IN Ed-Fi Suite v3.6.1, Data Standard v4.0: Student School Attendance Events

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Summary

This event entity represents the recording of whether a student is in attendance on a daily basis at their school.

Object Triggering Logic

Action	Business Rule(s)

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POST	Reports a record when the student has attendance events entered **OR** when the student has no attendance events but it is a day marked as Attendance.
	• 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 ○ Calendar Exclude ○ School Exclude • The attendance date being reported must fall on or between the enrollment start and end dates. • The attendance date being reported must be marked as Attendance on the Calendar > Day tab. • A maximum of two records will be sent for any given student/day combination. The sum of the eventDurations on these records must equal 1. • Local attendance codes are mapped to State Codes through System Administration > Attendance > Attendance Codes > State Code. These State Codes are then mapped to Ed-Fi Codes in Resource Preferences. The Local attendance code must be mapped to a State Code for it to report properly.
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 the following negative attendance information is changed: ○ Attendance Code ○ Present Minutes ○ Comments • When the following enrollment information is changed: ○ Start Date ○ End Date ○ State Exclude ○ No Show ○ Service Type
DELETE	• When all reportable enrollments are deleted. • When information is changed that makes the student have no reportable attendance information for the day.

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Required Resources (Upstream)

The following resources must be sent prior to this resource:

- Schools (Pre-populated)
- Sessions
- Students

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

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.

	Data Element Label	Business Rule(s)	Mandatory (M) Conditional (C) Optional (O)	Data Source GUI Path	Database Field	Uses Template Logic (✓ / ✗ / EXT)
1	**attendanceEventCategoryDescriptor** (*string*)	*A code describing the attendance event, for example: Present Unexcused absence Excused absence Tardy.* <hr> Reports the Ed-Fi Code mapped to the **Attendance State Code** that is determined as the 1st place or 2nd place attendance status code for the day. • See below in eventDuration for the calculation that determines the "1st place" and "2nd place" attendance status codes. • When there are no negative attendance codes listed for the day, and the student is eligible to report for that particular day, report the Ed-Fi Code mapped to the **In Attendance** code. ○ We assume the student was "In Attendance" if no negative attendance codes are entered.	M	Attendance	Attendance . excuseID AttendanceExcuse .stateCode	✗

2	**eventDate** (*date*)	*Date for this attendance event.* Reports the **Date** being reported.	M	Attendance	Attendance .date	✅
3	**schoolReference** (*reference*)	*A reference to the Schools resource associated with the Student School Attendance Events being reported.* Reports the fields that are part of the Natural Key for the Schools resource. • educationOrganizationId = **10 + State District Number + State School Number**	M	District Information School Information	District .number School .number	❌
4	**sessionReference** (*reference*)	*A reference to the Sessions resource associated with the Student School Attendance Events being reported.* Reports the fields that are part of the Natural Key for the Sessions resource.	M	N/A	N/A	✅
5	**studentReference** (*reference*)	*A reference to the Students resource associated with the Student School Attendance Events being reported.* Reports the fields that are part of the Natural Key for the Students resource.	M	N/A	N/A	✅
6	eventDuration (*decimal*)	*The amount of time for the event as recognized by the school: 1 day = 1, 1/2 day = 0.5, 1/3 day = 0.33.*	M	Attendance	N/A	❌

Reports either **0.5** or **1** based on the logic shown below:

Determining Base Requirements for Period Schedules, Courses, and Sections to be Considered in the Calculation for Total Instructional Time:

- Period Schedules
  - Start Time and End Time **must be populated**.
- Courses
  - Active **IS** checked.
  - Attendance **IS** checked.
- Sections
  - Scheduled into a period schedule that meets the base requirements shown above.

Determine the "Full Day Threshold (Percentage)" and "Half Day Threshold (Percentage)":

- These fields can be found in Resource Preferences for the Student School Attendance Events resource.
- These fields default to "100" and "50" respectively.
- These fields only accept values between 1 and 100.
- These fields treat the whole number entered as a percentage.
  - Example: 90 is treated as 90%.

