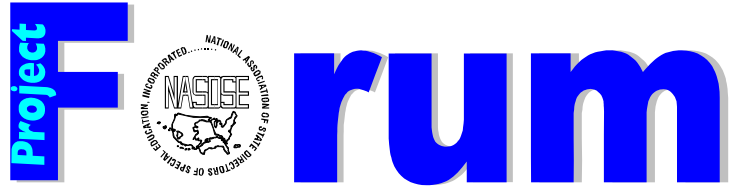


Quick
Turn
Around



QTA – A brief analysis of a critical issue in special education

Unique Student Identifiers

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Overview

This Quick Turn Around (QTA) summarizes information gathered by Project Forum at the National Association of State Directors of Special Education (NASDSE) on states' use of unique student identifiers. For the purposes of this document, *unique student identifier* is defined as a grouping of numbers and/or letters associated with only one student that is used to identify and track key school data about that student throughout his/her school history. This activity was carried out as part of Project Forum's Cooperative Agreement with the U.S. Department of Education's Office of Special Education Programs (OSEP).

Background

States need a systematic way of maintaining data to analyze and keep track of important information on students, such as test results. States are beginning to realize the effectiveness of using unique student identifiers to track critical data on students, such as enrollment, achievement scores and other factors throughout their school history. The identifier can also be used to track students as they move from school to school within districts or across the state (Hoff, 2003). The increased national spotlight on student outcomes has placed intense pressure on our nation's schools, school districts and state education agencies, because they must closely follow the achievement of individual students and demonstrate that all students are meeting high standards for learning (U.S. Department of Education, 2000), thus increasing the need for a system that can document students' progress.

There are four common ways to assign unique student identification numbers: 1) a Social Security Number that is usually assigned to people at a very early age by the federal government (e.g., 284-57-9847); 2) an algorithm that is devised to encrypt the student's name, birth date, gender, place of birth or other possible data elements (e.g., ROB25121964MBOS); 3) a state-assigned identifier that is created by the state education agency (SEA) for every student and must be used by the local education agency (LEA) (e.g., 1238729MO50); and 4) a locally assigned identifier that is created by each LEA, but does not transfer to other schools or LEAs (U.S. Department of Education, 2000).

Each unique student identifier has both advantages and disadvantages to its use. Two studies by Ligon (1997) and Clements and Ligon (2001) on the design and implementation of student

identifier systems analyzed the pros and cons of each approach. The advantages of using a *Social Security Number* as an identifier are: the number is unique on a nationwide basis; the federal government assigns and maintains the Social Security Number, which takes the responsibility off of the state in determining and assigning the number; student records can easily be verified if the family moves across the state; and the Social Security Number can be used to exchange information about families across social service agencies to determine eligibility for services. The disadvantages are that the SEA would have to provide an alternative identifier to parents or students who refuse to provide a Social Security Number. So, if students move, tracking changes might prove more difficult. Another disadvantage is that some states have added legal requirements for using a Social Security Number, creating a barrier to its use.

For those states that use an *algorithm*, the advantages are: the algorithm can be put into a software program to facilitate appropriate assignment and some elements of an algorithm have specific meaning to the student. For example, in ROB25121994MBOS, the 25 could be the district where the student was first enrolled and 121994 could be the student's date of birth. The disadvantages are that the identifiers need to be lengthy to ensure uniqueness and hackers might be able to identify the encryption routine.

The advantage of using a *state-assigned identifier* is that the identifier is not directly linked to non-educational confidential data about the student. The disadvantages are that the LEAs must rely upon the SEA for their identifiers and the assignment of the identifier requires sound management.

For states that use a *locally assigned identifier*, the advantages are that the LEA maintains complete control of identifier assignments and the LEAs are not required to make changes in their identifier system. The disadvantage is the identifier is unique only at district level, which does not allow for state-level longitudinal tracking.

