rule, regulation, or standard that was violated when an incident occurred (e.g., the identification of a relevant law, conduct standard, or acceptable use policy).
Element Number: 1148
Element Type: AN
Field Length: 45

Same Physical Location of Instruction

Definition: An indication as to whether the originating and receiving locations of instruction are in the same physical location.
Element Number: 1147
Element Type: ID
Field Length: 4
Related Options:

    0232 No
    0002 Yes

Scheduled Work Days Weekly

Definition: The specific day(s) of a week an individual is scheduled to work for an employer (e.g., Monday, Wednesday, and Friday; Monday to Friday).
Element Number: 0481
Element Type: AN
Field Length: 80

Scheduled Work Months Annually

Definition: The specific month(s) of a year an individual is scheduled to work for an employer (e.g., September to May; June, and August to December).
Element Number: 0482
Element Type: AN
Field Length: 80

Scheduled Work Time Daily

Definition: The specific hours during a day an individual is scheduled to work for an employer, including a starting and an ending time (e.g., 9:00 a.m. to 6:00 p.m., 1:00 p.m. to 5:00 p.m.).
Element Number: 0480
Element Type: AN
Field Length: 24

School Attendance Area

Definition: A description of the geographic area encompassed by the enrollment boundaries of the school.
Element Number: 0961
Element Type: AN
Field Length: 80

School Level

Definition: An indication of the level of the education institution.
Element Number: 0031
Element Type: ID
Field Length: 4
Related Options:

    0013 Adult
    1302 All levels
    1304 Elementary
    2402 High school
    0787 Infants/toddlers
    2399 Intermediate
    2401 Junior
    2400 Middle
    0789 Prekindergarten
    1981 Preschool/early childhood
    2397 Primary
    2403 Secondary

Scope of Assignment

Definition: The range or extent of an individual's current assignment.
Element Number: 0559

Element Type: ID
Field Length: 4
Related Options:

    1615 Agency-wide
    1614 More than agency-wide
    1616 Multioperational but less than agency-wide
    1617 Single operational
    1613 Statewide

Secondary Disability Type

Definition: A secondary disability condition identified with an individual, as distinguished from a primary disability.
Element Number: 0773
Element Type: ID
Field Length: 4
Related Options:

    2121 Autistic/autism
    2122 Deaf–blindness
    2133 Deafness
    2134 Developmental delay
    2127 Emotional disturbance
    2123 Hearing impairment
    2135 Infants and toddlers with disabilities
    2124 Mental retardation
    2125 Multiple disabilities
    2126 Orthopedic impairment
    2132 Other health impairment
    2128 Specific learning disability
    2129 Speech or language impairment
    2130 Traumatic brain injury
    2131 Visual impairment

Security System

Definition: The type of system that protects the facility from intrusion.
Element Number: 0894
Element Type: ID
Field Length: 4
Related Options:

    2508 Card access control system
    2507 Intrusion detection system
    2509 Keypad access control system
    2510 Metal detector
    2499 Video
    9999 Other

Service Population

Definition: The number of school-age children who reside within a school attendance area, and are thus eligible for education and services by a school.
Element Number: 0959
Element Type: N
Field Length: 4

Session Beginning Date
Definition: The month, day, and year a session begins.
Element Number: 0264
Element Type: DT
Field Length: 8

Session Ending Date
Definition: The month, day, and year a session ends.
Element Number: 0265
Element Type: DT
Field Length: 8

Session Type
Definition: A prescribed span of time an education institution is open, instruction is provided, and students are under the direction and guidance of teachers and/or education institution administration. A session may be interrupted by one or more vacations.
Element Number: 0266
Element Type: ID
Field Length: 4
Related Options:
    0827 Full school year
    0834 Intersession
    0835 Long session
    0832 Mini-term
    0830 Quarter
    0831 Quinmester
    0828 Semester
    0833 Summer term
    0829 Trimester
    0837 Twelve month
    9999 Other

Sex
Definition: A person's gender.
Element Number: 0851
Element Type: ID
Field Length: 4
Related Options:
    1631 Female
    1632 Male

Special Adaptation Requirements
Definition: The description of special adaptation due to health or religious reasons that an individual needs to perform his or her duties.
Element Number: 0346
Element Type: AN
Field Length: 80

Special Education/Ungraded School

Definition: A school that adapts the curriculum, materials, or instruction for students identified as needing special education. This may include instruction for students with any of the following: autism, deaf–blindness, hearing impairment, mental retardation, multiple disabilities, orthopedic impairment, serious emotional disturbance, specific learning disability, speech or language impairment, traumatic brain injury, visual impairment, and other health impairments.

Element Number: 0840

Element Type: ID

Field Length: 4

Related Options:

    0232 No

    0002 Yes

Standardization Group

Definition: The group for which the scores of an assessment have been standardized for use in interpreting the results.

Element Number: 0190

Element Type: ID

Field Length: 4

Related Options:

    0006 Categorical type

    0938 International

    0862 Local (e.g., school board, city council)

    0939 National

    0005 Regional

    0675 School

    0391 State

    9999 Other

State Abbreviation

Definition: The abbreviation for the state (within the United States) or outlying area in which an address is located.

Element Number: 0267

Element Type: ID

Field Length: 4

Related Options:

    3348 AL

    3349 AK

    3350 AZ

    3351 AR

    3352 CA

    3353 CO

    3354 CT

    3355 DE

    3356 DC

    3357 FL

    3358 GA

    3359 HI

    3360 ID

    3361 IL

    3362 IN

    3363 IA

3364 KS
3365 KY
3366 LA
3367 ME
3368 MD
3369 MA
3370 MI
3371 MN
3372 MS
3373 MO
3374 MT
3375 NE
3376 NV
3377 NH
3378 NJ
3379 NM
3380 NY
3381 NC
3382 ND
3383 OH
3384 OK
3385 OR
3386 PA
3387 RI
3388 SC
3389 SD
3390 TN
3391 TX
3392 UT
3393 VT
3394 VA
3395 WA
3396 WV
3397 WI
3398 WY
3399 DO
3400 DD
3401 BI
3402 AS
3403 GU
3404 MP
3405 PR
3406 VI

State FIPS (Federal Information Processing Standards) Code

Definition: The Federal Information Processing Standards (FIPS) numeric code for the state.
Element Number: 0268
Element Type: ID
Field Length: 4

Related Options:

- 3289 01 (Alabama)
- 3290 02 (Alaska)
- 3291 04 (Arizona)
- 3292 05 (Arkansas)
- 3293 06 (California)
- 3294 08 (Colorado)
- 3295 09 (Connecticut)
- 3296 10 (Delaware)
- 3297 11 (District of Columbia)
- 3298 12 (Florida)
- 3299 13 (Georgia)
- 3300 15 (Hawaii)
- 3301 16 (Idaho)
- 3302 17 (Illinois)
- 3303 18 (Indiana)
- 3304 19 (Iowa)
- 3305 20 (Kansas)
- 3306 21 (Kentucky)
- 3307 22 (Louisiana)
- 3308 23 (Maine)
- 3309 24 (Maryland)
- 3310 25 (Massachusetts)
- 3311 26 (Michigan)
- 3312 27 (Minnesota)
- 3313 28 (Mississippi)
- 3314 29 (Missouri)
- 3315 30 (Montana)
- 3316 31 (Nebraska)
- 3317 32 (Nevada)
- 3318 33 (New Hampshire)
- 3319 34 (New Jersey)
- 3320 35 (New Mexico)
- 3321 36 (New York)
- 3322 37 (North Carolina)
- 3323 38 (North Dakota)
- 3324 39 (Ohio)
- 3325 40 (Oklahoma)
- 3326 41 (Oregon)
- 3327 42 (Pennsylvania)
- 3328 44 (Rhode Island)
- 3329 45 (South Carolina)
- 3330 46 (South Dakota)
- 3331 47 (Tennessee)
- 3332 48 (Texas)
- 3333 49 (Utah)
- 3334 50 (Vermont)
- 3335 51 (Virginia)
- 3336 53 (Washington)
- 3337 54 (West Virginia)

3338 55 (Wisconsin)
        3339 56 (Wyoming)
        3340 58 (Department of Defense Dependents Schools–overseas)
        3341 59 (Bureau of Indian Affairs)
        3342 60 (American Samoa)
        3343 61 (Department of Defense Dependents Schools–domestic)
        3344 66 (Guam)
        3345 69 (Northern Marianas)
        3346 72 (Puerto Rico)
        3347 78 (Virgin Islands)
        0996 No option list available

Statute Title

Definition: The full, legally accepted or popularly accepted name or title of a statute (e.g., Individuals with Disabilities Act, Elementary and Secondary Education Act, School-to-Work Opportunities Act).
Element Number: 0271
Element Type: AN
Field Length: 45

Street Number/Name

Definition: The street number and street name, or post office box number, of an address.
Element Number: 0272
Element Type: AN
Field Length: 35

