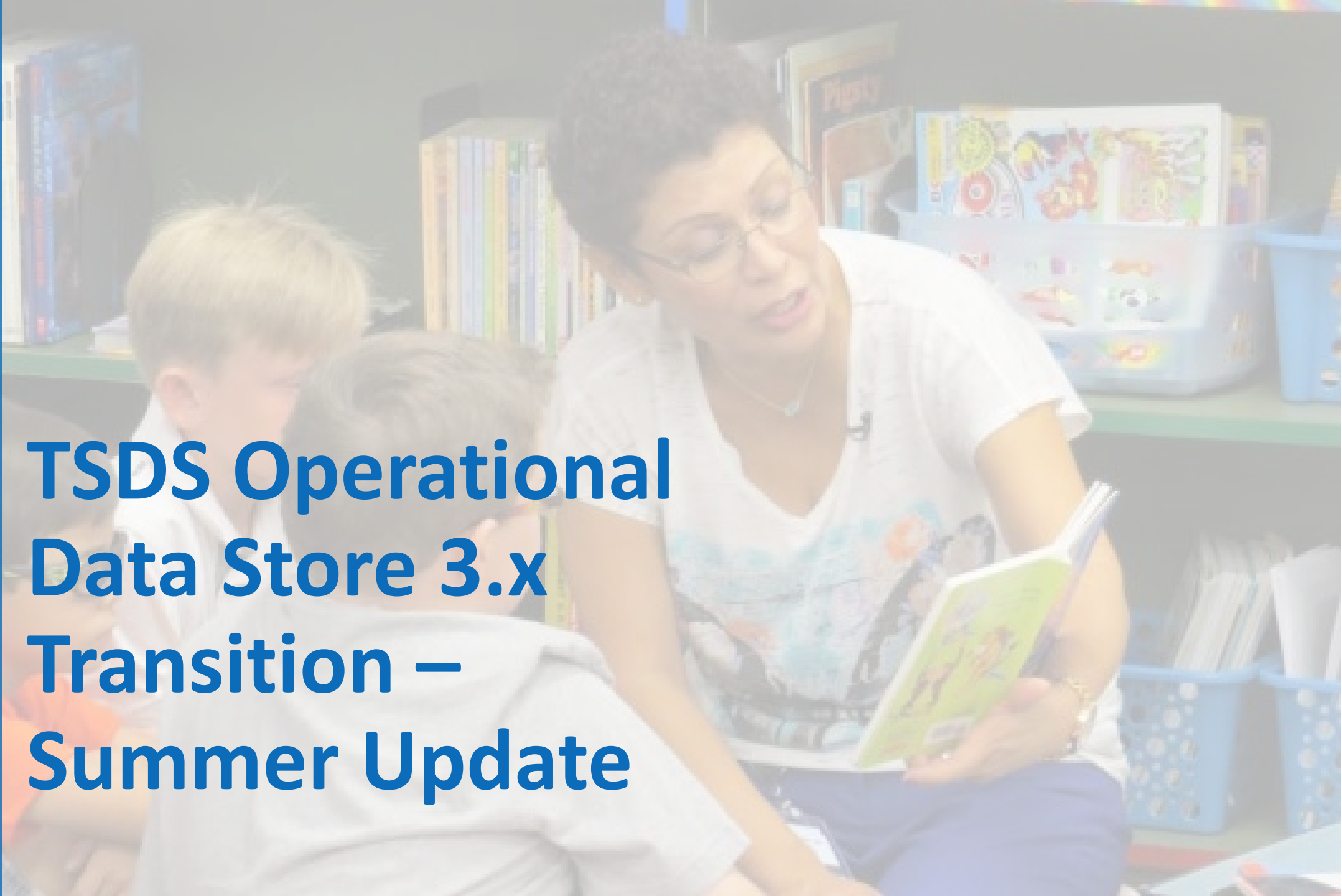


A background photograph of a classroom. A female teacher with short dark hair and glasses, wearing a white t-shirt, is sitting on the floor and reading a book to two young students. The students are also sitting on the floor, looking at the book. In the background, there are bookshelves filled with books and blue storage bins.

