AZ Ed-Fi Suite v7.3, Data Standard v5.2: Student Education Organization Associations (SY 25-26)

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Summary

This association represents student information as reported in the context of the student's relationship to the education organization. Enrollment relationship semantics are covered by StudentSchoolAssociation.

Object Triggering Logic

Action	Business Rule(s)

Post	Reports a record when an Enrollment is saved and overlaps the configured year. • This resource will only report for SY 25-26 and prior. ◦ Ed-Fi Connections past SY 25-26 will utilize the Student Demographics, Student Directories, and Student Identification Codes resources. • A record is only reported for Enrollments in the same School Year as the Ed-Fi Connection sending the record. ◦ School Year dates are defined in School Year Setup. ▪ If Start Date is NULL, 07/01/StartYear will be used. ▪ If End Date is NULL, 06/30/EndYear will be used. • A record will report for each Enrollment with a unique School. • When a student has two enrollments in the same School, Calendar, and Schedule Structure with the same start date, report from the enrollment service type in the following order: ◦ P: Primary Enrollment ◦ S: Partial/Ancillary ◦ N: Special Ed Services • When a student has two Primary enrollments in the same school with the same start date, post the record with the highest enrollment ID. • Do not report a record if the any of the following exclusions are present: ◦ Enrollment State Exclude ◦ Enrollment No Show ◦ Enrollment Grade Exclude from State Reporting ◦ Enrollment Start Status is *E: NON-SAIS DISTRICT USE ONLY!* ◦ Calendar Exclude ◦ School Exclude

Delete/Post Put	A DELETE / POST will be performed if the data element being altered is part of the resource's natural key. For AZ SEOA only, a DELETE / POST will also be performed on any other data elements where a PUT would normally be performed. • When any of the following information is changed on Enrollments: ◦ Enrollment ID (New Enrollment) ◦ Start Date ◦ State Start Status ◦ End Date ◦ No Show • When any of the following information is changed on Identity: ◦ Identity ID (New Identity) ◦ Effective Date ◦ Gender ◦ US Entry Type ◦ Home Primary Language ◦ Most Spoken Language ◦ First Acquired Language ◦ Race Checkboxes ◦ Is the individual Hispanic/Latino? ◦ Tribal Affiliation ◦ Tribal Enrollment • When any of the following information is changed on Demographics: ◦ Local Student Number ◦ Student State ID • When any of the following information is changed on Relationships: ◦ Relationship ID (New Relationship) ◦ Guardian ◦ Start Date ◦ End Date • When any of the following information is changed on Household Membership: ◦ Household Membership ID (New Household Membership) ◦ Start Date

    - End Date
    - Secondary
- When any of the following information is changed on Household Location:
    - Household Location ID (New Household Location)
    - Start Date
    - End Date
    - Secondary
    - Mailing
- When any of the following information is changed on Address Information:
    - Address ID (New Address)
    - P.O. Box
    - Number
    - Prefix
    - Street
    - Tag
    - Direction
    - Apt
    - City
    - State
    - Zip
- When any of the following information is changed on Foster Care:
    - Foster Care ID (New Foster Care record)
    - Start Date
    - End Date
- When any of the following information is changed on Military Connections:
    - Military Connections ID (New Military Connections record)
    - Start Date
    - End Date
    - Status
- When any of the following information is changed on Flags:
    - Flag ID (New Flag record)
    - Start Date

	◦ End Date • Changes to Resource Preferences mappings **do NOT trigger**. A manual resync must be performed on the resource if mappings are changed.
Delete	• When the student is now excluded in some way. • When the Enrollment is deleted. • When the Enrollment dates are changed to no longer overlap the configured year. • When a record is in the Ed-Fi Identity Mapping Report but cannot be found on the Campus site.

