**SIF Data Model Extension Proposal Template**

*This template should be used by individuals or Project Teams to submit (and later track the progress of) proposed extensions to the SIF Data Model. These extensions can either be new data objects or revisions to the schema defining elements and / or attributes in existing ones.*

*It is designed to be a “living document” and contains two “status tracking” sections which should be maintained and updated as the change approval process for this extension evolves.*

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|  |
| --- |
| Extension Proposal Version Control |
| Version | Date: | Author/Organization: | Comments |
| 1.0 | 11/9/11 | Claudia Roberts/PearsonVince Paredes/SIF Staff | This was a collaborative effort. The Proposal to add SIF\_ExtendedElements on repeatable elements and complex elements within the hierarchy of the StudentAcademicRecord object is a stop-gap solution to make this object extensible for those mapping elements that are state-specific or inappropriate to add to the Data Model as standard elements. It is understood that the International Tech Board is working on a more comprehensive solution to the Data Model, which addresses the larger issue of extensibility. This Proposal used DMEP Template v2.7 from the Sharepoint site. |

# **1 Identification**

|  |  |
| --- | --- |
| Proposed Extension Name | SIF\_ExtendedElements Change |
| Submitted by (Project Team or Individual) | Student Record Exchange Objects Project Team |
| Date of initial submittal |  |
|  |  |
| What is the base SIF Data Model release? | SIF 2.6 |
| What is the base SIF Infrastructure release? |  |
|  |  |
| What existing SIF object(s) if any will be affected?  | StudentAcademicRecord |
| What is the name of any new object(s)? | N/A |
|  |  |
| DM Extension ID (to be assigned when submitted) | (assigned by Tech Board ?) |

**Status Tracker Phase 1: Documentation and Approval**

*The steps in this initial phase document the proposed extensions to the SIF Data Model to the point where they can be reviewed and approved by the Tech Board as deserving of further effort. Completion of the detailed design and evaluation of the dependencies and migration impacts are left until Phase II.*

|  |  |  |  |
| --- | --- | --- | --- |
| **Template Section** | **Draft Completed****(Owner / Date)** | **Reviewed (R) or Accepted (A)****(Owner / Date)** | **Comments** |
| Rationale and Business Case  | Champion**Date: Nov 2011** | Tech Board (A)**Date:** | Assign to relevant Project Team(s) |
| Use Case(s) | Champion / Project Team**Date:** | Project Team (R)**Date:** |  |
| Proposal approval | Project Team**Date:** | Tech Board (A)**Date:** | Placed in Fast Track or Object Pipeline |

# **2. Proposal**

*This section should be completed by the “Proposal Champion”. A champion is usually one of the authors of the business case (although it may be SIF staff). This individual is responsible for driving the proposal through the qualification and acceptance cycle.*

*The following two subsections must be completed before the process can begin.*

## 2.1 Rationale for Extension

*Explain the rationale for the proposed extension to the SIF Data Model:*

* *What are the problems / limitations to be addressed?*
* *What is the additional information required?*
* *<If applicable>* Why should this proposal be a Fast Track request? (Not Applicable)

During the SIF International Developer Summit in Washington DC this past October, members of the Infrastructure Group, SIF Tech Board, and Student Record Exchange Project Team were able to communicate with each other in “real time” (face-to-face). At the Summit, it was acknowledged that the StudentAcademicRecord object is difficult to use for its intended purposes. One of the reasons is that it lacks extensibility. For such a complex object, with nested repeatable elements, a single SIF\_ExtendedElement at the root of the object is insufficient. At the Summit, it was the Infrastructure Group that passed the responsibility of crafting this Proposal on to the Student Record Exchange Project Team.

Like other SIF objects, the SIF\_ExtendedElements element is located on the root of the object, and only on the root. The single location of the SIF\_ExtendedElement makes it difficult to extend repeatable elements, and cumbersome to extend non-repeatable elements that reside on nodes that are one or more levels deep in the hierarchy of the object.

The StudentAcademicRecord object was designed to convey student academic data for the purposes of record exchange and transcripts. For student record exchange, states often require elements that are state-specific, and require extensions to the Data Model for their state.

For the people creating SIF state mapping profiles, the challenge has been to map these extensions so that the elements retain their context. We have seen several workarounds such as using a combination of SIS objects and SRE objects, or using complex SIF\_ExtendedElements on the root that replicate a part of the object, or using extension names that include the full path required.

There are a few assumptions that underline this Proposal:

1. The StudentAcademicRecord was designed to carry all the current and historical academic data for a student without having to request SIS objects, such as SchoolCourseInfo or SectionInfo.
2. The StudentAcademicRecord object already has complexity that challenges even those who have experience working with the SIS objects.
3. It is harder for us humans, who work with the SIF mapping documents and the SIF Data Model, to understand the relationship and granularity of an element when it is out of context, at the bottom of a very large object that has a high degree of complexity.
4. That it is more preferable to add extensions to every complex node that contains one or more complex types (excluding element lists) than to add extensions to only the absolute minimum required to make this object usable.

## 2.2 Business Case

*Provide a specific example of where the additional information defined in this proposal will be used in one or more educational processes*

*It should focus exclusively on the business problem to be solved and avoid proposing solutions.*

***Overview of Student Academic Record Object***

This Proposal, to add SIF\_ExtendedElements element to specific nodes within the StudentAcademicRecord object, has two goals – 1.) to extend the data model to accommodate state-specific elements when a SIF\_ExtendedElement is an appropriate mapping, and, 2.) to gain a degree of user friendliness to this object for those humans who work with it.

Contrary to the typical design of the SIS objects, the StudentAcademicRecord (SAR) object was designed to provide a single container for all the logical components of a student’s academic data. The object is designed to contain data for multiple school enrollments, multiple school years, multiple courses, multiple terms, multiple marking periods, as well as summary data for different periods, all contained in a single instance of this object. An instance of an SAR object represents the academic content of a complete transcript or student record collected or submitted from an entity. It is, by nature, a large object. It contains several complex elements, some repeatable.

To make the SAR object usable, given its current design, extensions need to be added throughout the object, to any complex node that contains one or more complex types (excluding the element list nodes). It takes a human to analyze the nature and granularity of the data and to map it appropriately to the SIF Data Model. Adding these extensions to these nodes will not only help to maintain the context of an extension element, it will also help the person mapping the elements to understand and map the associations correctly.

***Business Case Example***

A typical business case for this Proposal is to be able to collect and convey state required, and state-specific, current and historical Course data from an SIS for the purposes of transferring a student’s academic record from one district to another within a state.

Another typical case for adding this Proposal is to collect and convey state-specific transcript data to a repository for the purpose of creating college transcripts.

# **3. Use Cases**

*The proposal champion or the assigned project team must provide one or more high-level use cases illustrating the interactions between “actors” (typically applications) that become possible if this proposal is adopted and successfully implemented. Use one copy of the form below for each.*

**Use Case Title: SIF\_ExtendedElements on StudentAcademicRecord**

|  |  |
| --- | --- |
| **Summary Description** | In order to fully map student record data to the StudentAcademicRecord object, the object must contain extensions to elements throughout the object (on any complex node that contains one or more complex types, excluding list elements). These SIF\_ExtendedElements must be added to the Data Model of this specific object so that an extension’s context can be accurately represented. In addition, but in no way of less importance, these extensions must be placed “inline” so that us humans who create and review the mappings can make sure that the context of these extensions are correct. |
| **Actors and types:****One or more of:*** **Requestor**
* **Provider**
* **Publisher**
* **Subscriber**
 | Requestor: State student data repository systems, transcript centersProvider: Student Information Systems (SIS) |
| **Preconditions** | The SIS has the state requested data. (Note that some of the data requested and provided is related to courses in progress and the completeness of the data will vary). |
| **Main Sequence of Events / Action Steps** | This object is requested either for individual student(s) or for all students. This may be a brokered transaction or consumer transaction via Web Services or may be a Request/Response set of action steps.  |
| **Alternative Sequence of Events / Action Steps** |  |
| **Post Conditions** | The student academic data is available in a data warehouse or transcript center. There are no SIF\_Events supported by this object, or any of the StudentRecordExchange objects.  |
| **SIF Mandatory Objects** | StudentAcademicRecord, StudentRecordExchange or StudentPersonal |
| **SIF Optional Objects** | None |
| **Open Issues** | The original idea was to add SIF\_ExtendedElements on only 13 identified elements, most of which were repeatable. After more deliberation, it has been determined that adding extensions to the repeatable elements, as well as those that are a complex node with one or more complex types would help us humans working with this object to read the data model more easily. For instance, though the various summary data can be mapped to an extension on the root, reviewing a mapping document with summary data is easier to understand when it is grouped with the other summary data on this object.  |

