

# AZ Ed-Fi Suite v7.3, Data Standard v6.0: Student Directories (SY 26-27)

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## Summary

The contact information associated to a student.

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## Object Triggering Logic

Action	Business Rule(s)
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Post

Reports a record when an Enrollment is saved and overlaps the configured year.

- This entity will only report a record if the Ed-Fi Configuration is tied to School Year 26-27 or higher.
  - This entity is not present in past configurations for AZ.
- 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 entity's natural key. A PUT will be performed otherwise.

- 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 Demographics:
  - Student State ID
- 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

	<ul style="list-style-type: none"> <li>• When any of the following information is changed on Address Information:             <ul style="list-style-type: none"> <li>◦ Address ID (New Address)</li> <li>◦ P.O. Box</li> <li>◦ Number</li> <li>◦ Prefix</li> <li>◦ Street</li> <li>◦ Tag</li> <li>◦ Direction</li> <li>◦ Apt</li> <li>◦ City</li> <li>◦ State</li> <li>◦ Zip</li> </ul> </li> <li>• Changes to Resource Preferences mappings <b>do NOT trigger</b>. A manual resync must be performed on the resource if mappings are changed.</li> </ul>
Delete	<ul style="list-style-type: none"> <li>• When the student is now excluded in some way.</li> <li>• When the Enrollment is deleted.</li> <li>• When the Enrollment dates are changed to no longer overlap the configured year.</li> <li>• When a record is in the Ed-Fi Identity Mapping Report but cannot be found on the Campus site.</li> </ul>

## Required Entities (Upstream)

The following entities must be sent prior to this entity:

- Local Education Agencies (Pre-populated)
  - Students
- 

## Dependent Entities (Downstream)

The following entities are dependent on this entity (must be sent after this entity):

- 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 entity. 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 ' <b>ENTITY</b> ' failed. <b>FIELD</b> is required.	<p>An element of the JSON that is required is missing and needs to be added.</p> <ul style="list-style-type: none"> <li>• Double check that all bolded data elements below are reporting a valid value and no data elements below are reporting an invalid value.</li> </ul>

<p>400: '<b>ENTITY</b>' failed. <b>ENTITY</b> reference could not be resolved.</p>	<p>A entity that was referenced from a difference entity does not yet exist.</p> <ul style="list-style-type: none"> <li>• Resync the entity being mentioned in the error, then resync the errored entity. Alternatively, the entity 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.</li> </ul>
<p>403: Authorization denied. The claim does not have any established relationships with the requested entity.</p>	<p>The key/secret being used does not have permission to send a record for the entity / referenced entity.</p> <ul style="list-style-type: none"> <li>• Double check your API credentials (key/secret). Sometimes specific keys/secrets cannot report specific entities.</li> <li>• The referenced person (student, staff, parent, contact, etc.) has not yet been associated to the key/secret. Resync their "linking" entity (Students → Student School Associations, Staffs → Staff Education Organization Assignment Associations, etc.) then resync the errored entity.</li> <li>• The referenced person (student, staff, parent, contact, etc.) may not exist in the ODS yet. Resync the "person" entity and the "linking" entity (Students → Student School Associations, Staffs → Staff Education Organization Assignment Associations, etc.) then resync the errored entity.</li> </ul>
<p>404: Failed to delete '<b>ENTITY</b>'. Record does not exist.</p>	<p>The attempt to delete a specific Ed-Fi record ID in the ODS failed because it did not exist.</p> <ul style="list-style-type: none"> <li>• This error can be ignored. The ID was cleared from the Ed-Fi Identity Mapping Report and will not attempt to delete again.</li> </ul>

<p>409: A natural key conflict occurred when attempting to create a new entity '<b>ENTITY</b>' with a duplicate key.</p>	<p>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.</p> <ul style="list-style-type: none"> <li>• Check for duplicate data in your Campus site. If no duplicate data can be found, report the issue to Campus Support.             <ul style="list-style-type: none"> <li>◦ 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.</li> </ul> </li> </ul>
<p>409: The entity (or a subordinate entity of the entity) cannot be deleted because it is a dependency of the '<b>ENTITY</b>' entity.</p>	<p>The entity that the application is attempting to delete is referenced from another entity.</p> <ul style="list-style-type: none"> <li>• Use the Delete Tool to delete the referenced entity in the error message. Then retry the delete on the original entity that errored.</li> </ul>



<p>500: Internal Server Error.</p>	<p>Something unexpected happened and no specific error message could be returned.</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.             <ul style="list-style-type: none"> <li>◦ There is a chance that Campus Ed-Fi code is sending an invalid JSON request resulting in the 500 error.</li> <li>◦ There is a chance that an Ed-Fi Data Standard / API bug is causing the issue.</li> <li>◦ Investigation is needed in these cases as there are many different potential causes.</li> </ul> </li> </ul>
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### Object Data Elements Logic

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

<b>Data Element Label</b>	<b>Business Rule(s)</b>	<b>Data Source GUI Path</b>	<b>Database Field</b>
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<p><b>educationOrganizationReference</b> (reference)</p>	<p><i>A reference to an Education Organization (Schools, Local Education Agencies, etc.) resource associated with the Student Directory being reported.</i></p> <hr/> <p>Reports the fields that are part of the Natural Key for the Local Education Agencies resource.</p>	<p>N/A</p>	<p>N/A</p>
<p><b>studentReference</b> (reference)</p>	<p><i>A reference to the Students resource associated with the Student Directory being reported.</i></p> <hr/> <p>Reports the fields that are part of the Natural Key for the Students resource.</p>	<p>N/A</p>	<p>N/A</p>

<p>addresses (array)</p>	<p><i>An unordered collection of studentDirectoryAddresses. The set of elements that describes an address, including the street address, city, state, and ZIP code.</i></p> <hr/> <p>Reports the following data elements in an array:</p> <ul style="list-style-type: none"> <li>• Scoping Information:             <ul style="list-style-type: none"> <li>◦ Addresses associated with Household Locations / Household Memberships that are marked as Private in the SIS <b>are still reported</b>. This is a state requirement. The AZ DOE treats all student-related information as PII.</li> <li>◦ For both <b>Home</b> and <b>Mailing</b>:                 <ul style="list-style-type: none"> <li>▪ In the event of "ties" use the following priority order to determine which address to report:                     <ul style="list-style-type: none"> <li>• Latest (Most Recent) Household Membership Start Date</li> <li>• Latest (Most Recent) Household Location Start Date</li> <li>• Oldest Address ID</li> </ul> </li> <li>▪ Only addresses that overlap the student's most recent (Latest Enrollment Start Date) reportable</li> </ul> </li> </ul> </li> </ul>	<p>Household Membership</p> <p>Related Households</p> <p>Address Information</p> <p>Enrollments</p>	<p>HouseholdLocation.mailing</p> <p>HouseholdMember.startDate</p> <p>HouseholdMember.endDate</p> <p>HouseholdLocation.startDate</p> <p>Address.state</p> <p>Address.city</p> <p>Address.zip</p> <p>Address.postOfficeBox</p> <p>Address.number</p> <p>Address.street</p> <p>Address.tag</p> <p>Address.prefix</p> <p>Address.dir</p>
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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:
    - Primary Households with Mailing checked on Household Location associated with a Household

Address.apt

Enrollment.startDate

Enrollment.endDate

- 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.		
electronicMails	This data element is optional and does not report.	N/A	N/A
internationalAddresses	This data element is optional and does not report.	N/A	N/A
telephones	This data element is optional and does not report.	N/A	N/A

## Appendix