TSDS Operational Data Store 3.x Transition – Summer Update

AGENDA



■ ODS 3.x TRANSITION

- TSDS Vision
- Timeline
- Data Governance & Texas Education Data Standards
- Pilot Program
- Ed-Fi Domain Overview
- Technical Guidance, Resources & Data Flows

TSDS VISION

- Key goals set in 2009:
 - Reduce **technology risk** and system downtime
 - Put real-time **student performance data** in the hands of educators
 - Become the **one common data collection platform** for TEA
- Other goals set in 2009:
 - Allow for more **usable, reliable, and expandable** data standards
 - Allow for more **flexible data validation** processes

AGENDA



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TIMELINE

■ February 2021

- TEA entered contract with Instructure
- Partnered with the Ed-Fi Alliance, the Michael & Susan Dell Foundation and the Bill & Melinda Gates Foundation

■ July 2021 – August 2022

- Pilot program for TSDS vendors
- Consists of a series of mini-pilots

■ August 2022 – August 2023

- Parallel submission year for participating LEAs
- Validate 3.x API transactions against official XML submissions

■ August 2023 – August 2024

- TSDS 3.x ODS go-live for 2023-2024 school year
- XML submissions no longer accepted for TSDS

AGENDA



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DATA GOVERNANCE

- Ed-Fi 3.x Data Governance Status
 - Based on Ed-Fi 3.2.0-c version

Domains Approved

- Alternative & Supplemental Services
- Discipline
- Education Organization
- Enrollment
- School Calendar
- Staff
- Student Academic Record
- Student identification & Demographics
- Teaching & Learning
- Restraint (domain entity)

Domains Pending Review

- Assessment
- Finance
- Student Attendance
- Student Cohort
- Survey (newly added)

Domains Not Utilized

- Bell Schedule
- Graduation
- Intervention

TSDS EDUCATION DATA STANDARDS (TEDS)

- TEA is working diligently to prepare the release of the TEDS publication for ODS 3.x.
 - The **near-final** version based on the **3.2.0-c Ed-Fi version** is tentatively scheduled for **October 2021**.
 - This publication should be considered near-final, as it is subject to change, and may not include all domains and Texas extensions.
- For the initial mini-pilot (Pilot 1), TEA will provide technical resources outside of the TSDS Web-Enabled Data Standards (TWEDS) format to assist vendors with development efforts.
 - These early resources may only contain a subset of Ed-Fi domains but will provide information on Texas-specific extensions and descriptors.
- TEA will maintain both the 3.x TEDS version and the current TEDS version throughout the ODS 3.x project.
- TEA will provide the ODS 3.x Domain documentation as an early release in **September 2021**.

AGENDA



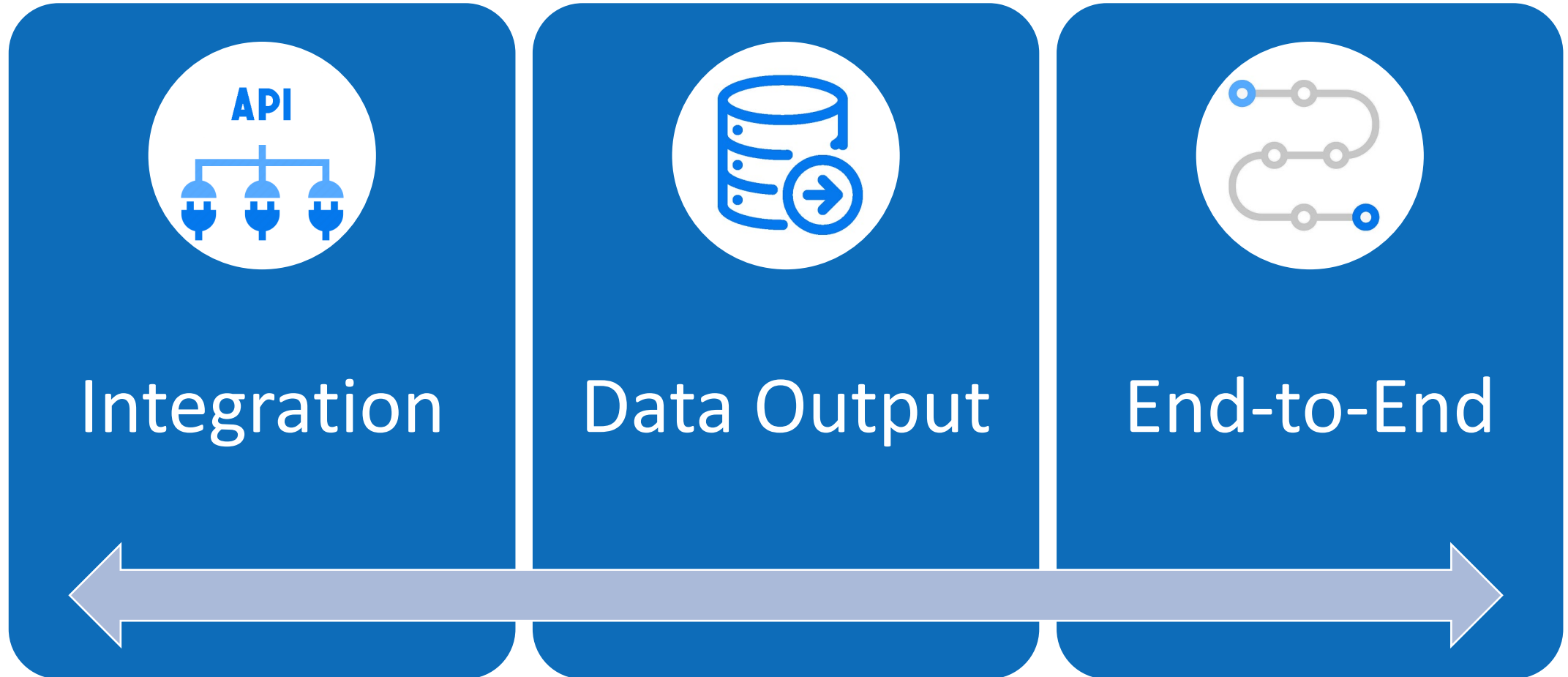
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PILOT PROGRAM OVERVIEW

