

Ed-Fi 3.x Section Entity Mapping

Overview

This document defines the mapping of Aeries data to the Ed-Fi data standard.



Document Version 1.0

Last Updated 07 Nov 2021

Status

Ready for v3 certification.

Description

This entity represents a setting in which organized instruction of course content is provided, in-person or otherwise, to one or more students for a given period of time. A course offering may be offered to more than one section.

Section Links

Mapping v3.2.0-c

<https://mappingedu.ed-fi.org/#!/entity/66036848-e7ba-ea11-80df-005056b36109/info?dataStandardId=7ec6133d-e7ba-ea11-80df-005056b36109>

Schema v3.2.0-c

<https://schema.ed-fi.org/datahandbook-v320c/#!/Section580>

API v3.4.0

<https://api.ed-fi.org/v3.4.0/docs/index.html#/sections>

Scenarios v3

<https://techdocs.ed-fi.org/display/EDFICERT/v3+MasterSchedule+%3E+Section+Scenarios>

Natural Key

- LocalCourseCode
- SchoolId
- SchoolYear
- SectionIdentifier
- SessionName

Used By

- StaffSectionAssociation.Section (as required)
- StudentCohortAssociation.Section (as optional collection)
- StudentSectionAssociation.Section (as required)
- SurveySectionAssociation.Section (as required)
- SectionOrProgramChoice.Section (as required collection)
- GradebookEntry.Section (as required)
- SectionAttendanceTakenEvent.Section (as required)
- StudentSectionAttendanceEvent.Section (as required)

Mapping

Parent	Property	Type	Required	Table	Field	Other	Code / Notes
\	availableCreditConversion	Double	Optional				
\	availableCredits	Double	Required	MST	CR		GetNullableDouble(s("CR"))
\	availableCreditTypeDescriptor	Descriptor	Optional				
\	characteristics	List(Of SectionCharacteristic)	Optional				
characteristics[n]	characteristics(1)	SectionCharacteristic	Optional				