**Status Tracker Phase 2: Execution of Proposed Changes**

*At this point the initial Data Model extension proposal has been accepted by the Tech Board and is either in the object pipeline, or being fast-tracked. The following sections have to be completed and (where indicated) reviewed and approved before this proposal can be reflected in the SIF specification.*

|  |  |  |  |
| --- | --- | --- | --- |
| **Template Section** | **Draft Completed****(Owner / Date)** | **Reviewed (R) or Accepted (A)****(Owner / Date)** | **Comments** |
| Dependencies  | Project Team / Staff**Date:**  | Internal Project Team review |  |
| Object Definition Table | Project Team**Date:** | Tech Board (R)**Date:** |  |
| Migration Plan | Staff / Project Team **Date:** | Tech Board (A)**Date:** | TB Approval is part of SIF Release cycle |
| Sample XML | Staff / Project Team **Date:** | Optional | Generally provided as part of published specification |

# **4. Impact Assessment**

*This section is the first to consider the actual implementation which will address the use cases previously identified. It requires assessing the impacts to both the existing objects and infrastructure, and to previously deployed applications. It would normally be produced by the Project Team (new or existing) assigned to this data model extension by the Tech Board at the time this proposal was approved.*

*In cases where a legacy object (one with no owning Project Team), is being changed, the task of assessing impact may be assigned to a Staff member to drive its completion.*

*The following two subsections must be completed.*

## 4.1 External Object Dependencies and Relation Map

*Identify any dependencies on existing XML entities in other SIF objects*

|  |  |  |
| --- | --- | --- |
| **Proposed new Element or Attribute** | **Object & XML Entity dependency** **(Element, Attribute, Type)** | **Relationship / Reason** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

## 4.2 Infrastructure / International Dependencies and Relation Map

*Identify any dependencies on infrastructure technologies and / or deliverables from the International Technical Board (ITB) which are planned for a future release.*

*This could include requiring or relying on specific functionality from one or more of the following:*

* *Transport (ex: SOAP conventions)*
* *SIS Functional Profiles*
* *Identity Management Profiles*
* *Global Data Model Metadata*
* *Central Administration or Smart Zone*
* *Zone Services (ex: Assessment)*

|  |  |  |
| --- | --- | --- |
| **Proposed new Object, Element or Attribute** | **Infrastructure or International technology dependency** | **Specifics of dependency** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

# **5 Detailed Design**

*Place the detailed element by element, attribute by attribute breakdown of the Data Model Extension here. This work is normally done by members of the assigned Project Team.*

*The possible values of the “Char” column include*

*One of the following primary (and mutually exclusive) characteristics:*

* ***M – Mandatory****. Item must appear in every Add Event and, where not excluded in a conditional Request, in every Response message for the object*
* ***Q – ReQuired****. Item must either appear in an Add Event or eventually be included in a Change Event, and once added is returned in all corresponding queries.*
* ***S – Supported****. Item may or may not appear in any message relating to the object. However if its value is supplied / available to the sender, the item is provided in Event and Response messages as if it were Mandatory.*
* ***O – Optional****. Item may or may not appear in any message relating to the object. It need not be supported by the sender*

Plus one or more of the following characteristics if applicable:

* ***C******– Conditional.*** *Item is treated as the accompanying primary characteristic if the specified conditions are satisfied*
* ***I –******Immutable.*** *Item value cannot be changed once supplied.*
* ***U –******Unique.*** *Item value is unique from all other objects containing that item (ex: RefId)*
* ***N –******Non-Queryable****. Item is often calculated (ex: an aggregate), and can’t be used as a search key in a conditional Request.*

Plus the following characteristic if applicable:

* ***R ­– Repeatable.*** *Item may appear more than one time.*

*The “type” of each item is either an XML type (ex: integer) or a named SIF Global Type.*

 *XML Facets can help to further define the value of an item. These can include length, range, and per-type value restrictions. They should be specified if known.*

*Fill out a separate copy of the following table for each affected new or existing SIF object.*

## Object Table

**Object Name: StudentAcademicRecord**

Note: Added elements are highlighted in yellow.

