

# **NE Ed-Fi Suite v3.6.1, Data Standard v4.0: Grades**

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## Summary

This educational entity represents an overall score or assessment tied to a course over a period of time (i.e., the grading period). Student grades are usually a compilation of marks and other scores.

## Object Triggering Logic

Action	Business Rule(s)
Post	<ul style="list-style-type: none"> <li>• When a grade is posted to a Grading Task that is mapped to an Ed-Fi Grade Type and marked as State Reported</li> <li>• Standards will not report to Ed-Fi</li> <li>• Do not report if the Course is marked as Inactive or State Excluded</li> <li>• Do not send records if the Calendar Exclude check box is checked</li> <li>• Do not send if the student's enrollment is in a School marked as Exclude</li> <li>• Check to see if the student has a Student Section Association in the Ed-Fi identity Mapping table before sending.               <ul style="list-style-type: none"> <li>◦ If the Student Section Association exists, continue with processing the record to Ed-Fi</li> <li>◦ If the Student Section Association does not exist, the record will go to the Error Log with a message stating: Student (First Name Last Name, Ed-Fi ID) does not have a Student Section Association record for the course (Course Number Course Name). This record must exist before Grades can be sent.</li> </ul> </li> <li>• Do not send if the student's enrollment is marked as No Show or State Exclude</li> </ul>

Delete /Post Put	<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 field that is part of the Natural Key is changed</li><li>• When a grade is updated on a Grading Task that is mapped to an Ed-Fi Grade Type</li></ul>
Delete	<ul style="list-style-type: none"><li>• When a grade is deleted from a Grading Task that is mapped to an Ed-Fi Grade Type</li><li>• When the Student School Association record is deleted for the school in which the grades are associated</li></ul>

## Required Resources (Upstream)

The following resources must be sent prior to this resource:

- Grading Periods
- Student Section Associations
- Learning Standards

## 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.	An element of the JSON that is required is missing and needs to be added. <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.	A resource that was referenced from a difference resource does not yet exist. <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.	<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 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	id	<i>The unique identifier of the resource.</i>	M			✓
2	<b>gradeTypeDescriptor</b>	<i>The type of grade (e.g., Exam, Final, Grading Period, Progress Report)</i>  1. Reports the Ed-Fi Code from mapping for the Grading Task or Rubric 2. If the grading task or Rubric is not mapped, do not report	M	Grading & Standards> Grading Tasks	gradingTask	✓

3	<b>gradingPeriodReference</b>	<p><i>A reference to the related GradingPeriod resource</i></p> <hr/> <p>1. Reports the fields that are part of the Natural Key for the Grading Period the Grading Task or Standard is aligned to</p> <p>a. Only report to Grading Periods that are aligned to the Term Schedule the grade was posted in</p>	M			✓
4	<b>studentSectionAssociationReference</b>	<p><i>A reference to the related Student Section Association resource</i></p> <hr/> <p>1. Reports the fields that are part of the Natural Key for the Student Section Association resource</p>	M			✓
5	<b>letterGradeEarned</b>	<p><i>A final or interim (grading period) indicator of student performance in a class as submitted by the instructor.</i></p> <hr/> <p>1. When a Grading Task is mapped to an Ed-Fi code of "Final: Final" and the student is assigned a grade mapped to a grading task with Final Grade, then report the grade regardless of roster end date.</p> <p>2. If no grade is mapped to final grade, do not report.</p> <p><b>Note:</b> Send a final grade when a student drops from a section in the first term of a section that spans multiple terms and a grade has been assigned after the student has dropped.</p>	C	Grading & Standards> Score Groups & Rubrics> Score	gradingscore. score	✓



6	numericGradeEarned	<p><i>A final or interim (grading period) indicator of student performance in a class as submitted by the instructor.</i></p> <hr/> <ol style="list-style-type: none"> <li>1. When a Grading Task is mapped to an Ed-Fi code of "Final: Final" and the student is assigned a grade mapped to a grading task with Final Grade, then report the grade regardless of roster end date.</li> <li>2. If no grade is mapped to final grade, do not report.</li> </ol> <p><b>Note:</b> Send a final grade when a student drops from a section in the first term of a section that spans multiple terms and a grade has been assigned after the student has dropped.</p>	C	Grading & Standards> Score Groups & Rubrics> Score	gradingscore.score	✓
7	learningStandardGrades	<p><i>An unordered collection of gradeLearningStandardGrades. A collection of learning standards associated with the grade</i></p>	O	N/A	N/A	✓

## Appendix