- **2021-2022:** pilot program consisting of a series of **mini-pilots**
 - The mini-pilots will **continue to build upon** each other with additional functionality and objectives.
 - There may be overlap with mini-pilots, as they are **not intended to be sequential in nature**.
 - The **vendors will determine** when to begin participating in the pilot program but may need to meet specific criteria prior to joining.
 - TEA will be providing **specific use cases** for pilot completion.
- **2022-2023:** parallel TSDS submissions to ensure vendor readiness

PILOT PROGRAM OBJECTIVES



MINI-PILOT: INTEGRATION

OBJECTIVE

- Initial vendor integration and testing against the TSDS 3.x API and ODS (Texas Extensions)
- Initial LEA partnerships and commitments

PARTICIPATION

- 1-2 vendors (SIS/HR)
- 2-4 LEAs

CRITERIA

- Ed-Fi Student Information System API v3 Certification (*if starting in July - September 2021*)
- Will utilize their own fictitious / anonymized test data
- Are amenable to changes in data standards and design

MINI-PILOT: DATA OUTPUT

OBJECTIVE

- Ensure data accuracy from source system to TSDS Landing Zone (ODS)
- Verify changes in data and effective dating
- Confirm TSDS promotions and reporting (downstream)

PARTICIPATION

- 2-5 vendors (SIS/HR/Assessment)
- 10-25 LEAs

CRITERIA

- Working towards Ed-Fi certification
- Ability to complete use cases for TSDS submissions (Texas extensions)
- Participating LEAs to validate with their source system data

MINI-PILOT: END-TO-END TESTING

OBJECTIVE

- Testing of validations and local reporting
- Ensure usability of interfaces
- Complete end-to-end testing (source system to TSDS applications)