|  | **Element/@Attribute** | **Char** | **Description** | **Type** |
| --- | --- | --- | --- | --- |
|   | StudentAcademicRecord |   | This object conveys a student's academic record data for student record exchange and transcript purposes.This object is designed to be a dual-purpose object. It can be linked to a StudentRecordExchange object for record exchange purposes. There may also be Zones where systems can provide this information for record exchange systems or general informational purposes, in which case the object can be linked directly to StudentPersonal.   |   |
| @key | RefId | M | The Id (GUID) of this record.  | [RefIdType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#RefIdType) |
| @ | SIF\_RefId | M | The GUID of an associated object, either StudentRecordExchange or StudentPersonal.   | [RefIdType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#RefIdType) |
| @ | SIF\_RefObject | M | The associated object type.   | values:StudentRecordExchangeStudentPersonal |
|   | ReportingDate | M | The date this record was prepared.  | [xs:date](http://www.w3.org/TR/xmlschema-2/#date) |
|   | StudentSchoolEnrollmentData | M | Collects elements of interest from StudentSchoolEnrollment.  |   |
| @ | SchoolAttendedRefId | M | References the school of record for the student (see SchoolAttended).  | [IdRefType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#IdRefType) |
|   | StudentSchoolEnrollmentData/     GradeLevel | M |   | [GradeLevel](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#GradeLevel) |
|   | StudentSchoolEnrollmentData/     Advisor | O | Staff member assigned to the student as an advisor.  |   |
|   | StudentSchoolEnrollmentData/     Advisor/StaffPersonalData      | M | Collects elements of interest from StaffPersonal.  |   |
|   | StudentSchoolEnrollmentData/     Advisor/StaffPersonalData/     Name | M |   | [Name](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#Name) |
|   | StudentSchoolEnrollmentData/     Advisor/StaffPersonalData/     Title | O |   | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | StudentSchoolEnrollmentData/     Advisor/StaffPersonalData/     AddressList | O |   | [AddressList](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#AddressList) |
|   | StudentSchoolEnrollmentData/     Advisor/StaffPersonalData/     PhoneNumberList | O |   | [PhoneNumberList](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#PhoneNumberList) |
|   | StudentSchoolEnrollmentData/     Advisor/StaffPersonalData/     SIF\_ExtendedElements | O |   | [SIF\_ExtendedElements](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_ExtendedElements) |
|   | StudentSchoolEnrollmentData/     Counselor | O | Staff member assigned to the student as a counselor.  |   |
|   | StudentSchoolEnrollmentData/     Counselor/StaffPersonalData      | M | Collects elements of interest from StaffPersonal.  |   |
|   | StudentSchoolEnrollmentData/     Counselor/StaffPersonalData/     Name | M |   | [Name](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#Name) |
|   | StudentSchoolEnrollmentData/     Counselor/StaffPersonalData/     Title | O |   | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | StudentSchoolEnrollmentData/     Counselor/StaffPersonalData/     AddressList | O |   | [AddressList](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#AddressList) |
|   | StudentSchoolEnrollmentData/     Counselor/StaffPersonalData/     PhoneNumberList | O |   | [PhoneNumberList](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#PhoneNumberList) |
|   | StudentSchoolEnrollmentData/     Counselor/StaffPersonalData/     SIF\_ExtendedElements | O |   | [SIF\_ExtendedElements](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_ExtendedElements) |
|   | StudentSchoolEnrollmentData/     SIF\_ExtendedElements | O |   | [SIF\_ExtendedElements](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_ExtendedElements) |
|   | DistrictEntryDate | O | The date the student originally enrolled in the district of the school of record.  | [PartialDateType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#PartialDateType) |
|   | SchoolAttendanceHistory | M | Chronology of schools attended in the student's academic career, including the current school if enrolled.  | [List](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#List) |
|   | SchoolAttendanceHistory/SchoolAttended      | MR | Data about each individual school attended.  |   |
| @ | RefId | M | Id used internally to StudentAcademicRecord to avoid duplication of school-related data.  | [RefIdType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#RefIdType) |
|   | SchoolAttendanceHistory/SchoolAttended/     LEAInfoData | O | Collects elements of interest from LEAInfo.  |   |
|   | SchoolAttendanceHistory/SchoolAttended/     LEAInfoData/LocalId | O |   | [LocalId](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#LocalId) |
|   | SchoolAttendanceHistory/SchoolAttended/     LEAInfoData/StateProvinceId      | O |   | [StateProvinceId](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#StateProvinceId) |
|   | SchoolAttendanceHistory/SchoolAttended/     LEAInfoData/NCESId | O |   | [NCESId](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#NCESId) |
|   | SchoolAttendanceHistory/SchoolAttended/     LEAInfoData/LEAName | M |   | [LEAName](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#LEAName) |
|   | SchoolAttendanceHistory/SchoolAttended/     LEAInfoData/SIF\_ExtendedElements      | O |   | [SIF\_ExtendedElements](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_ExtendedElements) |
|   | SchoolAttendanceHistory/SchoolAttended/     SchoolInfoData | M | Collects elements of interest from SchoolInfo.  |   |
|   | SchoolAttendanceHistory/SchoolAttended/     SchoolInfoData/LocalId | M |   | [LocalId](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#LocalId) |
|   | SchoolAttendanceHistory/SchoolAttended/     SchoolInfoData/StateProvinceId      | O |   | [StateProvinceId](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#StateProvinceId) |
|   | SchoolAttendanceHistory/SchoolAttended/     SchoolInfoData/NCESId | O |   | [NCESId](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#NCESId) |
|   | SchoolAttendanceHistory/SchoolAttended/     SchoolInfoData/SchoolName      | M |   | [SchoolName](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SchoolName) |
|   | SchoolAttendanceHistory/SchoolAttended/     SchoolInfoData/SchoolURL | O |   | [SchoolURL](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SchoolURL) |
|   | SchoolAttendanceHistory/SchoolAttended/     SchoolInfoData/SchoolContactList      | O |   | [SchoolContactList](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SchoolContactList) |
|   | SchoolAttendanceHistory/SchoolAttended/     SchoolInfoData/AddressList      | O |   | [AddressList](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#AddressList) |
|   | SchoolAttendanceHistory/SchoolAttended/     SchoolInfoData/PhoneNumberList      | O |   | [PhoneNumberList](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#PhoneNumberList) |
|   | SchoolAttendanceHistory/SchoolAttended/     SchoolInfoData/IdentificationInfoList      | O |   | [IdentificationInfoList](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#IdentificationInfoList) |
|   | SchoolAttendanceHistory/SchoolAttended/     SchoolInfoData/GradeLevels      | O |   | [GradeLevels](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#GradeLevels) |
|   | SchoolAttendanceHistory/SchoolAttended/     SchoolInfoData/SIF\_ExtendedElements      | O |   | [SIF\_ExtendedElements](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_ExtendedElements) |
|   | SchoolAttendanceHistory/SchoolAttended/     AccreditingBody | O | Accrediting body for the school.  | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | SchoolAttendanceHistory/SchoolAttended/     MarkingSystems | C | Note: Mandatory if school of record. Marking systems/grading tables used by the school.  | [List](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#List) |
|   | SchoolAttendanceHistory/SchoolAttended/     MarkingSystems/MarkValueInfoData      | MR | Marking system/grading table used by the school.  |   |
| @ | RefId | M | Id used internally to StudentAcademicRecord to link marks to their marking systems.  | [RefIdType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#RefIdType) |
|   | SchoolAttendanceHistory/SchoolAttended/     MarkingSystems/MarkValueInfoData/     Name | M | The text name of the value list ("Letter Grades", "Letter Grades (+/-)", "ESU", "Pass/Fail", "Override Grades", "Citizenship Comment Codes", etc.).  | [xs:string](http://www.w3.org/TR/xmlschema-2/#string) |
|   | SchoolAttendanceHistory/SchoolAttended/     MarkingSystems/MarkValueInfoData/     Percentage | C | Indicates whether a percent Mark is accepted (format ##0.00).  |   |
|   | SchoolAttendanceHistory/SchoolAttended/     MarkingSystems/MarkValueInfoData/     Percentage/Minimum | O | The minimum percent value accepted for this mark. If present, the publisher of this object is required to ensure that any values present in the StudentSectionMarks object will not be lower than this value.  | [xs:decimal](http://www.w3.org/TR/xmlschema-2/#decimal) |
|   | SchoolAttendanceHistory/SchoolAttended/     MarkingSystems/MarkValueInfoData/     Percentage/Maximum | O | The maximum percent value accepted for this mark. If present, the publisher of this object is required to ensure that any values present in the StudentSectionMarks object will not be higher than this value.  | [xs:decimal](http://www.w3.org/TR/xmlschema-2/#decimal) |
|   | SchoolAttendanceHistory/SchoolAttended/     MarkingSystems/MarkValueInfoData/     Numeric | C | Indicates whether a raw numeric score is accepted.  |   |
|   | SchoolAttendanceHistory/SchoolAttended/     MarkingSystems/MarkValueInfoData/     Numeric/Precision | O | Number of significant digits.  | [xs:unsignedInt](http://www.w3.org/TR/xmlschema-2/#unsignedInt) |
|   | SchoolAttendanceHistory/SchoolAttended/     MarkingSystems/MarkValueInfoData/     Numeric/Scale | O | Number of decimal places.  | [xs:unsignedInt](http://www.w3.org/TR/xmlschema-2/#unsignedInt) |
|   | SchoolAttendanceHistory/SchoolAttended/     MarkingSystems/MarkValueInfoData/     Numeric/Low | O | Lowest Mark in the range (e.g., 98, 3.95).  | [xs:decimal](http://www.w3.org/TR/xmlschema-2/#decimal) |
|   | SchoolAttendanceHistory/SchoolAttended/     MarkingSystems/MarkValueInfoData/     Numeric/High | O | Highest Mark in the range (e.g., 100, 4.0).  | [xs:decimal](http://www.w3.org/TR/xmlschema-2/#decimal) |
