

2015 Ed-Fi Alliance Summit

Austin Texas, October 12-14, 2015



It all adds up.





Ed-Fi Data Standard Overview

Chris Moffatt

Director of Technology, Ed-Fi Alliance

chris.Moffatt@ed-fi.org

Ed-Fi Data Standard & Implementation Suite

• Ed-Fi Data Standard

- The Ed-Fi Data Standard serves as the foundation for enabling interoperability among secure data systems and contains a Unifying Data Model designed to capture the meaning and inherent structure in the most important information in the K–12 education enterprise.

• Ed-Fi Operational Data Store and API


- The Ed-Fi Operational Data Store (ODS) provides a place to store information that integrates and catalogs secure real-time data from other systems within your agency, regardless of the source and supports transactional data.
- The Ed-Fi ODS API provides the ability to selectively create, read, and update information stored in an Ed-Fi powered ODS, maximizing developer productivity and success.

• Ed-Fi Dashboards

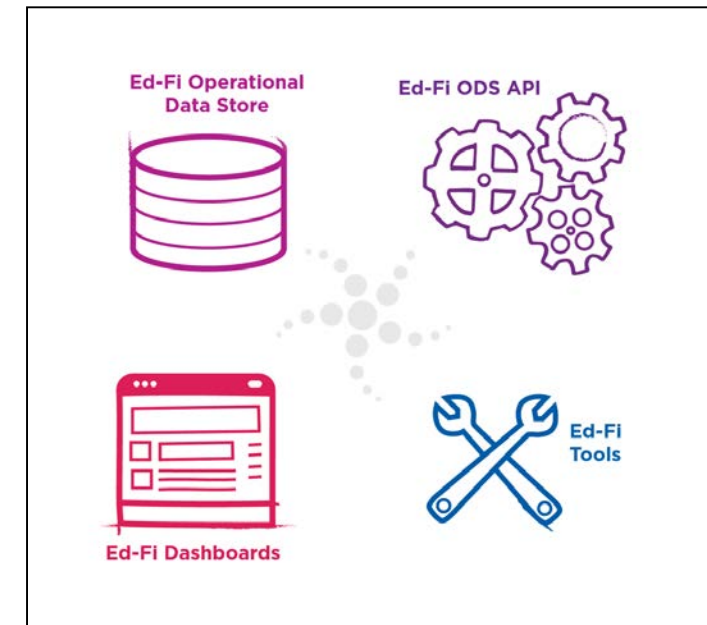

- Ed-Fi Dashboards provide a starting point for developing student performance dashboards that put real-time, actionable information at the fingertips of educators.

• Ed-Fi Tools

- Ed-Fi Tools aid developers implementing the technical components of the Ed-Fi Implementation Suite. Specifically, the online Ed-Fi Validation Tool helps users streamline the testing process by verifying exchanges are working correctly.

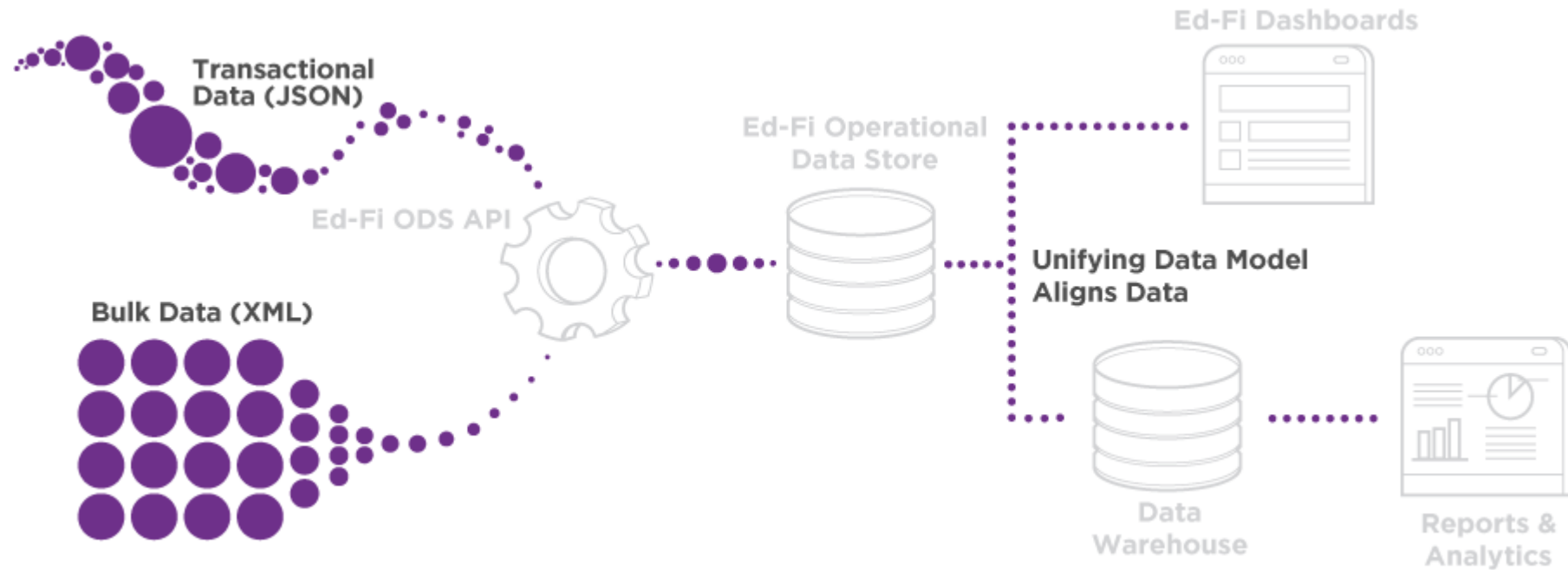


Domains	
Alternative/Supplemental Services	Intervention
Assessment	School Calendar
Bell Schedule	Staff
Discipline	Student Academic Record
Education Organization	Student Attendance
Enrollment	Student Cohort
Finance	Student Identification and Demographics
Graduation	Teaching and Learning