Teaching Assignment

Definition: The teaching field taught by an individual.
Element Number: 0436
Element Type: ID
Field Length: 4
Related Options:
        1305 Accounting
        1362 Agriculture or natural resources
        1333 American Indian/Native American studies
        1334 Anthropology
        1311 Architecture or environmental design
        1150 Area, ethnic, and cultural studies
        1348 Autism
        1346 Basic skills or remedial education
        0251 Bilingual education
        1325 Biology or life science
        1306 Business and management
        1363 Business/office
        1364 Career education
        1326 Chemistry
        1315 Chinese
        1335 Civics
        1153 Communications technologies

1324 Computer science

1366 Cosmetology

0068 Curriculum and instruction

0684 Dance

1349 Deaf and hard-of-hearing

1350 Developmentally delayed

1312 Drama/theater

1296 Early childhood

1351 Early childhood–special education

1327 Earth/space science/geology

1336 Economics

0097 Educational administration

0120 Educational psychology

1304 Elementary

1352 Emotionally disturbed or behavior disorders

1157 Engineering

0256 English as a second language

1162 English language and literature/letters

1308 English or language arts

1367 Family and consumer science (home economics)

1368 Food/restaurant skills and services

2371 Foreign language and literature

1316 French

1328 General science

0547 Geography

1317 German

2381 Gifted and talented

0302 Guidance counseling

1329 Health education

1369 Health professions and occupations

0550 History

1337 Humanities

1318 Italian

1319 Japanese

1309 Journalism/communications

0805 Kindergarten

1320 Latin

1338 Law

1353 Learning disabilities

1163 Liberal arts and sciences, general studies, and humanities

1164 Library science

1166 Mathematics

1354 Mentally disabled

2400 Middle

1355 Mildly/moderately disabled

0557 Military science

0558 Multi/interdisciplinary studies

1313 Music

1356 Orthopedically-impaired

1344 Other area or ethnic studies

1307 Other business
1323 Other languages
1332 Other natural sciences
1345 Other social studies/social sciences
1361 Other special education
1371 Other vocational/technical education
1339 Philosophy
0559 Physical education
1330 Physical science
1331 Physics
1340 Political science and government
0789 Prekindergarten
1181 Psychology
1183 Public administration and services
0560 Reading
1342 Religion
1321 Russian
2403 Secondary
1357 Severely/profoundly disabled
0563 Social studies
1343 Sociology
1322 Spanish
2043 Special education
1310 Speech
1358 Speech/language-impaired
1370 Trades and industry (e.g., CADD, electronics repair, mechanics, precision production)
1359 Traumatically brain-injured
1314 Visual arts
1360 Visually impaired
9999 Other

Teaching Assignment Beginning Date
Definition: The month, day, and year on which a teaching assignment begins.
Element Number: 0828
Element Type: DT
Field Length: 8

Teaching Assignment Ending Date
Definition: The month, day, and year a teaching assignment ends.
Element Number: 0829
Element Type: DT
Field Length: 8

Teaching Credential Basis
Definition: An indication of the predetermined criteria for granting the teaching credential that an individual holds.
Element Number: 0395
Element Type: ID
Field Length: 4

Related Options:
- 1235 Four-year bachelor's degree
- 1236 Five-year bachelor's degree
- 1242 Credentials based on reciprocation with another state
- 1238 Doctoral degree
- 1237 Master's degree
- 1239 Met state testing requirement
- 1241 Relevant experience
- 1240 Special/alternative program completion

Teaching Credential Type

Definition: An indication of the category of a legal document giving authorization to perform teaching assignment services.
Element Number: 0394
Element Type: ID
Field Length: 4
Related Options:
- 1229 Emergency
- 1234 Intern
- 1226 Master
- 1230 Nonrenewable
- 1223 Probationary/initial
- 1225 Professional
- 1224 Provisional
- 1222 Regular/standard
- 1231 Retired
- 1227 Specialist
- 1232 Substitute
- 1233 Teacher assistant
- 1228 Temporary
- 9999 Other

Teaching Field or Area Authorized

Definition: An indication of a teaching field within which an individual is authorized to teach by an active teaching credential. In a departmentalized organization, a teaching field is a major subdivision of the educational program such as language arts, mathematics, music, distributive education, or physical education. In a nondepartmentalized situation or in a self-contained classroom, a general teaching level such as "elementary" or "secondary" may be the most accurate designation of a teaching field.
Element Number: 0421
Element Type: ID
Field Length: 4
Related Options:
- 1305 Accounting
- 1362 Agriculture or natural resources
- 1333 American Indian/Native American studies
- 1334 Anthropology
- 1311 Architecture or environmental design
- 1150 Area, ethnic and cultural studies
- 1348 Autism
- 1346 Basic skills or remedial education

0251 Bilingual education
1325 Biology or life science
1306 Business and management
1363 Business/office
1364 Career education
1326 Chemistry
1315 Chinese
1335 Civics
1153 Communications technologies
1324 Computer science
1366 Cosmetology
0068 Curriculum and instruction
0684 Dance
1349 Deaf and hard-of-hearing
1350 Developmentally delayed
1312 Drama/theater
1296 Early childhood
1351 Early childhood–special education
1327 Earth/space science/geology
1336 Economics
0097 Educational administration
0120 Educational psychology
1304 Elementary
1352 Emotionally disturbed or behavior disorders
1157 Engineering
0256 English as a second language
1162 English language and literature/letters
1308 English or language arts
1367 Family and consumer science (home economics)
1368 Food/restaurant skills and services
2371 Foreign language and literature
1316 French
1328 General science
0547 Geography
1317 German
2381 Gifted and talented
0302 Guidance counseling
1329 Health education
1369 Health professions and occupations
0550 History
1337 Humanities
1318 Italian
1319 Japanese
1309 Journalism/communications
0805 Kindergarten
1320 Latin
1338 Law
1353 Learning disabilities
1163 Liberal arts and sciences, general studies and humanities
1164 Library science

1166 Mathematics
1354 Mentally disabled
2400 Middle
1355 Mildly/moderately disabled
0557 Military science
0558 Multi/interdisciplinary studies
1313 Music
1356 Orthopedically impaired
1344 Other area or ethnic studies
1307 Other business
1323 Other languages
1332 Other natural sciences
1345 Other social studies/social sciences
1361 Other special education
1371 Other vocational/technical education
1339 Philosophy
0559 Physical education
1330 Physical science
1331 Physics
1340 Political science and government
0789 Prekindergarten
1181 Psychology
1183 Public administration and services
0560 Reading
1342 Religion
1321 Russian
2403 Secondary
1357 Severely/profoundly disabled
0563 Social studies
1343 Sociology
1322 Spanish
2043 Special education
1310 Speech
1358 Speech/language-impaired
1370 Trades and industry (e.g., CADD, electronics repair, mechanics, precision production)
1359 Traumatically brain-injured
1314 Visual arts
1360 Visually impaired
9999 Other

Telephone Number

Definition: The telephone number including the area code and extension, if applicable.
Element Number: 0279
Element Type: AN
Field Length: 15

Telephone Number Type

Definition: The type of communication number listed for an individual or organization.
Element Number: 0280
Element Type: ID
Field Length: 4

Related Options:
> 0350 Alternate telephone number
> 0359 Answering service
> 0400 Appointment telephone number
> 0370 Beeper number
> 2364 Facsimile number
> 0478 Instant messaging number
> 0096 Main telephone number
> 0486 Media conferencing number
> 0437 Telemail
> 0426 Telex number
> 0448 Voice mail

Telephone Status

Definition: A description of preferred communication type or special circumstances that affect communication to an individual, organization, or institution via telephone (e.g., no telephone connection, TTY used, no one available to answer the telephone during certain hours).
Element Number: 0281
Element Type: AN
Field Length: 60

Tertiary Disability Type

Definition: A tertiary disability condition identified with an individual, as distinguished from a primary or secondary disability.
Element Number: 0774
Element Type: ID
Field Length: 4
Related Options:
> 2121 Autistic/autism
> 2122 Deaf–blindness
> 2133 Deafness
> 2134 Developmental delay
> 2127 Emotional disturbance
> 2123 Hearing impairment
> 2135 Infants and toddlers with disabilities
> 2124 Mental retardation
> 2125 Multiple disabilities
> 2126 Orthopedic impairment
> 2132 Other health impairment
> 2128 Specific learning disability
> 2129 Speech or language impairment
> 2130 Traumatic brain injury
> 2131 Visual impairment

Timetable Day

Definition: The locally defined rotation-cycle date code when the class meets (e.g., in a two day schedule, valid values could be "A" and "B," or "1" and "2").
Element Number: 0283
Element Type: AN
Field Length: 10

Total Cost of Education to Student

Definition: The total amount of expenditures required of a student to receive instructional services from an education institution.
Element Number: 0627
Element Type: R
Field Length: 5.2

Total Days in Grading Period

Definition: The total number of days in a given grading period. Also included are days the education institution facility is closed and the student body as a whole is engaged in planned activities off-campus, under the guidance and direction of staff members.
Element Number: 0284
Element Type: N
Field Length: 3

Total Days in Session

Definition: The total number of days in a given session. Also included are days the education institution facility is closed and the student body as a whole is engaged in planned activities off-campus, under the guidance and direction of staff members.
Element Number: 0285
Element Type: N
Field Length: 3