|   | SchoolAttendanceHistory/SchoolAttended/     MarkingSystems/MarkValueInfoData/     Letter | C | Indicates whether a letter Mark is accepted.  | [ActionList (ValidMark/Code)](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#ActionList) |
|   | SchoolAttendanceHistory/SchoolAttended/     MarkingSystems/MarkValueInfoData/     Letter/ValidMark | MR | List of specific valid letter Marks.  |   |
|   | SchoolAttendanceHistory/SchoolAttended/     MarkingSystems/MarkValueInfoData/     Letter/ValidMark/Code | M | String representing the actual Mark that would appear on the report card (e.g., "A+", "I", "100").  | [xs:token](http://www.w3.org/TR/xmlschema-2/#token) |
|   | SchoolAttendanceHistory/SchoolAttended/     MarkingSystems/MarkValueInfoData/     Letter/ValidMark/NumericEquivalent      | O | Numeric equivalent for the Mark (e.g., 100, 4.0).  | [xs:decimal](http://www.w3.org/TR/xmlschema-2/#decimal) |
|   | SchoolAttendanceHistory/SchoolAttended/     MarkingSystems/MarkValueInfoData/     Letter/ValidMark/Description      | O | The description for this code. (e.g. "Excellent", "Participates in Class", "Incomplete", etc...).  | [xs:string](http://www.w3.org/TR/xmlschema-2/#string) |
|   | SchoolAttendanceHistory/SchoolAttended/     MarkingSystems/MarkValueInfoData/     Narrative | C | If present, indicates that a free-form text narrative is accepted.  |   |
|   | SchoolAttendanceHistory/SchoolAttended/     MarkingSystems/MarkValueInfoData/     Narrative/MaximumSize | O | An integer value representing the maximum number of Unicode characters for the narrative, the UTF-8 encoding of which may be longer.  | [xs:unsignedInt](http://www.w3.org/TR/xmlschema-2/#unsignedInt) |
|   | SchoolAttendanceHistory/SchoolAttended/     MarkingSystems/MarkValueInfoData/     SIF\_ExtendedElements | O |   | [SIF\_ExtendedElements](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_ExtendedElements) |
|   | EnrollmentHistory | O | A list of each enrollment in the schools above (see SchoolAttended).  | [List](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#List) |
|   | EnrollmentHistory/StudentSchoolEnrollmentData      | OR | Collects elements of interest from StudentSchoolEnrollment.  |   |
| @ | SchoolAttendedRefId | M | Reference to SchoolAttended.  | [IdRefType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#IdRefType) |
|   | EnrollmentHistory/StudentSchoolEnrollmentData/     SchoolYear | O |   | [SchoolYear](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SchoolYear) |
|   | EnrollmentHistory/StudentSchoolEnrollmentData/     EntryDate | O |   | [PartialDateType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#PartialDateType) |
|   | EnrollmentHistory/StudentSchoolEnrollmentData/     ExitDate | C | Note: Mandatory if student exited school.  | [PartialDateType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#PartialDateType) |
|   | EnrollmentHistory/StudentSchoolEnrollmentData/     EntryType | O |   |   |
|   | EnrollmentHistory/StudentSchoolEnrollmentData/     EntryType/Code | O | Code indicating the type of entry for this enrollment  | [NCES0619EntryTypeType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CExternalCodeSets.html#NCES0619EntryTypeType) |
|   | EnrollmentHistory/StudentSchoolEnrollmentData/     EntryType/OtherCodeList | O |   | [OtherCodeList](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#OtherCodeList) |
|   | EnrollmentHistory/StudentSchoolEnrollmentData/     GradeLevel | O | Grade or academic level of student.  | [GradeLevel](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#GradeLevel) |
|   | EnrollmentHistory/StudentSchoolEnrollmentData/     ExitStatus | O |   |   |
|   | EnrollmentHistory/StudentSchoolEnrollmentData/     ExitStatus/Code | M | Code indicating the exit status for this enrollment.  | [NCES0643ExitWithdrawalStatusType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CExternalCodeSets.html#NCES0643ExitWithdrawalStatusType) |
|   | EnrollmentHistory/StudentSchoolEnrollmentData/     ExitStatus/OtherCodeList | O |   | [OtherCodeList](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#OtherCodeList) |
|   | EnrollmentHistory/StudentSchoolEnrollmentData/     ExitType | O |   |   |
|   | EnrollmentHistory/StudentSchoolEnrollmentData/     ExitType/Code | M | Code indicating the type of exit for this enrollment.  | [NCES0644ExitWithdrawalTypeType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CExternalCodeSets.html#NCES0644ExitWithdrawalTypeType) |
|   | EnrollmentHistory/StudentSchoolEnrollmentData/     ExitType/OtherCodeList | O |   | [OtherCodeList](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#OtherCodeList) |
|   | EnrollmentHistory/StudentSchoolEnrollmentData/     StudentLEARelationship | O |   |   |
|   | EnrollmentHistory/StudentSchoolEnrollmentData/     StudentLEARelationship/MembershipType      | O | The type of this affiliation as it relates to the LEA identified.  | values:HomeThe LEA is responsible for reporting the student's membership/child accounting information.ConcurrentThe LEA is not the primary reporting unit for the student's membership/child accounting information.SummerA summer school enrollment, not part of the regular school year. |
|   | EnrollmentHistory/StudentSchoolEnrollmentData/     StudentLEARelationship/LEARelationshipType      | M | An instance of the OrganizationRelationshipType common type that describes the details of the student's affiliation with the LEA.  | [OrganizationRelationshipType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#OrganizationRelationshipType) |
|   | EnrollmentHistory/StudentSchoolEnrollmentData/     StudentLEARelationship/SIF\_ExtendedElements      | O |   | [SIF\_ExtendedElements](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_ExtendedElements) |
|   | EnrollmentHistory/StudentSchoolEnrollmentData/     StudentSchoolRelationship      | O |   |   |
|   | EnrollmentHistory/StudentSchoolEnrollmentData/     StudentSchoolRelationship/     MembershipType | O | The type of this affiliation as it relates to the school identified.  | values:HomeThe LEA is responsible for reporting the student's membership/child accounting information.ConcurrentThe LEA is not the primary reporting unit for the student's membership/child accounting information.SummerA summer school enrollment, not part of the regular school year. |
|   | EnrollmentHistory/StudentSchoolEnrollmentData/     StudentSchoolRelationship/     ResidencyStatus | O | Location of an individual’s legal residence relative to (within or outside) the boundaries of the school for the enrollment reported.  |   |
|   | EnrollmentHistory/StudentSchoolEnrollmentData/     StudentSchoolRelationship/     ResidencyStatus/Code | M | Code indicating the residency status for this enrollment.  | [NCES0598PublicSchoolResidenceStatusType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CExternalCodeSets.html#NCES0598PublicSchoolResidenceStatusType) |
|   | EnrollmentHistory/StudentSchoolEnrollmentData/     StudentSchoolRelationship/     NonResidentAttendReason | C | If the school represented by this enrollment is outside of the student's usual attendance area (as indicated in the ResidencyStatus element), this element indicates the reason that the student attends this school.  | [NCES0599NonResidentAttendanceRationaleType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CExternalCodeSets.html#NCES0599NonResidentAttendanceRationaleType) |
|   | EnrollmentHistory/StudentSchoolEnrollmentData/     StudentSchoolRelationship/     SIF\_ExtendedElements | O |   | [SIF\_ExtendedElements](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_ExtendedElements) |
|   | EnrollmentHistory/StudentSchoolEnrollmentData/     SIF\_ExtendedElements | O |   | [SIF\_ExtendedElements](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_ExtendedElements) |
|   | CurrentCourseActivity | C | Note: Mandatory if coursework is underway. Conveys a student's current coursework along with mid-term marks if applicable.  |   |
|   | CurrentCourseActivity/TermInfoData      | M | Collects elements of interest from TermInfo.  |   |
| @ | SchoolAttendedRefId | M | Reference to the school of record for the courses being taken (see SchoolAttended).  | [IdRefType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#IdRefType) |
|   | CurrentCourseActivity/TermInfoData/     SchoolYear | O |   | [SchoolYear](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SchoolYear) |
|   | CurrentCourseActivity/TermInfoData/     StartDate | O |   | [PartialDateType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#PartialDateType) |
|   | CurrentCourseActivity/TermInfoData/     EndDate | O |   | [PartialDateType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#PartialDateType) |
|   | CurrentCourseActivity/TermInfoData/     Description | O |   | [xs:string](http://www.w3.org/TR/xmlschema-2/#string) |
|   | CurrentCourseActivity/TermInfoData/     TermCode | O |   | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | CurrentCourseActivity/TermInfoData/     Track | O |   | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | CurrentCourseActivity/TermInfoData/     TermSpan | O |   | [TermSpan](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#TermSpan) |
|   | CurrentCourseActivity/TermInfoData/     SIF\_ExtendedElements | O |   | [SIF\_ExtendedElements](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_ExtendedElements) |
|   | CurrentCourseActivity/Courses      | M | Courses being taken.  | [List](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#List) |
|   | CurrentCourseActivity/Courses/     Course | MR | Course being taken.  |   |
|   | CurrentCourseActivity/Courses/     Course/SchoolAttendedRefId      | C | Reference to the school where the course is being taken (see SchoolAttended); may be omitted if the school is the same as the school of record.   | [IdRefType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#IdRefType) |
|   | CurrentCourseActivity/Courses/     Course/SchoolCourseInfoData      | M | Collects elements of interest from SchoolCourseInfo.  |   |
|   | CurrentCourseActivity/Courses/     Course/SchoolCourseInfoData/     CourseCode | O |   | [CourseCode](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#CourseCode) |
|   | CurrentCourseActivity/Courses/     Course/SchoolCourseInfoData/     StateCourseCode | O |   | [StateCourseCode](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#StateCourseCode) |
