AZ Ed-Fi Suite v7.3, Data Standard v5.2: Course Transcripts (SY 25-26)

Table of Contents

Summary

This entity is the final record of a student's performance in their courses at the end of a semester or school year.

Object Triggering Logic

Action	Business Rule(s)

Post	Reports a record when a student has a Transcript for a Course with a State Code that overlaps the configured year **AND** the Student's Grade is in 9-12 **OR**
	Reports a record when a student has a Grade posted to a Grading Task that is marked as State Reported **AND** the Student's Grade is in K-8.

- A record is only reported for Enrollments, Transcripts, and Grades 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.
- 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!*
  - Course Inactive
  - Course State Exclude
  - Course Cross Site
  - Calendar Exclude
  - School Exclude

Delete/Post	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.
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 Transcripts:
  - Transcript ID (New Transcript)
  - Attempted Credits
  - Earned Credits
  - Course Number
  - Course Name
  - State Code
  - Score
  - Grade
  - School Year
  - Ed-Fi Term Type
  - Ed-Fi Course Result Override
- When any of the following information is changed on Enrollments:
  - Enrollment ID (New Period Schedule)
  - Start Date
  - End Date
  - No Show
- When any of the following information is changed on Course Information:
  - Course ID (New Course)
  - State Code
  - Active
  - Cross Site
- When any of the following information is changed on Grades:

	- Score - Passing - Changes to Resource Preferences mappings **do NOT trigger**. A manual resync must be performed on the resource if mappings are changed.
Delete	- When the Transcript record is deleted. - When the Grade is deleted. - When the associated Enrollment is deleted or made to no longer overlap the configured year. - When the Student is now excluded in some way. - 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:

- Courses
- Student Academic Records

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 | **courseAttempt ResultDescriptor** (*string*) | *The result from the student's attempt to take the course.*

When reporting from a State Reported Grading Task or Standard (K-8 Outcomes):

• Reports **Pass** if the Score Group / Rubric used for posting the grade has the Passing checkbox checked for the grade given to the student.
• Reports **Fail** in all other situations.
• **Note:** We do not report "Incomplete," "Withdrawn," or "Not Applicable" results for State Reported Grading Tasks and Standards.

When reporting from the Transcript (HS Outcomes):

• Reports the Ed-Fi Code mapped to the value selected for **Ed-Fi Course Result Override**.
  ○ If Ed-Fi Course Result Override is NULL, reports from the Ed-Fi Code mapped to the calculated value based on **Credits Earned** and **Credits Attempted**.
  ○ These mappings can be found in the Resource Preferences of the Ed-Fi Connection under the Course Transcripts resource. | M | Transcripts | TranscriptCredit .creditsAttempted, .creditsEarned

TranscriptCourse .edFiCourseResult | ⊗ |

2	**courseReference** (*reference*)	A reference to the Courses resource associated with the Course Transcript being reported.
		
		Reports the fields that are part of the Natural Key for the Courses resource.
		
		• courseCode
		  ◦ Reports the **State Code**.
		• educationOrganizationId
		  ◦ Reports **79275**.
		    ▪ This is the ID for the AZ DOE.
		    ▪ AZ DOE "owns" all Courses records.
			M	N/A	N/A	❌

3	**studentAcademic RecordReference** (*reference*)	A reference to the Student Academic Records resource associated with the Course Transcript being reported. Reports the fields that are part of the Natural Key for the Student Academic Records resource.	M	N/A	N/A	✅
4	alternativeCourseTitle (*string*)	The descriptive name given to a course of study offered in the school, if different from the CourseTitle. Reports the **Course Name**.	M	Transcripts Course Information	TranscriptCourse .courseName Course .name	✅

| 5 | attemptedCredits (*number*) | *The value of credits or units of value awarded for the completion of a course.*

When reporting from a State Reported Grading Task or Standard:

• Reports **1** for students in Grades K-8.