Tuition Payment Amount

Definition: Payments, charged on a per-term or annual basis, required of a student for instructional services in a program of study.
Element Number: 0625
Element Type: R
Field Length: 5.2

Tuition Status

Definition: Information indicating the extent of tuition payment required of a student.
Element Number: 0628
Element Type: ID
Field Length: 4
Related Options:
  1878 Full-tuition student
  1879 Nontuition student
  1880 Partial-tuition student

Unique Course Code

Definition: A unique number that identifies the classroom, the subjects taught, and the instructors that are assigned.
Element Number: 0292
Element Type: AN
Field Length: 30

Unit Duration

Definition: An estimate of the length of time for the lesson unit.
Element Number: 0293
Element Type: AN
Field Length: 10

Unit Name

Definition: The name of the lesson unit.
Element Number: 0294
Element Type: AN
Field Length: 45

Victim Description

Definition: Information on the type of individual who was injured or otherwise harmed as a direct result of the incident. (When known and/or if useful, use a more specific option code; for example, "Counselor" rather than "Professional Staff.")
Element Number: 1052
Element Type: ID
Field Length: 4
Related Options:

    3168 Former student
    3054 Law enforcement officer
    3059 Nonschool personnel
    3061 Other adult
    3062 Other nonstudent youth
    0850 Parent/guardian
    3060 Representative of visiting school
    3422 Staff member
    0126 Student
    9997 Unknown

Virtual School

Definition: A school that focuses on instruction in which students and teachers are separated by time and/or location, and interact primarily through the use of computers and/or telecommunications technologies.
Element Number: 1120
Element Type: ID
Field Length: 4
Related Options:

    0232 No
    0002 Yes

Web Site Address (URL)

Definition: Unique Resource Locator (URL). The unique address of a web page.
Element Number: 0304
Element Type: AN
Field Length: 300

Years of Prior Education Experience

Definition: The total number of years an individual has previously held an education position (including positions as a teacher and administrator).
Element Number: 0439
Element Type: R
Field Length: 2.1

Years of Prior Related Experience

Definition: The total number of years of employment in a noneducation area related to the field in which an individual is currently employed (e.g., 10 years of employment as an automotive mechanic for an individual teaching automotive in a vocational education program).
Element Number: 0440
Element Type: R
Field Length: 2.1

Years of Prior Teaching Experience

Definition: The total number of years an individual has previously held a teaching position in one or more education institutions.
Element Number: 0438
Element Type: R
Field Length: 2.1

Years of Virtual Teaching Experience

Definition: The total number of years an individual has previously held a teaching position in a virtual school or class in one or more education institutions.
Element Number: 1149
Element Type: R
Field Length: 2.1

Zip Code

Definition: The five- or nine-digit zip code portion of an address.
Element Number: 0305
Element Type: N
Field Length: 9

Zone Number

Definition: The number assigned to a geographic area for purposes of census enumeration. For a public school census, this number is generally assigned by the local education agency (LEA).
Element Number: 0306
Element Type: AN
Field Length: 15

APPENDIX B.
Data Elements Related to Student Services and Security in a Virtual Environment

Although many topics influence student service, safety, and security in a virtual setting, a subset of these issues is often addressed while education institutions are negotiating contracts with prospective service providers. The following data elements and management topics may help planners identify and organize legal and security issues related to ensuring and improving student services and safety in a virtual setting. All of the following topical areas and data elements are discussed in greater detail in chapter 2. All data elements are defined in appendix A of this document and in the *NCES Handbooks Online,* Version 4.0, an online tool from the National Center for Education Statistics available at *http://nces.ed.gov/programs/handbook/index.asp.*

School Identification and Classification
Planners may wish to confirm a provider's status as a school or program, as well as its past conduct (e.g., while operating under a different name).
0187 Name of Institution
0313 Former Name of Institution
0029 Administrative Funding Control
0316 Regular School
0036 Alternative School
0840 Special Education/Ungraded School
0174 Magnet/Special Program Emphasis School
0089 Charter School Status
1120 Virtual School
1121 Accreditation Status
0187 Name of Institution (Accrediting Organization)

School Contact Information
Planners may wish to confirm instructions for contacting the provider and its staff, both on a routine and emergency basis.
0281 Telephone Status
0280 Telephone Number Type (includes main number, answering service, beeper number, fax, etc.)
0279 Telephone Number
0121 Electronic Mail Address Type
0120 Electronic Mail Address
0304 Web Site Address (URL)
0025 Address Type
0272 Street Number/Name
0037 Apartment/Room/Suite Number
0081 Building/Site Number
0090 City
0186 Name of County
0267 State Abbreviation
0188 Name of State
0305 Zip Code

School Calendar

Planners may wish to confirm the operational assurances offered by the provider.

0264 Session Beginning Date
0265 Session Ending Date
0285 Total Days in Session
0150 Instructional Minutes

Course Information

Planners may wish to confirm that all coursework will conform to relevant curriculum frameworks and standards.

0110 Curriculum Framework
0109 Curriculum Framework Name
0034 Aligned with State Standards

Safety and Discipline

Planners may wish to confirm that the provider will adhere to all relevant incident reporting expectations.

1126 Incident Recording Mechanism
1148 Rule/Regulation Violated
0894 Security System
1054 Disciplinary Action
1057 Duration of Disciplinary Action

Student Information   (e.g., identification, demographic, contact, progress, health)

Planners may wish to confirm that the provider will adhere to all applicable privacy regulations (e.g., the Children's Online Privacy Protection Act and the Family Educational Rights and Privacy Act—see appendix C).

0131 First Name
0184 Middle Name
0156 Last/Surname
0146 Identification Code
0147 Identification System
0310 Hispanic or Latino Ethnicity
0849 Race
0851 Sex
0322 Citizenship Status
0585 English Proficiency
0327 Language Type
0328 Language Code
0588 Minor/Adult Status
0589 Homelessness Status
0590 Migratory Status
0605 Economic Disadvantage Status
0606 Eligibility Status for School Food Service Programs*
0607 Participation in School Food Service Programs*
0608 Family Public Assistance Status
0025 Address Type
0272 Street Number/Name
0037 Apartment/Room/Suite Number
0081 Building/Site Number
0090 City
0186 Name of County

0267 State Abbreviation
0188 Name of State
0305 Zip Code
0634 Financial Assistance Amount
0644 Exit/Withdrawal Type
0650 Discontinuing Schooling Reason
0374 Grade Earned
0672 Promotion Type
0673 Nonpromotion Reason
0376 Grade Point Average (GPA): Cumulative
0676 Class Rank
0768 Primary Disability Type
0773 Secondary Disability Type
0774 Tertiary Disability Type
0346 Special Adaptation Requirements
0351 Additional Special Health Needs, Information, or Instructions

* Virtual schools might not serve meals, but they could still collect free- and reduced-price meal eligibility as a measure of economic need.

Staff Member Demographics

Planners may wish to confirm the background and security clearance of any service provider staff with access to students or student data.
0401 Background Check Type
0403 Background Check Completion Date

Staff Member Employment Credentials/Assignment Information

Planners may wish to confirm teaching staff credentials and assignments.
0326 Employment Eligibility Verification
0332 Highest Level of Education Completed
0385 Degree/Certificate Title
0391 Credential Type
0419 Credential-Authorized Function
0420 Authorized Instructional Level
0421 Teaching Field or Area Authorized

APPENDIX C.
References and Other Resources

Appendix C lists references and other resources related to virtual education and education data quality, including materials available from the National Forum on Education Statistics (Forum), the National Center for Education Statistics (NCES), and other organizations.

References and Related Publications

Distance Education Courses for Public Elementary and Secondary School Students: 2002–03 (NCES 2005–010).
Setzer, J. C., and Lewis, L. (2005). U.S. Department of Education. Washington, DC: National Center for Education Statistics.
http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2005010
This public school district survey is the first national survey to explore distance education courses for public elementary and secondary school students. The report provides national estimates of the number of districts and schools with students enrolled in distance education courses, as well as the number of students enrolled in those courses. In addition, it examines the reported reasons for having distance education courses, the instructional level of the populations served, entities delivering the courses to students, and data pertaining to online courses. Data about curriculum areas and technology in distance education courses are also discussed. Survey findings are presented at the national level and by school-district characteristics such as metropolitan status, district enrollment size, region, and poverty concentration.

Forum Guide to Building a Culture of Quality Data: A School and District Resource (NCES 2005–801).
National Forum on Education Statistics (2005). U.S. Department of Education. Washington, DC: National Center for Education Statistics.
http://nces.ed.gov/forum/pub_2005801.asp
This free publication asserts that good data, like good students, are produced in schools. While it is undeniably harder to teach a student than it is to collect statistics, certain procedures can help to achieve both goals. Recently, awareness has grown about the link between effective teaching, efficient schools, and quality data. The quality of information used to develop an instructional plan, run a school, plan a budget, or place a student in a class depends on the school data clerk, teacher, counselor, and/or school secretary who enter data into a computer. With that in mind, the focus of this report is on data entry—getting things right at the source.