|   | CurrentCourseActivity/Courses/     Course/SchoolCourseInfoData/     DistrictCourseCode | O |   | [DistrictCourseCode](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#DistrictCourseCode) |
|   | CurrentCourseActivity/Courses/     Course/SchoolCourseInfoData/     NationalCourseCode | O |   | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | CurrentCourseActivity/Courses/     Course/SchoolCourseInfoData/     SubjectAreaList | O |   | [SubjectAreaList](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SubjectAreaList) |
|   | CurrentCourseActivity/Courses/     Course/SchoolCourseInfoData/     CourseTitle | O |   | [CourseTitle](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#CourseTitle) |
|   | CurrentCourseActivity/Courses/     Course/SchoolCourseInfoData/     Description | O |   | [xs:string](http://www.w3.org/TR/xmlschema-2/#string) |
|   | CurrentCourseActivity/Courses/     Course/SchoolCourseInfoData/     InstructionalLevel | O |   | [InstructionalLevel](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#InstructionalLevel) |
|   | CurrentCourseActivity/Courses/     Course/SchoolCourseInfoData/     CoreAcademicCourse | O |   | [xs:boolean](http://www.w3.org/TR/xmlschema-2/#boolean) |
|   | CurrentCourseActivity/Courses/     Course/SchoolCourseInfoData/     GraduationRequirement | O |   | [GraduationRequirement](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#GraduationRequirement) |
|   | CurrentCourseActivity/Courses/     Course/SchoolCourseInfoData/     Department | O |   | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | CurrentCourseActivity/Courses/     Course/SchoolCourseInfoData/     SIF\_ExtendedElements | O |   | [SIF\_ExtendedElements](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_ExtendedElements) |
|   | CurrentCourseActivity/Courses/     Course/StartDate | O | Date course section started.  | [PartialDateType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#PartialDateType) |
|   | CurrentCourseActivity/Courses/     Course/EndDate | O | Date course section ended, or will end.  | [PartialDateType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#PartialDateType) |
|   | CurrentCourseActivity/Courses/     Course/MarkingPeriod | M |   |   |
|   | CurrentCourseActivity/Courses/     Course/MarkingPeriod/TermInfoData      | O | Information related to the span of time associated with the marking period.  |   |
|   | CurrentCourseActivity/Courses/     Course/MarkingPeriod/TermInfoData/     StartDate | O |   | [PartialDateType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#PartialDateType) |
|   | CurrentCourseActivity/Courses/     Course/MarkingPeriod/TermInfoData/     EndDate | O |   | [PartialDateType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#PartialDateType) |
|   | CurrentCourseActivity/Courses/     Course/MarkingPeriod/TermInfoData/     Description | O |   | [xs:string](http://www.w3.org/TR/xmlschema-2/#string) |
|   | CurrentCourseActivity/Courses/     Course/MarkingPeriod/TermInfoData/     TermCode | O |   | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | CurrentCourseActivity/Courses/     Course/MarkingPeriod/TermInfoData/     Track | O |   | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | CurrentCourseActivity/Courses/     Course/MarkingPeriod/TermInfoData/     TermSpan | O |   | [TermSpan](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#TermSpan) |
|   | CurrentCourseActivity/Courses/     Course/MarkingPeriod/TermInfoData/     SIF\_ExtendedElements | O |   | [SIF\_ExtendedElements](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_ExtendedElements) |
|   | CurrentCourseActivity/Courses/     Course/MarkingPeriod/GradeLevelWhenTaken      | O | Student's grade level at time of course.  | [GradeLevel](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#GradeLevel) |
|   | CurrentCourseActivity/Courses/     Course/MarkingPeriod/MarkData      | C | Note: Mandatory if mid-term mark exists. Mid-term mark.  |   |
| @ | MarkValueInfoDataRefId | M | Reference to marking system at school of record.  | [IdRefType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#IdRefType) |
|   | CurrentCourseActivity/Courses/     Course/MarkingPeriod/MarkData/     Percentage | C | The percent score for this mark (0.00 - 100.00).  | [xs:decimal](http://www.w3.org/TR/xmlschema-2/#decimal) |
|   | CurrentCourseActivity/Courses/     Course/MarkingPeriod/MarkData/     Numeric | C | The raw numeric score for this mark.  | [xs:unsignedInt](http://www.w3.org/TR/xmlschema-2/#unsignedInt) |
|   | CurrentCourseActivity/Courses/     Course/MarkingPeriod/MarkData/     Letter | C | The letter grade for this mark.  | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | CurrentCourseActivity/Courses/     Course/MarkingPeriod/MarkData/     Narrative | C | The free form text narrative for this mark.  | [xs:string](http://www.w3.org/TR/xmlschema-2/#string) |
|   | CurrentCourseActivity/Courses/     Course/MarkingPeriod/MarkData/     SIF\_ExtendedElements | O |   | [SIF\_ExtendedElements](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_ExtendedElements) |
|   | CurrentCourseActivity/Courses/     Course/MarkingPeriod/CourseCreditsAttempted      | O | Number of course credits attempted.  | [xs:decimal](http://www.w3.org/TR/xmlschema-2/#decimal) |
|   | CurrentCourseActivity/Courses/     Course/MarkingPeriod/SIF\_ExtendedElements      | O |   | [SIF\_ExtendedElements](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_ExtendedElements) |
|   | CurrentCourseActivity/Courses/     Course/SIF\_ExtendedElements      | O |   | [SIF\_ExtendedElements](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_ExtendedElements) |
|   | CourseHistory | O | Conveys the coursework completed, performance and attendance information for a student's academic career.   | [List](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#List) |
|   | CourseHistory/Term | OR | Time spans by which courses are grouped.  |   |
|   | CourseHistory/Term/TermInfoData      | M | Collects elements of interest from TermInfo.  |   |
| @ | SchoolAttendedRefId | M | Reference to the school of record for the time span (see SchoolAttended).  | [IdRefType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#IdRefType) |
|   | CourseHistory/Term/TermInfoData/     SchoolYear | O |   | [SchoolYear](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SchoolYear) |
|   | CourseHistory/Term/TermInfoData/     StartDate | O |   | [PartialDateType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#PartialDateType) |
|   | CourseHistory/Term/TermInfoData/     EndDate | O |   | [PartialDateType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#PartialDateType) |
|   | CourseHistory/Term/TermInfoData/     Description | O |   | [xs:string](http://www.w3.org/TR/xmlschema-2/#string) |
|   | CourseHistory/Term/TermInfoData/     TermCode | O |   | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | CourseHistory/Term/TermInfoData/     Track | O |   | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | CourseHistory/Term/TermInfoData/     TermSpan | O |   | [TermSpan](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#TermSpan) |
|   | CourseHistory/Term/TermInfoData/     SIF\_ExtendedElements | O |   | [SIF\_ExtendedElements](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_ExtendedElements) |
|   | CourseHistory/Term/Courses      | O |   |   |
|   | CourseHistory/Term/Courses/     Course | OR |   |   |
|   | CourseHistory/Term/Courses/     Course/SchoolAttendedRefId      | C | Reference to the school where the course was taken (see SchoolAttended); may be omitted if the school is the same as the school of record.   | [IdRefType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#IdRefType) |
|   | CourseHistory/Term/Courses/     Course/SchoolCourseInfoData      | M | Collects elements of interest from SchoolCourseInfo.  |   |
|   | CourseHistory/Term/Courses/     Course/SchoolCourseInfoData/     CourseCode | O |   | [CourseCode](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#CourseCode) |
|   | CourseHistory/Term/Courses/     Course/SchoolCourseInfoData/     StateCourseCode | O |   | [StateCourseCode](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#StateCourseCode) |
|   | CourseHistory/Term/Courses/     Course/SchoolCourseInfoData/     DistrictCourseCode | O |   | [DistrictCourseCode](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#DistrictCourseCode) |
|   | CourseHistory/Term/Courses/     Course/SchoolCourseInfoData/     NationalCourseCode | O |   | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | CourseHistory/Term/Courses/     Course/SchoolCourseInfoData/     SubjectAreaList | O |   | [SubjectAreaList](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SubjectAreaList) |
|   | CourseHistory/Term/Courses/     Course/SchoolCourseInfoData/     CourseTitle | O |   | [CourseTitle](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#CourseTitle) |
|   | CourseHistory/Term/Courses/     Course/SchoolCourseInfoData/     Description | O |   | [xs:string](http://www.w3.org/TR/xmlschema-2/#string) |
|   | CourseHistory/Term/Courses/     Course/SchoolCourseInfoData/     InstructionalLevel | O |   | [InstructionalLevel](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#InstructionalLevel) |
|   | CourseHistory/Term/Courses/     Course/SchoolCourseInfoData/     CoreAcademicCourse | O |   | [xs:boolean](http://www.w3.org/TR/xmlschema-2/#boolean) |
|   | CourseHistory/Term/Courses/     Course/SchoolCourseInfoData/     GraduationRequirement | O |   | [GraduationRequirement](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#GraduationRequirement) |
|   | CourseHistory/Term/Courses/     Course/SchoolCourseInfoData/     Department | O |   | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | CourseHistory/Term/Courses/     Course/SchoolCourseInfoData/     SIF\_ExtendedElements | O |   | [SIF\_ExtendedElements](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_ExtendedElements) |
|   | CourseHistory/Term/Courses/     Course/StartDate | O | Date course section started.  | [PartialDateType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#PartialDateType) |
|   | CourseHistory/Term/Courses/     Course/EndDate | O | Date course section ended.  | [PartialDateType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#PartialDateType) |
|   | CourseHistory/Term/Courses/     Course/MarkingPeriods | M | Student performance/attendance data for each marking period.  | [List](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#List) |