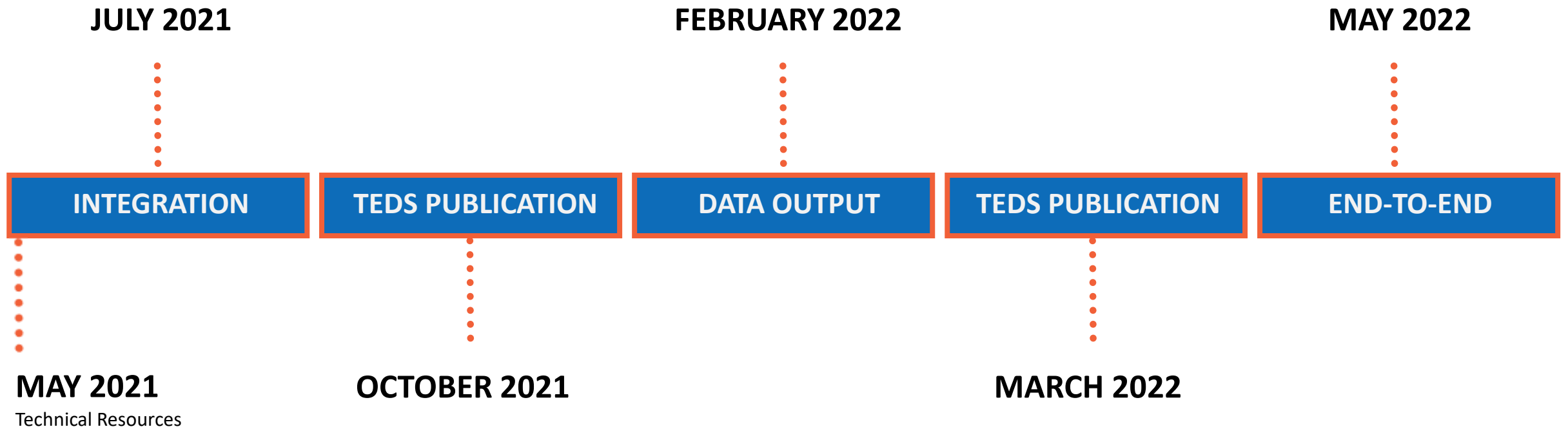
PARTICIPATION

- 10+ vendors (SIS/HR/Assessment)
- 50+ LEAs

CRITERIA

- Ed-Fi certification in process
- Strong participation and commit from LEA partnerships
- Capacity to provide technical support and respond to identified issues

PILOT PROGRAM TIMELINE: 2021-2022



ENSURING VENDOR READINESS

2022-2023: Parallel Year

- LEAs will submit both XML and API data
- LEAs will validate against reports and validations
- Obtain TSDS compatible designation

2023-2024: Go-Live Year

- Only API transactions will be accepted for TSDS
- XML data loads will not be available
- Complete vendor readiness

For the **2022-2023 parallel submission** year, TEA would expect to have **250 LEAs** participating to ensure system readiness.

PILOT PROGRAM: VENDOR COMMUNICATIONS

- **May 25, 2021:**

- TEA conducted the **TSDS ODS 3.x Vendor Kickoff** for vendors to provide an overview of the upgrade, the associated timelines, and the requirements and expectations for vendors.

- **June 30, 2021:**

- TEA hosted the **TSDS ODS 3.x Ed-Fi Certification** webinar along with the Ed-Fi Alliance to provide an overview of the Ed-Fi certification process, review the available technical resources, the recommended timelines for certification, and allow for open discussion and questions.

- **Future Webinars:**

- TEA will continue to host additional webinars on a frequent basis throughout the pilot program to ensure vendor readiness and provide technical support.

PILOT PROGRAM: VENDOR APPLICATION

■ June 15, 2021:

- An application was sent out to TSDS vendors to solicit their interest and gather information on which products they intend to implement and test within the pilot program.

■ June 29, 2021:

- The vendor application was closed for vendors.
- TEA received a **total of 18 completed applications** from Student Information System (SIS), Human Resources/Finance, ECDS Assessment vendors.
- Vendors informed TEA of **26 different products** that they were expecting to pilot for the TSDS ODS 3.x upgrade.
 - 11 Student Information Systems
 - 8 Human Resources / Finance Systems
 - 5 Student Assessment Systems (ECDS)

PILOT PROGRAM: UPDATES

- **July 2021:**

- The pilot program was started with one vendor to vet initial technical resources and implementation guidance.

- **August 2021 – September 2021:**

- TEA will implement feedback received and update technical resources and guidance for TSDS vendors.
- TEA will bring in an additional one to two vendors into the pilot program.

- **October 2021:**

- TEA will publish a near-final version of TEDS based on Ed-Fi 3.2.0-c.
- Additional vendors will be brought into the pilot program.

ED-FI CERTIFICATION

- To ensure each vendor has met requirements and demonstrated the capability to integrate with the Ed-Fi APIs, each source vendor is expected to complete the relevant Ed-Fi certification or badging program.
 - [Ed-Fi Certification Program Information](#)
 - [Ed-Fi Badging Program](#)
- Vendors are **not required** to have an Ed-Fi certification **to start the pilot program in 2021-2022**, however they are strongly encouraged to be working towards completing those requirements during the pilot program.
 - For vendors wanting to participate early in the pilot program (July – September), Ed-Fi certification will be required.
 - For vendors participating after that timeframe, an Ed-Fi certification will be **required** prior to the **end of the parallel submission year in 2022-2023**.
- The Ed-Fi Alliance is available to assist vendors with certification and badging
 - Register for an Ed-Fi Community log-in for access to how-to, best practice guides, the Ed-Fi data standard documentation, and Ed-Fi certification and badging program details.
 - Get access to the Ed-Fi Slack channel and ticket tracking systems to access asynchronous support.
 - For questions and guidance beyond the documentation and asynchronous channels, contact [Cy Jones – Ed-Fi Solution Architect Vendor Partnerships](#).