Forum Guide to the Privacy of Student Information: A Resource for Schools (NFES 2006–805).
National Forum on Education Statistics. (2006). U.S. Department of Education. Washington, DC: National Center for Education Statistics.
http://nces.ed.gov/forum/pub_2006805.asp
This free publication was written to help school and local education agency staff better understand and apply the Family Educational Rights and Privacy Act (FERPA), a federal law that protects privacy interests of parents and students in student education records. It defines terms such as "education records" and "directory information"; and offers guidance for developing appropriate privacy policies and information disclosure procedures related to military recruiting, parental rights and annual notification, videotaping, online information, media releases, surveillance cameras, and confidentiality concerns related specifically to health-related information.

Forum Guide to Protecting the Privacy of Student Information: State and Local Education Agencies (NCES 2004–330).
National Forum on Education Statistics (2004). U.S. Department of Education. Washington, DC: National Center for Education Statistics.
http://nces.ed.gov/forum/pub_2004330.asp
This free guide presents a general overview of privacy laws and professional practices that apply to information collected for, and maintained in, student records. The document also provides an overview of key principles and concepts govern-

ing student privacy; summarizes federal privacy laws including recent changes; identifies issues concerning the release of information to both parents and external organizations; and suggests good data management practices for schools, districts, and state education agencies.

Forum Unified Education Technology Suite.
National Forum on Education Statistics. U.S. Department of Education, National Center for Education Statistics.
http://nces.ed.gov/forum/pub_tech_suite.asp
This free online resource combines material from four previously published NCES/Forum guides *(Safeguarding Your Technology, Technology @ Your Fingertips, Technology in Schools,* and *Weaving a Secure Web Around Education)* into one comprehensive document that will be updated periodically as a web resource. The publication presents a practical, comprehensive, and proven approach to assessing, acquiring, instituting, managing, securing, and using technology in education settings.

Keeping pace with K–12 online learning: A snapshot of state-level policy and practice.
Watson, J., Winograd, K., and Kalmon, S. (2004). North Central Regional Educational Laboratory (NCREL®): Learning Point Associates.
http://www.ncrel.org/tech/pace/index.html
Online learning holds promise for providing new educational opportunities to a wide range of students across the country. The rapid expansion of K–12 online learning, however, threatens to outpace the development of appropriate state-level policies that serve to fulfill the promise. This study, conducted by the North Central Regional Educational Laboratory (NCREL®) and Learning Point Associates, and directed and funded by partnering organizations—the Colorado Department of Education, the Illinois Virtual High School, Learning Point Associates, and the Wisconsin Virtual School—ascertains what states are doing to address the need for policy guidance. In particular, the report provides information on specific topics of K–12 online learning policy and practice, as well as analysis and discussion of those issues.

NCES Handbooks Online (NCES 2003–419).
National Center for Education Statistics (2003). U.S. Department of Education, National Center for Education Statistics.
http://nces.ed.gov/forum/pub_2003419.asp
The *NCES Handbooks Online* define standard education terms for students, staff, schools, local education agencies, intermediate education agencies, and state education agencies. It is intended to serve as reference documents for public and private education institutions and early childhood centers, as well as education researchers and other users of education data. This web-based tool allows users to view and download information about data elements via an electronic table of contents, a drill-down finder, element-name and first-letter searches, and advanced query options.

Privacy Issues in Education Staff Records: Guidelines for Education Agencies (NCES 2003–363).
U.S. Department of Education. Washington, DC: National Center for Education Statistics.
http://nces.ed.gov/forum/pub_2000363.asp
This report discusses key concepts related to protecting and managing information in staff records. It does not provide legal guidelines, but does address the federal Freedom of Information and Privacy Act and offers principles of best practice.

Safety in Numbers: Collecting and Using Crime, Violence, and Discipline Incident Data to Make a Difference in Schools (NCES 2002–312).
National Forum on Education Statistics. U.S. Department of Education Washington, DC: National Center for Education Statistics.
http://www.nces.ed.gov/forum/pub_2002312.asp
This free resource is designed to help school, district, and state staff improve the effectiveness of their efforts to collect and use disciplinary incident data. It provides recommendations on what types of data to collect, why such information is critical, and how the data maybe used to improve school safety and answer policy questions relating to school improvement and student safety.

SETDA National Leadership Institute Toolkit on Virtual Learning 2004–2005.
State Educational Technology Directors Association (2005).
http://www.setda.org/content.cfm?sectionID=265
As state technology leaders, members of the State Educational Technology Directors Association (SETDA) are continually engaged in the development of strategies and tools to assist educators and administrators in effectively implementing and integrating technology into classrooms, curricula, and learning. During the 2004 National Leadership Institute (NLI), SETDA leaders focused on virtual learning. They examined, discussed and developed tools designed to help education leaders effectively use technology and virtual learning to increase opportunities to help students learn and teachers teach. While the Toolkit was developed for state leaders, SETDA encourages broad dissemination so that all educators and administrators can help improve and enhance education through virtual learning.

Technology Counts 2004.
Education Week.
http://counts.edweek.org/sreports/tc04
This seventh edition of *Education Week's* annual report on educational technology presents an overview of technology in schools around the world, a review of national trends in the use of educational technology, and snapshots of the steps that states have taken to use educational technology more effectively.

Technology Counts 2005.
Education Week.
http://www.edweek.org/ew/toc/2005/05/05
This eighth edition of *Education Week's* annual report on educational technology tracks the economic and policy forces driving change at the federal, state, and local levels.

Other resources

Americans with Disabilities Act (ADA)
http://www.usdoj.gov/crt/ada/adahom1.htm
The Americans with Disabilities Act (ADA) gives civil rights protections to individuals with disabilities similar to those provided to individuals on the basis of race, color, sex, national origin, age, and religion. More specifically, it guarantees equal opportunity for individuals with disabilities in public accommodations, employment, transportation, state and local government services, and telecommunications.

Children's Online Privacy Protection Act
http://www.coppa.org
The Children's Online Privacy Protection Act applies to the online collection of personal information about children under the age of 13. The new rules spell out what a website operator must include in a privacy policy, when and how to seek verifiable consent from a parent, and the responsibilities of an operator in protecting children's privacy and safety online.

Family Educational Rights and Privacy Act (FERPA)
http://www.ed.gov/policy/gen/guid/fpco/ferpa/index.html
The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education.

National Center for Education Statistics (NCES)
http://nces.ed.gov
The National Center for Education Statistics (NCES) is the primary federal entity for collecting, analyzing, and reporting data related to education in the United States and other nations. It fulfills a congressional mandate to collect, collate, analyze,

and report full and complete statistics on the condition of education in the United States; conduct and publish reports and specialized analyses of the meaning and significance of such statistics; assist state and local education agencies in improving their statistical systems; and review and report on education activities in foreign countries. Through the National Cooperative Education Statistics System, NCES supports the activities of the National Forum on Education Statistics and the publication of resources such as this.

National Forum on Education Statistics (Forum)

http://nces.ed.gov/forum

The National Forum on Education Statistics (Forum) is comprised of representatives of state and local education agencies, Offices of the U.S. Department of Education, other federal agencies, and national associations with an interest in education data. It is sponsored by the National Center for Education Statistics. Its mission is to develop and recommend strategies for building an education data system that will support local, state, and national efforts to improve public and private education throughout the United States. The Forum is committed to improving the quality, comparability, and usefulness of elementary and secondary education data, while remaining sensitive to data burden concerns.

No Child Left Behind (NCLB) Act of 2001

http://www.ed.gov/nclb/landing.jhtml

The No Child Left Behind Act of 2001 (NCLB) is an education-reform effort passed into law in January 2002. NCLB reauthorized the Elementary and Secondary Education Act (ESEA), which is the main federal law affecting education from Kindergarten through high school. NCLB is built on four principles: accountability for results, more choices for parents, greater local control and flexibility, and an emphasis on doing what works based on scientific research.

North Central Regional Educational Laboratory (NCREL®)

http://www.ncrel.org

The North Central Regional Educational Laboratory (NCREL®) is one of the 10 regional educational laboratories funded by the U.S. Department of Education, and its work is conducted by Learning Point Associates. As a member of the Regional Educational Laboratory Network, NCREL is dedicated to providing high-quality, research-based resources to educators and policymakers in the states of Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio, and Wisconsin.

Schools Interoperability Framework Association

http://www.sifinfo.org

The Schools Interoperability Framework Association (SIFA) is a nonprofit membership organization comprised of over 300 school districts, state education agencies, software companies, and other organizations—all collaborating to create a set of rules and definitions that enable software programs from different vendors to share information. Implementing products that conform to the "SIF Implementation Specification" enables local schools, districts, or states to share data without any additional programming. SIFA's goal is to make it possible for school administrators, teachers, and other school personnel to have secure access to the most current and accurate education data available.

State Educational Technology Directors Association

http://www.setda.org

The State Educational Technology Directors Association (SETDA) is the principal national association representing state directors for educational technology. It promotes national leadership in educational technology, encourages lifelong learning, provides professional development for state education technology directors, and builds partnerships to advance learning opportunities—all with an ultimate goal of improving student achievement through technology.

