



There's a Crisis in Education

The demands on our K-12 educational institutions have never been more pressing. Stagnant test scores, alarming dropout rates and deep concerns about the next generation's ability to compete in a global economy have forced state agencies and local school districts to search for more effective ways to improve student outcomes.

Many districts have implemented information systems to capture student data that supports state and federal accountability reporting needs. Unfortunately, most of these disparate systems are unable to share information with other education systems and provide only partial, rearview insights into what's already happened in a student's career. As a result, there's no way for educators to access the consolidated, up-to-date information needed to have a real impact on the academic performance of their students.

Until now.

The Ed-Fi[™] Data Standard: Improving K-12 Education

Ed-Fi is a new educational data standard that empowers educators with real-time, actionable information on every student in their classroom, school or district.

Ed-Fi integrates and organizes raw education data and information from a broad range of data sources so it can be sifted, analyzed and put to use every day. With Ed-Fi, educators are equipped with the information they need to understand the individual needs of students, and can prepare to address those needs on the first day of school. And on-demand access means that action plans for students can be monitored and refined throughout the school year.

Most important, Ed-Fi can be implemented in almost any school, school district or state education agency today.

Ed-Fi Data Standard in Action

Ed-Fi is built on an Extensible Markup Language (XML) framework for exchanging student data among disparate source systems, such as grade book applications, curriculum and lesson planning systems, and benchmark testing and reporting systems. The data exchanged among these systems can include records on students' grades, absence rates, transcripts and standardized test scores. Ed-Fi is vendor-neutral and can work with any hardware and software platform. **Figure 1** shows a typical school system in which data from disparate source systems is periodically moved into a centralized data warehouse. Once there, various processes clean the data, verify it, and produce compliance and other reports for district, state and federal agencies. These reports provide an aggregate-level view of educational system performance but do not deliver actionable, student-level insights to educators.



Ed-Fi

The Ed-Fi data standard augments this process by consolidating historical data from the data warehouse with ongoing feeds of student-level data imported directly from source systems via XML. As Figure 1 illustrates, Ed-Fi can be introduced into an environment without disrupting existing systems, processes, or data and reporting flows.

The unified data is presented to educators and other relevant stakeholders through customized, browser-based dashboards powered by Ed-Fi (Figure 2). The dashboards help educators to diagnose student needs, and to determine what interventions or programs will best help those students succeed.

Depending on user need, dashboard views can be configured to focus on the performance of a particular student, class, grade, school, district or even the entire state. Ed-Fi dashboards can be used by district- and state-level policy makers, as well as by educators and administrators seeking to complement accountability and other vertical reporting needs.

"Ed-Fi is vendor-neutral and can be implemented today in virtually any school, without disrupting existing systems and infrastructure."

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An Ecosystem for Success Development of the Ed-Fi solution was funded by the Michael & Susan Dell Foundation, an organization dedicated to transforming the lives of children living in urban poverty through better health and education. To help ensure success with Ed-Fi, the Foundation is launching the Ed-Fi Alliance, a consortium of state education agencies, school districts, implementation partners, content providers, assessment vendors and tool developers. An Ed-Fi license

provides these parties with unrestricted access to all Ed-Fi components, free of charge.



Aligned and Compatible with CEDS and Other Standards

There are several education-related data standards, but only Ed-Fi has the specific goal of improving student outcomes by providing actionable information that is critical for educators in the classroom.

Ed-Fi aligns with Version 2 and all future releases of the Common Education Data Standard (CEDS) developed by the National Center for Education Statistics (NCES). The Michael & Susan Dell Foundation has shared a close relationship with NCES since its inception and fully supports the CEDS effort. Ed-Fi team members actively participate in CEDS technical and stakeholder groups. In fact, in CEDS Version 2, NCES adopted many of the K-12 content-area data elements that were already part of Ed-Fi (**Figure 3**).

Most importantly, Ed-Fi cannot "break" any data standards states have already implemented. Ed-Fi leverages or extends other standards—rather than replacing them—and strengthens their power.

States and districts have an untapped, valuable resource in the data they already collect. Ed-Fi allows them to unlock the potential of that data for the benefit of educators and students. Compatible with many standards, Ed-Fi is easy-to-implement and provides the added benefit of being CEDS-aligned.

Ed-Fi

ACADEMIC HONORS AND RECORDS ACCOUNTABILITY RATINGS ACCOUNTS **ADDRESSES** ASSESSMENTS ATTENDANCE **BELL SCHEDULES BILINGUAL PROGRAMS BUDGETS** CAREER TECHNICAL **EDUCATION PROGRAMS CLASS RANKING** COHORTS COURSES CREDITS **CURRENCIES** DISABILITIES **DISCIPLINE ACTIONS**

EDUCATION ORGANIZATIONS EMPLOYMENT PERIODS GPA GRADES LEARNING OBJECTIVES LEARNING STYLES **OBJECTIVE ASSESSMENTS** PARENTS PAYROLL **POST-SECONDARY EVENTS** PROGRAM PARTICIPATION RECOGNITION **REPORT CARDS** SCHOOLS SESSIONS STAFF STUDENTS **TEACHER CREDENTIALS**

LEARN MORE

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FIGURE 3

CATEGORIES OF DATA ELEMENTS

For a complete list of elements

ed-fi.org/technical-documentation

within each category, see

SHARED BETWEEN ED-FI AND CEDS

Find out how you can improve K-12 education in your school, district or state. Visit www.ed-fi.org to join the Ed-Fi Alliance and learn how to adopt the Ed-Fi data standard.

CEDS

CONTENT AREAS

EARLY LEARNING

POST-SECONDARY