



A Practical Guide to Interoperability Use Cases

Ed-Fi's answer to our community's most commonly asked questions about Ed-Fi and IMS Global

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Preamble

Clarity around how the Ed-Fi Alliance Standards and IMS Global Learning Consortium® Standards can be used in support of educators is a common and increasingly frequent request from the Ed-Fi Community. In many cases, Ed-Fi and IMS Global standards often seek to solve different problems, and therefore a better understanding of the tools and functionality available for various use cases is important to selecting the best solution for a given use case. Each organization's technologies provide real, and distinct, value to users in their daily lives and work. Much like the difference between Bluetooth and Wi-Fi, both capabilities provide separate benefits and functionality that often work together. Our goal is to equip the community with the information they need to be able to select the best solution for a specific need. We believe this approach will most effectively serve the ed tech field, educators, technologists and ultimately students.

Objective

The objective of this document is to provide a high-level overview of potential solutions to the most common use cases for the Ed-Fi Community. It is not meant to be a compendium of all standards, nor is it a technical comparison or deep dive on each specification. Rather, this is a reference guide intended to reduce confusion for Ed-Fi Community members who are looking to the Alliance for clarity and information. Educators of all types simply want to know that their systems are going to work together. Further, we welcome inputs and feedback on how we can continue to add value to this reference guide in order to create an accurate and effective resource for the Ed-Fi Community. It should be noted that this document is intended to be fact-based and draws upon the expertise and knowledge of the Ed-Fi Community as well as publicly available information. We welcome input and suggestions in order to make this guide even more helpful. Please email us at info@ed-fi.org.

The name IMS Global Learning Consortium®, the IMS logos, Better Learning Through Better Learning Technology® and Learning Tools Interoperability® (LTI®), Accessible Portable Item Protocol® (APIP®), Question and Test Interoperability® (QTI®), Common Cartridge®, AccessForAll®, OneRoster®, Caliper Analytics®, SensorAPI™, and Competencies and Academic Standards Exchange® (CASE®) are trademarks of IMS Global Learning Consortium, Inc. in the United States and/or other countries. (www.imsglobal.org).

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Most Common Use Case Scenarios

	If you need to...	...and...	...then standards or complimentary commercial solutions include:
Rostering	Securely share and sync (auto-populate) roster information across applications and synch student and teacher roster accounts	You are an LEA or SEA where a hosted / managed service is not preferred	<ul style="list-style-type: none"> • Ed-Fi Enrollment API • IMS OneRoster®
		<p>OR</p> Your individual situation dictates the use of a managed or third-party service	<p>Clever and Class Link: Two ed tech startups that identified roster as a business opportunity and have developed highly successful, but tightly scoped, managed solutions alongside a multitude of other point solutions.</p> <p>Both Microsoft (Microsoft School Data Sync and Office 365 Schools REST API) and Google (Google Classroom™ API) have implemented solutions to aid in provisioning apps deployed into their respective ecosystems.</p>
Assessment Results	Move assessment results to other systems (i.e. SIS/ Assessment applications/analytics)	You need to bring together formative/summative/interim assessment results to understand where students need intervention to boost performance and achieve better outcomes	<ul style="list-style-type: none"> • Ed-Fi Assessment API
		<p>OR</p> You need to align those assessment results across multiple assessment platforms to learning standards to understand student learning mastery	<ul style="list-style-type: none"> • Ed-Fi Learning Standards API • Certica AB Connect • IMS CASE® • OpenSALT
Assignment Results	Move assignment results to other systems (i.e. SIS/Grading Book applications)	You need to integrate meaningful gradebook data	<ul style="list-style-type: none"> • Ed-Fi Student Data Management API • IMS OneRoster®
Compliance Reporting	Reduce the time, cost and complexity of state and federal compliance and school performance reporting from districts	You desire an efficient real-time process for reporting of high-quality data from districts via a “single source of truth”	<p>Ed-Fi Student Data Management API + Ed-Fi ODS, aligned to the Common Education Data Standards (CEDS)</p> <p>May be used in combination with CEDS and the Generate tool for federal reporting.</p>

	If you need to...	...and...	...then standards or complimentary commercial solutions include:
Learning Analytics¹	Produce localized reporting and analytics for teachers, students and administrators without the limitations of single vendor or off-the-shelf offerings	As an SEA or LEA, you wish to “exert ownership over your data” in a flexible managed environment with detailed assessment results, grades, discipline, attendance, etc.	Ed-Fi Student Data Management API + Ed-Fi ODS , (deployed on-premises or cloud-based via AWS, Azure, etc.) Alternatively, if the situation preferences the use of a fully managed service, Certica Data Connect™ , EdGraph™ or similar options.
		OR Your use case can be served with grades or gradebook level data	<ul style="list-style-type: none"> • IMS LTI® • IMS OneRoster®
Teaching & Learning Tools	Understand the data generated in your learning tools	You want real-time, event and clickstream data from your students’ use of learning tools	<ul style="list-style-type: none"> • IMS Caliper Analytics® • ADL Experience API (xAPI)
		OR As an SEA or LEA, you want to create a 360 view of student learning with data from teaching and learning tools	Ed-Fi Data Standard implemented via the Ed-Fi ODS/API
		OR You want to take advantage of hosted service offerings to understand usage or efficacy	Learn Platform (Lea(R)n) , Clever Goals or similar products
Learning Management Systems / Portals	Access varied instructional or assessment item content from multiple software platforms or publishers into a learning management system or learning portal	This space was left intentionally blank.	<ul style="list-style-type: none"> • IMS Common Cartridge® • ADL SCORM® • IMS LTI® • IMS QTI® and APIP®
Learning Standards Index and Content Tagging	Provide vendor systems access to a maintained repository of learning standards/objectives/competencies	You need to maintain or access your state or local learning standards catalogue, and PDFs or spreadsheets are not a workable system of record	<ul style="list-style-type: none"> • Ed-Fi Learning Standards API • AB Connect • Certica Standards Connect™ • IMS CASE® • OpenSALT

1. Learning Analytics: Learning analytics refers to the interpretation of a wide range of data produced by and gathered on behalf of students in order to assess academic progress, predict future performance, and spot potential issues.