GLOSSARY

A

Acceptable use policy (AUP): A policy designed to describe the ways a computer or network may be used appropriately. AUPs usually include explicit statements about the required procedures, rights, and responsibilities of a technology user. As a condition of system use, users sign AUPs to certify intentions to follow all policies and procedures stipulated in the document.

Access: To make use of a technology resource (e.g., a computer or network). Also, to make use of the information or data that resides on a computer or network.

Accreditation: A process that generally includes a review of an organization's educational program and staff for quality, and concludes with certification (or not) that the organization meets a minimum set of standards.

Accreditation organization: An authority that reviews an organization's educational program and staff for quality, and certifies whether the organization meets a minimum set of standards.

Adaptive technologies: External support, such as advanced voice recognition systems, Braille computer displays, and text-to-speech programs used to enhance a person's ability to function within his or her environment. *See also assistive technologies.*

Antivirus software: Computer programs designed to detect the presence or occurrence of a computer virus. The software subsequently signals an alert of such detection via any of a variety of mechanisms and, in many commercial products, can then be used to delete the virus. *See also software, virus, and virus scanner.*

Appropriate use policy: *See acceptable use policy.*

Assistive technologies: Any item, piece of equipment, or product system—whether acquired commercially off the shelf, modified, or customized—used to increase, maintain, or improve the functional capabilities of people with disabilities. *See also adaptive technologies.*

Asynchronous: Not occurring at the same time. In virtual courses, "asynchronous" refers to communication between participants (e.g., students and teachers) that occurs at different times, the period of which may vary by circumstance. For example, students might submit questions via e-mail for teachers to respond to at a later time. *See also synchronous.*

Attack: An attempt to violate information and technology security.

Audit trail: A detailed record of user transactions that chronicles all system activity (from each user's log on to log off and everything in between). Review and analysis of audit trail records can lead to the detection of unauthorized or otherwise unacceptable system activity.

Authentication: The act of verifying a user's identity to prevent unauthorized use. *See also log on and password.*

B

Bandwidth: The amount of data that can be moved to a computer during a given period of time; or the speed [usually expressed in kilobits per second (Kbps) or megabits per second (Mbps)] of the telecommunications link between a computer and a local-area network (LAN) and/or an Internet service provider (ISP), routing service, or other method of connection to the Internet. Examples of bandwidth-level ratings: 33.6 Kbps or under; 56 Kbps; 128 Kbps; 256 Kbps; 512 Kbps; 768 Kbps (.5 T1); T1; Ethernet; DS(1) or higher.

Blended technologies: The use of a combination of instructional technologies within a single course including, for example, satellite and web-based technologies or two-way interactive television (I-TV), web-based instruction, and on-site interaction.

Broadband: Telecommunication in which a wide band of frequencies is available to transmit information.

Browser: A software application used to locate and display web pages. Common web browsers are Microsoft Internet Explorer and Mozilla. Both are graphical browsers, meaning they can display graphics as well as text. In addition, most browsers can present multimedia information, including sound and video, though this may require plug-ins.

Business case: A document that provides a description of the desired technology solution and the anticipated costs and benefits.

C

Cable Modem: Hardware that encodes and decodes computer-based communications for transmission over a cable television system. A modem is designed to operate over cable-TV lines rather than phone lines.

CD-ROM (Compact Disc-Read Only Memory): An optical disk capable of storing large amounts of embedded electronic programs or files that can only be read from the disk (i.e., data cannot be written to the disk after it has been produced). Unlike diskettes, CD-ROMs can be read by any type of computer with a CD-ROM disk drive. *See also DVD-ROM and storage media.*

Cellular wireless: A method of connection to the Internet that does not use any ground lines. The existing standard protocol is relatively slow; however, newer standards are evolving. Care must be taken to secure these networks from hackers because cellular wireless is still susceptible to interception. *See also hacker.*

Certificate authority: A "trusted" third-party entity that issues digital certificates to individuals or organizations. These digital certificates are used to create digital signatures and other security mechanisms. By issuing a digital certificate, the certificate authority guarantees the identify of the recipient of the unique identifier. *See also digital certificate and digital signature.*

Class: A setting in which organized instruction of course content is provided to one or more students (including cross-age groupings) for a given period of time. Instruction, provided by one or more teachers or other staff members, may be delivered in person or via a different medium. Note that more than one class may offer the same course. *See also course and virtual class.*

Classroom: The location in a school where instructional services are regularly provided to groups of students. *See also instructional setting.*

Client: The computer (user) in a client/server network that requests files or services. The computer that responds to the "client" and supplies the services is called the "server." *See also client/server network, server, and thin client.*

Client/server network: A network configuration in which all users access files stored on a central computer or several central computers. Each central computer is a server, and each user (actually each user's computer) is a client. *See also client, network, peer-to-peer network, server, and thin client.*

Commercial service provider: A company that, for a fee, will connect one computer to other computers so that they may exchange information. *See also internet service provider.*

Computer: An electronic device that stores, retrieves, and processes data; and can be programmed with instructions. A computer is composed of hardware and software, and can exist in a variety of sizes and configurations. *See also hardware, mainframe computer, minicomputer, peripheral equipment, personal computer, and software.*

Computer laboratory: In an instructional setting, a space where computers are clustered; usually used by a group of students or a class, and reserved for teaching coursework that requires the use of a computer. *See also computer.*

Computer learning: *See virtual education.*

Computer type: The classification of a computer according to its storage and computing capacity, the number of users it can support, the variety of input and output options, and its physical size. Three major types of computers are mainframe computers, minicomputers, and microcomputers. *See also mainframe computer, minicomputer, and personal computer.*

Confidential information: Private information about an individual that is protected by organizational policy or law, such as the Family Education Rights and Privacy Act (FERPA). *See also sensitive information.*

Contingency plan: A prepared plan that details an organization's anticipated response to potential emergency situations. The purpose of a contingency plan is to minimize the amount of planning necessary once an organization and its staff are in an emergency situation (e.g., a fire, earthquake, or hacking incident); instead, they can refer to, and enact, the preplanned list of activities identified as necessary for protecting lives, salvaging systems, and limiting damage. Well-designed contingency plans specify individual staff roles and responsibilities during an emergency. *See also recovery plan.*

Course: The organization of subject matter and related learning experiences for the instruction of students on a regular or systematic basis. Courses are usually offered to an individual or group of students (e.g., a class) for a predetermined period of time (e.g., a semester). *See also class and e-course.*

Cyber education: *See virtual education.*

D

Data: Raw information that lacks the context necessary to be meaningful (e.g., "34" is data because it has no meaning unless some context is provided; "34 degrees Fahrenheit" has meaning and is therefore "information"). The terms "data" and "information" are often used to differentiate between computer-read (i.e., data) and human-read (i.e., information) figures and text. *See also data element and information.*

Data element: A specific piece of information that can be defined and measured. For example, the *NCES Handbooks Online* define the data element #0851, Sex, as "A person's gender" and recognizes the coding options "Male" and "Female." Data elements are the basic unit of information—anything less would not have meaning. *See also data.*

Data loop: One or more data elements repeated as necessary to fully describe multiple entries. For example, most students take more than one class during a grading period, meaning that data elements maintained about the entity "class" will occur multiple times (for each class on a student's transcript).

Decryption: The process of translating an encrypted file back into its original unencrypted form via the use of a matching decryption key. *See also encryption.*

Dial-up service: A method of connecting to the Internet through a modem and a traditional telephone line. Dial-up services are usually sufficient for basic web and e-mail applications, but are not as efficient for transferring larger files (e.g., video clips). *See also digital subscriber line.*

Digital certificate: An attachment to an electronic transmission that allows the recipient to authenticate, via third-party verification from an independent certificate authority, the identity of the sender. Digital certificates are used to identify encryption and decryption codes between message senders and recipients. *See also authentication, certificate authority, decryption, digital signature, and encryption.*

Digital signature: A code attached to an electronic message that is used to verify the sender's identity, much in the same way a written signature identifies the sender of a letter. To be effective, digital signatures must be unique, and protected from theft and forgery. *See also certificate authority and digital certificate.*

Digital subscriber line (DSL): A high-bandwidth technology for connecting to the Internet using the copper telephone lines that exist in almost every home and office. Special hardware attached to both ends of the line allows data transmission at far greater speeds than standard telephone wiring and dial-up connectivity. *See also dial-up service.*

Directory information: Information about an individual that can legally be made public (e.g., name, street address, and telephone number). *See also confidential information and sensitive information.*

Distance education course: Credit-granting school courses in which the teacher and students are separated by time and/or location. Note that not all distance education courses (e.g., mail correspondence courses) are virtual education courses which, by definition, require participant interaction through the use of computers and/or telecommunications technologies. *See also course, e-course, and virtual education.*

Distance education/distance learning technologies: Any of a number of technologies involving taking courses or learning at a distance, with synchronous or asynchronous communication between student and teacher. *See also virtual education.*

Distributed learning: *See virtual education.*

Domain: As used within this document, a domain indicates the source from which a data element, its definition, and attributes originate within the *NCES Handbooks Online* (i.e., school, student, or staff member).