TSDS COMPATIBLE DESIGNATION

- In addition to Ed-Fi certification, TEA will require all vendors to complete validation scenarios with LEA partner(s) during the **2022-2023 parallel submission year**.
- Each vendor is expected to partner with at **least one LEA** to submit data based upon the TEDS 3.x specifications, along with their current XML data submissions.
- The **participating LEA(s) will verify** the ODS 3.x data against their official 2022-2023 TSDS submissions to ensure the vendor is **TSDS compatible** and ensure vendor readiness for the go-live year in 2023-2024.

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Current TSDS Terminology to ODS 3.x Terminology



Interchanges



Domains

Complex Type



Entity

Data Elements

Codes



Descriptors

Student Identification and Demographics Domain

Entities Collected:

- **Student**: captures information and characteristics of the student.
- **Parent**: data about parents and guardians.
- **StudentParentAssociation**: links students and parents and defines their relationship.
- **StudentEducationOrganizationAssociation**: demographic and characteristics of a student that are specific to the relationship with the student and a particular education organization.

New Data Elements:

- **OrderOfPKFundingSource**: used to determine the order of prekindergarten funding.
- **LanguageUse**: how the language is used. (e.g. Home Language, Student Language)
- **StudentCharacteristic**: characteristics of a student's situation. Generally non-program-based student characteristics. (e.g. At-Risk, Immigrant)
- **BeginDate/EndDate**: month, day, and year to determine the "effective date" for a particular data element set.

New Descriptor Tables:

- **LanguageUse**: used with the data element "Language" to determine the home language and student language.
- **StudentCharacteristic**: used with the data element "StudentCharacteristic" to identify the specific characteristic of a student. (e.g. At-Risk, Immigrant)

Enrollment Extension Domain

Entities Collected:

- ***StudentSchoolAssociation***: represents the school in which the student is enrolled.
- ***StudentEducationOrganizationAssociation***: represents student information that is specific to a student's relationship with an education organization.
- ***StudentEducationOrganizationResponsibilityAssociation***: indicates any relationship between a student and an education organization.

New Data Elements:

- ***EntryDate***: month, day, and year a student begins receiving instruction at a school.
- ***EntryType***: the process by which a student enters a school during the current school year.
- ***ExitWithdrawDate***: the day after the students last attendance at a school.
- ***Responsibility***: indicates the education organization's responsibility for a student.
- ***BeginDate/EndDate***: month, day, and year to determine the "effective date" for a particular data element set.

New Descriptor Tables:

- ***EntryType***: defines the process by which a student enters a school during the year.
- ***Responsibility***: this descriptor defines types of responsibility an education organization may have for the student. (e.g. accountability, attendance)

School Calendar Extension Domain

Entities Collected:

- **Calendar**: a set of dates associated with an organization.
- **CalendarDate**: the type of scheduled or unscheduled event for the day.
- **Session**: a term in the school year, generally a unit of time into which courses are scheduled, instruction occurs and by which credits are awarded.

New Data Elements:

- **PeriodSequence**: the sequential order of a period relative to other periods.
- **SessionName**: identifier for the calendar for the academic session (e.g., 2021-2022 School Year)
- **Term**: descriptor value indicating the term. (e.g., Semester)
- **BeginDate/EndDate**: month, day, and year to determine the “effective date” for a particular data element set.

New Descriptor Tables:

- **Term**: defines the term of a session during the school year (e.g., Semester)

Staff Extension Domain

Entities Collected:

- **Staff**: represents an individual who performs specific activities.
- **StaffEducationOrganizationAssignmentAssociation**: indicates the education organization to which a staff member provides a specific service.
- **StaffEducationOrganizationEmploymentAssociation**: indicates the education organization where a staff is formally associated, the percent employed, and number of days employed.

New Data Elements:

- **BeginDate/EndDate**: month, day, and year to determine the “effective date” for a particular data element set.