Required Resources (Upstream)

The following resources must be sent prior to this resource:

- Local Education Agencies (Pre-populated)
- Students

Dependent Resources (Downstream)

The following resources are dependent on this resource (must be sent after this resource):

- N/A

Error Log

The following are potential Tier 1 (Ed-Fi API generated) or custom (Campus-generated) errors you may receive when posting, updating, or deleting this resource. Please keep in mind that the "Error Message" below may not match your exact error message.

Error Message	Possible Causes / How to Fix
400: Validation of '**RESOURCE**' failed. **FIELD** is required.	An element of the JSON that is required is missing and needs to be added. • Double check that all bolded data elements below are reporting a valid value and no data elements below are reporting an invalid value.
400: '**RESOURCE**' failed. **RESOURCE** reference could not be resolved.	A resource that was referenced from a difference resource does not yet exist. • Resync the resource being mentioned in the error, then resync the errored resource. Alternatively, the resource being referenced may be incorrect. This can happen with Schools and the Ed-Fi School ID being used as an example. Double check the referenced values being sent are valid.

403: Authorization denied. The claim does not have any established relationships with the requested resource.	The key/secret being used does not have permission to send a record for the resource / referenced resource. • Double check your API credentials (key/secret). Sometimes specific keys/secrets cannot report specific resources. • The referenced person (student, staff, parent, contact, etc.) has not yet been associated to the key/secret. Resync their "linking" resource (Students → Student School Associations, Staffs → Staff Education Organization Assignment Associations, etc.) then resync the errored resource. • The referenced person (student, staff, parent, contact, etc.) may not exist in the ODS yet. Resync the "person" resource and the "linking" resource (Students → Student School Associations, Staffs → Staff Education Organization Assignment Associations, etc.) then resync the errored resource.
404: Failed to delete '**RESOURCE**'. Record does not exist.	The attempt to delete a specific Ed-Fi record ID in the ODS failed because it did not exist. • This error can be ignored. The ID was cleared from the Ed-Fi Identity Mapping Report and will not attempt to delete again.
409: A natural key conflict occurred when attempting to create a new resource '**RESOURCE**' with a duplicate key.	The Ed-Fi API has a natural key system alongside a standard REST ID system. This error is often protecting against the erroneous creation of a duplicate record in the API. However, it may also indicate that the natural key requirements of the Ed-Fi API have not been satisfied, and the key needs to be modified. • Check for duplicate data in your Campus site. If no duplicate data can be found, report the issue to Campus Support. ◦ This can be caused by numerous issues. Our code may be attempting to send duplicate records when it should not. The natural key (bolded fields below) may not be unique enough to satisfy Ed-Fi requirements in all cases. Most times this error will require a code change to fix.
409: The resource (or a subordinate entity of the resource) cannot be deleted because it is a dependency of the '**RESOURCE**' entity.	The resource that the application is attempting to delete is referenced from another entity. • Use the Delete Tool to delete the referenced resource in the error message. Then retry the delete on the original resource that errored.
500: Internal Server Error.	Something unexpected happened and no specific error message could be returned. • This issue usually occurs when the ODS is having issues. Confirm that there are no issues with the ODS the data is being sent to and then attempt to retry the errored record. • Contact Campus Support if 500 errors continue to occur, can be replicated consistently, and the ODS the data is being sent to has no ongoing issues. ◦ There is a chance that Campus Ed-Fi code is sending an invalid JSON request resulting in the 500 error. ◦ There is a chance that an Ed-Fi Data Standard / API bug is causing the issue. ◦ Investigation is needed in these cases as there are many different potential causes.

Object Data Elements Logic

Data element labels below in **BOLD** are part of the natural key of this resource and are required data elements for the record to send through Ed-Fi.

- The Mandatory / Conditional / Optional column indicates what the state requires for each data element. For Core Ed-Fi connections, it indicates what the data standard requires for each data element.

