



# SIF NZ Data Model

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NSIP A4L Community Day Update 2018

# AGENDA



NZ Education  
Sector Overview



SISI Vision



SISI Early Stage  
Rollouts



SISI Project  
Status



Our Process



Data Standards  
Governance for  
SIF

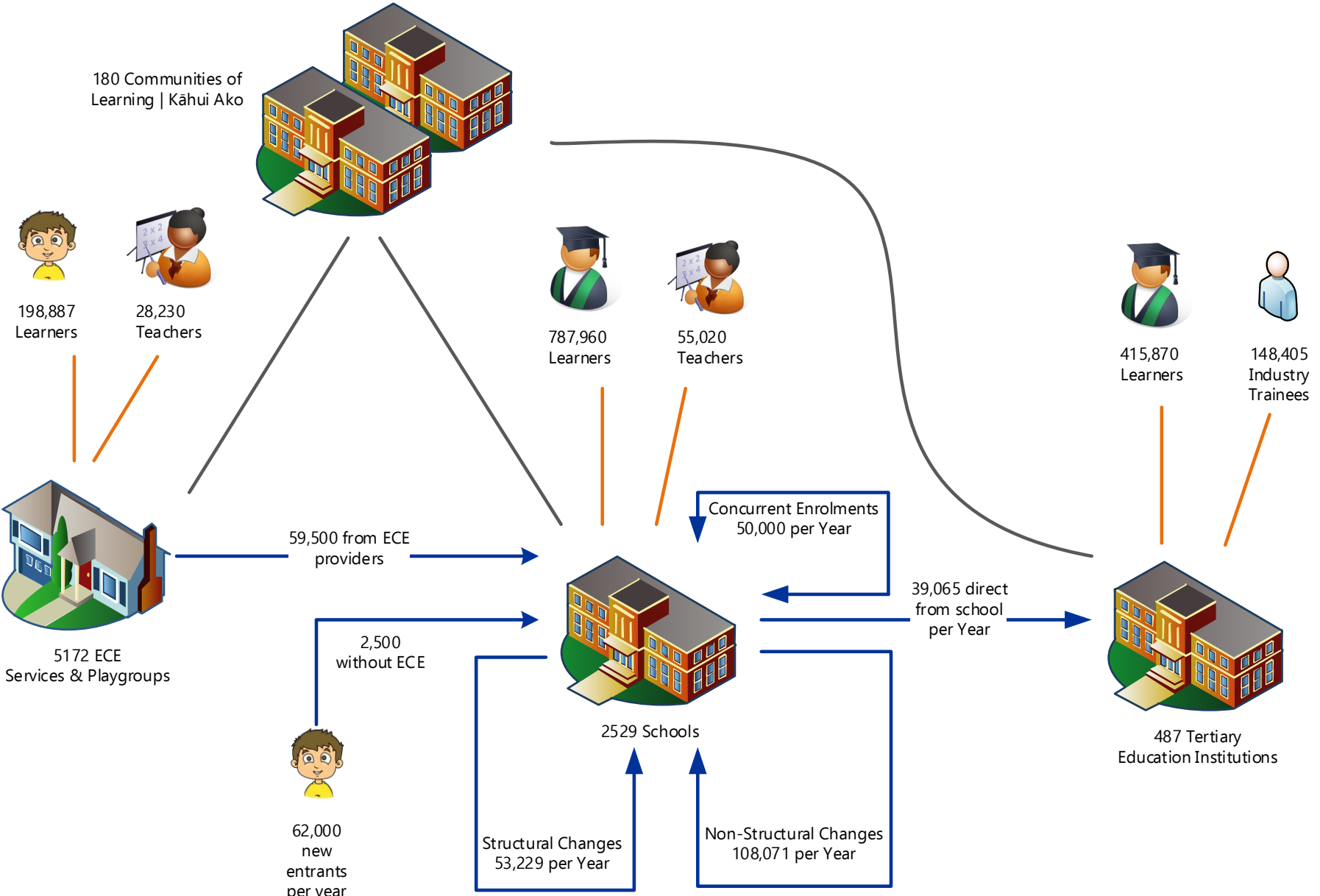


Logical Data  
Model

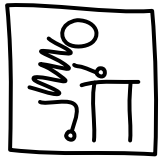


Draft SIF NZ  
Data Model  
Overview

# NZ EDUCATION SECTOR OVERVIEW

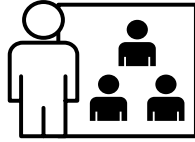


Learners can access, analyse and manage their own information throughout their life-long learning journey.



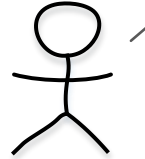
**Learners**

Whānau can view their learner's progress information anytime they want, whether or not the school SMS offers a parent portal.