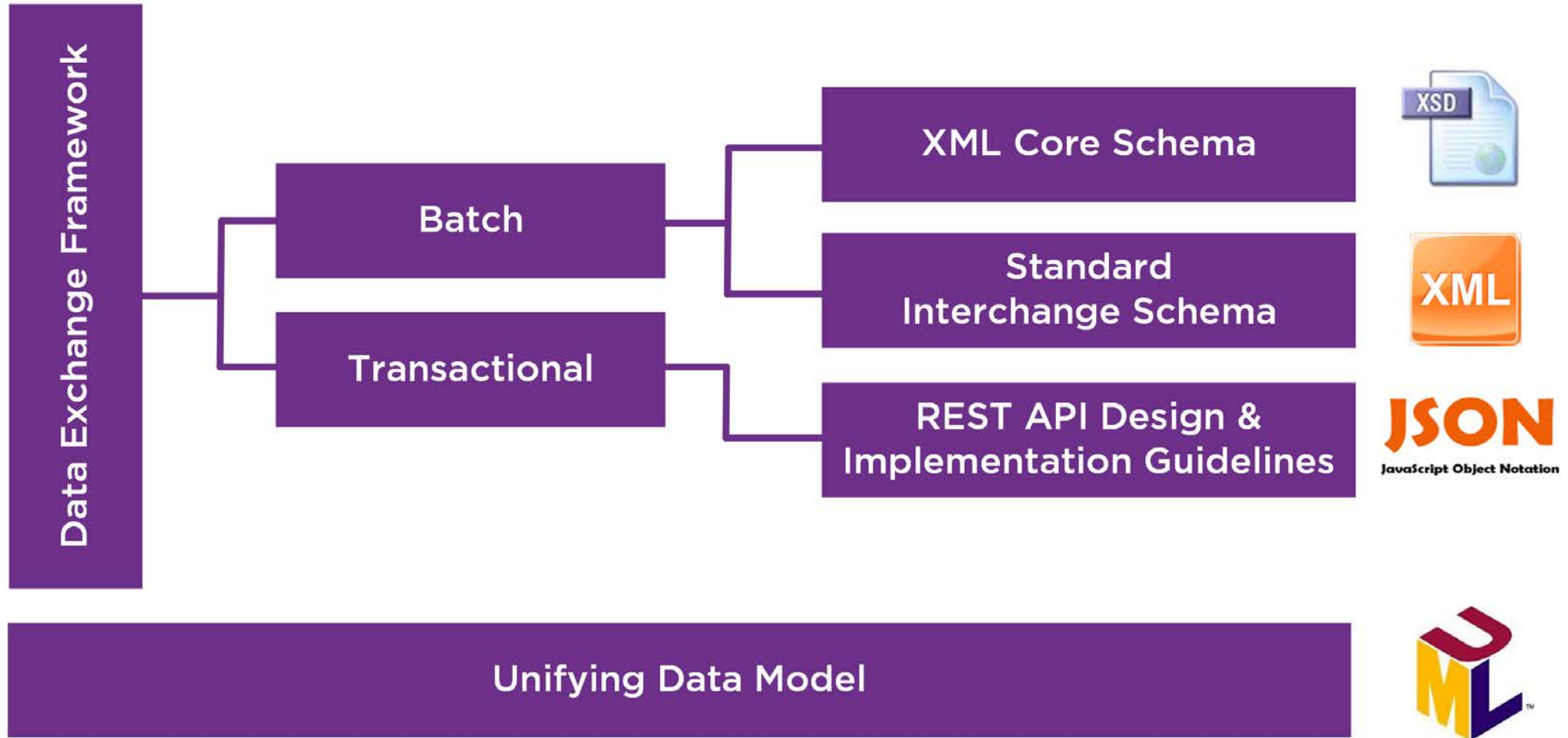


Ed-Fi Data Standard

The Ed-Fi Data Standard provides a vehicle for education data interchange and a foundation for populating an Ed-Fi ODS or other data systems



Ed-Fi Data Standard

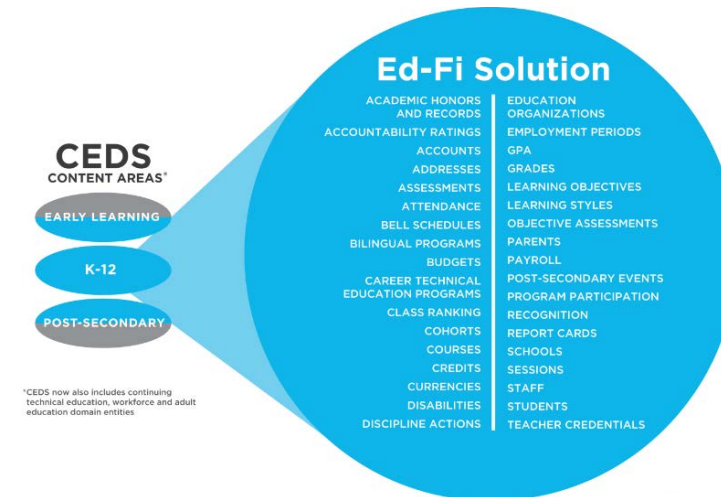


Unifying Data Model

- Enterprise data model of K-12 education data
- Aligned to the Common Education Data Standards ([CEDS](#))
- Informed by use cases and field implementations