characteristics[n]	sectionCharacteristicDescriptor	Descriptor	Optional				
\	classPeriods	Collection	Required				
classPeriods	classPeriodReference	ClassPeriodReference	Required				
classPeriodReference	classPeriodName	String	Required	MST	PD, BL, DY		GetClassPeriodName(rowMST!PD, rowMST!BL, rowMST!DY) see function below
classPeriodReference	schoolId	Integer	Required	MST	SC		GetNullableInteger(rowMST!SC)
\	courseOfferingReference	CourseOfferingReference	Identity				
courseOfferingReference	sessionName	String	Identity	TRM	D1,D2,SC, TM		schoolYear = GetSchoolYear(rowMST!D1) termName = GetTermName(rowMST!SC, rowMST!TM) GetSessionName(schoolYear, termName)
courseOfferingReference	localCourseCode	String	Identity	MST	CN		GetString(rowMST!CN)
courseOfferingReference	schoolId	Integer	Identity	MST	SC		GetNullableInteger(rowMST!SC)
courseOfferingReference	schoolYear	Integer	Identity	TRM	D1		GetSchoolYear(rowMST!D1) see function below
\	educationalEnvironmentDescriptor	Descriptor	Required			map it. if it's not mapped then return 'Classroom'	eduEnvironmentType = GetEdFiCodeValue(EducationalEnvironmentType, "MST", "EE", rowMST!EE) If(String.IsNullOrEmpty(eduEnvironmentType), "Classroom", eduEnvironmentType)
\	instructionLanguageDescriptor	Descriptor	Required				
\	locationReference	LocationReference	Identity				
locationReference	classroomIdentificationCode	String	Required	MST	RM	If blank, send "Unassigned".	GetClassroomIdentificationCode(rowMST!RM) If(String.IsNullOrEmpty(room), "Unassigned", room) see function below
locationReference	schoolId	Integer	Required	MST	SC		GetNullableInteger(rowMST!SC)
\	mediumOfInstructionDescriptor	Descriptor	Optional				
\	populationServedDescriptor	Descriptor	Optional				
\	programs	List(Of SectionProgram)	Optional				
programs[n]	programs(1)	SectionProgram	Optional				
programs[n]	programReference	ProgramReference	Optional				
programs[n]	educationOrganizationId	Integer	Optional				
programs[n]	name	String	Optional				
programs[n]	programTypeDescriptor	Descriptor	Optional				
\	schoolReference	SchoolReference	Identity				
schoolReference	schoolId	Integer	Required	MST	SC		GetNullableInteger(s("SC"))
\	sequenceOfCourse	Integer	Required			hard code to 1	GetNullableInteger(1)
\	sectionIdentifier	String	Identity	MST	SC, SE		GetUniqueSectionCode(s("SC"), s("SE")) see function below
\	courseLevelCharacteristics	Collection	Optional				
courseLevelCharacteristics	courseLevelCharacteristicDescriptor	String	Optional				
\	offeredGradeLevels	Collection	Optional				
offeredGradeLevels	gradeLevelDescriptor	Descriptor	Optional				

```
Public Shared Function GetClassPeriodName(ByVal period As String, ByVal  
block As Integer, ByVal day As String) As String
```

```
    'Examples: "FLEXPl, 1 MTWTF", "2-3 MTWTF", "5 MW", "6 A-DAYS"  
    Return period & (IIf(block > 1 AndAlso IsNumeric(period), "-" &  
(CInt(period) + block - 1), "")) & RTrim(" " & day)
```

```
End Function
```

```
Public Shared Function GetSessionName(ByVal schoolYear As Integer,  
ByVal term As String) As String
```

```
    Return schoolYear.ToString() & " " & term
```

```
End Function
```

```
Public Shared Function GetTermName(ByVal schoolcode As Integer, ByVal  
termCode As String, ByVal ConnectionString As String) As String
```

```
    'Ref: https://mappedu.ed-fi.org/#/element/e778beed-1c80-ea11-80df-005056b36109/details?dataStandardId=e8efbbaa-1b80-ea11-80df-005056b36109
```

```
    Select Case termCode  
        Case "Y"  
            Return "Year Round"  
        Case "S"  
            Return "Spring Semester"  
        Case "F"  
            Return "Fall Semester"
```

```
End Select
```

```
If Trimester(schoolcode, ConnectionString) Then  
    Select Case termCode  
        Case "1"  
            Return "First Trimester"  
        Case "2"  
            Return "Second Trimester"  
        Case "3"  
            Return "Third Trimester"
```

```
End Select
```

```
Else
```

```
    Select Case termCode  
        Case "1"  
            Return "First Quarter"  
        Case "2"
```

```

                Return "Second Quarter"
            Case "3"
                Return "Third Quarter"
            Case "4"
                Return "Fourth Quarter"
        End Select
    End If

    Return termCode

End Function

Public Shared Function GetClassroomIdentificationCode(ByVal room As
String) As String

    Return IIf(String.IsNullOrEmpty(room), "Unassigned", room)

End Function

Public Shared Function GetUniqueSectionCode(ByVal school As String,
ByVal section As String) As String

    Return school & "-" & section

End Function

Public Shared Function GetSchoolYear(ByVal SchoolDate As String) As
Integer?

    Dim schoolYear As Integer? = Nothing
    Dim schoolDateValue As Date

    If Date.TryParse(SchoolDate, schoolDateValue) Then
        schoolYear = EdFiV2Functions.GetSchoolYearFromDate
(schoolDateValue)
    End If

    Return schoolYear

Public Shared Function GetSchoolYearFromDate(ByVal SchoolDate As Date)
As Integer

    ' Ed-Fi sometimes uses a single year as 'school year'. It's
actually, just the end year of a full school year in the form YYYY-YYYY
    Return GetEndYear(SchoolDate)

End Function

```

```
Public Shared Function GetEndYear(ByVal startDate As Date) As Integer

    Dim endYear As Integer = Nothing
    Dim startMonth As Integer = Month(startDate)

    If startMonth >= 7 Then                                     ' July-Dec = "this
year" (i.e. 9/1/2012 = 2012-2013, so 2013)
        endYear = Year(startDate) + 1
    Else ' startMonth < 7                                     '
Jan-June = "last year" (i.e. 3/1/2012 = 2011-2012, so 2012)
        endYear = Year(startDate)
    End If

    Return endYear

End Function
```