Domain name: Used in website addresses (URLs) to identify particular web pages or sites on the Internet. For example, the domain name "nces.ed.gov" represents the website for the National Center for Education Statistics.

Downloading: The process of transferring information from a remote computer to a local computer.

DSL: *See digital subscriber line.*

DVD-ROM (Digital Video Disc-Read Only Memory): A disc for storing data, similar to a CD-ROM but with more storage capacity (4.7 gigabytes) and digital video capabilities. *See also CD-ROM and storage media.*

E

E-course: A course delivered primarily through electronic media (e.g., Internet and other technologies) and guided by a course of study. *See also course.*

Educational technology: Educational computing and technology encompasses knowledge about, and use of, computers and related technologies in: a) delivery, development, prescription, and assessment of instruction; b) effective uses of computers as an aid to problem-solving; c) school and classroom administration; d) educational research; e) electronic information access and exchange; f) personal and professional productivity; and g) computer science education. [Source: International Society for Technology in Education (ISTE)]

Electronic data interchange (EDI): The exchange of routine education (and business) information transactions in a format a computer can process.

Electronic mail (e-mail): Asynchronous (time-independent) messages sent from a user to one or more recipients over computer networks. Contrasts with synchronous (time-dependent) messaging systems such as Internet chat. *See also e-mail and e-mail address.*

E-mail: Electronic messages, typically addressed as person-to-person correspondence, that are transmitted between computers and across networks. *See also e-mail address and electronic mail.*

E-mail address: An address for a unique user's electronic mailbox; characters identifying the user are followed by the "@" (at) symbol and the address of the mailbox's computer. *See also e-mail and electronic mail.*

Encryption: The process of translating a file into an apparently unintelligible format (i.e., to encode it) by using mathematical algorithms or other encoding mechanisms. The recipient of an encrypted message must possess a matching key to decrypt and read the message. *See also decryption.*

Ethical standards: Guidelines for appropriate behavior based on the recognized standards of a profession or group (e.g., ethical standards of the workplace forbid displays of insulting and insensitive messages).

F

File: In technology systems, a file is a block of data stored on a magnetic medium such as a CD-ROM. A file may contain a computer program, a document, or other collections of data and information.

File transfer protocol (FTP): A standard Internet protocol for transferring files from one computer to another.

Filtering: The process of controlling access to a network by analyzing the incoming and outgoing packets. A filter lets the packets pass (or not) based on the IP addresses of the source and/or destination. Websites and e-mail messages can also be filtered based on content (e.g., code that may appear to be a computer virus, or a website with objectionable material). *See also packet.*

Firewall: An electronic boundary (or physical piece of hardware) that prevents unauthorized users and/or packets of data or information (e.g., files and programs) from accessing a protected system. *See also packet.*

Frequently asked questions (FAQs): A list of questions typically asked by system users, and the answers to those questions. FAQs are prepared to help users without requiring continuous staff support.

Full-time equivalent (FTE): Translation of hours of human labor into equivalent units of full-time work, usually at the rate of eight hours for one full-time day.

G

Gateway: An electronic device that allows two different computers or networks to connect by "translating" between networks that use different protocols. *See also computer and network.*

H

Hacker: An unauthorized user who attempts to access a system and its information.

Hardware: The computer equipment used to do the work (i.e., operate software programs). Hardware can be physically touched, such as the computer case and peripheral equipment attached to the computer. *See also computer, peripheral equipment, and software.*

Help desk: A source from which computer, network, or software users can receive assistance. Access to a help desk is usually offered via telephone, fax, and/or e-mail.

High-speed dial-up: Sometimes advertised as broadband dial-up, an Internet service provider (ISP) feature that speeds up data transfer by using a special server, called an acceleration server, to act as a bridge between the user's dial-up connection and a web page.

Highly qualified teacher: Although there are many definitions of "highly qualified," the No Child Left Behind Act of 2001 (NCLB) states that teachers in "core academic subjects" (English, reading or language arts, mathematics, science, foreign languages, civics and government, economics, arts, history, and geography) must meet three criteria to be considered highly qualified. They must: hold a bachelor's degree; obtain full state certification, as defined by the state; and demonstrate competency, as defined by the state, in each core academic subject taught. *See also No Child Left Behind Act of 2001 (NCLB) and teacher.*

Homepage: The first page (i.e., the opening screen) of a website. *See also Internet and World Wide Web (WWW).*

Hybrid school: A school that offers both virtual and face-to-face instruction. *See also virtual school.*

Hypertext markup language (HTML): A formatting language used to create web pages and specify how they will appear on screen.

I

Information: Data that are meaningful (i.e., they are presented in a context that allows them to be read by a human as opposed to being read by a computer). *See also data.*

Instructional management software: Computer programs that help teachers prepare for instruction and maintain records. Some typical instructional management applications include gradebook programs and curriculum builders such as crossword puzzle generators.

Instructional setting: Any setting in a school where regular instruction is provided, such as a classroom or laboratory. *See also classroom.*

Instructional software: Computer programs that allow students to learn new content, practice using content already learned, and/or be evaluated on how much content they currently know. These programs allow teachers and students to demonstrate concepts, perform simulations, and record and analyze data. Sometimes general application software such as database programs and spreadsheets can also be used within the instructional context to help analyze and present data and information.

Instructional support applications: Software or computer-based systems that support instruction or instructional management (e.g., lesson planning software, student attendance systems).

Integrated services digital network (ISDN): A digital phone line that can transmit data, video, and voice. ISDN lines are "point-to-point" connections from the telephone company to the computer user.

Interface: A shared boundary where independent systems meet. In computer systems, interface commonly refers to the mechanism used to communicate with a computer or network (e.g., a monitor, a keyboard, a mouse). It also refers to those connections that enable communication and data exchanges to take place between separate systems.

Internet: A worldwide network of computer networks used to exchange data and communicate. *See also World Wide Web (WWW).*

Internet connection: Telecommunications link between a computer or a local area network (LAN) and the global Internet. Examples of connection types include dial-up via modem, wired LAN and router, wireless LAN and router, cable modem, satellite/modem hybrid link, full-satellite (two-way) link, and digital subscriber lines (DSL). *See also dial-up service, digital subscriber line (DSL), and Internet.*

Internet phone, voiceover-Internet protocol (VoIP): Telephone communications, usually long-distance, that use the Internet as part of the communications link. *See also Internet protocol (IP).*

Internet protocol (IP): A basic protocol for communicating over the Internet. An IP number is a numerical address (consisting of numbers separated by periods) that uniquely identifies individual computers on the Internet. *See also IP address and protocol.*

Internet service provider (ISP): An entity that provides commercial access to the Internet. Service can range in size from dial-up access with a speed of 56-Kbps over an ordinary telephone line with several dozen customers, to multiple pops (connection points) in multiple cities with substantial backbones and thousands, tens of thousands, or even more customers. ISPs may also offer web hosting and other services.

Intranet: A localized network of computers used to communicate electronically within a specific and limited area (e.g., within a school).

IP address: An identifier for a computer or device on a TCP/IP (Transmission Control Protocol over Internet Protocol) network. TCP/IP networks use the destination IP address to route messages. Within a private network, IP addresses can be assigned at random as long as each one is unique. However, connecting a private network to the Internet requires a publicly registered IP address (called Internet addresses) to avoid duplication. *See also Internet protocol, protocol, and TCP/IP.*

ISDN: *See integrated services digital network.*

ISP: *See internet service provider.*

L

LAN: *See local area network.*

Laptop: A portable, personal computer small enough to fit on a person's lap. Laptops are usually capable of being powered by rechargeable batteries. *See also computer and personal computer.*

Library: *See media library.*

List server: A device that operates mailing lists and distributes new messages, newsletters, or other postings from the list's members to its subscribers. Postings can be delivered as they are received, or they can be stored and delivered on a scheduled basis.

Local area network (LAN): A linkage of computers and/or peripherals (e.g., printers) confined to a limited area (e.g., a room, building, or campus) to enable users to communicate and share information. *See also network and wide area network (WAN).*

Log on: To connect to a computer or network, usually through the entry of an acceptable user ID and password (i.e., through appropriate authentication). *See also authentication and password.*

M

Macintosh: A family of personal computers manufactured by Apple Computer.

Mainframe computer: A computer that serves as central support to many users, and has the storage and computing capacity needed for managing large sets of data and files. Mainframes often store data on large reel-to-reel magnetic tapes that require extensive physical storage space. Mainframe users frequently rely on terminals or "tubes" to connect to the mainframe. *See also computer, minicomputer, and personal computer.*

Maintenance contract: An agreement with an outside service or agency (e.g., the vendor who sold the equipment) to maintain or repair a computer system and/or its peripheral equipment.

Masquerading: Impersonating an authorized user to gain access to a computer or network. One common act of masquerading is to "borrow" someone else's password. *See also password and spoofing.*

Media library: An on-site location that serves as a repository for archived files and software, and allows for security measures to be concentrated and even intensified. Note that a media library is not a substitute for off-site storage of backups.

Megabyte (MB): The amount of computer memory needed to store 1,048,576 characters (roughly equivalent to a novel of average length). Megabytes are often used to describe the amount of memory on a disk or in random access memory (RAM). *See also random access memory (RAM).*

Megahertz (MHz): A measure of the clock speed of a central processing unit (CPU), expressed in millions of cycles per second.