New Descriptor Tables:

**No New
Descriptor
Tables**

Education Organization Extension Domain

Entities Collected:

- **LocalEducationAgency**: represents an administrative unit at the local level which exists primarily to operate schools or to contract for educational services.
- **EducationServiceCenter**: represents a regional, multi-services public agency authorized by state law to develop, manage and provide services, programs or other support options to LEAs.
- **EducationOrganization**: represents any public, charter, organization or agency that provides instructional or support services to students or staff at any level.
- **School**: represents an educational organization that includes staff and students.

New Data Elements:

- **LocalEducationAgencyCategory**: the category of the LEA.
- **EducationOrganizationId**: the identifier assigned to an education organization.
- **EducationOrganizationCategory**: the classification of the education agency.
- **NameOfInstitution**: the name of the institution.
- **BeginDate/EndDate**: month, day, and year to determine the “effective date” for a particular data element set.

New Descriptor Tables:

- **LocalEducationAgencyCategory**: the category of the LEA. For example: School District or Charter.
- **EducationOrganizationCategory**: the specific classification of the education agency.

Alternative and Supplemental Services Extension Domain

Entities Collected:

- **Program**: any program designed to work in conjunction with, or as a supplement to, the main academic program.
- **GeneralStudentProgramAssociation**: the relationship between students and programs.
- **StudentCTEProgramAssociation**: represents the career and technical education program that a student participates in.
- **StudentTitleIPartAProgramAssociation**: represents the Title I Part A program that a student participates in or from which the student receives services.
- **StudentSpecialEducationProgramAssociation**: represents the special education program that a student participates in or from which the student receives services.
- **StudentLanguageInstructionProgramAssociation**: represents the language instruction that a student participates in or from which the Student receives services.

New Data Elements:

- **ProgramName**: the formal name of the program of instruction.
- **BeginDate/EndDate**: month, day, and year to determine the “effective date” for a particular data element set.
- **OrderOfSpecialEducationSetting**: the order of the student’s Special Education setting.
- **OrderOfDisability**: the order by severity of student’s disabilities.

New Descriptor Tables:

**No New
Descriptor
Tables**

Discipline Extension Domain

Entities Collected:

- ***DisciplineIndicent***: represents the actions or behaviors that constitute an “offense” in violation of laws, rules, policies, or norms of behavior. This entity is associated with the school where the incident occurred.
- ***StudentDisciplineIncidentAssociation***: links students to DisciplineIncidents entites and indicates their role in that incident.
- ***DisciplineAction***: represents the action taken against a student or students.

New Data Elements:

- ***IncidentDate***: is the month, day, and year on which the DisciplineIncident occurred.

New Descriptor Tables:

**No New
Descriptor
Tables**

Restraint Event Extension Domain Entity

The *Restraint Event Extension domain entity* is not referenced by any other Ed-Fi domains. TEA is currently working with Ed-Fi to determine how other states have implemented this domain entity.

RestraintEvent Extension Domain Entity: represents the instances when a student was physically or mechanically restrained.

New Data Elements:

**No New
Data Elements**

New Descriptor Tables:

**No New
Descriptor
Tables**

Teaching and Learning Extension Domain

Entities Collected:

- **Course**: the organization of subject matter and related learning experiences provided for the instruction of students on a regular basis. TEA will populate this entity using the SERVICE-ID (C022) table.
- **CourseOffering**: the courses offered by a particular LEA and campus.
- **Section**: the specific classroom unit where instruction is provided.
- **StaffSectionAssociation**: teacher assigned to a specific section.
- **StudentSectionAssociation**: student class enrollment in a specific section.

New Data Elements:

- **SessionName**: identifier for the calendar for the academic session (e.g., 2021-2022 School Year)
- **BeginDate/EndDate**: month, day, and year to determine the “effective date” for a particular data element set.

New Descriptor Tables:

**No New
Descriptor
Tables**

Student Academic Record Extension Domain

Entities Collected:

- ***StudentAcademicRecord***: represents the cumulative record of academic achievement for a student.
- ***CourseTranscript***: the final record of a student's performance in their course at the end of a semester or school year.

New Data Elements:

- ***Term***: defines the term of a session during the school year (e.g., Semester).
- ***BeginDate/EndDate***: month, day, and year to determine the "effective date" for a particular data element set.
- ***AchievementCategory***: defines the category of achievement attributed to the learner.
- ***NumberOfParts***: the number of parts identified for a course.