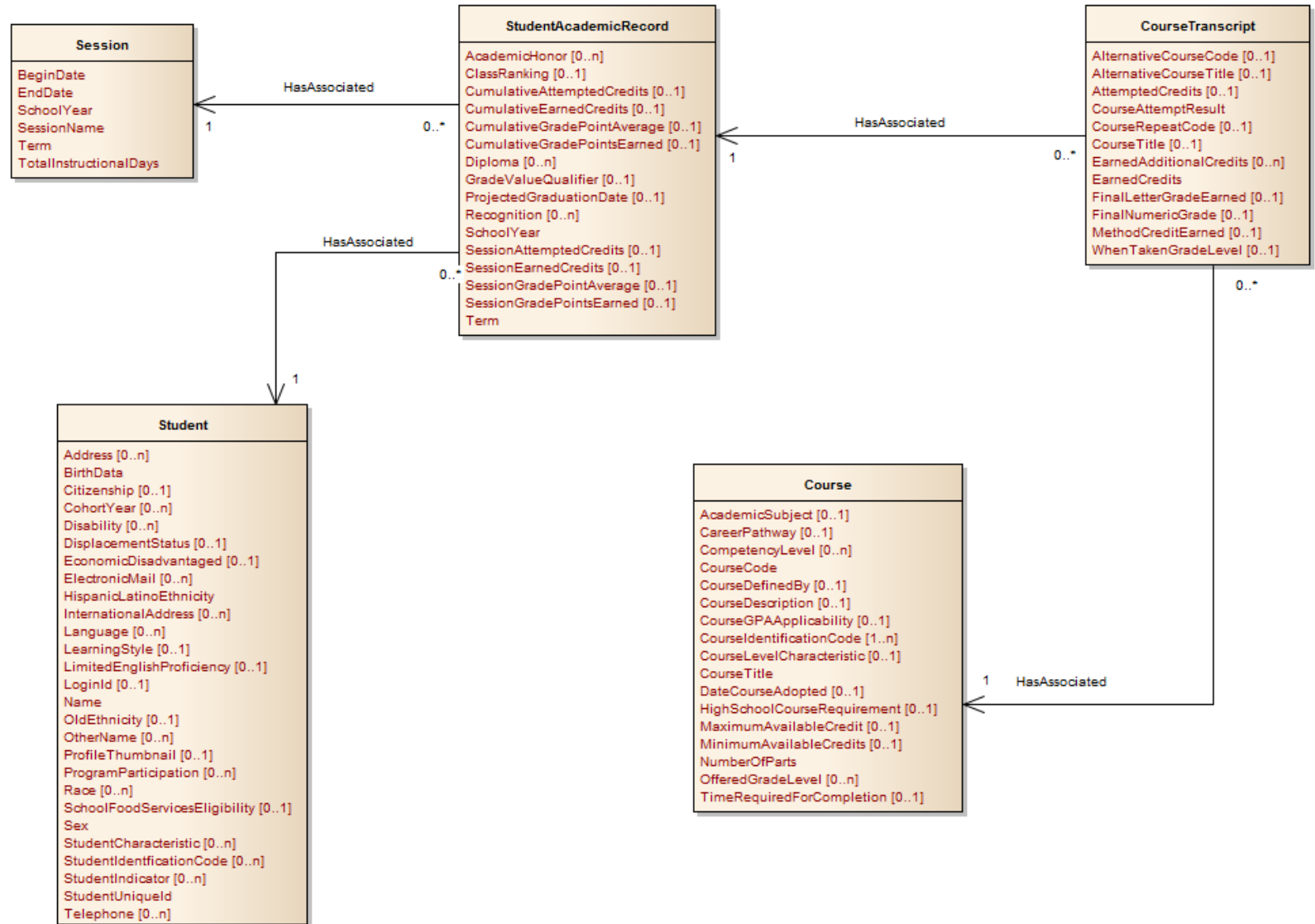


Domains	
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Unifying Data Model

- The Ed-Fi UDM is an abstract model
- The basis for designs and artifacts in the data exchange framework




CEDS Alignment



Common Education Data Standards

[Create an Account](#) [Forgot User Name](#) or [Password](#)


[Home](#) [About](#) [Elements](#) [Data Model](#) [Tools](#) [Resources](#) [Contact Us](#)




JOIN CEDS DEVELOPMENT COMMUNITY


Contribute to workgroups and towards the development of the CEDS standard.