	Data Element Label	Business Rule(s)	Mandatory (M) Conditional (C) Optional (O)	Data Source GUI Path	Database Field	Uses Template Logic (✓ / ✗ / EXT)
1	**educationOrganizationReference** (*reference*)	*A reference to an Education Organization (Schools, Local Education Agencies, etc.) resource associated with the Student Education Organization Association being reported.* Reports the fields that are part of the Natural Key for the Local Education Agencies resource.	M	N/A	N/A	✗
2	**studentReference** (*reference*)	*A reference to the Students resource associated with the Student Education Organization Association being reported.* Reports the fields that are part of the Natural Key for the Students resource.	M	N/A	N/A	✓

3	addresses (*array*)	*An unordered collection of studentEducation OrganizationAssociation Addresses. The set of elements that describes an address, including the street address, city, state, and ZIP code.* Reports the following data elements in an array: • Scoping Information: ◦ Addresses associated with Household Locations / Household Memberships that are marked as Private in the SIS **are still reported**. This is a state requirement. The AZ DOE treats all student-related information as PII. ◦ For both **Home** and **Mailing**: ▪ In the event of "ties" use the following priority order to determine which address to report: • Latest (Most Recent) Household Membership Start Date • Latest (Most Recent) Household Location Start Date • Oldest Address ID ▪ Only addresses that overlap the student's most recent (Latest Enrollment Start Date) reportable Enrollment (from that configuration year) will be eligible to report. ◦ For **Home** specifically: ▪ Reports the most recent (Latest Household Membership Start Date) address based on the following priority order: • Primary Households with Physical checked on Household Location associated with a Household Membership with a NULL End Date. • Secondary Households with Physical checked on Household Location associated with a Household Membership with a NULL End Date. • All Households with Physical checked on Household Location where the Household Membership End Date is within the configured year. • If no address can be found, do not report. ◦ For **Mailing** specifically: ▪ Reports the most recent (Latest Household Membership Start Date) address based on the following priority order:	O	Household Membership Related Households Address Information Enrollments	HouseholdLocation .mailing HouseholdMember .startDate HouseholdMember .endDate HouseholdLocation .startDate Address .state Address .city Address .zip Address .postOfficeBox Address .number Address .street Address .tag Address .prefix Address .dir Address .apt Enrollment .startDate Enrollment .endDate	

        - Primary Households with Mailing checked on Household Location associated with a Household Membership with a NULL End Date.
        - Secondary Households with Mailing checked on Household Location associated with a Household Membership with a NULL End Date.
        - All Households with Mailing checked on Household Location where the Household Membership End Date is within the configured year.
        - If no address can be found, do not report.
- addressTypeDescriptor
    - Report **Home** or **Mailing** depending on the address reporting.
- stateAbbreviationDescriptor
    - Reports the **State**.
- city
    - Reports the **City**.
- postalCode
    - Reports the **Zip**.
- streetNameNumber
    - Reports the **PO Box + Number + Street + Tag + Prefix + Dir**.
        - "PO Box" will only be included if P.O. Box is checked on Address Information.
- apartmentRoomSuiteNumber
    - Reports the **Apt**.
- The following data elements do not report:
    - buildingSiteNumber
    - congressionalDistrict
    - countyFIPSCode
    - doNotPublishIndicator
    - latitude
    - localeDescriptor
    - longitude
    - nameOfCounty
    - periods
        - beginDate

		▪ endDate **NOTE:** Given the reporting logic, it is possible that a student won't report both a Home and Mailing address. Arizona DOE requires that all students report with both a Home and Mailing address (Integrity Rule 51002). It is up to the district to ensure that data is entered appropriately for student addresses.				
4	hispanicLatinoEthnicity (*boolean*)	*An indication that the individual traces his or her origin or descent to Mexico, Puerto Rico, Cuba, Central, and South America, and other Spanish cultures, regardless of race. The term, "Spanish origin," can be used in addition to "Hispanic or Latino."* • Report **True** when *Is the individual Hispanic/Latino?* is set to *Y: Yes* on the current Identity record. • Report **False** in all other situations.	O	Identities	Identity .hispanicEthnicity	✅