|   | CourseHistory/Term/Courses/     Course/MarkingPeriods/MarkingPeriod      | MR | Student performance/attendance data for a marking period.  |   |
|   | CourseHistory/Term/Courses/     Course/MarkingPeriods/MarkingPeriod/     SchoolAttendedRefId | C | Reference to the school where student took the course during the marking period, if different from schools above.   | [IdRefType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#IdRefType) |
|   | CourseHistory/Term/Courses/     Course/MarkingPeriods/MarkingPeriod/     TermInfoData | O | Information related to the span of time associated with the marking period.  |   |
|   | CourseHistory/Term/Courses/     Course/MarkingPeriods/MarkingPeriod/     TermInfoData/StartDate | O |   | [PartialDateType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#PartialDateType) |
|   | CourseHistory/Term/Courses/     Course/MarkingPeriods/MarkingPeriod/     TermInfoData/EndDate | O |   | [PartialDateType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#PartialDateType) |
|   | CourseHistory/Term/Courses/     Course/MarkingPeriods/MarkingPeriod/     TermInfoData/Description | O |   | [xs:string](http://www.w3.org/TR/xmlschema-2/#string) |
|   | CourseHistory/Term/Courses/     Course/MarkingPeriods/MarkingPeriod/     TermInfoData/TermCode | O |   | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | CourseHistory/Term/Courses/     Course/MarkingPeriods/MarkingPeriod/     TermInfoData/Track | O |   | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | CourseHistory/Term/Courses/     Course/MarkingPeriods/MarkingPeriod/     TermInfoData/TermSpan | O |   | [TermSpan](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#TermSpan) |
|   | CourseHistory/Term/Courses/     Course/MarkingPeriods/MarkingPeriod/     TermInfoData/SIF\_ExtendedElements      | O |   | [SIF\_ExtendedElements](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_ExtendedElements) |
|   | CourseHistory/Term/Courses/     Course/MarkingPeriods/MarkingPeriod/     GradeLevelWhenTaken | O | Student's grade level at time of course.  | [GradeLevel](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#GradeLevel) |
|   | CourseHistory/Term/Courses/     Course/MarkingPeriods/MarkingPeriod/     MarkData | C | Note: Mandatory if mid-term mark exists. Mid-term mark.  |   |
| @ | MarkValueInfoDataRefId | M | Reference to marking system at school of record.  | [IdRefType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#IdRefType) |
|   | CourseHistory/Term/Courses/     Course/MarkingPeriods/MarkingPeriod/     MarkData/Percentage | C | The percent score for this mark (0.00 - 100.00).  | [xs:decimal](http://www.w3.org/TR/xmlschema-2/#decimal) |
|   | CourseHistory/Term/Courses/     Course/MarkingPeriods/MarkingPeriod/     MarkData/Numeric | C | The raw numeric score for this mark.  | [xs:unsignedInt](http://www.w3.org/TR/xmlschema-2/#unsignedInt) |
|   | CourseHistory/Term/Courses/     Course/MarkingPeriods/MarkingPeriod/     MarkData/Letter | C | The letter grade for this mark.  | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | CourseHistory/Term/Courses/     Course/MarkingPeriods/MarkingPeriod/     MarkData/Narrative | C | The free form text narrative for this mark.  | [xs:string](http://www.w3.org/TR/xmlschema-2/#string) |
|   | CourseHistory/Term/Courses/     Course/MarkingPeriods/MarkingPeriod/     MarkData/SIF\_ExtendedElements      | O |   | [SIF\_ExtendedElements](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_ExtendedElements) |
|   | CourseHistory/Term/Courses/     Course/MarkingPeriods/MarkingPeriod/     CourseCreditsAttempted | O | Number of course credits attempted.  | [xs:decimal](http://www.w3.org/TR/xmlschema-2/#decimal) |
|   | CourseHistory/Term/Courses/     Course/MarkingPeriods/MarkingPeriod/     CourseCreditsEarned | O | Number of course credits earned.  | [xs:decimal](http://www.w3.org/TR/xmlschema-2/#decimal) |
|   | CourseHistory/Term/Courses/     Course/MarkingPeriods/MarkingPeriod/     CreditType | O | Type of credit.  | [NCES0108CreditTypeEarnedType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CExternalCodeSets.html#NCES0108CreditTypeEarnedType) |
|   | CourseHistory/Term/Courses/     Course/MarkingPeriods/MarkingPeriod/     ExcessiveAbsenceIndicator      | O | Flag indicating that the student was excessively absent from the class.  | [xs:boolean](http://www.w3.org/TR/xmlschema-2/#boolean) |
|   | CourseHistory/Term/Courses/     Course/MarkingPeriods/MarkingPeriod/     DaysAbsent | O | Number of days absent.  | [xs:decimal](http://www.w3.org/TR/xmlschema-2/#decimal) |
|   | CourseHistory/Term/Courses/     Course/MarkingPeriods/MarkingPeriod/     DaysPresent | O | Number of days present.  | [xs:decimal](http://www.w3.org/TR/xmlschema-2/#decimal) |
|   | CourseHistory/Term/Courses/     Course/MarkingPeriods/MarkingPeriod/     SIF\_ExtendedElements | O |   | [SIF\_ExtendedElements](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_ExtendedElements) |
|   | CourseHistory/Term/Courses/     Course/SectionInfoData | O |   |   |
|   | CourseHistory/Term/Courses/     Course/SectionInfoData/MediumOfInstruction      | O | Medium through which the student receives instructional communication from the teacher.  |   |
|   | CourseHistory/Term/Courses/     Course/SectionInfoData/MediumOfInstruction/     Code | M | Code representing the medium of instruction.  | [NCES0209MediumOfInstructionType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CExternalCodeSets.html#NCES0209MediumOfInstructionType) |
|   | CourseHistory/Term/Courses/     Course/SectionInfoData/MediumOfInstruction/     OtherCodeList | O |   | [OtherCodeList](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#OtherCodeList) |
|   | CourseHistory/Term/Courses/     Course/SIF\_ExtendedElements      | O |   | [SIF\_ExtendedElements](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_ExtendedElements) |
|   | AcademicPerformanceHistory | O | Provides a summary of a student's academic performance by reporting period.  | [List](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#List) |
|   | AcademicPerformanceHistory/     TermPerformance | OR | Individual term performance.  |   |
|   | AcademicPerformanceHistory/     TermPerformance/TermInfoData      | O | Collects elements of interest from TermInfo.  |   |
|   | AcademicPerformanceHistory/     TermPerformance/TermInfoData/     SchoolYear | O |   | [SchoolYear](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SchoolYear) |
|   | AcademicPerformanceHistory/     TermPerformance/TermInfoData/     StartDate | O |   | [PartialDateType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#PartialDateType) |
|   | AcademicPerformanceHistory/     TermPerformance/TermInfoData/     EndDate | O |   | [PartialDateType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#PartialDateType) |
|   | AcademicPerformanceHistory/     TermPerformance/TermInfoData/     Description | O |   | [xs:string](http://www.w3.org/TR/xmlschema-2/#string) |
|   | AcademicPerformanceHistory/     TermPerformance/TermInfoData/     TermCode | O |   | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | AcademicPerformanceHistory/     TermPerformance/TermInfoData/     Track | O |   | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | AcademicPerformanceHistory/     TermPerformance/TermInfoData/     TermSpan | O |   | [TermSpan](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#TermSpan) |
|   | AcademicPerformanceHistory/     TermPerformance/TermInfoData/     SIF\_ExtendedElements | O |   | [SIF\_ExtendedElements](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_ExtendedElements) |
|   | AcademicPerformanceHistory/     TermPerformance/GradeLevelWhenTaken      | O | Student's grade level at time.  | [GradeLevel](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#GradeLevel) |
|   | AcademicPerformanceHistory/     TermPerformance/CreditsAttempted      | O | Number of credits attempted.  | [xs:decimal](http://www.w3.org/TR/xmlschema-2/#decimal) |
|   | AcademicPerformanceHistory/     TermPerformance/CreditsEarned      | O | Number of credits earned.  | [xs:decimal](http://www.w3.org/TR/xmlschema-2/#decimal) |
|   | AcademicPerformanceHistory/     TermPerformance/GPACreditsAttempted      | O | Number of GPA credits attempted.  | [xs:decimal](http://www.w3.org/TR/xmlschema-2/#decimal) |
|   | AcademicPerformanceHistory/     TermPerformance/GPACreditsEarned      | O | Number of GPA credits earned.  | [xs:decimal](http://www.w3.org/TR/xmlschema-2/#decimal) |
|   | AcademicPerformanceHistory/     TermPerformance/GPAGradePoints      | O | Number of GPA points received.  | [xs:decimal](http://www.w3.org/TR/xmlschema-2/#decimal) |
|   | AcademicPerformanceHistory/     TermPerformance/GPA | O | Grade point average for term.  | [xs:decimal](http://www.w3.org/TR/xmlschema-2/#decimal) |
|   | AcademicPerformanceHistory/     TermPerformance/WeightedGPA      | O | Weighted grade point average for term.  | [xs:decimal](http://www.w3.org/TR/xmlschema-2/#decimal) |
|   | AcademicPerformanceHistory/     TermPerformance/DaysAbsent      | O | Number of days absent.  | [xs:decimal](http://www.w3.org/TR/xmlschema-2/#decimal) |
|   | AcademicPerformanceHistory/     TermPerformance/DaysPresent      | O | Number of days present.  | [xs:decimal](http://www.w3.org/TR/xmlschema-2/#decimal) |
|   | AcademicPerformanceHistory/     TermPerformance/SIF\_ExtendedElements      | O |   | [SIF\_ExtendedElements](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_ExtendedElements) |
|   | AcademicPerformanceSummary | M | Conveys a cumulative summary of a student's entire academic performance at the time the transcript was generated.  |   |
|   | AcademicPerformanceSummary/     TotalCreditsAttempted | O | Total credits attempted during academic career.  | [xs:decimal](http://www.w3.org/TR/xmlschema-2/#decimal) |
|   | AcademicPerformanceSummary/     TotalCreditsEarned | O | Total credits earned during academic career.  | [xs:decimal](http://www.w3.org/TR/xmlschema-2/#decimal) |
|   | AcademicPerformanceSummary/     CumulativeGPACreditsEarned      | O | Cumulative number of GPA credits earned during academic career.  | [xs:decimal](http://www.w3.org/TR/xmlschema-2/#decimal) |
|   | AcademicPerformanceSummary/     CumulativeGradePoints | O | Cumulative number of grade points earned during academic career.  | [xs:decimal](http://www.w3.org/TR/xmlschema-2/#decimal) |
|   | AcademicPerformanceSummary/     CumulativeGPA | O | Cumulative grade point average for academic career.  | [xs:decimal](http://www.w3.org/TR/xmlschema-2/#decimal) |
