

# Data Quality Campaign

Using Data to Improve Student Achievement

## DQC June Quarterly Issue Brief Excerpt

### P-16 Data Systems: An Alignment Status Report

The need for high school graduates who are adequately prepared for postsecondary education is well documented. Heeding those calls, most states and districts already are implementing P-16 initiatives to raise standards in high schools so that our students will be better prepared for the demands of postsecondary education when they graduate. These initiatives focus on aligning P-12 and college standards, assessments and accountability policies to ensure smooth student transitions.

We know that these plans must stem from solid data, but a coherent system that can provide this information does not exist in every state. In addition to aligning their policies, states must align their P-12 and postsecondary data systems as part of the important structural changes to better prepare students for higher education and the changing global economy.

Educators and policymakers are recognizing the need for a longitudinal system that will allow P-12 and postsecondary officials to track high school graduates through higher education and into the workplace. Such systems would give schools much-needed clarity about academic strengths and weaknesses, allow schools to administer assessments early enough that they can intervene when students have gaps in their learning, and locate barriers to success within systems.

#### **Student Unit Records (SURs): Building Blocks of Successful Data Systems**

SUR systems contain an individual electronic record for each student enrolled in a postsecondary institution or school for each term or year. These systems collect a wide range of demographic and performance data at regular intervals, which allows records to be merged with other longitudinal files to investigate student success and behavior over time and across settings and treatments. They also can be analyzed to examine progress made and impacts on particular populations.

Postsecondary unit record systems offer an additional benefit: They can be used to answer questions that take accountability discussions to higher levels. For example, how effective are college-entry curriculums, remediation or early-collegiate programs in furthering P-16 objectives? What is the impact of particular state financial aid strategies on the postsecondary success rates of low-income students? What is the impact of particular kinds of educational programs on local labor markets? These policy questions cannot be answered in any other way.

#### **Higher Education SUR Systems**

According to a recent inventory, there are 46 higher education SUR databases in 39 states. Most contain records only of students enrolled in public postsecondary institutions; however, some also include data on students enrolled in independent colleges, and more states are considering moving in this direction. Collectively, such systems contain basic information on 73

percent of the students enrolled nationwide in colleges and universities.

All of the higher education SUR systems have been in place at least long enough to track students to the point of earning a degree (six years), and many have much longer histories. However, the records are not consistent among states, and most do not contain sufficient transcript-level detail to answer questions about course-taking patterns or how well curricular requirements are being met.

#### **Linking Systems**

States are in different stages of developing coordinated data systems, but some data already are being shared across systems. Many postsecondary systems contain admissions information, including a student's final high school grade point average, and certain systems keep track of work attempted prior to postsecondary admission, such as transfer credits or prior college-level work. With this information, some states have been able to develop feedback systems that allow high schools to receive information about their graduates' postsecondary performance.

Examples from Texas, Florida and California are included in the complete downloadable copy of the Issue Brief at [www.DataQualityCampaign.org/Activities](http://www.DataQualityCampaign.org/Activities), where you can also view video and PowerPoint presentations from the DQC quarterly meeting in June.

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## Campaign activities – Welcome New Managing Partners



**Education Commission of the States** ([www.ecs.org](http://www.ecs.org))  
 The Education Commission of the States (ECS) helps state leaders shape education policy. ECS is the only national organization that brings together a cross-role constituency – governors, legislators, chief state school officers, high education officials, business leaders and others - to work side by side to improve education. As a non-profit interstate compact, ECS is the nation's preeminent nonpartisan source of information, ideas and leadership on education policy.

**National Association of State Boards of Education** ([www.nasbe.org](http://www.nasbe.org))  
 The National Association of State Boards of Education (NASBE) is the only national organization giving voice and adding value to the nation's State Boards of Education. A non-profit organization founded in 1958, NASBE works to strengthen state leadership in educational policymaking, promote excellence in the education of all students, advocate equality of access to educational opportunity, and assure continued citizen support for public education.

