Educational Standards <http://www.edmatrix.org/matrix.html>

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Acronym** | **Standards Org** | **Description** | **Types** | **Data Layers** | **Ed Levels** |
| [**Caliper**](https://www.imsglobal.org/activity/caliper) | IMS Global | **IMS Caliper Analytics**: A protocol for transmitting and collecting learning events for later analysis. | Student Data | 4. Protocol | All |
| [**CASE**](https://www.imsglobal.org/activity/case) | IMS Global | **Competencies & Academic Standards Exchange:** A standard format for representing competency frameworks such as state standards, learning objectives, etc. | Competency Data Model | 1. Data Dict  2. Data Model  3. Serialization  4. Protocol | All |
| [**CCSS**](http://www.corestandards.org/) | CCSSO/NGA | **Common Core State Standards:** Competency standards for English Language Arts - Literacy and Mathematics for K-12. Adopted by many U.S. States. | Competency & Achievement | N/A | K-12 |
| [**CEDS**](http://ceds.ed.gov/) | US Ed | **Common Education Data Standards:** Data Dictionary and Logical Data Model for representing educational data of all sorts. | Competency Data  Student Data  Educator Data  Content Data | 1. Data Dict.  2. Data Model | All |
| [**CLR**](https://www.imsglobal.org/activity/comprehensive-learner-record) | IMS Global | **Comprehensive Learner Record:** A digital record for learners incorporating all learning experiences and achievements. | Student Data | 3. Serialization | All |
| [**Ed-Fi**](https://www.ed-fi.org/) | Ed-Fi Alliance | **Ed-Fi:** Rules that allow educational data systems to connect and share educational data. | Student Data  Educator Data  Content Data | 3. Serialization  4. Protocol | Pre-K to 12 |
| [**EDI**](https://en.wikipedia.org/wiki/Electronic_data_interchange) | NIST | **Electronic Data Interchange:** An older data transmission standard. In education, the principal use is exchange of student transcript data between institutions. | Foundational | 4: Protocol | All |
| [**EPUB**](http://idpf.org/edupub) | IDPF | **EPUB for Education:** A profile of the IDPF EPUB standard for digital book publishing targeted at education. | Content Packaging | 3. Serialization | All |
| [**FERPA**](https://www2.ed.gov/policy/gen/guid/fpco/ferpa/index.html) | US  Government | **Family Educational Rights and Privacy Act:** A U.S. Federal law that protects the privacy of student education records. | Design & Practice | N/A | All |
| [**HTML**](https://www.w3.org/html) | W3C | **HyperText Markup Language:** Standard format for web content. Many applications and standards make use of HTML format content. | Foundational | 3. Serialization | All |
| [**HTTP**](https://tools.ietf.org/html/rfc7230) | IETF | **HyperText Transfer Protocol:** Standard protocol for transmitting content and data on the internet. The world-wide web and many data exchange protocols are based on HTTP. | Foundational | 3. Serialization | All |
| [**IMS CC**](http://www.imsglobal.org/cc) | IMS Global | **IMS Common Cartridge:** A content packaging standard for course materials. | Content Packaging | 1. Data Dict.  2. Data Model  3. Serialization | All |
| [**IMS CP**](https://www.imsglobal.org/content/packaging/index.html) | IMS Global | **IMS Content Packaging:** A format for packaging content and associated metadata for exchange between educational systems. | Content Packaging | 1. Data Dict.  2. Data Model  3. Serialization | All |
| [**ISTE Standards**](https://www.iste.org/standards) | ISTE  Standards | The **ISTE Standards** are a framework of practice for technology-supported learning. They include standards for students, educators, leaders, and coaches. | Competency & Achievement | N/A | All |
| [**JSON**](https://ecma-international.org/publications/standards/Ecma-404.htm) | ECMA | **JSON:** A lightweight text-based format for data interchange. Many educational data formats are based on json. | Foundational | 3. Serialization | All |
| [**LOM**](https://standards.ieee.org/standard/1484_12_1-2002.html) | IEEE | **Learning Object Metadata:** A schema for metadata about learning objects or resources. | Content Metadata | 1. Data Dict.  2. Data Model  3. Serialization | All |
| [**LRMI**](http://dublincore.org/specifications/lrmi) | Dublin Core | **Learning Resource Metadata Initiative:** A set of metadata terms for describing learning resources and their relationship to standards or competencies. | Content Metadata | 1. Data Dict.  2. Data Model | All |
| [**LTI**](http://www.imsglobal.org/activity/learning-tools-interoperability) | IMS Global | **IMS Learning Tools Interoperability:** A protocol that enables a learning management system to incorporate custom learning tools or experiences offered by another system. | Content Integration | 4. Protocol | All |
| [**NGSS**](https://www.nextgenscience.org/) | Achieve | **Next Generation Science Standards:** A set of standards and competency framework for science education. Adopted by several states. | Competency & Achievement | N/A | K-12 |
| [**OBI**](https://openbadges.org/) | IMS Global | **Open Badge Infrastructure:** A format for communicating skills and achievements. | Student Data | 3. Serialization  4. Protocol | All |
| [**OneRoster**](https://www.imsglobal.org/activity/onerosterlis) | IMS Global | **OneRoster:** A protocol and format for secure exchange of class roster information between applications. | Student Data | 3. Serialization  4. Protocol | K-12 |
| [**PESC**](http://www.pesc.org/) | PESC | **PESC Standards for Credential Exchange:** A set of standards for communicating student transcript information between institutions including high school to college and between colleges and universities. | Student Data | 1. Data Dict  2. Data Model  3. Serialization  4. Protocol | Higher Ed |
| [**QTI**](http://www.imsglobal.org/question) | IMS Global | **IMS Question and Test Interoperability:** A content packaging format for questions (assessment items) and tests. | Content Packaging | 1. Data Dict.  2. Data Model  3. Serialization | All |
| [**SCORM**](https://www.adlnet.gov/scorm) | ADL | **Sharable Content Object Reference Model:** A format for developing and publishing reusable digital learning resources for use in learning management systems and other learning environments. | Content Packaging | 2. Data Model  3. Serialization | All |
| [**Section 508**](https://www.section508.gov/) |  | U.S Federal Government Requirements for accessibility of IT applications. | Design & Practice | N/A | All |
| [**SIF Data Model**](https://www.a4l.org/page/DataModel) | A4L | **SIF Data Model:** Data model for representing and transmitting educational information. | Student Data  Educator Data  Content Data | 2. Data Model  3. Serialization | K-12 |
| [**SIF Infrastructure**](https://www.a4l.org/page/Infrastructure) | A4L | **SIF Infrastructure:** Protocol for transmitting educational information. | Student Data  Educator Data  Content Data | 4. Protocol | K-12 |
| [**UDL**](http://www.cast.org/our-work/about-udl.html) | CAST | **Universal Design for Learning:** A framework to optimize teaching and learning based on learning science and in support of students of all abilities. | Design & Practice | N/A | All |
| [**WCAG**](https://www.w3.org/WAI/standards-guidelines/wcag) | W3C | **Web Content Accessibility Guidelines:** A set of guidelines for ensuring that web content is accessible to people with disabilities. | Design & Practice | N/A | All |
| [**xAPI**](https://www.adlnet.gov/xapi) | ADL | **Experience API:** A protocol for reporting and tracking learning activities and experiences. | Student Data | 4. Protocol | All |
| [**XML**](https://www.w3.org/XML) | W3C | **Extensible Markup Language:** A common format for representing digital content and data. Many educational data formats are based on XML. | Foundational | 3. Serialization | All |