News & Resources

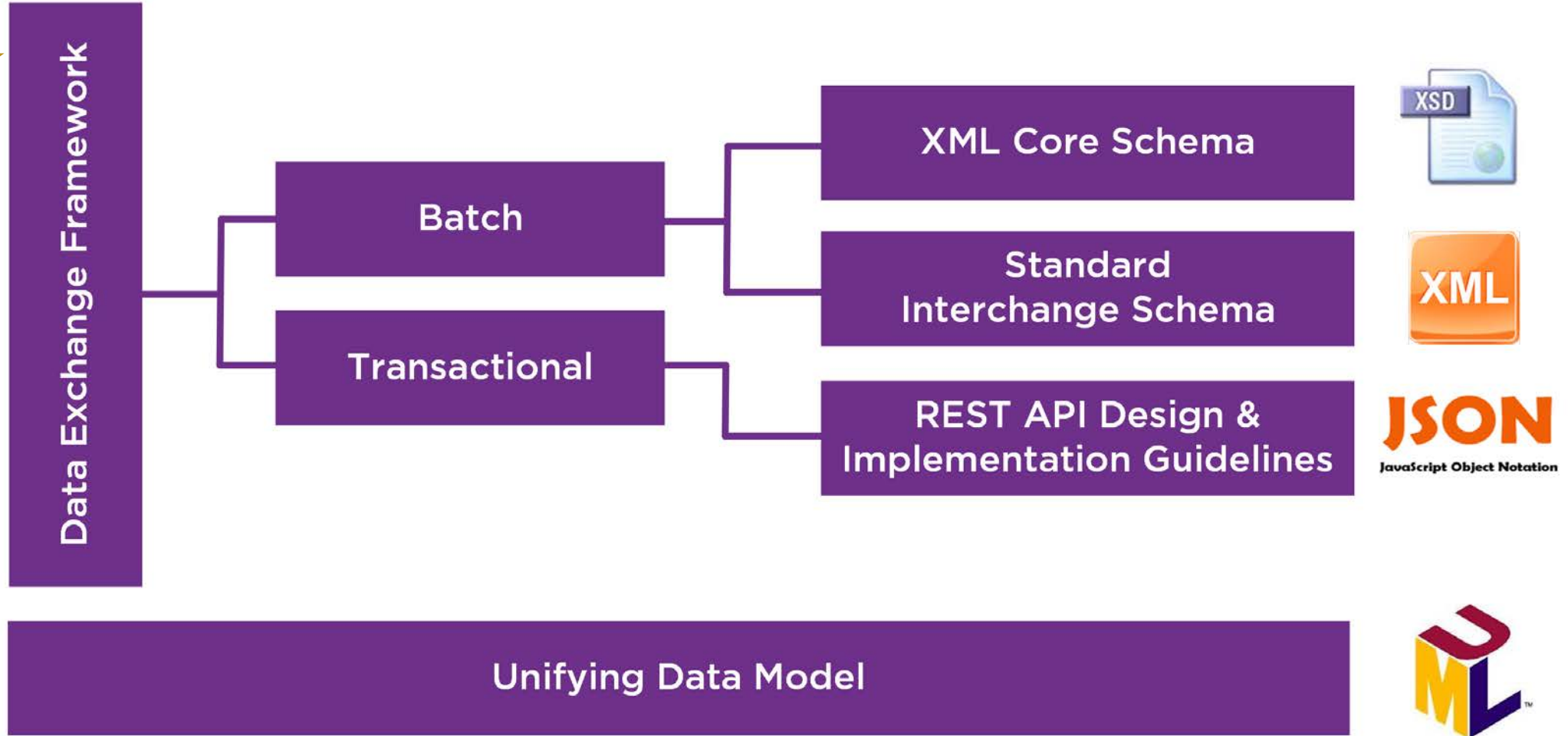


[New Maps Published for Ed-Fi Alliance and CCSSO EIMAC](#): The Ed-Fi Data Standard v2.0 map is now available in the Align Tool with over 400 elements. Be sure to put "Not Applicable" in the "State" section when searching. The EIMAC – Instructional Improvement System (IIS) Multi-state Tagging Initiative v5.0 map is also available in the Align tool. This map contains a list of metadata tags, values, and definitions for learning resources. Be sure to put "More than One State" in the "State" section when searching.