|   | AcademicPerformanceSummary/     GPAType | O | Brief name/description of type of GPA.  | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | AcademicPerformanceSummary/     ClassRank | O | Student's rank in graduating class.  | [xs:unsignedInt](http://www.w3.org/TR/xmlschema-2/#unsignedInt) |
|   | AcademicPerformanceSummary/     ClassTotalNumber | O | Total number of students in student's graduating class.  | [xs:unsignedInt](http://www.w3.org/TR/xmlschema-2/#unsignedInt) |
|   | AcademicPerformanceSummary/     ClassRankingDate | O | Date class ranking was determined.  | [PartialDateType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#PartialDateType) |
|   | AcademicPerformanceSummary/     ProjectedGraduationDate | O | Projected graduation date.  | [PartialDateType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#PartialDateType) |
|   | AcademicPerformanceSummary/     GraduationDate | C | Note: Mandatory if graduated. Graduation date.  | [PartialDateType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#PartialDateType) |
|   | AcademicPerformanceSummary/     GraduationDiplomaType | C | Note: Mandatory if graduated. Type of diploma earned.  | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | AcademicPerformanceSummary/     AcademicTrack | O | An indication of the general nature and difficulty of instruction provided throughout a course.Note: This element is deprecated, in favor of the two elements below, beginning with Version 2.2.  | [NCES0106CourseInstructionalLevelType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CExternalCodeSets.html#NCES0106CourseInstructionalLevelType) |
|   | AcademicPerformanceSummary/     AcademicFoci | O |   | [List](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#List) |
|   | AcademicPerformanceSummary/     AcademicFoci/AcademicFocus      | OR | Indicates the general nature and difficulty of instruction provided throughout a course.  |   |
|   | AcademicPerformanceSummary/     AcademicFoci/AcademicFocus/     Code | M | A code to depict the focus of the educational program (replaces deprecated AcademicTrack.   | [NCES0229ProgramTypeType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CExternalCodeSets.html#NCES0229ProgramTypeType) |
|   | AcademicPerformanceSummary/     AcademicFoci/AcademicFocus/     OtherCodeList | O | Alternate codes indicating the general nature and difficulty of the educational program.  | [OtherCodeList](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#OtherCodeList) |
|   | AcademicPerformanceSummary/     AcademicSubjects | O |   | [List](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#List) |
|   | AcademicPerformanceSummary/     AcademicSubjects/AcademicSubject      | OR | Coding to depict an intended subject area.  |   |
|   | AcademicPerformanceSummary/     AcademicSubjects/AcademicSubject/     Code | M | A code to depict an academic or vocational discipline studied by an individual in an educational program (based on NCES CIP 2000).  | [NCES0373PostsecondarySubjectMatterAreaType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CExternalCodeSets.html#NCES0373PostsecondarySubjectMatterAreaType) |
|   | AcademicPerformanceSummary/     AcademicSubjects/AcademicSubject/     OtherCodeList | O | Alternate codes for an academic or vocational discipline studied by an individual in an educational program.   | [OtherCodeList](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#OtherCodeList) |
|   | AcademicPerformanceSummary/     SIF\_ExtendedElements | O |   | [SIF\_ExtendedElements](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_ExtendedElements) |
|   | AssessmentPerformanceHistory | C | Note: Mandatory if assessments exist. Conveys a history of assessments that the student has taken throughout his/her academic career.  | [List](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#List) |
|   | AssessmentPerformanceHistory/     Assessment | MR | A record of performance on an individual assessment.  |   |
|   | AssessmentPerformanceHistory/     Assessment/Name | M | Textual description of assessment.  | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | AssessmentPerformanceHistory/     Assessment/AdministrationDate      | O | Date the assessment was administered.  | [PartialDateType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#PartialDateType) |
|   | AssessmentPerformanceHistory/     Assessment/Form | O | Form, version or edition of the test.  | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | AssessmentPerformanceHistory/     Assessment/Level | O | Free-form text description of the level of the test.  | [xs:string](http://www.w3.org/TR/xmlschema-2/#string) |
|   | AssessmentPerformanceHistory/     Assessment/StudentGradeLevelWhenAssessed      | O | Student's grade level when assessed.  | [GradeLevel](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#GradeLevel) |
|   | AssessmentPerformanceHistory/     Assessment/SubtestCategory      | O | The subtest or subject category of the assessment.  | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | AssessmentPerformanceHistory/     Assessment/TestScoreType | O | Type of test score.  | [NCES0056AssessmentReportingMethodType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CExternalCodeSets.html#NCES0056AssessmentReportingMethodType) |
|   | AssessmentPerformanceHistory/     Assessment/TestScore | O | Test score.  | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | AssessmentPerformanceHistory/     Assessment/SIF\_ExtendedElements      | O |   | [SIF\_ExtendedElements](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_ExtendedElements) |
|   | AdditionalGraduationRequirementPerformanceHistory | C | Note: Mandatory if additional graduation requirements exist. Conveys a student's achievements in relation to additional graduation requirements.  | [List](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#List) |
|   | AdditionalGraduationRequirementPerformanceHistory/     Requirement | MR | A record of performance in an individual graduation requirement.  |   |
|   | AdditionalGraduationRequirementPerformanceHistory/     Requirement/Name | M | Textual description of the requirement.  | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | AdditionalGraduationRequirementPerformanceHistory/     Requirement/Method | O | The method by which the requirement was met.  | [xs:string](http://www.w3.org/TR/xmlschema-2/#string) |
|   | AdditionalGraduationRequirementPerformanceHistory/     Requirement/Status | M | Student's status with regard to the requirement.  | values:MetNot Met |
|   | AdditionalGraduationRequirementPerformanceHistory/     Requirement/StatusDeterminationDate      | O | Date the student's status was determined.  | [PartialDateType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#PartialDateType) |
|   | AdditionalGraduationRequirementPerformanceHistory/     Requirement/SIF\_ExtendedElements      | O |   | [SIF\_ExtendedElements](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_ExtendedElements) |
|   | ActivityAwardHistory | C | Note: Mandatory if activities/awards exist. Conveys award the student has received and/or activities in which s/he has been involved.  | [List](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#List) |
|   | ActivityAwardHistory/ActivityAward      | MR | A record of an individual award or activity  |   |
|   | ActivityAwardHistory/ActivityAward/     Name | M | The title that identifies a particular co-curricular or extra-curricular activity.  | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | ActivityAwardHistory/ActivityAward/     InvolvementCode | O | The code used to identify the co-curricular or extra-curricular activity in which the individual is involved.  | [NCES0679ActivityInvolvementCodeType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CExternalCodeSets.html#NCES0679ActivityInvolvementCodeType) |
|   | ActivityAwardHistory/ActivityAward/     InvolvementBeginningDate | O | The month, day, and year on which the individual began to participate in the activity.  | [PartialDateType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#PartialDateType) |
|   | ActivityAwardHistory/ActivityAward/     InvolvementEndingDate | O | The month, day, and year on which the individual ceased to participate in the activity.  | [PartialDateType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CCommonTypes.html#PartialDateType) |
|   | ActivityAwardHistory/ActivityAward/     InvolvementAmount | O | An indication of the degree to which the individual is involved in the activity (e.g., number of hours per week).  | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | ActivityAwardHistory/ActivityAward/     HonorsInformationCode | O | A designation of the type of academic distinctions or other honors earned by or awarded to the student.Note: HonorsInformationCode and HonorsDescription are related to honors (athletic award, citizenship award/recognition, medals, honor society membership, etc.) other than graduation and scholar awards and scholarships. DiplomaCredentialHonorsCode and DiplomaCredentialHonorsDescription are focused on graduation honors like cum laude designations (magna, summa), scholar and honors awards, scholarships, and such.   | [NCES0674HonorsTypeType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CExternalCodeSets.html#NCES0674HonorsTypeType) |
|   | ActivityAwardHistory/ActivityAward/     HonorsDescription | O | A textual description of the distinction or honor.  | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | ActivityAwardHistory/ActivityAward/     DiplomaCredentialHonorsCode      | O | The nature of recognition given the student for the successful completion of work in high school.  | [NCES0684DiplomaCredentialLevelAndHonorsType](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CExternalCodeSets.html#NCES0684DiplomaCredentialLevelAndHonorsType) |
|   | ActivityAwardHistory/ActivityAward/     DiplomaCredentialHonorsDescription      | O | A textual description of the recognition.  | [xs:normalizedString](http://www.w3.org/TR/xmlschema-2/#normalizedString) |
|   | ActivityAwardHistory/ActivityAward/     SIF\_ExtendedElements | O |   | [SIF\_ExtendedElements](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_ExtendedElements) |
|   | SIF\_Metadata | O |   | [SIF\_Metadata](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_Metadata) |
|   | SIF\_ExtendedElements | O |   | [SIF\_ExtendedElements](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5Cdist%5CSpecification%5Cout%5CDataModel.html#SIF_ExtendedElements) |