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Calculation of Instructional Time Associated to Each Attendance Code:

1. Calculate the total instructional time associated to the student's schedule for the day being reported.
2. Calculate the total instructional time associated to each Attendance State Code.
   a. If two attendance local codes that have the same Attendance State Code are placed on the same day, those two codes sum towards the same State Code instead of being considered separately.
   b. A lack of an attendance code is considered as "In Attendance".
   c. The value entered into "Present Minutes" is considered as "In Attendance".
      i. We will take the absolute value of the value entered in Present Minutes (e.g. -45 is treated as 45).
3. Convert the total instructional time associated to each Attendance State Code into a percentage of the student's day:
   a. Formula: *Total Instructional Time (Attendance State Code) / Total Instructional Time (Student's Schedule) = Percentage of Day (Attendance State Code)*
4. Rank the Attendance State Codes by their Percentage of Day.

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5. Compare the 1st Place Attendance State Code to the Full Day Threshold.
   a. If the 1st Place code is greater than or equal to the Full Day Threshold, report that state code for **attendanceEventCategoryDescriptor** with an **eventDuration of 1**.
      i. **The logic chain will end here if 5a was true.**
   b. If the 1st Place code is less than the Full Day Threshold, continue to step 6.
6. Compare the 1st Place Attendance State Code to the Half Day Threshold.
   a. If the 1st Place code is greater than or equal to the Half Day Threshold, report that state code for **attendanceEventCategoryDescriptor** with an **eventDuration of 0.5**. Also report the 2nd Place Attendance State Code for **attendanceEventCategoryDescriptor** with an **eventDuration of 0.5**.
      i. **The logic chain will end here if 6a was true.**
   b. If the 1st Place code is less than the Half Day Threshold, continue to step 7.
7. Report the 1st Place and 2nd Place Attendance State Codes for **attendanceEventCategoryDescriptor** with an **eventDuration of 0.5** each.
   a. We can only report up to 2 records per day.
   b. These records must sum up to an eventDuration of 1.

What happens when there is a tie in instructional time between Attendance State Codes?

- We will use the attendance code(s) that appear higher on the priority list shown below:
  1. In Attendance
  2. Virtual
  3. Excused Absence
  4. Exempt
  5. Unexcused Absence
  6. Suspended
  7. Expelled
- Example:
  - The instructional time associated to "In Attendance", "Excused Absence", and "Unexcused Absence" is 120 minutes each for the day. We would report "In Attendance" and "Excused Absence" as they appear higher on the list than "Unexcused Absence".

How is Expelled Attendance recorded?

Important: Expelled attendance must be populated **by the school** on the day of expulsion. Enter the date of expulsion in Expulsion Date on Enrollment.

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		- When Expulsion Date < Enrollment End Date - Send a record with an attendanceEventCategoryDescriptor of Expelled and an eventDuration of 1 for every instructional day after the date entered in Expulsion Date up to and including the Enrollment End Date. - When Expulsion Date = Enrollment End Date - Send a record with an attendanceEventCategoryDescriptor of Expelled and an eventDuration of 1 for every instructional day after the date entered in Expulsion Date. - In all other situations - Report attendance using the "normal" method shown above.				
7	arrivalTime	This is optional, does not report.	O	N/A	N/A	N/A
8	attendanceEventReason	This is optional, does not report.	O	N/A	N/A	N/A
9	departureTime	This is optional, does not report.	O	N/A	N/A	N/A
10	educationalEnvironmentDescriptor	This is optional, does not report.	O	N/A	N/A	N/A
11	schoolAttendanceDuration	This is optional, does not report.	O	N/A	N/A	N/A
12	absentTime	This is optional, does not report.	O	N/A	N/A	N/A - EXT
13	scheduledTime	This is optional, does not report.	O	N/A	N/A	N/A - EXT

Appendix

A custom Prism Call is present in Indiana for the Student School Attendance Events resource. We cannot trigger on records that don't exist (NULL Attendance = "In Attendance), so this Prism Call will run each morning to resync the previous day's attendance.

- Documentation: [Indiana Ed-Fi Scheduled Tasks | Infinite Campus](#)

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