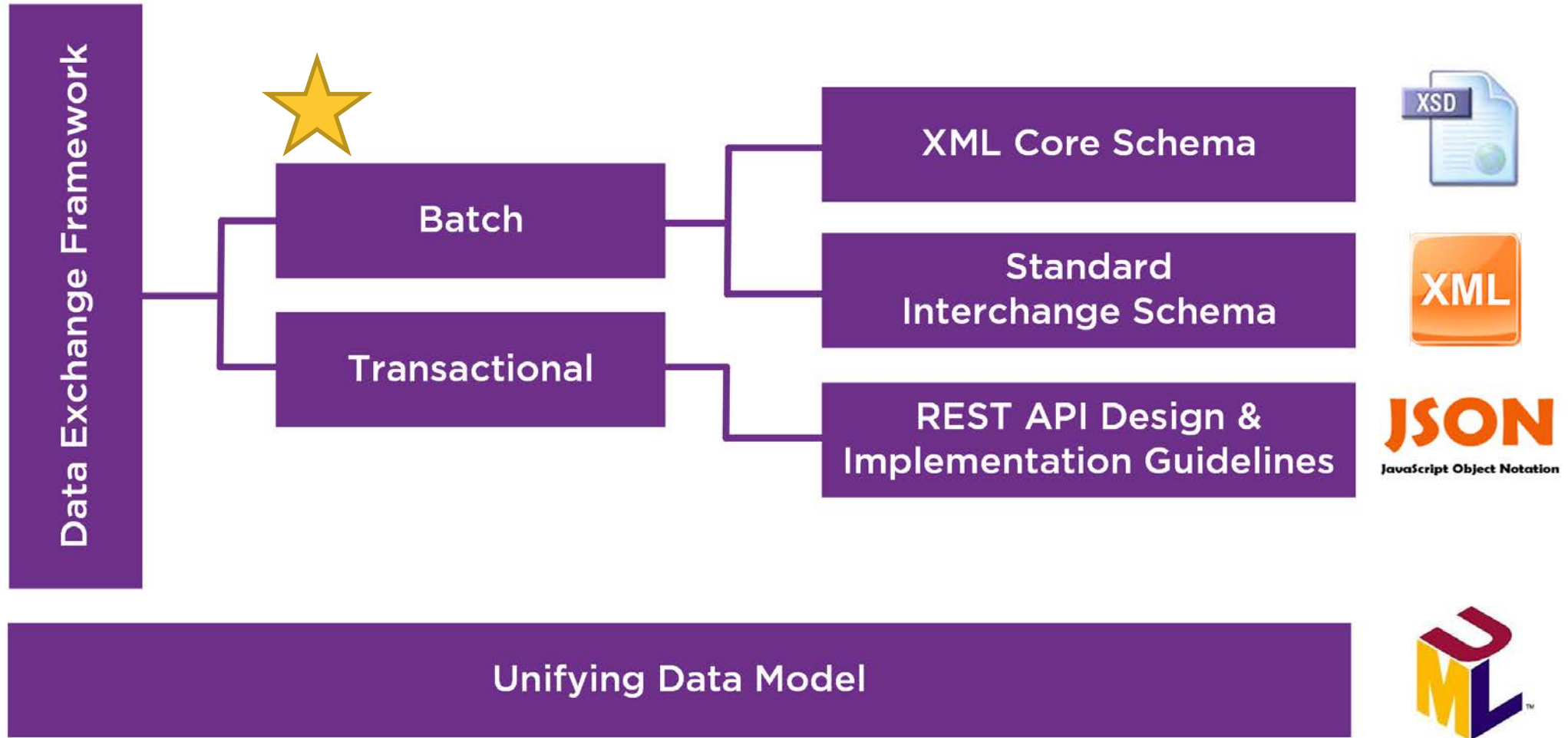


 @CEDStandards

Ed-Fi Data Standard

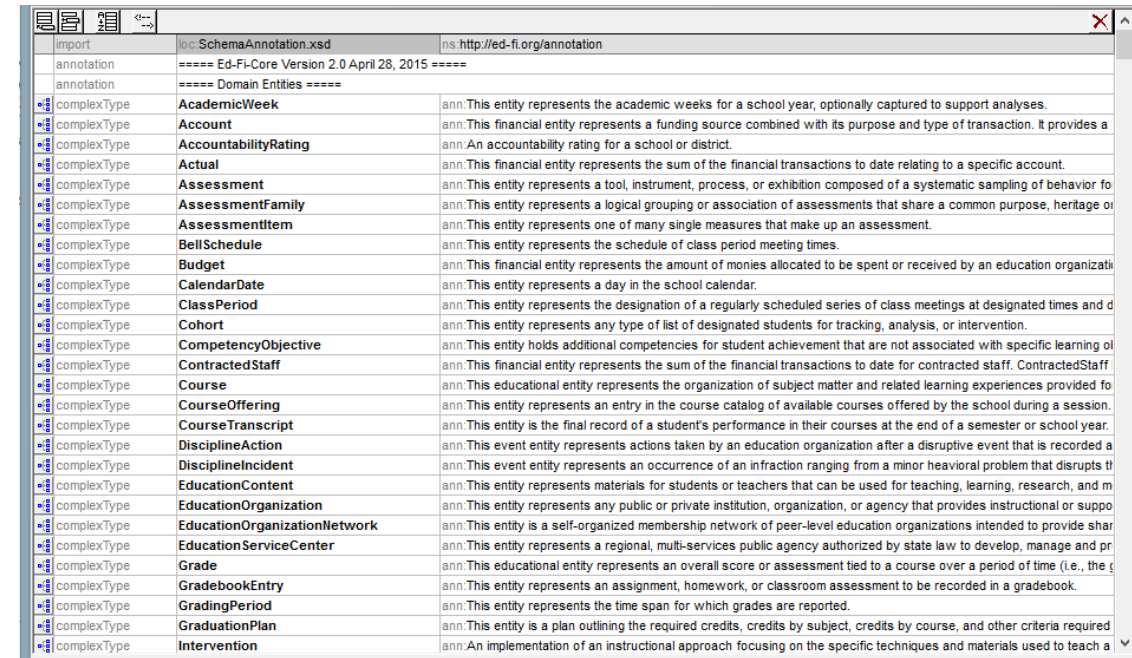


Ed-Fi Data Standard



Data Exchange Framework

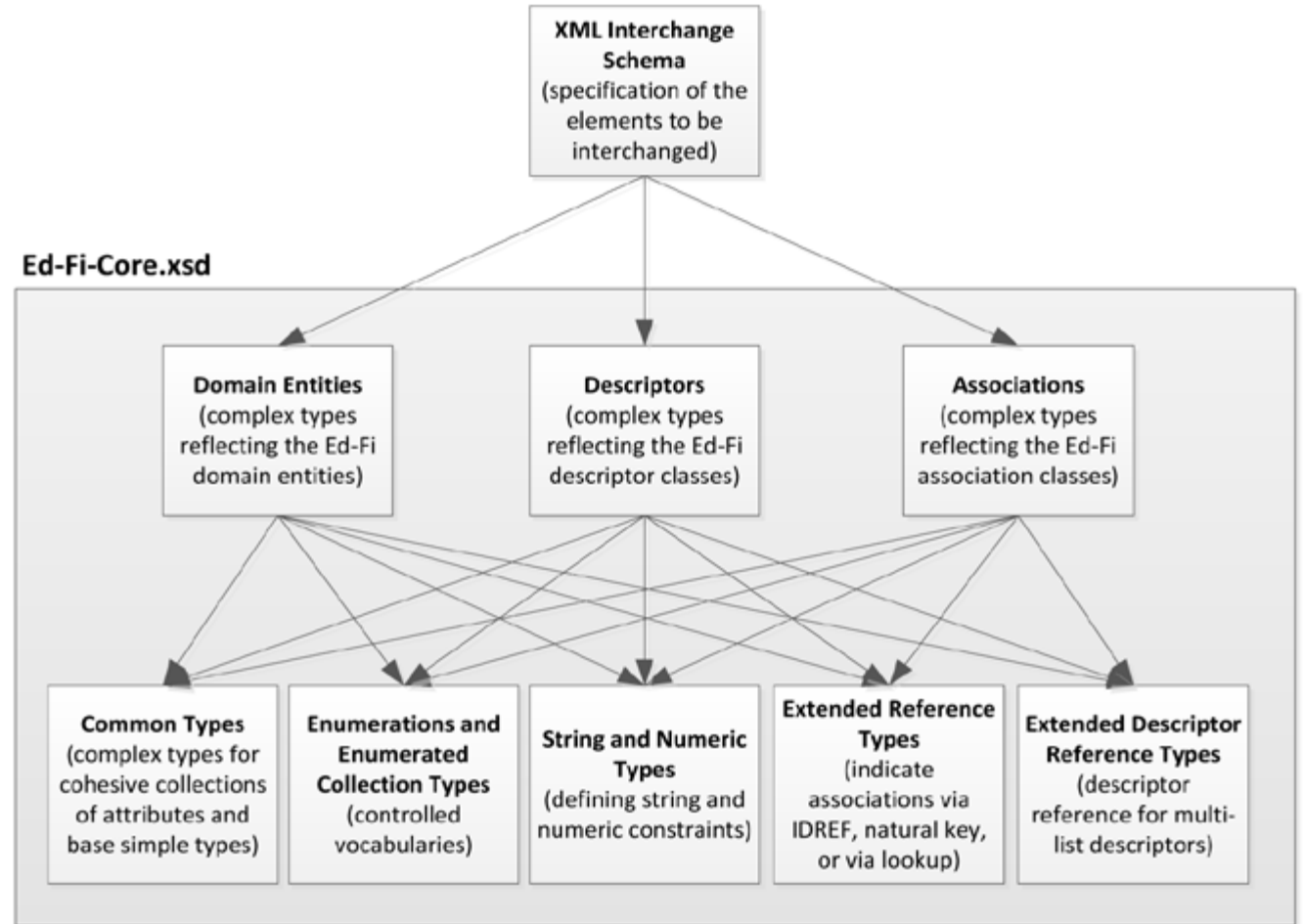
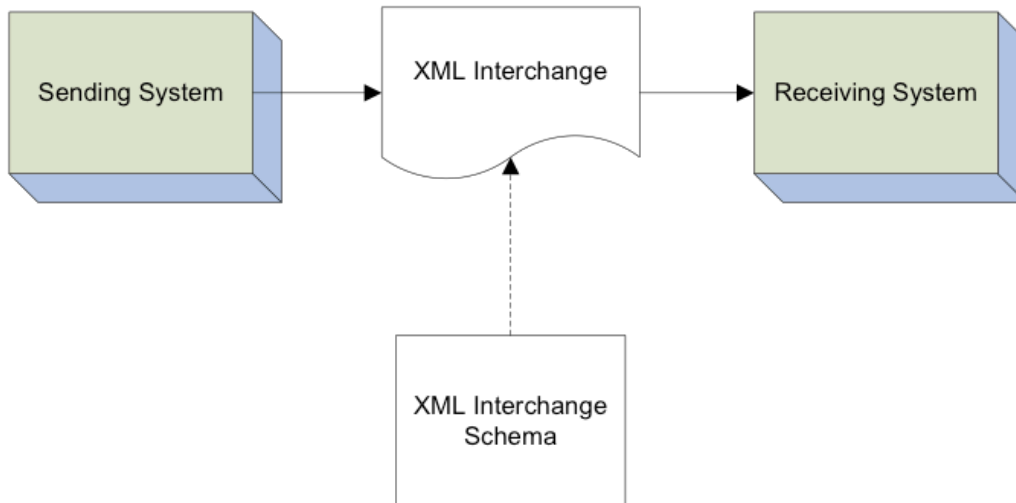
1. XML Core Schema: A core set of domain, association, and attribute types that directly map to the Unifying Data Model – “building blocks”
2. A method for composing interchange schemas
3. A method for extending the XML core schema and interchange schemas to account for implementation-specific data