Along with the advantages and disadvantages of using each unique student identifier, there are some states that have faced additional challenges to the process of determining which identifier is best. For example in New York, which currently does not have a unique student identifier, determining what type of identifier to use has become a political issue due to confidentiality concerns. As a result, New York has requirements and restrictions centered in its legislation related to restrictions on the use of Social Security Numbers as a unique student identifier. Currently, the Commissioner of Education is responsible for establishing the procedures for a statewide system of assigning unique identification numbers for all students in public and non-public schools (Clements and Ligon, 2001).

The purpose of this Project Forum inquiry was to gather information from SEAs about what type of unique student identifier is used, what year SEAs begin using unique student identifiers, and what are the benefits and problems for states and LEAs using and maintaining this type of system.

Methodology

In October 2003, Project Forum extracted information from the proceedings document published by Westat after its seventh annual meeting of state special education data managers.¹ The proceedings document contained a description of each state's student identifier and noted whether or not states use one data system for all students. Once this information was obtained, Project Forum developed a questionnaire that also included the name of the state, the type of student identifier used and the type of data system available for each state. These data were pre-entered at the top of each questionnaire and respondents were asked to verify the information. The questionnaire was then mailed to the state directors of special education in all of the 50 states and 11 non-state jurisdictions. Responses were received October 2003 through February 2004 from 44 states and one non-state jurisdiction, hereafter referred to as SEAs.

Report of Findings

Type of Unique Student Identifiers

Thirty-three SEAs reported having some type of unique student identifier. Of the four common unique student identifiers, more SEAs reported using a state-assigned unique number than any of the other three types. Seventeen SEAs use a state-assigned unique number, while a Social Security Number is the second most commonly used unique student identifier, (9 SEAs). A locally assigned number is used by only one SEA. (See Table 1)

Table 1
Type of Unique Student Identifier

Type	SEAs	Total
State-assigned unique number	AK, AZ, HI, IN, MA, MI, MN, MS, NM, OR, PA, RI, TX, VA, VT, NH, WV	17
Social Security Number	AL, AR, FL, ID, KS, LA, MD, SD, TN	9
Algorithm assigned by state	MT, CA, CT, IA, OH, WI,	6
Locally assigned unique number	UT	1
Currently no unique student number	CNMI, CO, KY, MO, NC, ND, NE, NJ, NY, OK, SC, WA	12

¹ The full document is available online at [Hwww.ideadata.org/Publications.asp](http://www.ideadata.org/Publications.asp)H.

Years of State Use

Thirteen SEAs began using a unique student identifier within the past four years, which is the largest increase in use than any other time period previously noted. There are five SEAs that initiated the use of unique student identifiers more than 30 years ago. One SEA could not provide a time when its practice began because each district assigns its own unique student identifier. (See Table 2) Additionally, seven SEAs are currently in the process of developing a unique student identifier.

Table 2
Year SEA Began Use of a Unique Student Identifier

Year	Number of SEAs
2000 – 2004	13
1995 – 1999	4
1990 – 1994	3
1985 – 1989	5
1980 - 1984	2
1970's	5

Statewide Data System

A statewide data system allows the linkage of student records for any student anywhere throughout the state. Of the 33 SEAs, 18 reported having a statewide data system that allows SEAs to extract and link information (e.g., attendance, test scores, last IEP) on any student throughout the state. Each of the 18 SEAs is also able to merge special education and general education databases using its unique student identifiers. Twelve SEAs have a statewide data system, but for special education students only. One SEA does not have a statewide data system, but does have data systems for each of its districts. Two SEAs have a unique student identifier, but no statewide data system.

