Core Ed-Fi Suite v3.6.1, Data Standard v4.0: Programs

February
2025

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Summary

This entity represents any program designed to work in conjunction with, or as a supplement to, the main academic program. Programs may provide instruction, training, services, or benefits through federal, state, or local agencies. Programs may also include organized extracurricular activities for students.

Object Triggering Logic

Action	Business Rule(s)
Post	Report a record when a Flag or Program is mapped to an Ed-Fi Program Type Descriptor and a resync is completed. • "Program" here is defined as pre-set Programs in the Resource Preferences mapping for the Programs resource. Custom Programs created by the District / School are not able to be mapped. • There must be at least one student with the mapped Flag to report a Programs record. • The Programs record is posted only once. All downstream resources will reference the same Programs record.

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Delete /Post
 	
Put
	A DELETE / POST will be performed if the data element being altered is part of the resource's natural key. A PUT will be performed otherwise.
	
	• When any of the following information is changed on Flags Setup:
	  ○ Flag ID (New Flag)
	  ○ Name
	• When any of the following information is changed on Academic Program Setup (for CTE programs):
	  ○ Academic Program ID (New Academic Program)
	• Changes to Resource Preferences mappings **do NOT trigger**. A manual resync must be performed on the resource if mappings are changed.

Delete	• Programs records are **NOT** deleted automatically. • The Delete Tool must be used to delete a Programs record. ○ This will only work if all downstream data has been removed from the ODS.

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Required Resources (Upstream)

The following resources must be sent prior to this resource:

- Local Education Agencies

Dependent Resources (Downstream)

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

- Staff Program Associations
- Student CTE Program Associations
- Student Homeless Program Associations
- Student Language Instruction Program Associations
- Student Migrant Education Program Associations
- Student Neglected Or Delinquent Program Associations
- Student Program Associations
- Student Program Attendance Events
- Student School Food Service Program Associations
- Student Special Education Program Associations
- Student Title 1 Part A Program Associations

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.

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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	**programName** (*string*)	*The formal name of the program of instruction, training, services, or benefits available through federal, state, or local agencies.*
		
		Flags:
		
		- Reports the **Flag Name**.
		
		Programs:
		
		- Report the **Program Type Descriptor** that the Program is mapped to.
		  ○ This mapping can be found in the Resource Preferences of the Ed-Fi Connection under the Programs resource.
		  ○ e.g. "Student Homeless Program Associations would report as "Homeless" if it was mapped to the "Homeless" code.
			M	Flag Setup
				
				Resource Preferences
					Program . programID
					
					EdFiMapping .edFiValue
						✅

2	**programTypeDescriptor** (*string*)	*The type of program.* **Flags:** • Reports the Ed-Fi Code mapped to the Flag reporting. ○ This mapping can be found in the Resource Preferences of the Ed-Fi Connection under the Programs resource. **Programs:** • Reports the Ed-Fi Code mapped to the Program reporting. ○ This mapping can be found in the Resource Preferences of the Ed-Fi Connection under the Programs resource.	M	Resource Preferences	EdFiMapping .edFiValue	✅
3	**educationOrganizationReference** (*reference*)	*A reference to an Education Organization (Schools, Local Education Agencies, etc.) resource associated with the Program being reported.* Reports the fields that are part of the Natural Key for the Local Education Agencies resource.	M	N/A	N/A	✅

4	programId (*string*)	*A unique number or alphanumeric code assigned to a program by a school, school system, a state, or other agency or entity.* **Flags** and **CTE Programs**: • Reports the **Program ID**. **Programs:** • Reports **1**.	O	Flags Setup Academic Programs Setup	Program . programID	✅
5	characteristics	This data element is optional and does not report.	O	N/A	N/A	N/A
6	learningObjectives	This data element is optional and does not report.	O	N/A	N/A	N/A
7	learningStandards	This data element is optional and does not report.	O	N/A	N/A	N/A
8	services	This data element is optional and does not report.	O	N/A	N/A	N/A
9	sponsors	This data element is optional and does not report.	O	N/A	N/A	N/A

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Appendix

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