import	loc: SchemaAnnotation.xsd	ns: http://ed-fi.org/annotation
annotation	===== Ed-Fi-Core Version 2.0 April 28, 2015 =====	
annotation	===== Domain Entities =====	
complexType	AcademicWeek	ann.This entity represents the academic weeks for a school year, optionally captured to support analyses.
complexType	Account	ann.This financial entity represents a funding source combined with its purpose and type of transaction. It provides a
complexType	AccountabilityRating	ann.An accountability rating for a school or district.
complexType	Actual	ann.This financial entity represents the sum of the financial transactions to date relating to a specific account.
complexType	Assessment	ann.This entity represents a tool, instrument, process, or exhibition composed of a systematic sampling of behavior fo
complexType	AssessmentFamily	ann.This entity represents a logical grouping or association of assessments that share a common purpose, heritage or
complexType	AssessmentItem	ann.This entity represents one of many single measures that make up an assessment.
complexType	BellSchedule	ann.This entity represents the schedule of class period meeting times.
complexType	Budget	ann.This financial entity represents the amount of monies allocated to be spent or received by an education organizati
complexType	CalendarDate	ann.This entity represents a day in the school calendar.
complexType	ClassPeriod	ann.This entity represents the designation of a regularly scheduled series of class meetings at designated times and d
complexType	Cohort	ann.This entity represents any type of list of designated students for tracking, analysis, or intervention.
complexType	CompetencyObjective	ann.This entity holds additional competencies for student achievement that are not associated with specific learning oi
complexType	ContractedStaff	ann.This financial entity represents the sum of the financial transactions to date for contracted staff. ContractedStaff
complexType	Course	ann.This educational entity represents the organization of subject matter and related learning experiences provided fo
complexType	CourseOffering	ann.This entity represents an entry in the course catalog of available courses offered by the school during a session.
complexType	CourseTranscript	ann.This entity is the final record of a student's performance in their courses at the end of a semester or school year.
complexType	DisciplineAction	ann.This event entity represents actions taken by an education organization after a disruptive event that is recorded a
complexType	DisciplineIncident	ann.This event entity represents an occurrence of an infraction ranging from a minor behavioral problem that disrupts th
complexType	EducationContent	ann.This entity represents materials for students or teachers that can be used for teaching, learning, research, and m
complexType	EducationOrganization	ann.This entity represents any public or private institution, organization, or agency that provides instructional or suppo
complexType	EducationOrganizationNetwork	ann.This entity is a self-organized membership network of peer-level education organizations intended to provide shar
complexType	EducationServiceCenter	ann.This entity represents a regional, multi-services public agency authorized by state law to develop, manage and pr
complexType	Grade	ann.This educational entity represents an overall score or assessment tied to a course over a period of time (i.e., the g
complexType	GradebookEntry	ann.This entity represents an assignment, homework, or classroom assessment to be recorded in a gradebook.
complexType	GradingPeriod	ann.This entity represents the time span for which grades are reported.
complexType	GraduationPlan	ann.This entity is a plan outlining the required credits, credits by subject, credits by course, and other criteria required
complexType	Intervention	ann.An implementation of an instructional approach focusing on the specific techniques and materials used to teach a

Ed-Fi Interchange Schemas

- Ed-Fi Interchange Schemas define the structure of XML data to transport data between systems
- Composed of elements from the domain and association types available in the Ed-Fi Core XML Schema