## Object Diagram

The diagram on the next page further illustrates the structure of the object. Zoom in on the picture to see more clearly or ctl-click the link below to open the image file if it was included with this document.

[**StudentAcademicRecord.png**](file:///C%3A%5CUsers%5CVince%5CDesktop%5CWorkFolders%5CSRE_2.6%5CStudentAcademicRecord.png)

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## XML Example

<StudentAcademicRecord RefId="D932E34082D04C048112729922B58A93" SIF\_RefObject="StudentRecordExchange" SIF\_RefId="0EAF9D6DA4854F348103B04BFEAC65B2">

 <ReportingDate>2010-07-15</ReportingDate>

 <StudentSchoolEnrollmentData SchoolAttendedRefId="140902170B360F35140071CD92A52A4A">

 <GradeLevel>

 <Code>12</Code>

 </GradeLevel>

 <Counselor>

 <StaffPersonalData>

 <Name Type="04">

 <LastName>Reese</LastName>

 <FirstName>Beth</FirstName>

 <FullName>Beth Reese</FullName>

 </Name>

 </StaffPersonalData>

 </Counselor>

 </StudentSchoolEnrollmentData>

 <SchoolAttendanceHistory>

 <SchoolAttended RefId="140902170B360F35140071CD92A52A4A">

 <LEAInfoData>

 <StateProvinceId>123456</StateProvinceId>

 <LEAName>Botetourt County</LEAName>

 </LEAInfoData>

 <SchoolInfoData>

 <LocalId>440</LocalId>

 <StateProvinceId>654321</StateProvinceId>

 <SchoolName>Lord Botetourt High School</SchoolName>

 <SchoolURL>http://sites.google.com/a/bcps.k12.va.us/lord-botetourte-high-school</SchoolURL>

 <SchoolContactList>

 <!-- ... -->

 </SchoolContactList>

 <AddressList>

 <Address Type="0123">

 <!-- ... -->

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 <Address Type="0765">

 <!-- ... -->

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 <Number>703-444-5600</Number>

 </PhoneNumber>

 <PhoneNumber Type="2364">

 <Number>703-555-5555</Number>

 </PhoneNumber>

 </PhoneNumberList>

 <SIF\_ExtendedElements>

 <SIF\_ExtendedElement Name="SchoolEmail">ABSmith@bcps.k12.va</SIF\_ExtendedElement>

 </SIF\_ExtendedElements>

 </SchoolInfoData>

 <MarkingSystems>

 <MarkValueInfoData RefId="9BA91E6D97A94933BA2A7D070881D2A3">

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 </SchoolAttended>

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 <CourseHistory>

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 <TermInfoData SchoolAttendedRefId="140902170C0227005A532E65ED069555">

 <SchoolYear>2010</SchoolYear>

 </TermInfoData>

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 <CourseCode>1109</CourseCode>

 <NationalCourseCode>010011IB1130</NationalCourseCode>

 <CourseTitle>English 6</CourseTitle>

 </SchoolCourseInfoData>

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 <MarkingPeriod>

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 <TermSpan>

 <Code>FG</Code>

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 <OtherCode Codeset="StateProvince">FG</OtherCode>

 <OtherCode Codeset="Other">8156</OtherCode>

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 </GradeLevelWhenTaken>

 <MarkData MarkValueInfoDataRefId="66C178304ECB4A8E8FA0A54B7ED4026A">

 <Letter>C</Letter>

 <Numeric>0.5</Numeric> <!-- Quality Points -->

 </MarkData>

 <CourseCreditsAttempted>0</CourseCreditsAttempted>

 <CourseCreditsEarned>1</CourseCreditsEarned>

 <SIF\_ExtendedElements>

 <SIF\_ExtendedElement Name="VA\_Verified\_Credit\_Earned">1</SIF\_ExtendedElement>

 <SIF\_ExtendedElement Name="CourseCreditBasis">CreditByExam</SIF\_ExtendedElement>

 </SIF\_ExtendedElements>

 </MarkingPeriod>

 </MarkingPeriods>

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 <SIF\_ExtendedElement Name="APCourse">No</SIF\_ExtendedElement>

 <SIF\_ExtendedElement Name="AcceleratedCourse">Yes</SIF\_ExtendedElement>

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 <SIF\_ExtendedElement Name="DualEnrollmentCourse">Yes</SIF\_ExtendedElement>

 <SIF\_ExtendedElement Name="HonorsCourse">No</SIF\_ExtendedElement>

 <SIF\_ExtendedElement Name="SummerCourse">No</SIF\_ExtendedElement>

 </SIF\_ExtendedElements>

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 </Courses>

 </Term>

 </CourseHistory>

 <AcademicPerformanceHistory>

 <TermPerformance>

 <TermInfoData>

 <SchoolYear>2009</SchoolYear>

 </TermInfoData>

 <DaysAbsent>6</DaysAbsent>

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 <SIF\_ExtendedElement Name="TermUnexcusedDaysAbent">3</SIF\_ExtendedElement>

 </SIF\_ExtendedElements>

 </TermPerformance>

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 <SchoolYear>2010</SchoolYear>

 </TermInfoData>

 <DaysAbsent>2</DaysAbsent>

 <SIF\_ExtendedElements>

 <SIF\_ExtendedElement Name="TermUnexcusedDaysAbent">3</SIF\_ExtendedElement>

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 <SchoolYear>2011</SchoolYear>

 </TermInfoData>

 <DaysAbsent>4</DaysAbsent>

 </TermPerformance>

 </AcademicPerformanceHistory>

 <AcademicPerformanceSummary>

 <CumulativeGPA>3.5</CumulativeGPA>

 <ClassRank>17</ClassRank>

 <ClassTotalNumber>145</ClassTotalNumber>

 <GraduationDate>2011-06-30</GraduationDate>

 <GraduationDiplomaType>2</GraduationDiplomaType>

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 </SIF\_ExtendedElements>

 </AcademicPerformanceSummary>

 <AssessmentPerformanceHistory>

 <Assessment>

 <Name>Industry Certification</Name>

 <AdministrationDate>2010-03-31</AdministrationDate>

 <SubtestCategory>Welding</SubtestCategory>

 <TestScore>99</TestScore>

 </Assessment>

 <Assessment>

 <Name>Industry Certification</Name>

 <AdministrationDate>2010-03-31</AdministrationDate>

 <SubtestCategory>Carpentry</SubtestCategory>

 <TestScore>PASS</TestScore>

 </Assessment>

 <Assessment>

 <Name>Industry Certification</Name>

 <AdministrationDate>2010-03-31</AdministrationDate>

 <SubtestCategory>MSSC</SubtestCategory>

 <TestScore>0</TestScore>

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 <SIF\_ExtendedElement Name="ScoreNotReportedReason">3</SIF\_ExtendedElement>

 </SIF\_ExtendedElements>

 </Assessment>

 </AssessmentPerformanceHistory>

 <ActivityAwardHistory>

 <ActivityAward>

 <Name>Carpentry Certification Completion</Name>

 <InvolvementEndingDate>2010-03-31</InvolvementEndingDate>

 <SIF\_ExtendedElements>

 <SIF\_ExtendedElement Name="GovernorRecognition">No</SIF\_ExtendedElement>

 </SIF\_ExtendedElements>

 </ActivityAward>

 </ActivityAwardHistory>

</StudentAcademicRecord>

# **6 Migration Plan (for proposed changes to existing objects only)**

*One of the mandatory components of every Data Model Change proposal is the Migration Plan. This section describes the impact of the proposed change to legacy SIF Zones and the techniques, best practices and deployment guidelines designed to minimize that impact. It is normally filled out in coordination with SIF Staff or an experienced SIF Data Modeler.*

*All migration plans have the same overarching goal: allow an existing SIF Zone to migrate to the new change incrementally ... by changing only one component at a time while maintaining at least the previous level of functionality, and “breaking” nothing in the process.*

*Several common strategies (in order of desirability) are:*

***1. Add new elements rather than modify old ones***

*This places a requirement on new agents to support duplicate entries in order to maintain backwards compatibility with agents conforming to earlier versions of the standard. To use this strategy, there must be a clear mapping provided for agent writers to utilize. This would include mapping any new code set values to the collection of previously existing ones.*

***2. Constrain the impact to the ZIS***

*In this case the ZIS will transparently “bridge” between agents supporting this change and earlier versions. To use this strategy, there must be a clear mapping provided for ZIS vendors to utilize, and at least two vendors must “sign off” on this section of the proposal.*

***3. Reduce the impact***

*This approach is effective for changing only those parts of the SIF specification which have been minimally adopted. Start by mapping the set of changed elements against the CSQ matrices to determine the number of existing SIF-certified applications that will be affected. Work with SIF Staff to alert impacted vendors (those with certified, and where known, uncertified products) and identify the number of sites which will be affected. Depending upon the size of the impact, the change may be accepted for a minor release.*

***4. Extended Elements***

*Use the extended element construct to add the new changes. This has the advantage that it standardizes how the functionality will be introduced, but suffers from the disadvantage that conformance to the changes cannot be easily verified, and a further change will be required when moving forward to the next major release. It is the least desirable way to introduce changes into a minor release, and a strong justification for this approach should be prepared.*

***5. Wait until the next major release***

*Defer the proposed change until the next major release because a clear incremental migration strategy for it cannot be constructed.*

**Migration Plan:**

*Using the above techniques or alternative ones, specify the recommended series of incremental component upgrades or deployments (of application, agent or ZIS) which must be performed before the data model changes introduced by this proposal can be successfully incorporated into an existing SIF Zone.*

|  |  |  |
| --- | --- | --- |
| **Component Replaced** | **Increased Functionality (if any)** | **Effect on Legacy components (if any)** |
|  |  |  |
|  |  |  |
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# **7 Issues**

*List any issues surrounding this proposal which the reviewers or approvers may need to consider.*