

# **Core Ed-Fi Suite v3.6.1, Data Standard v4.0: Student Assessments**

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## Summary

This entity represents the analysis or scoring of a student's response on an assessment. The analysis results in a value that represents a student's performance on a set of items on a test.

## Object Triggering Logic

Action	Business Rule(s)
Post	<p>When an Assessment is assigned to a Student <b>AND</b> the Assessment Date or Test Start Date is within the current configured year <b>AND</b> the associated student has an enrollment in the configured year.</p> <ul style="list-style-type: none"> <li>• A record is only reported for Assessment records and Enrollments in the same School Year as the Ed-Fi Connection sending the record.                             <ul style="list-style-type: none"> <li>◦ School Year dates are defined in School Year Setup.                                     <ul style="list-style-type: none"> <li>▪ If Start Date is NULL, 07/01/StartYear will be used.</li> <li>▪ If End Date is NULL, 06/30/EndYear will be used.</li> </ul> </li> </ul> </li> <li>• Do not report a record if the any of the following exclusions are present:                             <ul style="list-style-type: none"> <li>◦ Enrollment No Show</li> <li>◦ Calendar Exclude</li> <li>◦ School Exclude</li> </ul> </li> </ul>

<p>Delete /Post</p> <p>Put</p>	<p>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.</p> <ul style="list-style-type: none"> <li>• When any of the following information is changed on Assessments:             <ul style="list-style-type: none"> <li>◦ Assessment ID (New Assessment)</li> <li>◦ Parent</li> <li>◦ Start Date</li> <li>◦ End Date</li> </ul> </li> <li>• When any of the following information is changed on Assessment Scores:             <ul style="list-style-type: none"> <li>◦ Score ID (New Assessment Score)</li> <li>◦ Assessment</li> <li>◦ Date</li> <li>◦ Raw Score</li> <li>◦ Scale Score</li> <li>◦ Percent</li> <li>◦ Percentile</li> <li>◦ Result</li> <li>◦ Normal Curve Equivalent</li> <li>◦ Proficiency Value</li> </ul> </li> <li>• When any of the following information is changed on Enrollments:             <ul style="list-style-type: none"> <li>◦ Enrollment ID (New Enrollment)</li> <li>◦ Start Date</li> <li>◦ End Date</li> <li>◦ No Show</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>
<p>Delete</p>	<ul style="list-style-type: none"> <li>• When the Assessment Score is deleted or no longer overlaps the configured year.</li> <li>• When the Enrollment is deleted or no longer overlaps the configured year.</li> <li>• When the Student is now excluded in some way.</li> <li>• When a record is in the Ed-Fi Identity Mapping Report but cannot be found on the Campus site.</li> </ul>

## Required Resources (Upstream)

The following resources must be sent prior to this resource:

- Assessments
- Students
- Schools

## 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 ' <b>RESOURCE</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>
400: ' <b>RESOURCE</b> ' failed. <b>RESOURCE</b> reference could not be resolved.	<p>A resource that was referenced from a difference resource does not yet exist.</p> <ul style="list-style-type: none"> <li>• 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.</li> </ul>

<p>403: Authorization denied. The claim does not have any established relationships with the requested resource.</p>	<p>The key/secret being used does not have permission to send a record for the resource / referenced resource.</p> <ul style="list-style-type: none"> <li>• Double check your API credentials (key/secret). Sometimes specific keys/secrets cannot report specific resources.</li> <li>• 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.</li> <li>• 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.</li> </ul>
<p>404: Failed to delete '<b>RESOURCE</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 resource '<b>RESOURCE</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 resource (or a subordinate entity of the resource) cannot be deleted because it is a dependency of the '<b>RESOURCE</b>' entity.</p>	<p>The resource 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 resource in the error message. Then retry the delete on the original resource that errored.</li> </ul>

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.

	<b>Data Element Label</b>	<b>Business Rule(s)</b>	<b>Mandatory (M) Conditional (C) Optional (O)</b>	<b>Data Source GUI Path</b>	<b>Database Field</b>	<b>Uses Template Logic</b>  (✓ / ✗ / EXT)
1	<b>studentAssessmentIdentifier</b> (string)	<i>A unique number or alphanumeric code assigned to an assessment administered to a student.</i>	M	Assessment	TestScore .scoreID	✓
2	<b>assessmentReference</b> (reference)	<i>A reference to the Assessments resource associated with the Student Assessment being reported.</i>  Reports the fields that are part of the Natural Key for the Assessments resource.	M	N/A	N/A	✓
3	<b>reportedSchoolReference</b> (reference)	<i>A reference to the Schools resource associated with the Student Assessment being reported.</i>  Reports the fields that are part of the Natural Key for the Schools resource.	M	N/A	N/A	✓

