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

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



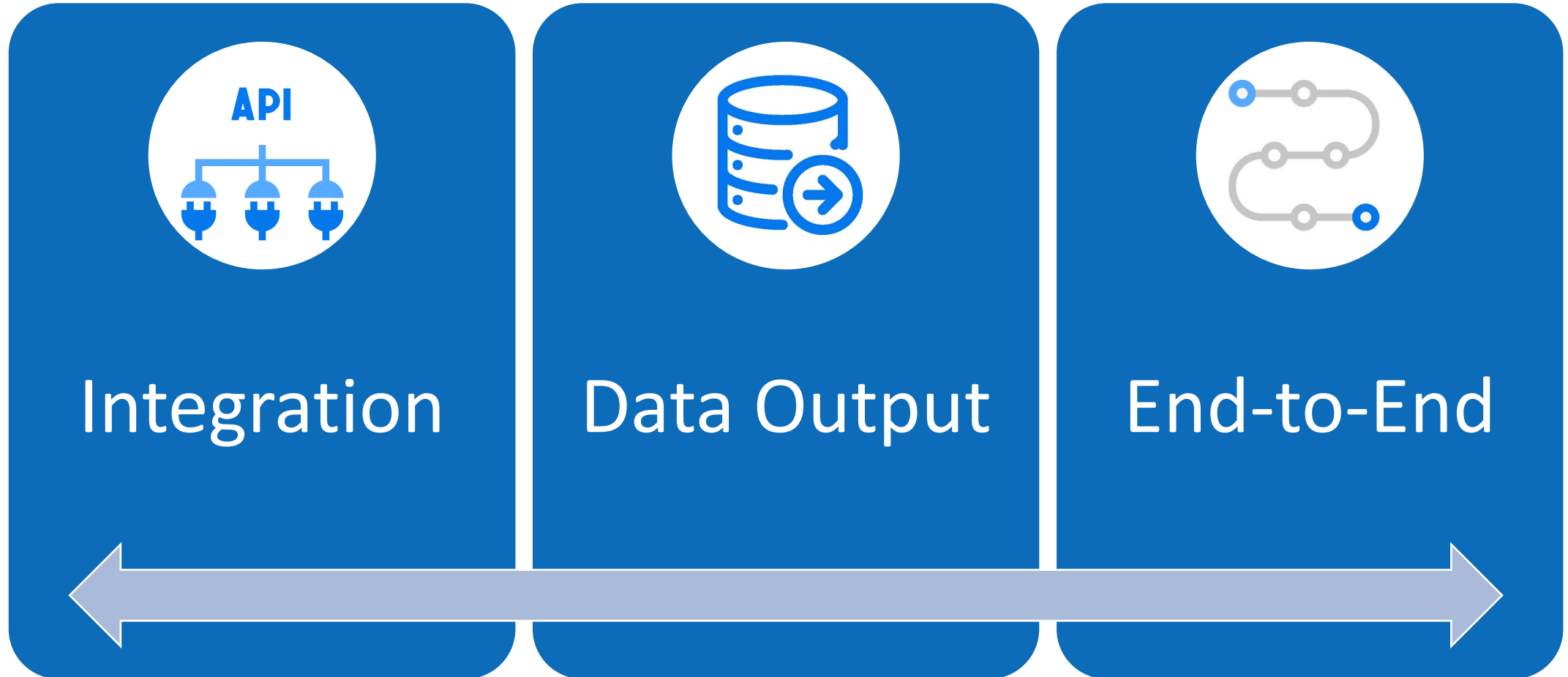
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PILOT PROGRAM OVERVIEW

- **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)