**National Association of System Heads** ([www.nashonline.org](http://www.nashonline.org))  
 NASH is a membership organization of Chief Executive Officers of 52 public higher education systems in 38 states and Puerto Rico. The goal of the association is to improve the governance of public higher education systems. Its member systems enroll the lion's share of college students nationwide. A major commitment of NASH is to work with P-12 systems and civic leaders to build statewide P-16 vehicles to promote and carry out a coordinated, standards-based education reform strategy.

## Partner Highlights: Schools Interoperability Framework Association

### SIF: The Vertical Reporting Solution

The Schools Interoperability Framework Association (SIFA<sup>®</sup>) is a unique, non-profit collaboration composed of over 350 schools, districts, states, national and international government entities, and software vendors who collectively define the rules for educational software data interoperability. The SIF Specification enables diverse school software applications to share data efficiently, reliably, and securely regardless of the platform or vendor.

The number of districts and states that use SIF for data interoperability has grown exponentially over the past three years – SIF interoperability is currently supplying information to over 5 million students and teachers. States and districts that are implementing SIF now see it as a practical way to address any number of vertical reporting, data quality and

data transmission issues.

### SIF Implementation Activities – Local Level

The most common reason districts give for implementing SIF is local data interoperability. School districts often find it burdensome for their staff to manage multiple disparate software applications, numerous discrete data entry processes, and the resulting inconsistent data. Moving to a SIF solution allows for a single data entry point, saving time entering and troubleshooting the data. Other efficiencies enable districts to direct more efforts toward their most important mission: that of educating children. SIF's key benefits to districts include:

- Better data interoperability
- Improved student achievement
- Increased identification of state and federal funding opportunities
- Improved services to staff and students

### SIF Implementation Activities - State Level

Each state now consumes many hours of manual data manipulation to convert district information into a format it can present in federal reports. But SIF can make the process significantly easier. SIF vertical reporting benefits include automated, real-time data collection, local control over data, accuracy, increased data quality, reliability and security, and significant state-wide time and cost savings.

SIF state-wide implementations are now underway in five states, with over a dozen additional states in the final planning for SIF implementations. Other states included SIF in successful State Longitudinal Data System Grant applications. Several federal agencies and programs have recommended utilizing applications adhering to the SIF Specification. Numerous states have become SIFA members, showing leadership in being part of establishing the pK-12 Data Standard.



## The Power of Using Longitudinal Data to Calculate Graduation and Dropout Rates

### Graduation Rate vs. Dropout Rate – Not Exact Opposites

The power of using longitudinal data in calculations of graduation and dropout rates lies in the ability to know exactly how many graduates there are and what is actually happening to all students – which ones graduate, where the students who don't graduate go, and how many actually graduate with which type of diploma. Up to now, graduation and dropout rates have typically been estimates based on the number of students in particular grades in specific years. With longitudinal data and the NGA graduation rate, we will have more accurate rates and know far more information about graduates and dropouts than before.

When considering graduation and dropout rates, it should be noted that they are not necessarily the inverse of each other; that is, the dropout rate for a state is rarely the number of students minus the number of graduates. Put another way, it is easy to assume that if a state has a graduation rate of 83% it will also have a dropout rate of 17%, but that is not the case. The two terms are often used interchangeably, but they are two distinct events and not the only two educational outcomes for students.

The power of longitudinal data (the ability to follow individual students across years) makes clear that the image of students starting and finishing their high school careers at one campus – moving from 9<sup>th</sup> grade through 12<sup>th</sup> grade – is not as accurate today as in years past. The American population in the late 20<sup>th</sup> and early 21<sup>st</sup> centuries has

become very mobile, for a variety of reasons, and this mobility has a huge impact on the educational experience of students. Student mobility occurs frequently both during and between school years, making it difficult to accurately account for transfers and dropouts.