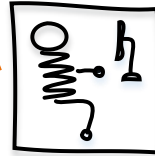
**Parents/Whānau/Care-Givers**

SMSs and other software vendors can use the SISI APIs to increase the value of their products and simplify data exchanges with other vendors.



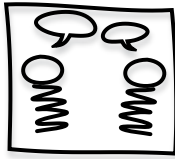
**Education Software Vendors**

Education Agencies can pull reporting data directly from SISI any time they need it rather than rely on historical reports from providers. Agency access to SISI data is subject to strong governance.



**Education Agencies**

COL can access a unified view of student data across participating schools to improve decision-making and resource allocation across the COL.



**Communities of Learning**

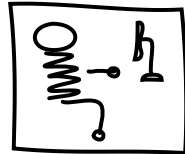
**National Learner Repository and Data Exchange**

Administration is streamlined for Schools, Early Childhood and Tertiary providers. The reporting burden is reduced and when a new student arrives they can access their data from SISI.



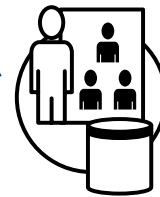
**Education Providers**

CoOL can access and update student data from SISI.



**Communities of Online Learning**

3rd Parties Providing Education Innovation, Data Analytics, Research, System Integrators and Standards.

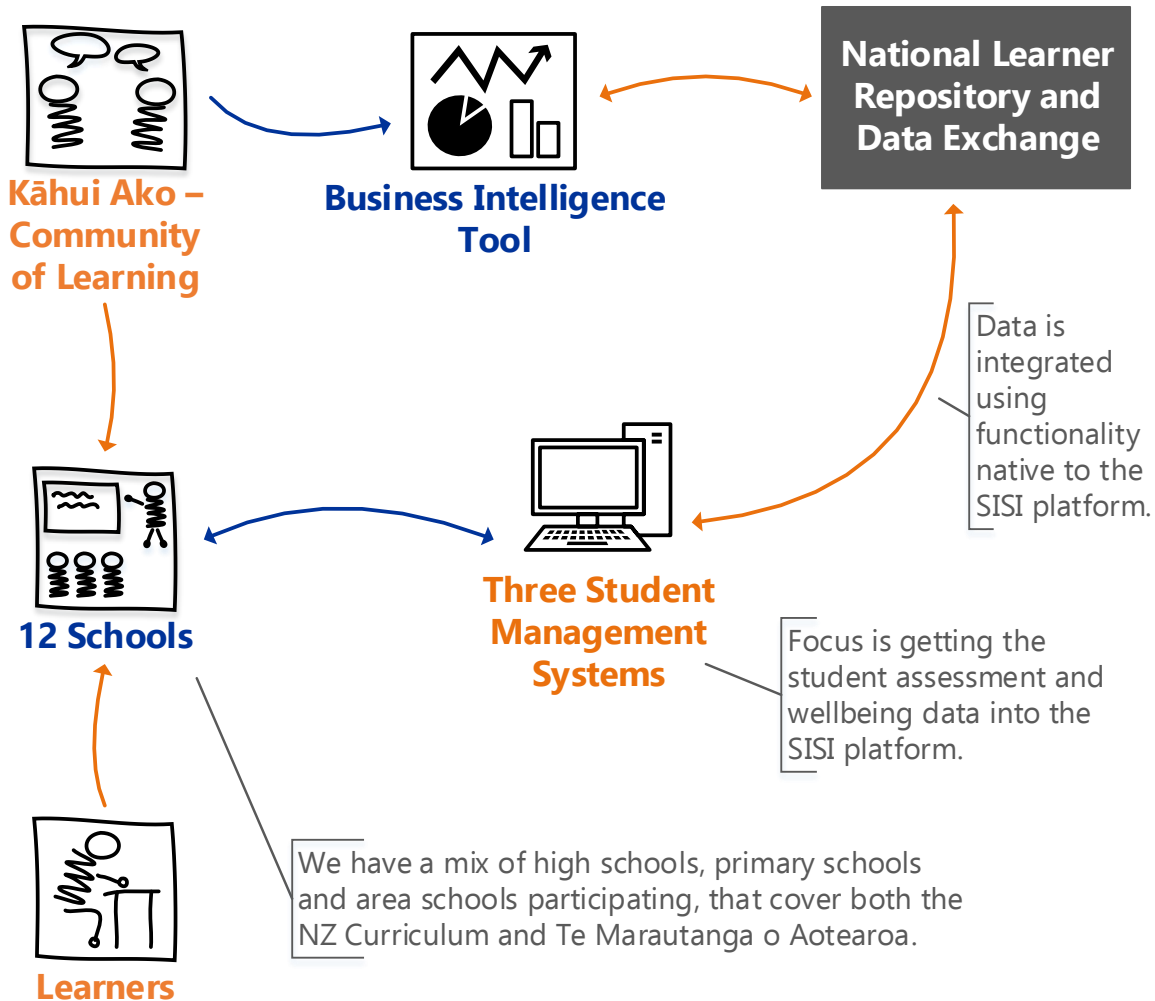


**Third Parties**

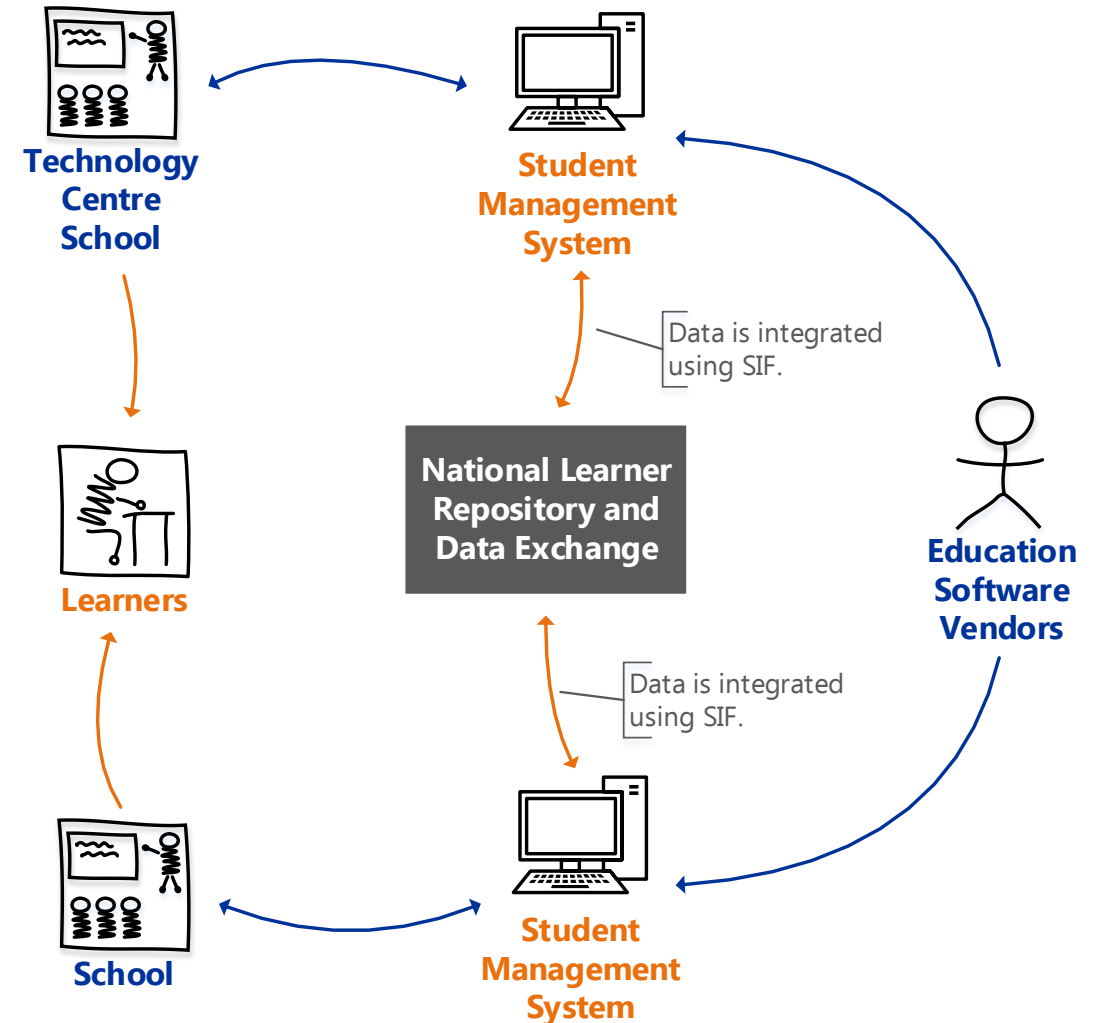
# SISI VISION

# SISI EARLY STAGE ROLLOUTS

## Data Analysis ESR



## Student Management System ESR



# SISI PROJECT STATUS

1

Have a preferred repository platform vendor, which is still in the commercial negotiations stage so cannot discuss further.

2

Working through renaming and rebranding the initiative to Te Rito to encompass the guiding principle to “Protect and uphold the mana of the child and their whanau”. Te Rito is the seed of the flax plant which is protected and nurtured by the flax leaves.

3

First drafts of the Privacy Impact Assessment has been completed.

4

Working on the 2019 budget bid to deliver the full SISI project.

5

Spent 18 months doing co-design with schools nationally. Currently focused on gathering detailed data and business requirements from the 12 schools participating in the ESRs.

6

Completed first draft of the SIF NZ Data Model.

7

Have a design for unified access control model to be shared between the SISI platform and SMS vendors.