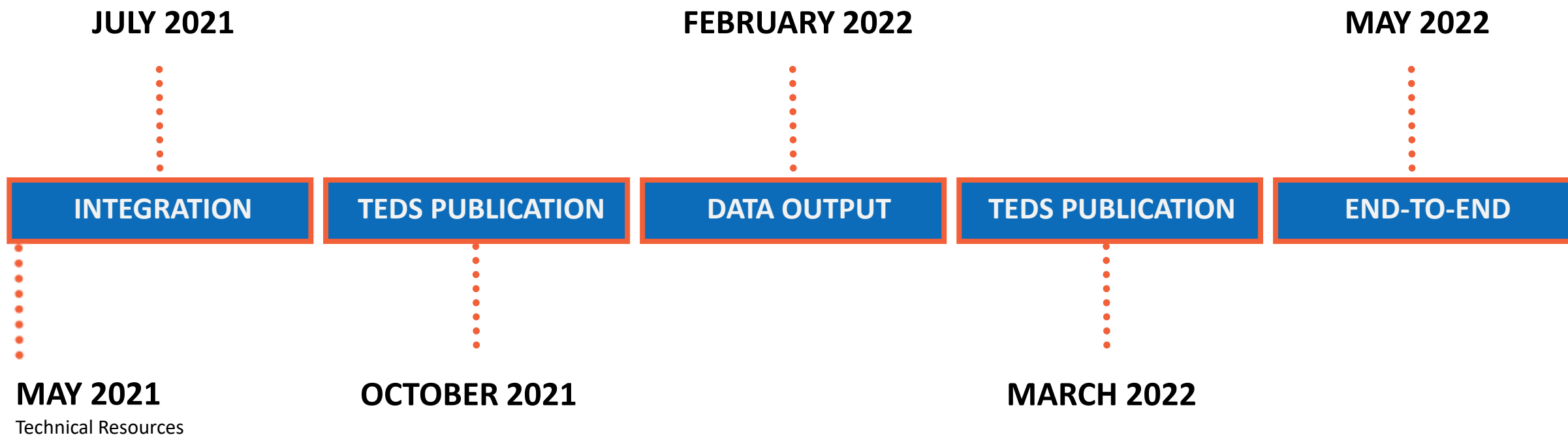
PARTICIPATION

- 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

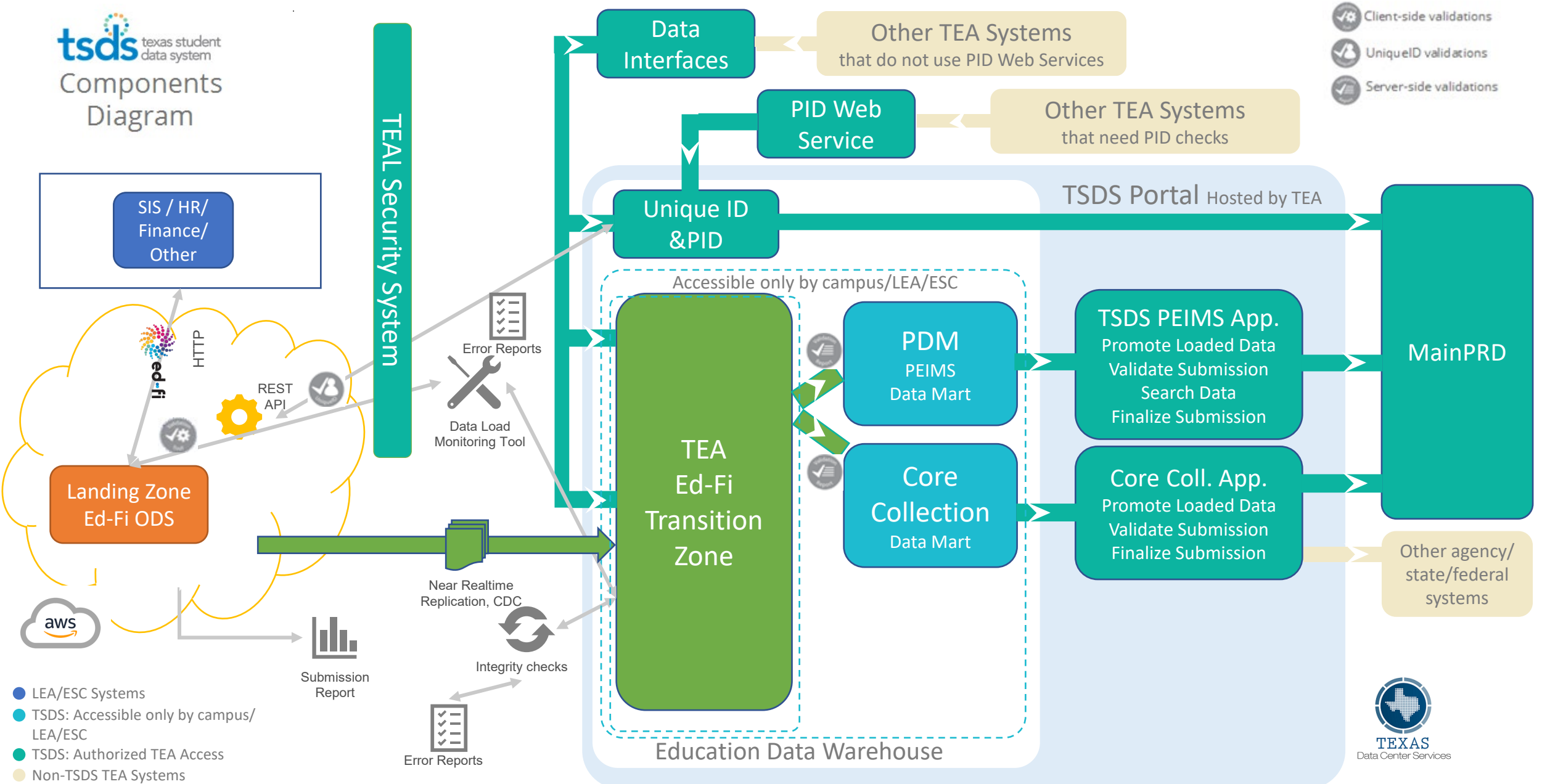
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TECHNICAL RESOURCES