Ed-Fi Standard Interchange Schemas

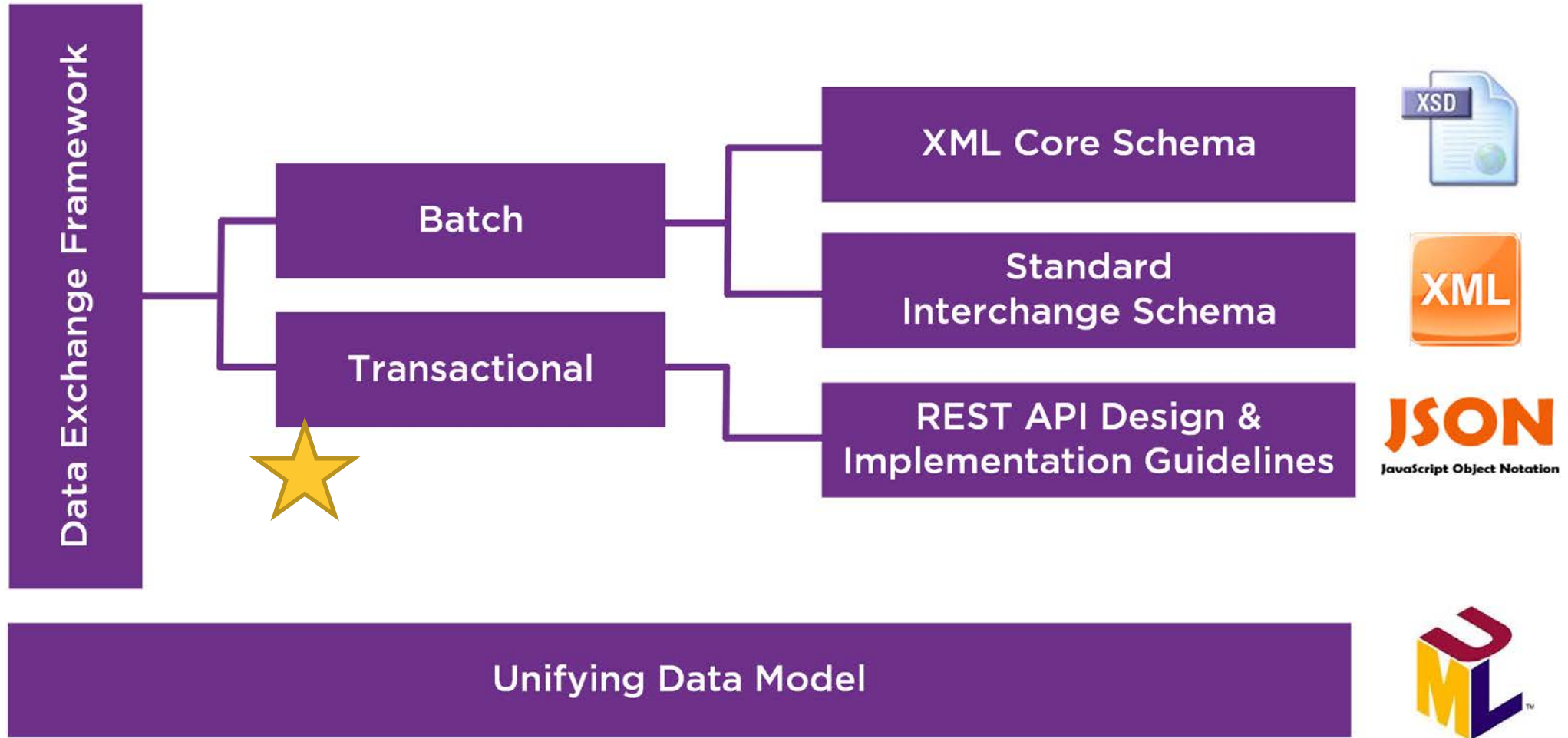
- Ed-Fi Version 2.0 contains a set of 21 Standard Interchange Schemas.
- Represent field-tested schemas for bulk interchange of data based on the Ed-Fi Core XSD.

Assessment Metadata	Student
Descriptors	Student Assessment
Education Organization	Student Attendance
EdOrg Calendar	Student Cohort
Finance	Student Discipline
Master Schedule	Student Enrollment
Parent	Student Grade
PostSecondary	Student Gradebook
Staff Association	Student Intervention
Standards**	Student Program
	Student Transcript

Ed-Fi Extensions Framework

- A method and examples for extending the Ed-Fi XML core schema and composing interchange schema to account for implementation-specific data and use cases
- Extensive documentation in the [Ed-Fi Data Standard – Developers Guide](#)
- Training Video: [How to Compose a Custom Interchange Schema](#)

Ed-Fi Data Standard



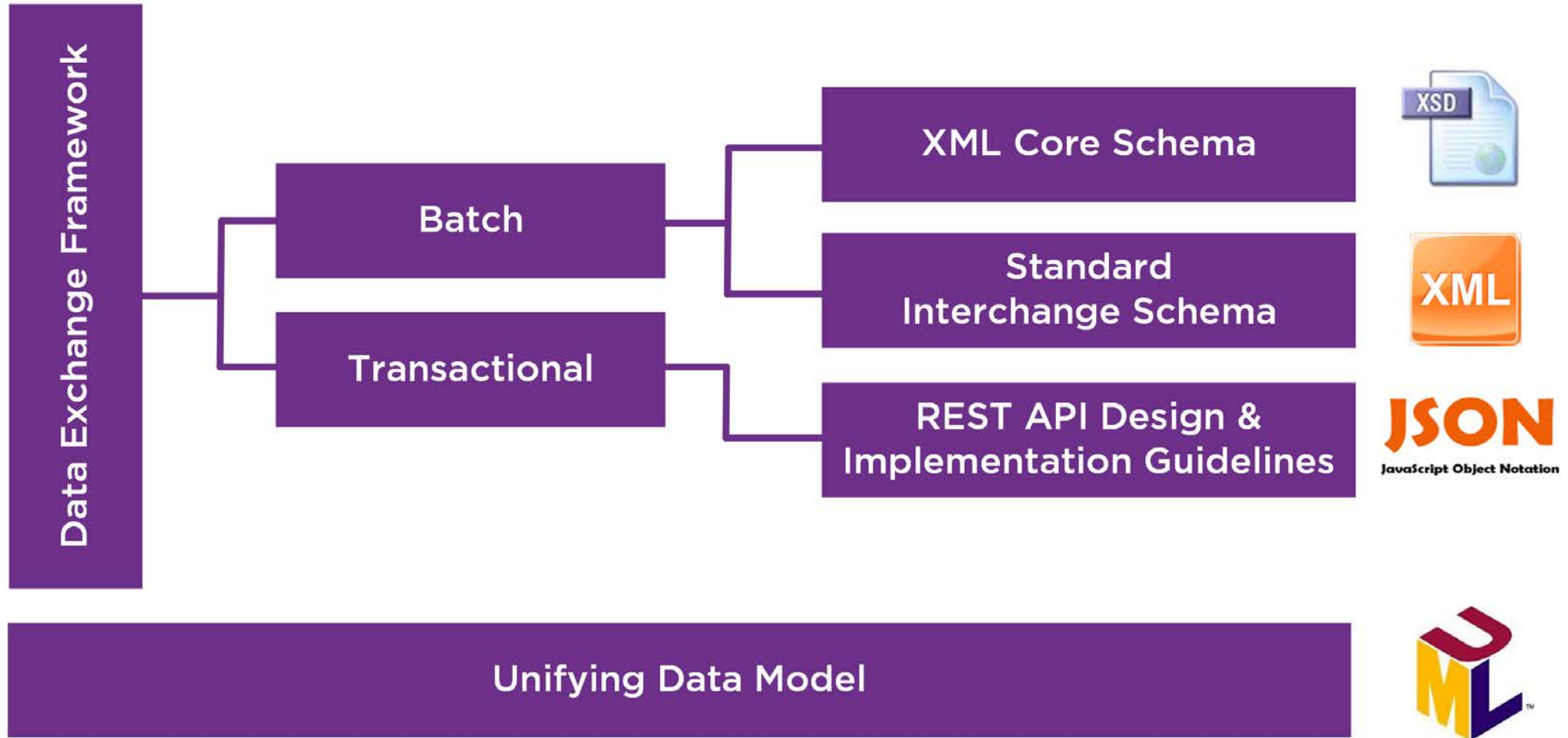
REST API Design & Implementation Guidelines