8

Engaging with Digital Identity within the Ministry to start work on the identity portion of the SMS ESR.



## Produce a Conceptual Data Model

Based on known requirements and current understanding of the education sector.



## Produce a Logical Data Model



Based off the Conceptual Data model and the SIF AU Data Model.

## Draft Data Objects for SIF NZ Data Model

Based on the SIF AU Data Model and Logical Data Model. Adopted wholesale where possible, modified and created new where required.



## Receive SISI ESR Data Requirements

Update the first draft of the SIF NZ Data Model to align with the data requirements produced by the SISI project.



## Establish SIF NZ Data Model Working Group

Seek approval from the Data Standards Management Board to set up the working group, then identify membership (sector and vendors) and establish.



## Agree SIF NZ Data Model and Seek Approval

The SIF NZ Data Model Working Group will have representatives from across the sector who will work together to agree on the contents of the data objects, and the processes for adoption, and implementation.

## Publish SIF NZ Data Model

The SISI SMS ESR will be the first implementation of the SIF NZ Data Model.



# OUR PROCESS



# DATA STANDARDS GOVERNANCE FOR SIF

## Data Standard Framework

Governance, policy, processes, templates and guidelines, standards register, prioritised work programme, ongoing advisory role, formal change management, compliance audits

### Education Agencies Data and Information Governance Board

Members from MOE, NZQA, TEC, endorse standards, utilise influence to support the adoption of endorsed education standards and NZ national standards

### Data Standards Management Board

Endorses and publishes education data standards, members from MOE, NZQA, TEC, and Statistics NZ, manages the prioritised work programme, gate keepers for the quality of the consultation process

### Education Sector Design Authority

Endorse the standards according to the sector architecture requirements, utilise their influence to support the use of adopted standards

### Data Standards Working Groups

Develop standards as directed, ad hoc groups based on expertise, may be part of a project that has identified a need for a standard

### Data Standards Management Board

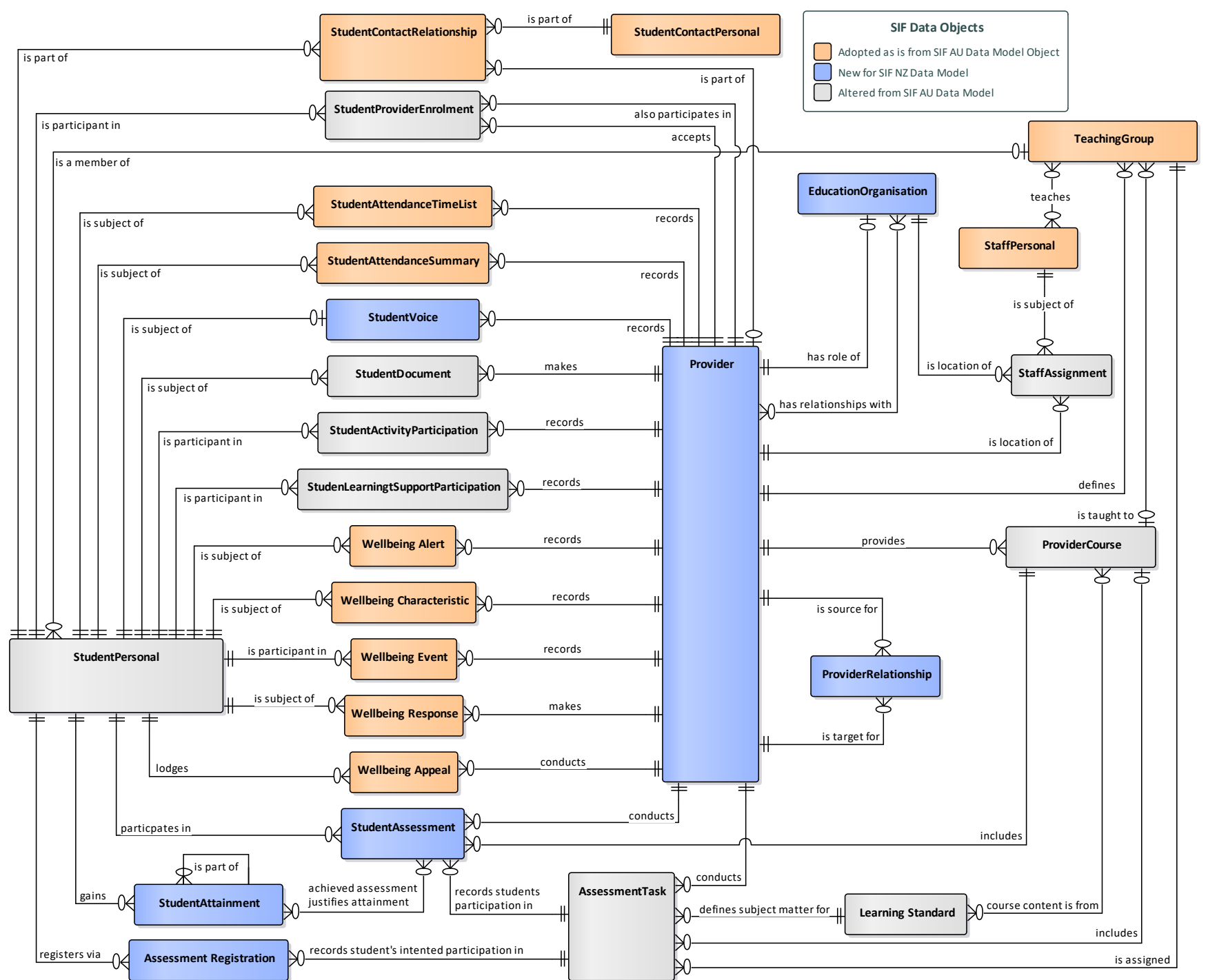
- A4L Management Board for SIF related standards
- Will endorse and publish the final SIF NZ standard
- Currently in the process of approving and setting up the SIF NZ Data Model Working Group