In order to accurately track students who transfer in and out of a state or local education agency, a state must have student-level data (a unique ID assigned to each student and enrollment records collected to track membership and attendance at every campus and district in the state). Ideally, the state will also maintain an exit or “leaver” data system (that is, a set of codes that identify the reason each student left a particular district or campus). Graduated and dropped out are only two of many reasons for which students leave a school system. States that already maintain exit data systems provide their districts with a wide variety of codes (sometimes 30 or more) with which to identify students' exit reasons. These codes include events such as marriage, death, transfer out of state, transfer to a home school, transfer to another country, transfer to a private school, incarceration, General Educational Development (GED) certificate, hospital-bound, and so on. Many of these categories are such that a student cannot be counted as either a graduate or a dropout by a particular campus, district, or state, and yet the student is no longer enrolled and receiving an education by that education agency. The students who

are no longer enrolled and yet are neither graduates nor dropouts are often referred to as non-graduates or “leavers” in some states. The non-graduates and students who are still enrolled after four years of high school must be taken into consideration when comparing graduation and dropout rates.

The degree of detail and accuracy with which these exit codes are reported and used can affect the degree of reliability of the graduation and dropout rates reported by the state, particularly at the campus and district level where just a few students can significantly affect the denominator and thereby change the graduation and dropout rates. Depending on the size of the campus or district and the number of non-graduates, there can be a significant difference between the graduate and dropout rates for that institution.

The National Forum on Education Statistics<sup>1</sup> produced an excellent document that outlines the need for an exit code data system and provides recommendations for how to establish a classification system of exit codes. This document and the suggested guidelines came from a task force of district, state and federal representatives with many years of experience in data collection, analysis and reporting who felt that the quality of education data in general, and the calculation of graduation and dropout statistics in particular, could best be improved by standardizing the way exit data are defined and collected.



<sup>1</sup> National Forum on Education Statistics. (2006). *Accounting for Every Student: A Taxonomy for Standard Student Exit Codes* (NFES 2006-804). U.S. Department of Education. Washington, DC: National Center for Education Statistics.



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## New Endorsing Partners

### Alliance for Quality Teaching

([www.qualityteaching.org](http://www.qualityteaching.org))

The Alliance for Quality Teaching is a bipartisan coalition of policymakers, stakeholders and practitioners in the state of Colorado. The Alliance believes quality teaching is the most important factor in improving student achievement and is dependent on high quality preparation, comprehensive recruitment strategies, induction and ongoing professional development. The Alliance work includes research, networking, and advocacy.

### National Association of Secondary School Principals (NASSP)

(<http://www.principals.org>)

The mission of NASSP is to promote excellence in middle and high school leadership. Recent reform efforts include:

- Development and release of Breaking Ranks and Breaking Ranks II series of papers
- Development and dissemination of Creating a Culture of Literacy, an adolescent literacy guide for middle level and high school principals

### Postsecondary Electronic Standards Council (PESC)

(<http://www.pesc.org>)

The Postsecondary Electronic Standards Council is a community-based, umbrella association of colleges and universities; professional and commercial organizations; data, software, and service providers; and state and federal government agencies. PESC's goal is to ensure student progression along the education network and to foster successful learning by leading the establishment and adoption of data exchange standards in education, by identifying and resolving data-based barriers that prevent progression, and by bridging data gaps in the student lifecycle.

**Data Quality Campaign Recognition Program:** The DQC will be recognizing data directors at the state and/or district level who have shown outstanding insight and initiative in the area of designing, developing, implementing, and/or changing longitudinal data systems. Please send your nominations to Nancy Smith at [nancy@just4kids.org](mailto:nancy@just4kids.org)

**Next Quarterly Issue Meeting:** *Using Data in the Central Office and in the Classroom to Improve Student Achievement, Sept 25<sup>th</sup>, 2:30-5:00pm, Washington, DC*

### About the DQC

The Data Quality Campaign is a national, collaborative effort to encourage and support state policymakers to improve the collection, availability, and use of high-quality education data, and to implement state longitudinal data systems to improve student

achievement. The campaign aims to provide tools and resources that will assist state development of quality longitudinal data systems, while also providing a national forum for reducing duplication of effort and promoting greater

coordination and consensus among the organizations focusing on improving data quality, access and use.

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