



Using the Project Unicorn Rubric to Your Advantage

Chloe Sanducci

Project Manager, Project Unicorn, InnovateEDU

What is Project Unicorn?

Project Unicorn is a sector wide effort to improve data interoperability within K-12 education.

We aim to create a community of innovators who make the broader case for secure interoperability by determining shared priorities, working in partnership with school systems and vendors to understand the importance and benefits.

This creates a demand side push for interoperability by educating buyers to consider the total cost of ownership through informed comparison of vendors.



School Network Signatories: **810**

Vendor Signatories: **286**

What is Project Unicorn?



BILL & MELINDA
GATES foundation



K12 Advisory Board

Technical Advisory Committee

Pledge Signatories

Speaking the Same Language

INTEROPERABILITY

n. The seamless, secure, and controlled exchange of data between applications

INSTRUCTIONAL IMPACT OF INTEROPERABILITY



INCREASED
USABILITY &
LOWER BARRIER
FOR ENTRY



INCREASED
TIME FOR
INSTRUCTION



IMPROVED
WORKFLOW
BETWEEN
PROGRAMS



INCREASED
FOCUS ON
PROFESSIONAL
LEARNING



ALLOWS
TECHNOLOGY
TO FADE INTO
SUPPORT ROLE

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Challenges from Lack of Interoperability

States and Districts are swimming in data they can't really use:

- Data stored in siloed locations
- Difficult to bring data from different sources together
- Data that is not validated often leads to inaccuracies
- Can strengthen privacy and security of data in transit and at rest

“a lack of interoperability is incredibly time-consuming, and a drain on districts who simply don’t have the resources to address the problem.”

–Digital Promise

Challenges caused by lack of interoperability:

- Educator/staff time spent manually downloading data and manipulating it in spreadsheets
- Unable to see data from multiple sources/assessments in one place
- Students leave LMS to go to external website for viewing digital learning content
- Data is moved in an unsecure and unprotected manner

Education Data Standards



- Rostering
- State Longitudinal Data Systems
- Student Records Exchange
- Transcripts
- <https://home.a4l.org/>



- Education Data Management initiative across P-20 U.S. Dept of Education
- Common vocabulary, data models
- Data dictionary
- Basis of other standards
- <https://ceds.ed.gov/>



- K12 and Higher Education
- Rostering (OneRoster)
- Comprehensive Learner Records
- Digital Curriculum, Assessments, Learning Apps
- Learning Platforms
- <https://www.1edtech.org/>



- K12 focused
- SIS, assessments, state reporting
- Ed-Fi Academy online training available
- <https://www.ed-fi.org>

Project Unicorn Resources & Support



Webinars



Publications



Technical
Assistance



State of the
Sector Report



Interoperability
Pledge



PROJECT UNICORN

Interoperability Rubric v3



PROJECT UNICORN

Interoperability Certification

projectunicorn.org/resources

The Project Unicorn Interoperability Rubric



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Interoperability Rubric v3

A source to help districts really see how an edtech tool measures against their key concerns.

A source to help edtech vendors measure how interoperable their product is.