### SIF NZ Data Model Working Group

- In the process of being set up
- Planning meeting has been held with SISI project to identify project representatives on the working group
- Members of the Data Standards Management Board are in the process identifying representatives from their respective agencies and vendors



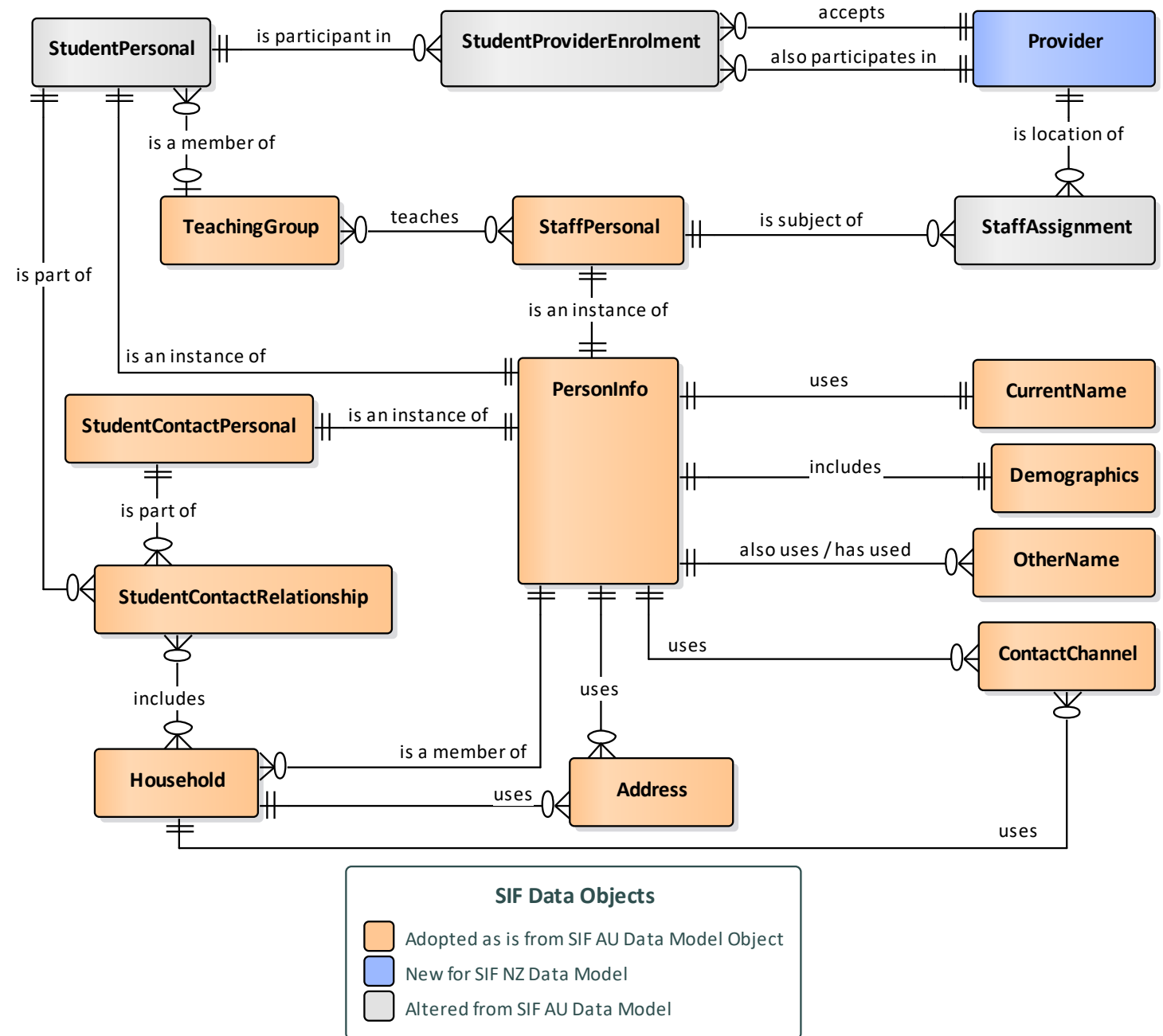
# LOGICAL DATA MODEL



# PERSON

## DEVIATIONS from SIF AU Data Model

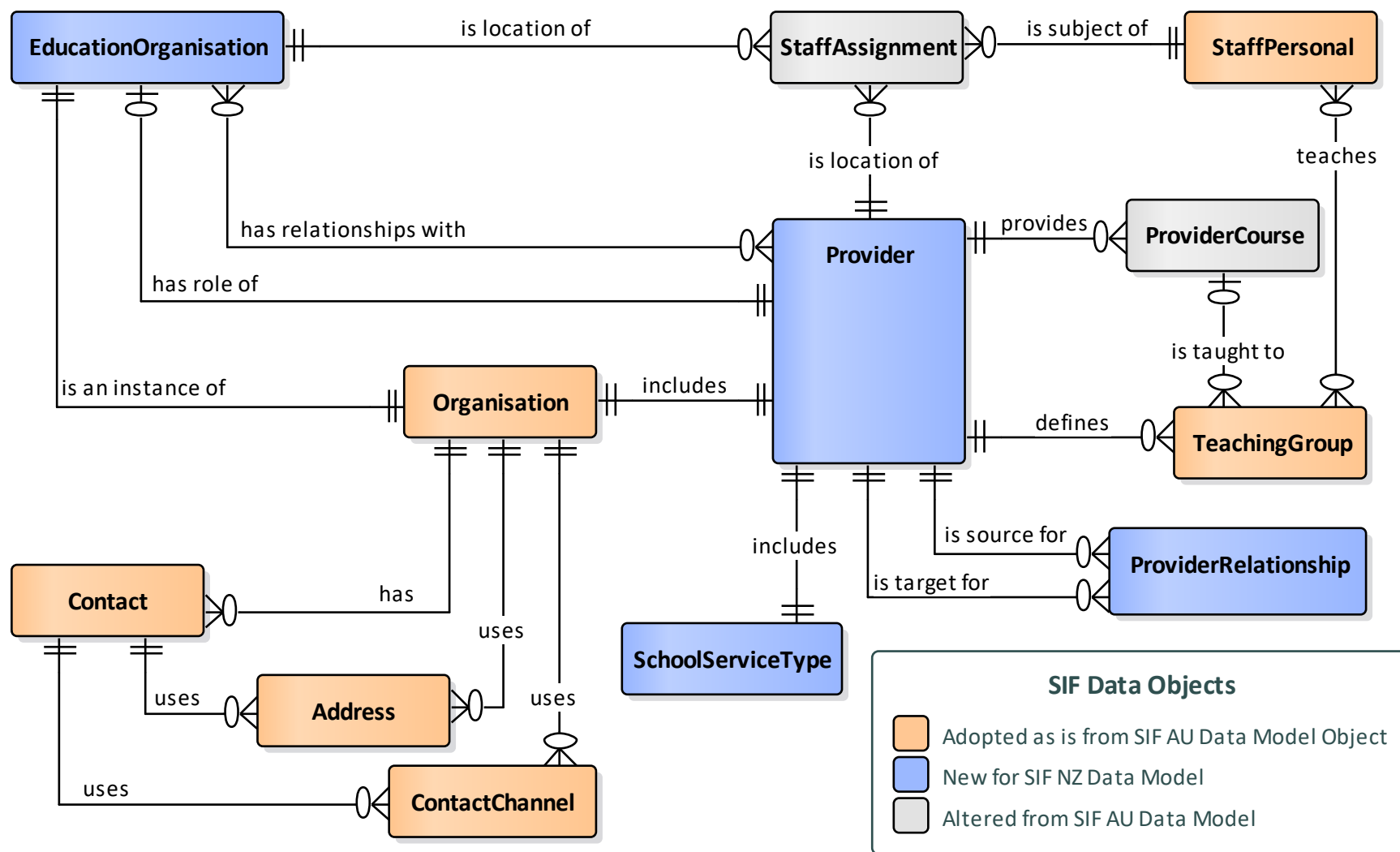
- Removal of Australian specific person demographic values.
- Addition of EthnicityList, IwiAffiliationList and ReligiousAffiliationList to person demographic values.
- Addition of HealthcareServiceInfo complex type to the StudentContactPersonal recording contact details of a student's health care providers.
- StaffAssignment data object has been adjusted:
  - StaffAssignment uses a generic data object link to either Provider or EducationOrganisation to record staff assignments to roles within Schools (via the Provider data object) or Kāhui Ako (via the EducationOrganisation data object).
  - Addition of SubjectAreaList and YearLevelList to restrict the context of a StaffAssignment to a particular cohort of Students. Eg: "Head of Dept (Maths)"