Ed-Fi REST API Design & Implementation Guidelines

Ed-Fi Data Standard v2.0 (API Guidelines v1.0)
April 28, 2015

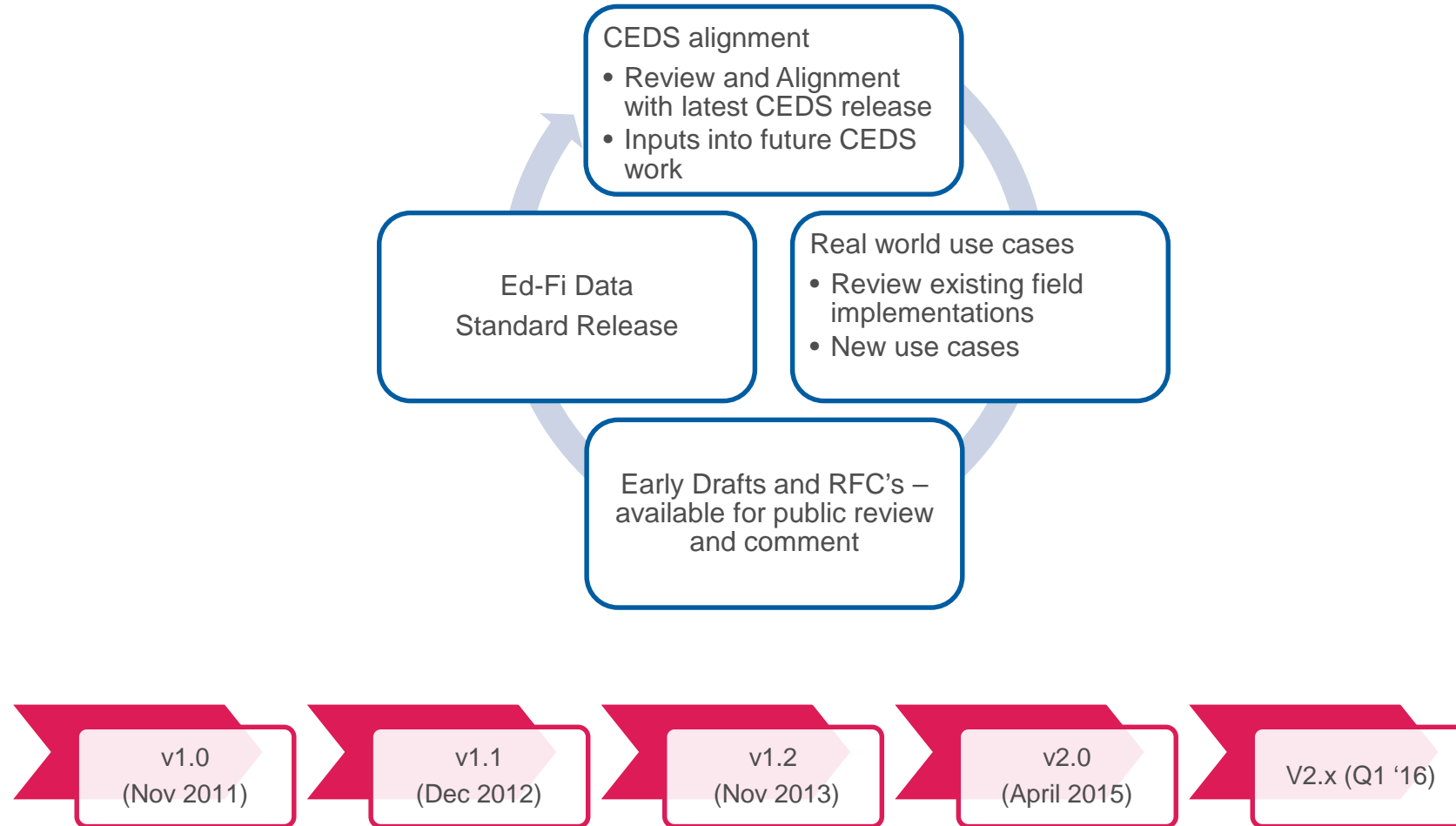
Ed-Fi Data Standard



Session Call-out

- Introduction to Data Mapping (Weds @ 9:50am)

Data Standard Release Cycle





Questions