4	<b>studentReference</b> ( <i>reference</i> )	<p><i>A reference to the Students resource associated with the Student Assessment being reported.</i></p> <hr/> <p>Reports the fields that are part of the Natural Key for the Students resource.</p>	M	N/A	N/A	✓
5	administrationDate ( <i>date</i> )	<p><i>The date and time an assessment was completed by the student. The use of ISO-8601 formats with a timezone designator (UTC or time offset) is recommended in order to prevent ambiguity due to time zones.</i></p> <hr/> <p>Report the <b>Date</b> of the Assessment.</p> <ul style="list-style-type: none"> <li>• Report the <b>Test Start Date</b> when the Date of the Assessment is NULL.</li> <li>• Does not report if Test Start Date and the Date of the Assessment are NULL.</li> </ul>	O	Assessment	TestScore .date Test .startDate	✓
6	assessedMinutes ( <i>integer</i> )	<p><i>Reported time student was assessed in minutes.</i></p> <hr/> <p>Reports <b>0</b>.</p> <ul style="list-style-type: none"> <li>• This value is hard-coded and cannot be changed.</li> </ul>	O	N/A	N/A	✓



7	period (array)	<p><i>Collects information on when the assessment was taken.</i></p> <hr/> <p>Reports the following data elements in an array:</p> <ul style="list-style-type: none"> <li>• assessmentPeriodDescriptor             <ul style="list-style-type: none"> <li>◦ Reports the Ed-Fi Code mapped to the value selected for <b>Assessment</b> <ul style="list-style-type: none"> <li>▪ This mapping can be found in the Resource Preferences of the Ed-Fi Connection under the Student Assessments resource.</li> </ul> </li> </ul> </li> <li>• beginDate             <ul style="list-style-type: none"> <li>◦ Reports the <b>Test Start Date</b>.</li> </ul> </li> <li>• endDate             <ul style="list-style-type: none"> <li>◦ Reports the <b>Test End Date</b>.</li> </ul> </li> </ul>	O	Assessment	<p>TestScore .testID</p> <p>Test .startDate</p> <p>Test .endDate</p>	✓
8	scoreResults (array)		O	Assessment	<p>TestScore .rawScore, .scaleScore, .percent, .percentile, .result, .normalCurveEquivalent, .proficiencyValue</p>	✓

*An unordered collection of studentAssessment ScoreResults. A meaningful score or statistical expression of the performance of an individual. The results can be expressed as a number, percentile, range, level, etc.*

Reports the following data elements in an array:

- assessmentReportingMethodDescriptor
  - Reports the Ed-Fi Code mapped to the value selected for **Score Type**.
    - This mapping can be found in the Resource Preferences of the Ed-Fi Connection under the Student Assessments resource.
    - Does not report the Score if the associated Score Type does not have an Ed-Fi Code mapped to it.
- resultDatatypeTypeDescriptor
  - Reports **Decimal** when the Score Type reporting is Raw Score, Scale Score, or Normal Curve Equivalent.
  - Reports **Percentage** when the Score Type reporting is Percent.
  - Reports **Percentile** when the Score Type reporting is Percentile.
  - Reports **Level** when the Score Type reporting is Result or Proficiency Value.
- result
  - Reports the **Score** of the associated Score Type being entered.

9	schoolYearTypeReference	This data element is optional and does not report.	O	N/A	N/A	N/A
10	accommodations	This data element is optional and does not report.	O	N/A	N/A	N/A
11	administrationEndDate	This data element is optional and does not report.	O	N/A	N/A	N/A
12	administrationEnvironmentDescriptor	This data element is optional and does not report.	O	N/A	N/A	N/A
13	administrationLanguageDescriptor	This data element is optional and does not report.	O	N/A	N/A	N/A
14	eventCircumstanceDescriptor	This data element is optional and does not report.	O	N/A	N/A	N/A
15	eventDescription	This data element is optional and does not report.	O	N/A	N/A	N/A
16	items	This data element is optional and does not report.	O	N/A	N/A	N/A
17	performanceLevels	This data element is optional and does not report.	O	N/A	N/A	N/A
18	platformTypeDescriptor	This data element is optional and does not report.	O	N/A	N/A	N/A
19	reasonNotTestedDescriptor	This data element is optional and does not report.	O	N/A	N/A	N/A
20	reportedSchoolIdentifier	This data element is optional and does not report.	O	N/A	N/A	N/A
21	retestIndicatorDescriptor	This data element is optional and does not report.	O	N/A	N/A	N/A
22	serialNumber	This data element is optional and does not report.	O	N/A	N/A	N/A

23	studentObjectiveAssessments	This data element is optional and does not report.	O	N/A	N/A	N/A
24	whenAssessedGradeLevelDescriptor	This data element is optional and does not report.	O	N/A	N/A	N/A

## Appendix