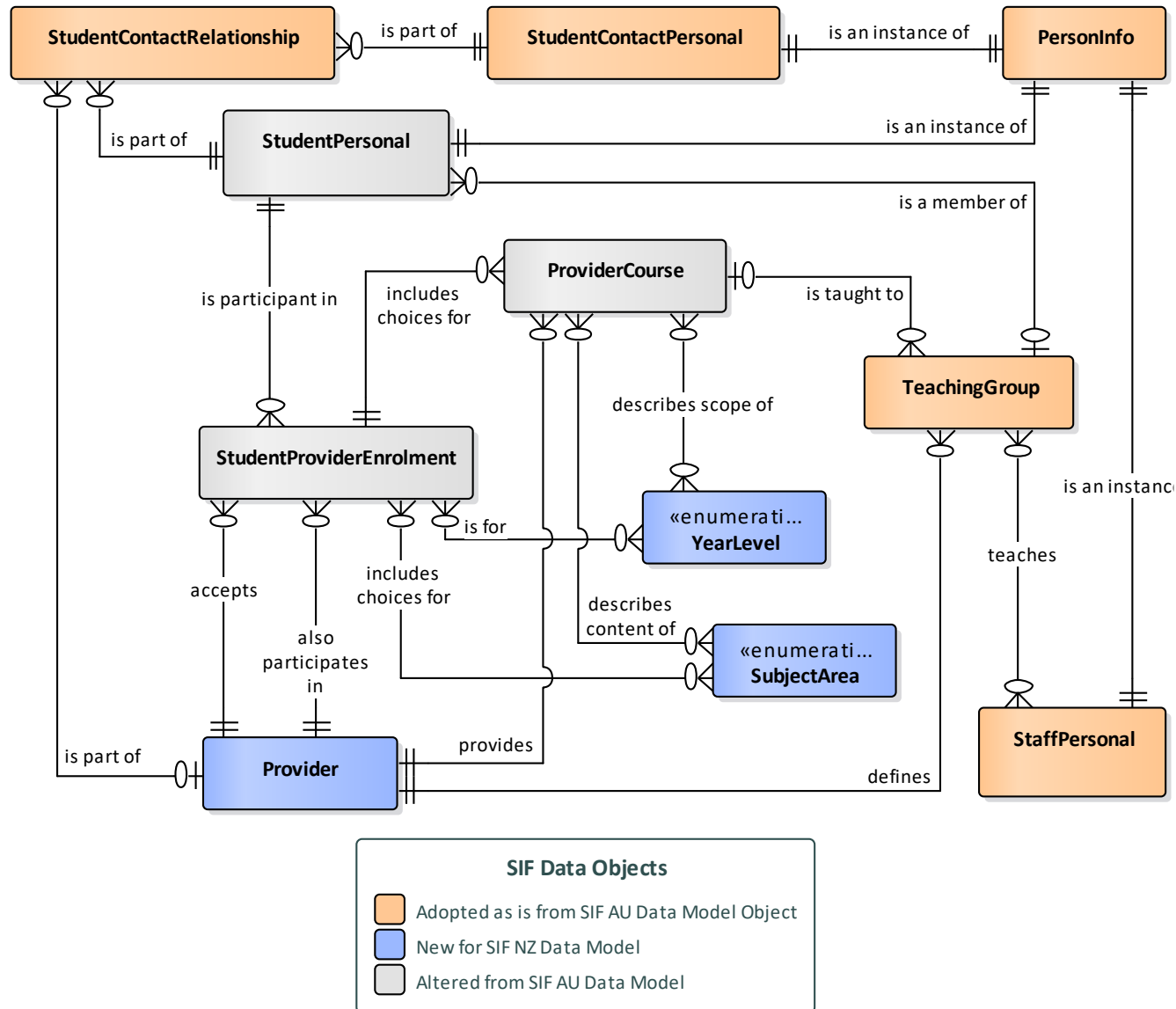
# PROVIDER

## DEVIATIONS from SIF AU Data Model

- The Provider data object was developed from the SchoolInfo data object in the SIF AU Data Model.
- To cater for life-long learning and management of student information across early childhood, school and tertiary sectors, the SchoolInfo data object has been remodelled as a Provider data object, able to represent an education provider from any sector.
- This impacts several other data objects in the SIF NZ Data Model where other transactions reference a school e.g. in StudentSchoolEnrolment, the SchoolInfoRefId field will be replaced with ProviderRefId.
- StudentSchoolEnrolment data object has been renamed to StudentProviderEnrolment.