Benefits of Unique Student Identifier

Of the many benefits reported by the SEAs to having a unique student identifier, two of the most commonly reported ones are that it allows data on students to follow them throughout their school history and the identifier assists in detecting replication of student records (17 and 14 SEAs, respectively). Another advantage reported includes maintaining the confidentiality of students (5 SEAs). The SEAs reporting this benefit all use a state-assigned unique number. Being able to compare dropout rates, enrollment and individual performance is another benefit. Allowing SEAs to more accurately meet the requirements for state regulations and agency policies consistently across the state was one of the least frequently reported benefits. (See Table 3)

Table 3
Benefits of Unique Student Identifier

Benefit	Number of SEAs
Allows data on students to follow them throughout their school history	17
Detects duplication of records	14
Maintains the confidentiality of student information	5
Merges data from different sources	5
Provides student identifier as login for online testing	2
Allows matching of data sets to compare groups of students (e.g., dropout rate, enrollment, individual performance)	2
Allows for the creation of a state centralized database	1
Allows SEA to more accurately meet the requirements for state regulations and agency policies consistently across the state	1

Problems with Unique Student Identifier and Related Issues

The use of student identifiers is not problem-free, as noted by some SEAs. They reported having the most difficulty with the identifier being assigned to more than one student. Twelve of the 33 SEAs with a unique student identifier reported some type of problem with using and maintaining a unique student identifier system. Eight SEAs that use a state-assigned number or an algorithm reported that the duplication of identifier was the biggest problem. Other reported problems include families that may have multiple Social Security Numbers for the same child and students who move to a new LEA and are assigned a new number by the SEA. (See Table 4) In some instances, the identifier cannot be matched with any other agency, making it difficult to use for secondary transition issues and the tracking of special education students across LEAs.

Table 4
Problem with Identifiers

Problem	Number of SEAs
Numbers are duplicated and being assigned to students	8
LEAs across the state are not consistently interpreting definition of a state assigned number	1
Social Security Number can be changed by family	1
Some students do not have a Social Security Number or will not permit its use, so districts must assign a different unique identification	1
Students are given a new student number when they move to a new school district (This happens with a locally assigned identifier.)	1

Best Features of System

Overall, most SEAs are satisfied with their unique student identifier system and reported some common themes. Of the 33 SEAs, 25 reported being satisfied with the unique student identifier system currently being used, while five SEAs are not. Additionally, one SEA responded that its system still has to be tested and two SEAs did not respond. The following are some of the best features reported by those SEAs satisfied with their unique student identifier system:

- The unique identifier remains with the student once he/she graduates.
- The identifier (Social Security Number) cannot be duplicated and can generate student detail (e.g., race, exceptionality, demographics, last IEP).
- The system can quickly assign a unique student identifier for new students.
- The system can locate where a student is at any given point in time in the state and what services he/she is receiving in special education.

The five SEAs that do not think their identifier system is satisfactory recommended the following changes:

- Steps need to be taken to decrease the duplication of identifiers.
- The local jurisdictions need to fully and consistently implement the unique identifier system.
- The method and procedure for assigning unique student identifiers needs to be improved for circumstances when students have similar names or birth dates.

Concluding Remarks

Thirty-three of the 45 SEAs that responded to Project Forum's survey have some type of unique student identifier. There seems to be a parallel in the recent increase in the number of SEAs using some type of unique student identifier and the implementation of the No Child Left Behind (2002) Act. Of those states that have unique student identifier system, more are using a state-assigned unique number than any of the other types of unique student identifiers. One possible explanation could be that there are fewer confidentiality concerns about state-assigned numbers because education and non-education data cannot be easily linked.

SEAs identified many benefits to having a unique student identifier (e.g., detecting a duplication of records, merging data from different sources and tracking a myriad of critical data on students throughout their school history). However, challenges remain, especially determining if one student has two different identifiers. For example, when students move to a different school district, they could possibly provide a different version of their name than in the previous district (Johnny Smith vs. John D. Smith). As a result, they are assigned a different unique student identifier and unfortunately SEAs do not have a process for checking for such an error in the system. Another challenge is selecting a unique student identifier that will not only maintain the confidentiality of the student's identity, but does not allow access to student information outside of school-related data. This issue may be more prevalent in some SEAs than others, but nonetheless remains a challenge.

Other issues include funding - finding the money to pay for the cost to maintain a student identifier system; oversight - making sure that people are in place to manage implementation and

maintenance of the system; and training - making certain that people are proficient in knowing how to appropriately and consistently use the system.

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