Meta tag: A command inserted in a document that specifies how the document, or a portion of the document, should be formatted. Tags are used by all format specifications that store documents as text files.

Microcomputer: *See personal computer.*

Minicomputer: A stand-alone computer system that generally supports anywhere from five to a few hundred users simultaneously. Many traditional minicomputers have been replaced by client/server networks and peer-to-peer networks. *See also client/server network, computer, mainframe computer, peer-to-peer network, and personal computer.*

Modem: A device that connects a computer to a telephone line (or, perhaps, another wire) for communication with another remote computer or information network. Modems may be internal or external to the computer. Modems are classified by the speed they can send and receive information. A shortened form of "modulator/demodulator." *See also computer, mainframe computer, and personal computer.*

Monitor: A device, similar to a television screen, that receives video signals from a computer and displays the information for the user. *See also peripheral equipment.*

Mouse: A hand-held pointing device used to give instructions to a computer and moves information around on a monitor screen. *See also peripheral equipment.*

Multimedia: The simultaneous presentation of several media types (e.g., text, graphics, video, and audio).

Multimedia computer: A computer capable of presenting several media types (e.g., text, graphics, video, and audio) simultaneously.

N

Need-to-know: 1) A security principle that states that system users should only be granted access to those components of the system (and its information) that they actually need to perform their job. 2) A legal designation that indicates that an individual has a legitimate educational reason for accessing confidential information.

Net education: *See virtual education.*

Network: A group of computers connected to each other to share software, data, communications, and peripheral devices. The term "network" commonly includes the hardware and software needed to connect the computers together. *See also client/server network, local area network (LAN), and wide area network (WAN).*

Networked learning: *See virtual education.*

No Child Left Behind Act of 2001: The No Child Left Behind Act of 2001 (NCLB) is a federal education-reform effort passed into law in January 2002. NCLB reauthorized the Elementary and Secondary Education Act (ESEA), which is the main federal law affecting education from Kindergarten through high school. NCLB is built on four principles: accountability for results, more choices for parents, greater local control and flexibility, and an emphasis on doing what works based on scientific research.

O

Off-site: A location other than an organization's primary work site or place of business. *See also off-site storage.*

Off-site storage: A location for storing backup files that is physically independent of the primary site where files are used. The purpose of off-site storage is to decrease the likelihood of a single, catastrophic event damaging or destroying both master and backup files. For example, if a fire were to break out in a building, the entire structure might be destroyed. If backup files were maintained in that building, they would probably be lost with the originals; but if the backup files were at a different location (i.e., in off-site storage), they would be much more likely to survive the event. *See also off-site.*

Online: The status of being connected to a computer or network, or having access to information available through the use of a computer or network. *See also access and remote access.*

Online learning: *See virtual education.*

Open learning: *See virtual education.*

Operating System: Software that contains the electronic instructions that control the computer and run the programs. This software is generally specific to a type of computer (e.g., Windows 2000, UNIX Linux, Mac OS X). *See also software.*

P

P2P: *See peer-to-peer network.*

Pace: A measure of the rate of advancement or progress through academic content. Virtual classes may be taught at the same pace as traditional, face-to-face instruction (i.e., to a group of students who log in, tune in, or otherwise participate in class at the same time) or at the individual student's pace (i.e., self-paced, which allows each student to access class instruction, materials, and assignments at his or her own time of choice, as long as the work is completed by agreed-upon deadlines).

Packet: A message fragment containing data or information. When messages are sent on the Internet, they are broken into smaller, more easily transportable pieces called packets. Each packet consists of a header and a piece of the message. A single e-mail message may actually be broken into a several different packets.

Password: A secret sequence of letters, numbers, or symbols that enables users to identify and authenticate themselves to a secured computer or network. Passwords can be established by a system administrator or by the individual user. Effective password systems require that users protect their passwords from being disclosure. *See also authentication and log on.*

PC: *See personal computer.*

PDA: *See personal data assistant.*

Peer-to-peer network (P2P): A configuration in which each computer on a network has the same capabilities, and any computer on the network can initiate a communications session with one of its "peers." Any peer computer on the network can access, add, copy, and move files to another peer computer on the network (though people store their files on their own computers). *See also client/server network and nework.*

Peripheral equipment: Any of a variety of devices attached to a computer, such as monitors, keyboards, modems, printers, scanners, and speakers. *See also monitor, mouse, printer, and scanner.*

Personal computer: A small (compared to a mainframe or minicomputer) computer based on a microprocessor and designed for a single user. Personal computers can be networked to communicate with other personal computers, mainframes, or minicomputers. *See also computer and laptop.*

Personal data assistant (PDA): A handheld device (e.g. Palm Pilot®, PocketPC®, etc.) that combines several computing activities. PDAs can function as cellular phones, fax transmitters, web browsers, and personal organizers.

Physical security: Measures that must be taken to prevent theft, vandalism, and other types of harm to equipment and information.

Platform: The hardware and operating system that runs application software on a computer. *See also computer, hardware, operating system, and software.*

Plug-ins: Software that adds a specific feature or service to a larger system. For example, in order to view a PDF file, the Adobe Acrobat Reader® plug-in is required. *See also software.*

Pop-up ads: Advertisements that appear in a separate browser window while a website is being viewed.

Portal: A website or service that offers a broad array of resources, such as e-mail, forums, search engines, and online shopping malls. The first web portals were online services, such as America Online (AOL), which provided access to the web; now most of the traditional search engines (Yahoo®, Google®, etc.) are web portals as well, having been modified to attract and keep a larger audience.

Printer: A piece of peripheral equipment that translates electronic signals from a computer into images on paper. Common types of printers include dot matrix, ink jet, laser, impact, fax, and pen-and-ink devices; many are capable of producing either black-and-white or color images. *See also peripheral equipment.*

Program: A series of courses that build on one another to provide either depth or breath within a subject matter area. Both a traditional or a virtual school may offer a virtual school program that consists of a series of virtual courses that build on one another within a subject matter area.

Protocol: A set of standards and rules, such as Ethernet or token ring, that enables networked computers to communicate or share information. *See also internet protocol (IP).*

R

Random access memory (RAM): The place in the computer where programs and data in current use (e.g., the operating system, applications programs, a spreadsheet) are kept temporarily for more efficient access. When the computer is turned off, the data are removed from RAM.

Recovery plan: A detailed program for regaining an organization's critical systems and general systems (i.e., "normal" operations) after a disaster. As with all emergency planning, recovery plans should be prepared in advance of any need. They should specify individual roles and responsibilities for performing planned responses, and be coordinated with other contingency planning and emergency response efforts. *See also contingency plan.*

Release: An intermediate edition of a computer software program. Releases are usually offered when minor changes or bug-fixes have been made to the program's previous edition. Releases are designated by a whole number (denoting the version) followed by a decimal number (e.g., 2.1). *See also software, upgrade, and version.*

Remote access: The act of accessing a computer or network from a location removed from the physical site of the computer or network. *See also access and telecommuter.*

Resolution: The clarity of an image produced on a monitor screen. *See also monitor.*

Risk: In information and technology security, a risk is any hazard or danger to which a system or its components (e.g., hardware, software, information, or data) is subjected. *See also attack, risk assessment, threat, and vulnerability.*

Risk assessment: The process of identifying: 1) all assets an organization possesses, 2) all potential threats to those assets, 3) all points of vulnerability to those threats, 4) the probability of potential threats being realized, and 5) the cost estimates of potential losses. Risk assessment enables an organization to at least consider the range of potential threats and vulnerabilities it faces, and is the first step in effectively securing an information and technology system. *See also attack, risk, threat, and vulnerability.*

Rogue programming: *See Trojan horse, virus, and worm.*

S

Scanner: An input device that takes in an optical image and digitizes it into an electronic image represented as binary data. *See also peripheral equipment.*

School: An institution that provides educational services and has one or more grade groups (PreK–12) or is ungraded, has one or more teachers, is located in one or more buildings, and has assigned administrator(s). A virtual school is defined in this document as a school that focuses primarily on instruction in which students and teachers are separated by time and/or location; and interact through the use of computers and/or telecommunications technologies. Virtual schools may or may not be located in a building that enables students to attend face-to-face classes on site.

Search engine: Software that searches for specific information or files on the Internet using search criteria that is entered.

Security: Protecting equipment, performance, and contents in a technology solution.

Security audit: A methodical examination and review of system and user activity.

Security drill: Repetitive instruction or training designed to establish security concepts and procedures within an organization and its staff.

Security goal: The primary goal of any information and technology security system is to protect information and system equipment without unnecessarily limiting access to authorized users and functions. *See also trusted system.*

Security policy: Clear, comprehensive, and well defined plans, rules, and practices designed to protect and regulate access to an organization's system and the information that comprises it. Security policy describes the ideal status toward which all organizational security efforts should lead.

Security signature: *See digital signature.*

Self-paced: An approach to instruction in which the rate of advancement or progress through academic content is based on an individual student's pace (i.e., whereby each student accesses class instruction, materials, and assignments at his or her own time of choice as long as the work is completed by agreed upon deadlines).