New Descriptor Tables:

- ***Term***: the descriptor defines the term of a session during the school year (e.g., Semester).
- ***Achievement***: the achievement earned by the student upon fulfilling specified criteria.

AGENDA



■ ODS 3.x TRANSITION

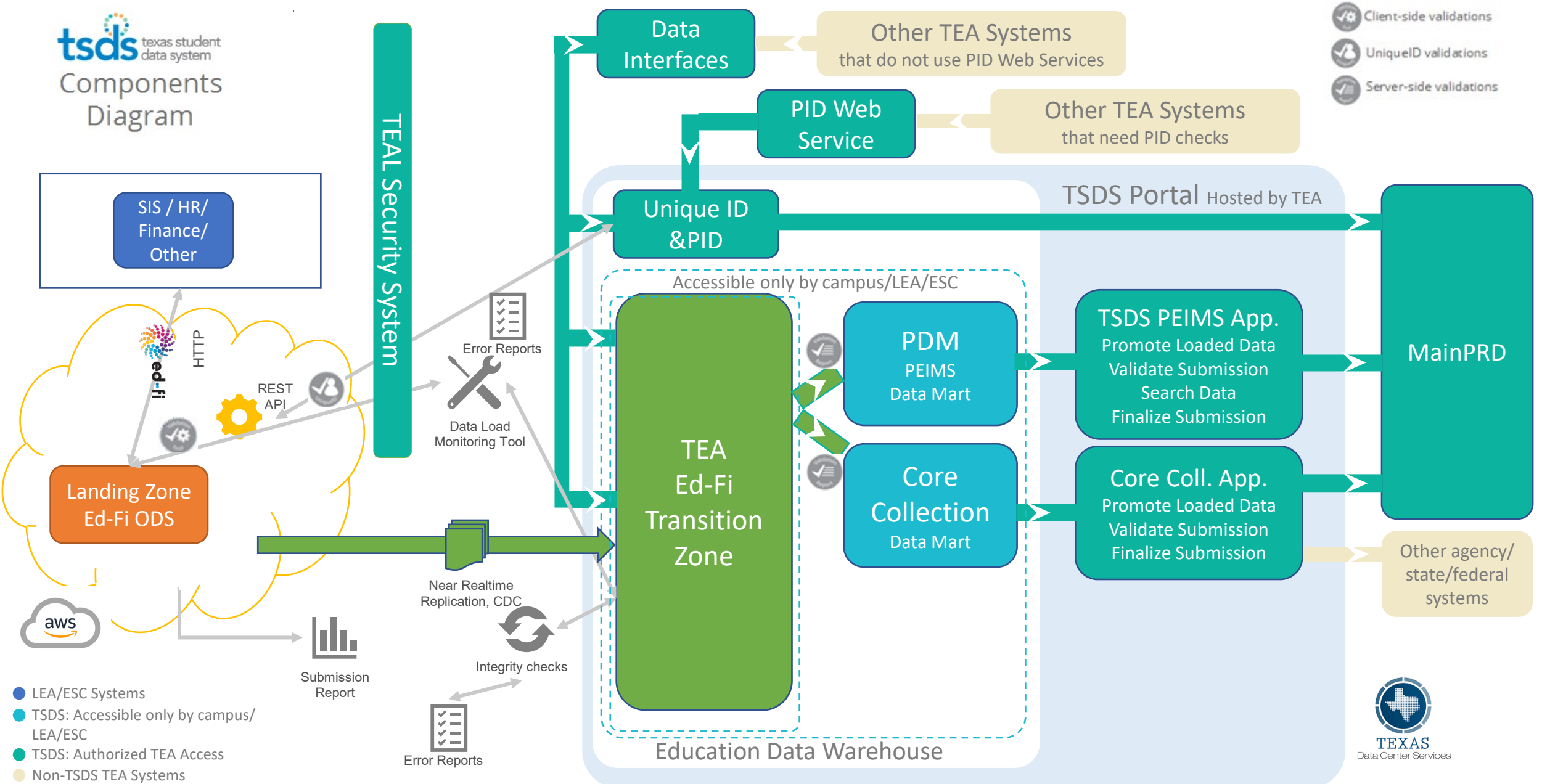
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TECHNICAL RESOURCES