5	languages (*array*)	*An unordered collection of studentEducationOrganizationAssociationLanguages. The language(s) the individual uses to communicate. It is strongly recommended that entries use only ISO 639-3 language codes.* Reports the following data elements in an array: • languageDescriptor ◦ Reports the Ed-Fi Code mapped to the value selected for **Home Primary Language, Most Spoken Language,** and **First Acquired Language** on the current Identity record. ▪ These mapping are hard-coded but can be overwritten using the Language Descriptor Override mapping in the Resource Preferences of the Ed-Fi Connection under the Student Education Organization Associations resource. • uses ◦ languageUseDescriptor ▪ Reports **Home language** when reporting the Home Primary Language. ▪ Reports **Spoken language** when reporting the Most Spoken Language. ▪ Reports **First Acquired Language** when reporting the First Acquired Language.	O	Identities	Identity .homePrimaryLanguage (Home Primary) .languageAlt (First Acquired) .languageAlt2 (Most Spoken)	✗
6	races (*array*)	*An unordered collection of studentEducation OrganizationAssociation Races. The general racial category which most clearly reflects the individual's recognition of his or her community or with which the individual most identifies as last reported to the education organization. The data model allows for multiple entries so that each individual can specify all appropriate races.* Reports the following data elements in an array: • raceDescriptor ◦ Reports the Ed-Fi Code mapped to each race checkbox that is checked in the current Identity record. ▪ This mapping can be found in the Resource Preferences of the Ed-Fi Connection under the Student Education Organization Associations resource.	O	Identities	RaceEthnicity .raceID	✓

7	sexDescriptor (*string*)	*A person's gender.* Reports the **Gender** from the person's most recent Identity record. • This does **NOT** consider legal information. We only report based on the preferred information. • Male reports **Male**. • Female reports **Female**. • All other codes report **Not Selected**. ◦ This will error. This is by design to indicate that the Gender selected cannot be reported.	O	Identities	Identity .gender	✅

8	studentCharacteristics (*array*)	*An unordered collection of studentEducation OrganizationAssociation StudentCharacteristics. Reflects important characteristics of a student. If a student has a characteristic present, that characteristic is considered true or active for that student. If a characteristic is not present, no assumption is made as to the applicability of the characteristic, but local policy may dictate otherwise.* Reports the following data elements in an array. Reports a record for each characteristic the student is eligible for based on below requirements. • studentCharacteristicDescriptor ◦ Reports the Ed-Fi Code mapped to the value selected for each respective area. This mapping can be found in the Resource Preferences of the Ed-Fi Connection under the Student Education Organization Associations resource. ▪ Parent in Military: Report the Ed-Fi Code mapped to the value selected for **Status** on a Military Connections record that overlaps the configured year. ▪ Foster Care: Reports the Ed-Fi Code mapped to the value selected for **Foster Care** when the student has a Foster Care program that overlaps the current configured year. ▪ Flags: Reports the Ed-Fi Code mapped to the **Flag** if the Student has a Flag record within the current configured year. ▪ 1/4 or more degree Indian blood: Reports **35** when the *1/4 more degree Indian blood* checkbox is checked on the person's current Identity record. • periods ◦ Only reports for **Foster Care** and **Parent in Military**. ◦ beginDate ▪ Reports the **Start Date** of the Program. ◦ endDate ▪ Reports the **End Date** of the Program. • The following data elements do not report: ◦ designatedBy	O	**Parent in Military:** Military Connections **Foster Care:** Foster Care **Flags:** Flags **1/4 or more degree Indian blood:** Identities	**Parent in Military:** ImpactAidEmployment .militaryStatus, .startDate, .endDate RelatedPair .guardian **Foster Care:** FosterCare .startDate, .endDate **Flags:** ProgramParticipation .startDate, .endDate **1/4 or more degree Indian blood:** Identity .certificateOfIndianBlood	