When reporting from the Transcript:

• Reports **Credits Attempted** for all other students. | M | Transcripts | TranscriptCredit .creditsAttempted | ❌ |
| 6 | courseTitle (*string*) | *The descriptive name given to a course of study offered in a school or other institution or organization. In departmentalized classes at the elementary, secondary, and postsecondary levels (and for staff development activities), this refers to the name by which a course is identified (e.g., American History, English III). For elementary and other non-departmentalized classes, it refers to any portion of the instruction for which a grade or report is assigned (e.g., reading, composition, spelling, language arts).*

Reports the **Course Name**. | M | Transcripts

Course Information | TranscriptCourse .courseName

Course .name | ✅ |

7	earnedCredits (*number*)	*The value of credits or units of value awarded for the completion of a course.* When reporting from a State Reported Grading Task or Standard: • Reports **1** for students in Grades K-8. When reporting from the Transcript: • Reports **Credits Earned** for all other students.	M	Transcripts	TranscriptCredit .creditsEarned	❌
8	finalLetterGradeEar ned (*string*)	*The final indicator of student performance in a class as submitted by the instructor.* When reporting from a State Reported Grading Task or Standard: • Reports the **Score Name**. When reporting from the Transcript: • Reports the **Score**.	M	Grades Transcripts	ScoreListItem .name TranscriptCourse .score	✅

9	whenTakenGradeLevelDescriptor (*string*)	*Student's grade level at time of course.*	M	Student Information > General > Enrollments > Grade	Enrollment.grade TranscriptCourse.grade	⊗
		When reporting from a State Reported Grading Task or Standard:				
		• Reports the **Grade Level** associated with the enrollment when they completed the course.				
		○ This mapping can be found in the Resource Preferences of the Ed-Fi Connection under the Grade Levels resource.				
		• If the student has multiple enrollments, the following priority list is used:				
		○ Local Service Type:				
		▪ P: Primary				
		▪ T: AOI				
		▪ A: Ancillary				
		▪ O: Program Only				
		○ Latest Start Date				
		○ Highest Enrollment ID				
		When reporting from the Transcript:				
		• Reports the Ed-Fi Code mapped to the value selected for **Grade**.				
		○ This mapping can be found in the Resource Preferences of the Ed-Fi Connection under the Grade Levels resource.				

10	finalLetterGradeDescriptor (*string*)	*The final indicator of student performance in a class as submitted by the instructor.* --- Reports the Ed-Fi Code mapped to the value selected for **Score** (Transcript) or **Score Name** (State Reporting Grading Task or Standard). • This mapping can be found in the Resource Preferences of the Ed-Fi Connection under the Course Transcripts resource.	O	Grades Transcripts	ScoreListItem .name TranscriptCourse .score	EXT
11	externalEducation OrganizationReference	This data element is optional and does not report.	O	N/A	N/A	N/A
12	academicSubjects	This data element is optional and does not report.	O	N/A	N/A	N/A
13	alternativeCourseCode	This data element is optional and does not report.	O	N/A	N/A	N/A
14	alternativeCourse IdentificationCodes	This data element is optional and does not report.	O	N/A	N/A	N/A
15	assigningOrganization IdentificationCode	This data element is optional and does not report.	O	N/A	N/A	N/A
16	attemptedCreditConversion	This data element is optional and does not report.	O	N/A	N/A	N/A
17	attemptedCreditTypeDescriptor	This data element is optional and does not report.	O	N/A	N/A	N/A

1 8	courseCatalogURL	This data element is optional and does not report.	O	N/A	N/A	N/A
1 9	courseRepeatCode Descriptor	This data element is optional and does not report.	O	N/A	N/A	N/A
2 0	creditCategories	This data element is optional and does not report.	O	N/A	N/A	N/A
2 1	earnedAdditionalCr edits	This data element is optional and does not report.	O	N/A	N/A	N/A
2 2	earnedCreditConve rsion	This data element is optional and does not report.	O	N/A	N/A	N/A
2 3	earnedCreditTypeD escriptor	This data element is optional and does not report.	O	N/A	N/A	N/A
2 4	externalEducation OrganizationName OfInstitution	This data element is optional and does not report.	O	N/A	N/A	N/A
2 5	finalNumericGrade Earned	This data element is optional and does not report.	O	N/A	N/A	❌
2 6	methodCreditEarne dDescriptor	This data element is optional and does not report.	O	N/A	N/A	N/A
2 7	partialCourseTrans criptAwards	This data element is optional and does not report.	O	N/A	N/A	N/A

Appendix