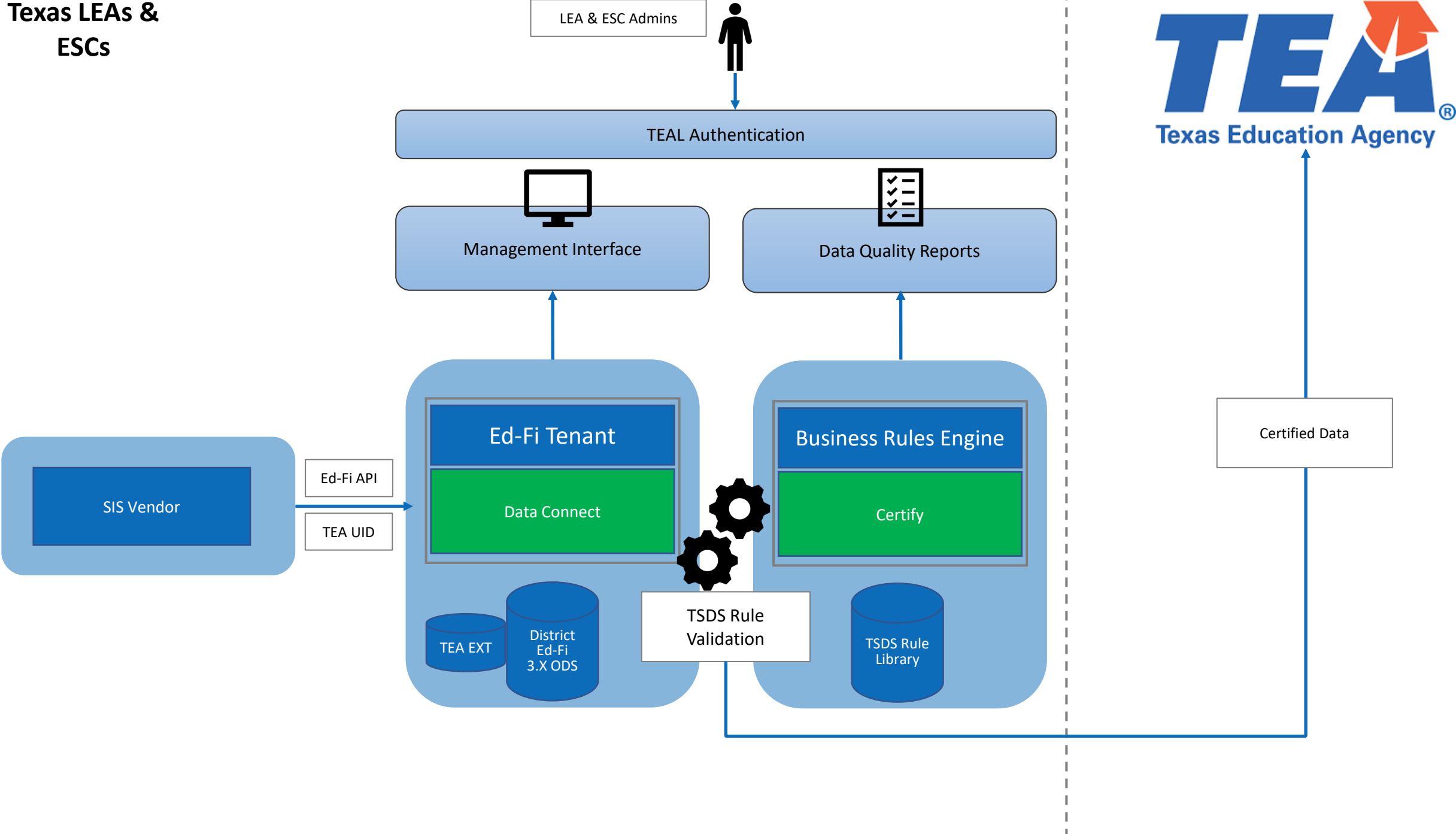
- **Technical Specifications:**
 - [Texas Education Data Standards \(TEDS\)](#)
 - [Ed-Fi Data Standard](#)
- **Ed-Fi Technical Resources (Vendors)**
 - [Ed-Fi Community Login Signup](#)
 - [Implementation Playbook for Technology Providers \(login needed\)](#)
- **Questions:**
 - TSDSCustomerSupport@tea.texas.gov

Proposed TSDS architecture

tsds texas student data system Components Diagram



Texas LEAs & ESCs



TEA

Questions

tsds