Sensitive information: Information or data which, if lost or compromised, might negatively affect the owner of the information or require substantial resources to recreate. *See also confidential information.*

Server: A computer or device on a network that manages network resources. For example, a file server is a computer and storage device dedicated to storing files. Any user on the network can store files on the file server. A print server is a computer system that manages one or more printers, a network server manages network traffic, and a database server processes database queries. It is possible to partition the space on one computer to create more than one server. *See also client and client/server network.*

Signature: *See digital signature.*

Software: Programs that tell a computer what to do. *See also antivirus software, hardware, instructional software, release, operating system, upgrade, and version.*

Spam: Electronic "junk" mail or junk newsgroup postings. Some people define spam even more generally, as any unsolicited e-mail. In addition to being a nuisance, spam also consumes network bandwidth. Because the Internet is a public network, little has been done to prevent spam (just as preventing junk mail in its paper form is difficult). However, some spam can be removed by using software filters in e-mail programs. *See also filtering.*

Spoofing: An intentional act of misrepresentation in which an unauthorized user or site intentionally tricks an authorized user to gain access to a computer or site. *See also masquerading.*

Standards: Guidelines for developing curriculum and for guiding teacher and student behavior. Standards define a common agreement about what should be taught or learned.

Standards for technology competency: Guidelines that specify what a teacher or a student should know about, and be able to accomplish with, technology.

Storage media: Any of a variety of agents or mechanisms for storing electronic data or files, including disks, tapes, compact discs (CD-ROMs), and digital video disks (DVD-ROMs). *See also CD-ROM and DVD-ROM.*

Student: A person enrolled in a school, whether part- or full-time.

Synchronous: Occurring at the same time. In virtual courses, "synchronous" refers to communication between participants (e.g., students and teachers) that occurs at the same time even though they may be in different physical locations. For example, instruction in which students and teachers are online at the same time so that a question can be immediately answered. *See also asynchronous.*

System: A group of elements, components, or devices that interact or are assembled to serve a common purpose. In a technological system, this refers to all hardware, software, networks, cables, peripheral equipment, information, data, personnel, and procedures (i.e., all technology resources) that comprise a computer environment. *See also data, hardware, information, network, peripheral equipment, software, and technology resources.*

T

TCP/IP (Transmission Control Protocol over Internet Protocol): Communication protocols used to connect hosts on the Internet. "TCP" stands for "Transmission Control Protocol," which is the main protocol in an IP (Internet Protocol) network. Whereas the IP deals solely with packet switching, TCP/IP allow two hosts to communicate with long streams of data at one time, thus always guaranteeing the packets arrive in the correct order. *See also Internet protocol, IP address, packet, and protocols.*

Teacher: An instructional leader in a school setting. *See also highly qualified teacher.*

Technical requirements: Straightforward statements that describe the necessary parameters of a technology solution. These parameters should address topics such as: the number of people who use the system at the same time; the users' location(s); the numbers and types of transactions that need to be processed; and the types of technology components that need to interact.

Technical support staff: Individuals who support and maintain an information system once it has been established. *See also technology resources.*

Technology plan: A plan that guides decisionmaking in a technology initiative from inception through evaluation and takes into account local, regional, and state laws; the organization's mission statement, technology policies, present technological capabilities, future technology requirements, facilities plans, and funding issues; timelines; and subsequent staff and student training. The overall goal of a sound plan is the successful integration of technology in support of student learning and school management. *See also technology policies.*

Technology policies: Within an organization, an evolving set of rules and regulations governing technology-related issues, including, but not limited to: the acquisition, maintenance, and disposal of school equipment or applications; the security of information, equipment, and files; acceptable use guidelines; commercial advertising on school literature and websites; and community or after-school access to technology resources. *See also acceptable use policy (AUP), security policy, and technology plan.*

Technology resources: The hardware, software, networks and networking capability, staff, dollars and context that, together, can be used to implement a technology plan.

Telecommuter: An individual who works at home, or at another location that is physically removed from a place of employment, via the use of technology (e.g., computers, modems, and fax machines). *See also remote access.*

Thin client: A network computer without a hard disk drive that, in client/server applications, is designed to be especially small so that the bulk of the data processing occurs on the server. *See also client and client/server network.*

Threat: Any actor, action, or event that contributes to the risk of an organizational asset. *See also attack, hacker, risk, risk assessment, and vulnerability.*

Topic area: As used in this guide, a topic area divides, separates, or otherwise organizes related data elements.

Trojan horse: A type of program that presents itself as an apparently useful function (e.g., a "thesaurus" upgrade for a word processing application) but actually conceals an unauthorized programmed threat (i.e., a virus) designed to damage the system or the information it contains. *See also threat and virus.*

Trusted system: An information and technology system that, while not invincible, can generally be "trusted" as low in risk. Since no system is foolproof, a trusted system is the ideal security state. *See also risk, security goal, and system.*

U

Unit record: A collection of data elements for a given object. A row in a database. *See also data element.*

Universal resource locator (URL): A website address composed of several parts, including the protocol, the server where the "resource" (e.g., web page) resides, the path, and the file name of the resource. An example of an URL is *"http://nces.ed.gov." See also domain name, protocol, and server.*

Upgrade: 1. (Verb) To install a higher version or release of software on a computer system, or to add memory or newer types of equipment to a computer system. 2. (Noun) The new software or equipment that has been added to a system. *See also release, software, and version.*

URL: *See universal resource locator.*

User: In information and technology systems, a "user" is a person who accesses a system. Education organization users typically include: instructional staff who provide instruction or perform instructional management tasks using technology; and administrative staff who use technology to manage the routine and nonroutine administrative activities of an organization as efficiently as possible. Students, parents, and community members may also be users.

V

Version: A major edition of a computer software program. The version number changes when a software developer makes major alterations (e.g., significant new features are added) to the program. The version number is the whole number that follows the name of the software; in contrast to the release number, which is the decimal number after the version number. For example, when Software 2.0 undergoes minor changes, it could be rereleased as Software 2.1 (i.e., it has been given a new release number in the decimal position). When it later undergoes significant revamping, the new version would be Software 3.0. *See also release, software, and upgrade.*

Videoconferencing: Interactive video-based communication. Two-way (or multiway) videoconferencing involves video links between all participants; one-way videoconferencing involves video in one direction, with audio links in the other.

Virtual class: Instruction of course content, provided to one or more students, by means of computers and/or telecommunications technologies that overcome the separation of participants by time and/or location. *See also class.*

Virtual education: Instruction in which students and teachers are separated by time and/or location and interact through the use of computers and/or telecommunications technologies. Often used interchangeably with "distance education," "distributed learning," "open learning," "networked learning," "web-based education." "online learning." "cyber education." "net education," "computer learning," and other similar expressions. *See also distance education/distance learning technologies.*

Virtual school: A public or private school that offers only virtual courses and does not necessarily have a physical facility at which students attend classes. A school that offers both virtual and face-to-face instruction may serve as a virtual school to students who participate in its virtual courses, but the school itself would be classified as a "hybrid school" rather than a virtual school. *See also class, course, hybrid school, school, and virtual class.*

Virus: A computer program that destroys data, unnecessarily ties up resources, or otherwise damages a system. Viruses are often able to replicate themselves and may therefore be passed from one computer or network to another via file transfers (similar to a biological virus passing from one host to the next). Viruses are combated by a variety of security techniques, most notably through the use of antivirus software and virus scanners. *See also antivirus software, threat, Trojan horse, virus scanner, and worm.*

Virus scanner: Software designed specifically to search files and disks for the presence of a virus. *See also antivirus software, software, Trojan horse, virus, and worm.*

Vulnerability: A point within an information or technology system that is susceptible to attack from a threat. *See also attack, risk, risk assessment and threat.*

W

W3C: *See World Wide Web Consortium.*

WAN: *See wide area network.*

Web: *See World Wide Web (WWW).*

Web browser: Software that allows a user to locate, view, and access information from sites on the World Wide Web via the use of a graphical interface (e.g. Internet Explorer, Mozilla). *See also software and World Wide Web.*

Wide area network (WAN): A data communications linkage (e.g., dedicated line, radio waves) that allows users to communicate and share information over distances greater than the distance transmitted by local area networks (e.g., building to building). *See also local area network (LAN) and network.*

Wireless: A network system with no physical connection between two pieces of equipment (i.e., they communicate via radio waves instead of having a connecting wire or fiber optic link).

World Wide Web (WWW): A system that allows access to websites all over the world using a standard, common interface to organize and search for information. The WWW simplifies the location and retrieval of various forms of information including text, audio, and video files. *See also Internet.*

World Wide Web Consortium (W3C): W3C is a forum for information, commerce, and collective action by a consortium of respected web inventors and developers who seek to develop technologies to enhance use of the World Wide Web *(http://www.w3.org). See also World Wide Web.*

Worm: A computer software program that can make copies of itself and spread through connected computers and networks, thereby using up system resources and/or causing other damage. *See also threat and virus.*

WWW: *See World Wide Web.*

ALPHABETICAL INDEX