

## *eScholar Uniq-ID<sup>®</sup> for Students*

School Districts and State Education Agencies have long understood the importance of ensuring unique student record identification, but have struggled to achieve and then maintain unique identities of students. The eScholar Uniq-ID<sup>®</sup> for Students system delivers a fully developed and proven system to collect student identification data, match, de-duplicate and assign identifiers. The eScholar Uniq-ID<sup>®</sup> for Students system is the only system that is broadly deployed across the country.

A powerful web-based application for assigning unique student identification numbers at both the district and state level, the eScholar Uniq-ID<sup>®</sup> for Students system can be implemented as a stand-alone product or as a component of SIF standard infrastructure. Either way, the eScholar Uniq-ID<sup>®</sup> for Students system provides the most dynamic unique student record identification capability found anywhere.

The technology and techniques employed in the eScholar Uniq-ID<sup>®</sup> for Students application have been developed and perfected through many state-wide implementations and eScholar's extensive work in cleansing and de-duplication of records in thousands of eScholar data warehouse implementations. eScholar has used this knowledge and combined it with a powerful matching technology to address unique identification of students. This product has been chosen and deployed by nine state education agencies – covering more than 2,600 districts – as the state-wide solution for uniquely identifying and tracking students. Through extensive experience in these implementations, eScholar has learned a great deal about accurately matching and de-duplicating students and providing these capabilities through a powerful yet intuitive web interface that minimizes user training and support.

The eScholar Uniq-ID<sup>®</sup> for Students system assigns a unique student record identifier that can be used to track student records across time, geography and the wide variety of systems in which student data is found. In addition to assigning ID's to new students as their records are added, the system provides an easy interface for users to identify students who have already been included in the system but may be registering for the first time in that particular location or district.

### **System Functionality**

The eScholar Uniq-ID<sup>®</sup> for Students system assigns a unique numeric identifier to each student. The identifiers are randomly assigned; they are never duplicated nor constructed based on any algorithm related to the student identification attributes. The system utilizes student directory information (First Name, Last Name, Date of Birth, etc) for matching. Since these student attributes are often similar to those of other students, the system will provide a list of registered

students who nearly match the attributes and allow the district data administrator to choose an existing ID or have the system assign a new one.

To perform the vital matching process, the system takes advantage of hundreds of matching techniques including Soundex, Edit Distance, Nicknames and many others. In addition, the system has the ability to resolve variations of given names (for example, Jack = John, Bill = William, etc). Through the matching of millions of student records eScholar continues to refine this process, ensuring that the techniques used provide the greatest possible precision. Our meticulous attention to the matching model results in minimal deployment costs, while maximizing the resultant data quality. The eScholar Uniq-ID<sup>®</sup> for Students system can ensure that a single ID cannot belong to more than one person and can minimize (but not fully eliminate) the possibility that a single person may be assigned more than one ID.

### **Duplicates and Shared Identifiers**

One of the most important functions of an identification system should be to minimize the number of duplicate and shared identifiers. A duplicate is an individual who has more than one identifier. A shared identifier is one that has been assigned to more than one individual. Regardless of the cause of duplicates and/or shared identifiers, some small fraction of the student records registered in the eScholar Uniq-ID<sup>®</sup> for Students system can turn out to be duplicates and/or shared identifiers.

The eScholar Uniq-ID<sup>®</sup> for Students system provides easy interfaces for administrators to find, research, and repair duplicates and shared identifiers. When duplicates are found, a linkage will be created between the duplicate and the actual identifier. This makes it possible to integrate historical information that may have been coded to the duplicate without requiring that an agency edit its historical data. Identifiers generated by the student application will not be reused, even if they are determined to have been assigned in duplicate. When shared identifiers are found, an administrator can separate the students who are sharing the identifiers, using an online interface to determine which individual should retain the identifier at issue and which students should be assigned brand new identifiers.

### **Mode of Operation**

The eScholar Uniq-ID<sup>®</sup> for Students system can be operated in both batch and interactive modes. Batch mode is useful for bringing entire districts into the system. Each district supplies a file of student directory information (student name, birth date, etc.) to the system and receives a listing of possible matches (near matches) against existing students where positive resolution is not possible. Once the near matches are resolved, the system will return the records with the unique identifier.

Interactive Mode is available to users through a web-based interface, Web Services, or SIF. The web-based interface is useful when students are registering in a district for the first time. The administrator can enter student directory information and quickly determine if this student has previously been provided an ID. If not, they can assign the student an ID on the spot. The interactive mode also includes Web Services and SIF. Web Services expose eScholar Uniq-ID<sup>®</sup> for Students system functionality to other systems developed by the client or other vendor. The

eScholar Uniq-ID® for Students system currently supports three Web Service functions: ID Assignment, Near Match Lists, and Near Match Resolution. These services combined allow users to submit student directory information, assign unique identifiers, review near matches, provide a near match decision, and to receive an assigned ID.

### Other System Features

- Configurable system properties
- Configurable authorization
- Flexible authentication
- Claiming for students moving between districts or schools
- Synchronization with other data sources

## Why eScholar?

- The leader in education data management, providing successful statewide solutions for 11 SEAs, supporting over 3,500 school districts and over 12 million students across the country.
- Focused exclusively on the education data management industry since 1997.
- Comprehensive services, training and support programs to ensure customer success.
- An established, active user community allowing access to best practices, experience, and support from peers nationwide

Today, our products have become the recognized standards in the student and staff identification and educational data warehousing markets. The eScholar Complete Data Warehouse® solution has become an indispensable solution to local and state education agencies for integrating and managing the vast quantity of information they collect on students, programs, teachers and much more. For more information, contact Sales at [sales@escholar.com](mailto:sales@escholar.com) or (877) 328-2969.

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