9	studentIdentificationCodes (*array*)	*An unordered collection of studentEducation OrganizationAssociation StudentIdentificationCodes. A coding scheme that is used for identification and record-keeping purposes by schools, social services, or other agencies to refer to a student.* Reports the following data elements in an array. This array will report if the Local Student Number or Student State ID fields have a value: • studentIdentificationSystemDescriptor ◦ Reports **District** when reporting the Local Student Number. • assigningOrganizationIdentificationCode ◦ Reports the **District Entity ID** when reporting the Local Student Number. ▪ First reports from School Information. ▪ If School Information is NULL, reports from District Information • identificationCode ◦ Reports the **Local Student Number**.	O	Demographics	Person .studentNumber	
10	tribalAffiliations (*array*)	*An unordered collection of studentEducation OrganizationAssociation TribalAffiliations. An American Indian tribe with which the student is affiliated as last reported to the education organization.* Reports the following data elements in an array: • tribalAffiliationDescriptor ◦ Reports the Ed-Fi Code mapped to the value selected for **Tribal Affiliation**. ▪ This mapping can be found in the Resource Preferences of the Ed-Fi Connection under the Student Education Organization Associations resource. ▪ Values can only be entered in this field if the *American Indian or Alaska Native* race checkbox is checked. ◦ A record will report for each uniquely mapped Tribal Affiliation value. ◦ Does not report if Tribal Affiliation is NULL or not mapped.	C	Identities	RaceSubcategory .subcategory	

11	azTribalAffiliations (*string*)	*An unordered collection of studentEducation OrganizationAssociation AZTribalAffiliations. An American Indian tribe with which an individual is affiliated.* Reports the following data elements in an array: • tribalAffiliationDescriptor ◦ Reports the Ed-Fi Code mapped to the value selected for **Tribal Enrollment**. ▪ This mapping can be found in the Resource Preferences of the Ed-Fi Connection under the Student Education Organization Associations resource. ▪ Values can only be entered in this field if the *American Indian or Alaska Native* race checkbox is checked. ◦ Does not report if Tribal Enrollment is NULL or not mapped. • isEnrolled ◦ Reports **True**. ▪ This is hard-coded as we only report the Tribal Enrollment in this array.	C	Identities	Identity .tribalEnrollment	EXT
12	ancestryEthnicOrigins	This data element is optional and does not report.	O	N/A	N/A	N/A
13	barrierTo InternetAccess InResidenceDescriptor	This data element is optional and does not report.	O	N/A	N/A	N/A
14	cohortYears	This data element is optional and does not report.	O	N/A	N/A	N/A
15	disabilities	This data element is optional and does not report.	O	N/A	N/A	⊗
16	electronicMails	This data element is optional and does not report.	O	N/A	N/A	⊗
17	internationalAddresses	This data element is optional and does not report.	O	N/A	N/A	N/A
18	internetAccessInResidence	This data element is optional and does not report.	O	N/A	N/A	N/A

19	internetAccess TypeInResidence Descriptor	This data element is optional and does not report.	O	N/A	N/A	N/A
20	internetPerformance InResidenceDescriptor	This data element is optional and does not report.	O	N/A	N/A	N/A
21	limitedEnglish ProficiencyDescriptor	This data element is optional and does not report.	O	N/A	N/A	⊗
22	loginId	This data element is optional and does not report.	O	N/A	N/A	N/A
23	oldEthnicityDescriptor	This data element is optional and does not report.	O	N/A	N/A	N/A
24	primaryLearning DeviceAccessDescriptor	This data element is optional and does not report.	O	N/A	N/A	N/A
25	primaryLearning DeviceAwayFrom SchoolDescriptor	This data element is optional and does not report.	O	N/A	N/A	N/A
26	primaryLearning DeviceProvider Descriptor	This data element is optional and does not report.	O	N/A	N/A	N/A
27	profileThumbnail	This data element is optional and does not report.	O	N/A	N/A	N/A
28	programParticipations	This data element is optional and does not report.	O	N/A	N/A	N/A
29	studentIndicators	This data element is optional and does not report.	O	N/A	N/A	⊗
30	telephones	This data element is optional and does not report.	O	N/A	N/A	⊗

Appendix