	1 - Initial	2 - Emerging	3 - Building	4 - Optimizing / Transformative
Data Quality	Linguistic student identifiers (e.g. first name, last name)	Linguistic plus numeric student identifiers (e.g. test name and grade level)	Unique numeric student identifiers used over time (e.g. one permanent product-assigned ID)	Integrate or import unique numeric student identifiers used by schools and other tools (e.g. SIS ID)
Data Granularity	1 unit of data (e.g. section) is available for immediate export or import	2 units of data (e.g. section, school) are available for immediate export or import	3 units of data (e.g. section, school, district) are available for immediate export or import	Four or more units of data (e.g. section, school, district, student) are available for immediate export or import
Export Process	No export; or export a non-editable, non-machine-readable file type (e.g. PDF)	Manually download a machine-readable file (e.g. CSV, XML, Excel)	Scheduled, industry protocol, secure file exchange (e.g. SFTP, AWS S3) to a shared location; or direct database access; or third-party product integration with industry aligned data descriptors (CSV, XML, Excel)	a. Industry standard aligned API with certification of APIs from appropriate industry standards body (e.g. Ed-Fi, Access 4 Learning, or IEdTech) OR b. Industry standard aligned API with open specification supporting one or more open education data standards (e.g. Ed-Fi, Access 4 Learning, or IEdTech)
Export Cost Transparency	Data export costs are available on request after purchase	Data export costs are available on request and charged to whom (e.g. district, vendor, etc.)	Data export costs are clearly outlined in pre-sales communications and to whom (e.g. district, vendor, etc.)	Data export costs are listed on a public website and to whom (e.g. district, vendor, etc.)
Export Cost	Data export has a custom charge not defined in advance of purchase	Data export priced by instance/occurrence, defined in advance of purchase	Data export priced as a flat rate, defined in advance of purchase	Data export bundled in or no additional cost with no incremental expense
Export Security	Encrypted, authenticated, authorized transfer with data restrictions and no differentiated account permissions	Encrypted, authenticated, authorized transfer with data restrictions, including limited account permissions and data filters (e.g. differentiate by school in a district)	Encrypted, authenticated, authorized transfer with data restrictions (e.g. several account permissions and data filters)	Encrypted, authenticated, authorized transfer with data restrictions (e.g. several account permissions and data filters) and procedural safeguards
Export Frequency	On request by customer (not automated) with non-specified timeframe for result	Ability to fetch data weekly	Ability to fetch data daily	Ability to fetch data on a real time basis if needed by customer, or highest frequency otherwise needed
				a. Industry standard file format (e.g. CSV, XML) downloaded with certification of APIs from appropriate industry standards body (e.g. Ed-Fi, Access 4 Learning, or IEdTech)

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The Project Unicorn Interoperability Rubric



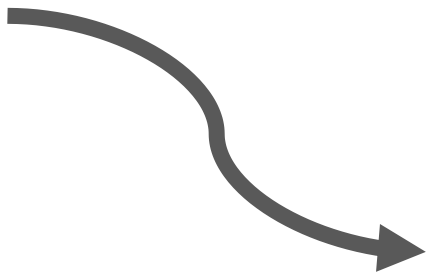
- Effort to create a shared language for school districts, states, and vendors
- Rubric to evaluate tools about the key aspects of interoperability
- Meant to be a living document that allows stakeholders to evaluate where their efforts and tools are on the journey towards interoperability
- Used to evaluate vendors, and implement language from the rubric into RFPs

The Project Unicorn Interoperability Rubric



PROJECT UNICORN

Interoperability Rubric v3



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projectunicorn.org/project-unicorn-rubric

Data Quality

A measure of the condition of data based on factors such as accuracy, completeness, consistency, reliability, whether it's up to date, and timeliness.

Data Granularity

A measure of the level of detail in a data structure.

Export Process

The extraction and conversion of raw data from an existing format into a format required by another application.

Export Cost Transparency

Clarifying which components are included and which have an additional cost. Transparency should outline who pays whom, is this payment fixed or variable, and if variable, based on what.

Export Cost

The cost (if any) of extracting data into another application and how the cost is applied.

Export Security

Restrictions an application places on the ability to extract data.

Export Frequency

A measure of how often a data export occurs.

Export Format

The structure the data must resemble in order to be extracted from an application.

Import Cost Transparency

Clarifying which components are included and which have an additional cost. Transparency should outline who pays whom, is this payment fixed or variable, and if variable, based on what.

Import Cost

The cost (if any) of inserting data into another application and how the cost is applied.

Import Security

Restrictions an application places on the ability to insert data.

Import Frequency

A measure of how often a data import occurs.

Import Format

The structure the data must resemble in order to be inserted into an application.