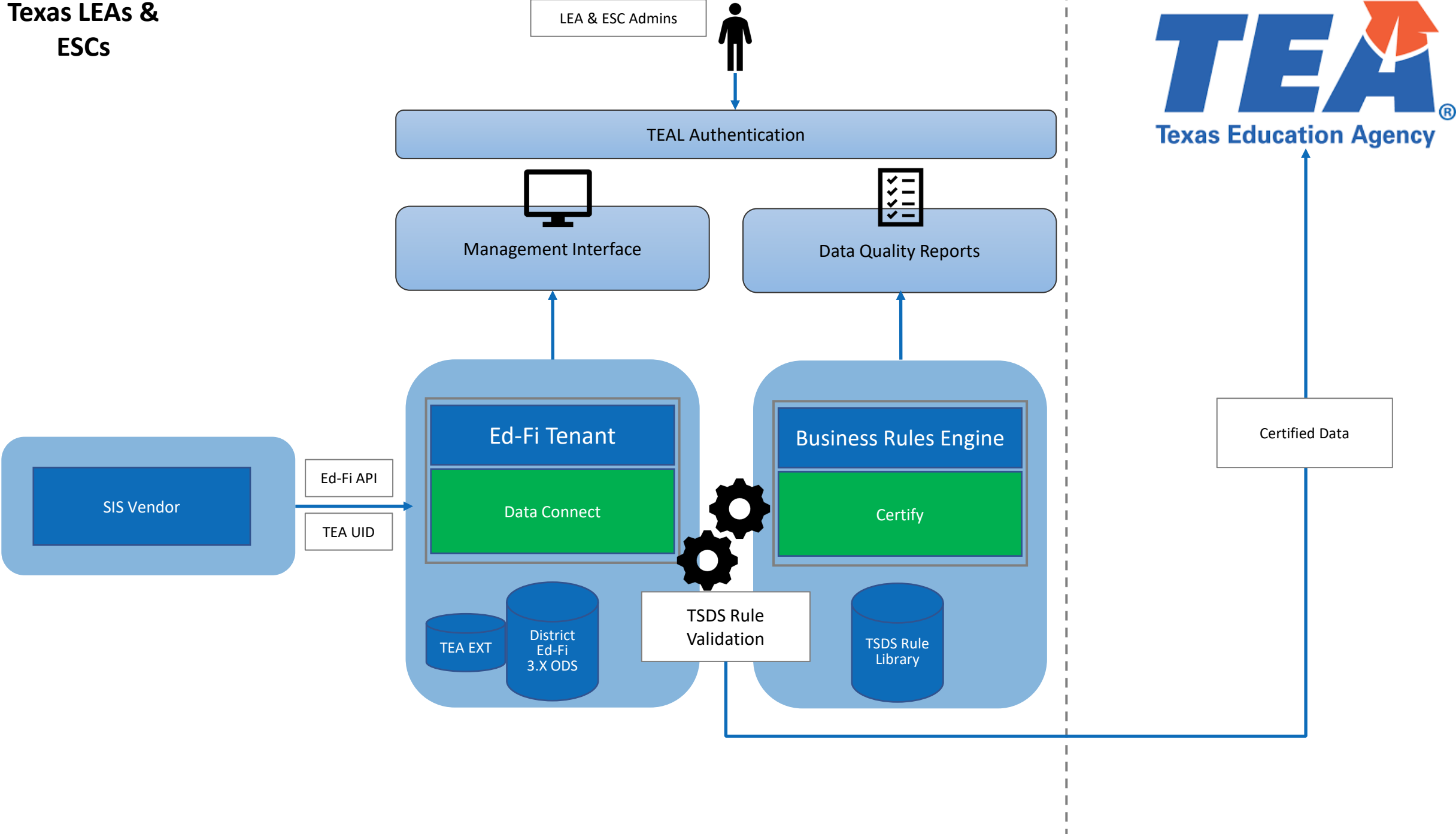
- **Technical Specifications:**
 - [Texas Education Data Standards \(TEDS\)](#)
 - [Ed-Fi Data Standard](#)
- **Ed-Fi Technical Resources (Vendors)**
 - [Ed-Fi Community Login Signup](#)
 - [Implementation Playbook for Technology Providers \(login needed\)](#)
- **Questions:**
 - TSDSCustomerSupport@tea.texas.gov

Proposed TSDS architecture

tsds texas student data system Components Diagram



Texas LEAs & ESCs



TEA

Questions

tsds