The Project Unicorn Interoperability Rubric



PROJECT UNICORN

Interoperability Rubric v3

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- Data Quality
- Data Granularity
- Export Process
- Export Cost Transparency
- Export Cost
- Export Security
- Export Frequency
- Export Format
- Import Process
- Import Cost Transparency
- Import Cost
- Import Security
- Import Frequency
- Import Format
- Technical Descriptions & Examples

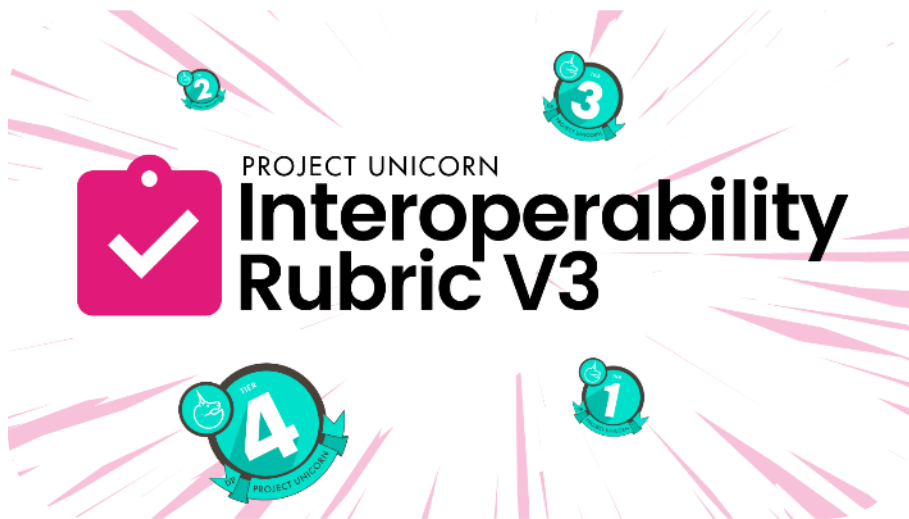


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Interoperability Rubric v3

- Data not available for export
- Only some data available for export
- Exports not available in commonly accepted format like .csv
- Custom programming required to get data out of a system
- Data only available within a closed ecosystem
- Tools may be “standards aligned,” but require “tweaking” for specific platform integrations (sometimes extra \$\$)

Project Unicorn Interoperability Certification



Signals that an edtech product prioritizes data interoperability.

At the core of interoperability is a focus on better informing instruction and driving student-centered learning experiences. The Interoperability Certification enables school systems to know they are investing in products that prioritize interoperability.

The Certification Process



- Applications are ranked on their level of interoperability on a scale from 1 to 4, as per the [**Project Unicorn Interoperability Rubric**](#).
- Each question will be scored on a scale based on the response and artifacts/evidence provided.
- The total score will determine the Product Certification tier an application has earned.
- Each submission receives an Open Badge based on the final ranking

Badge to be featured on:



The Value of the Interoperability Certification



Join Our Community!



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PLEDGE SIGNATORY



Tools and Resources

Resource Database

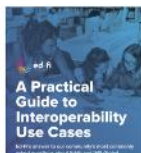
Please use the drop downs to search our database of resources.

Items: 37

Categories: District/School

Tags: All

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Ed-Fi: A Practical Guide to Interoperability Use Cases

September 8, 2021

Clarity around how the Ed-Fi Alliance Standards and IMS Global Learning Consortium® Standards can be used in support of education 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...

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July 14, 2020

This infographic illustrates that, when all the important people in their lives have appropriate access to information, individuals get the support they need to succeed.

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Benefits of Signing the Project Unicorn Pledge

April 23, 2020

Learn about the benefits of signing the Project Unicorn pledge which includes joining a community of districts and vendors, access to other resources, scholarships, and technical support.

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Interoperability Standards in Education

April 23, 2020

Learn about the different organizations in K-12 that provide data standards to make data interoperable by possible.

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Meet with us – we'd love to learn from you!

Fill out this quick form to set up a meeting with the Project Unicorn team:

<https://tinyurl.com/A4L2023>



THANK YOU!



From the Project Unicorn Team