# STUDENT ENROLMENT



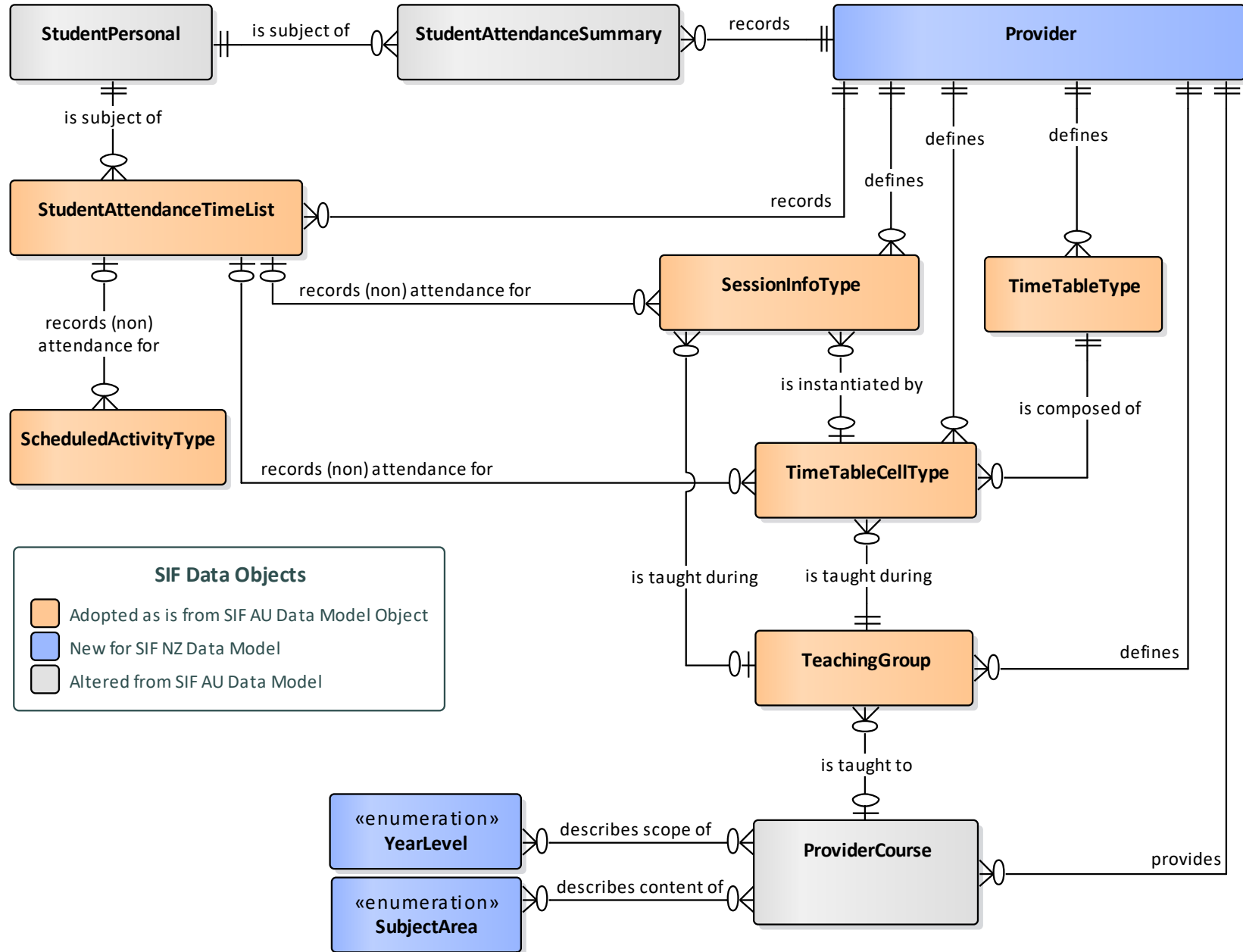
## DEVIATIONS from SIF AU Data Model

- Many data elements in SchoolInfo data object that are relevant to School enrolments are not relevant to enrolments in early childhood education (ECE) or tertiary education. Consequently these data elements were pushed 'down one level' into the StudentSchoolEnrolment element within the StudentProviderEnrolment data object.
- In New Zealand enrolment at a school is a multi-year concept; particularly while students are enrolled in primary and intermediate schools; this leads to the need for an InstructionalPeriodEnrolment to hold enrolment details that are relevant to a particular Term, Semester or academic Year.
- Addition of data elements to support concurrent enrolment at multiple schools.
- Addition of data elements to support delivery of education being in either English medium or Māori medium, according to one of New Zealand's two curricula: The New Zealand Curriculum, or Te Marautanga o Aotearoa.
- Replacement of StudentSubjectChoiceList data element with StudentCourseChoiceList as modern enrolment systems collect learner's choices for particular courses that are offered by the provider, rather than generic subject choices.

# ATTENDANCE

## DEVIATIONS from SIF AU Data Model

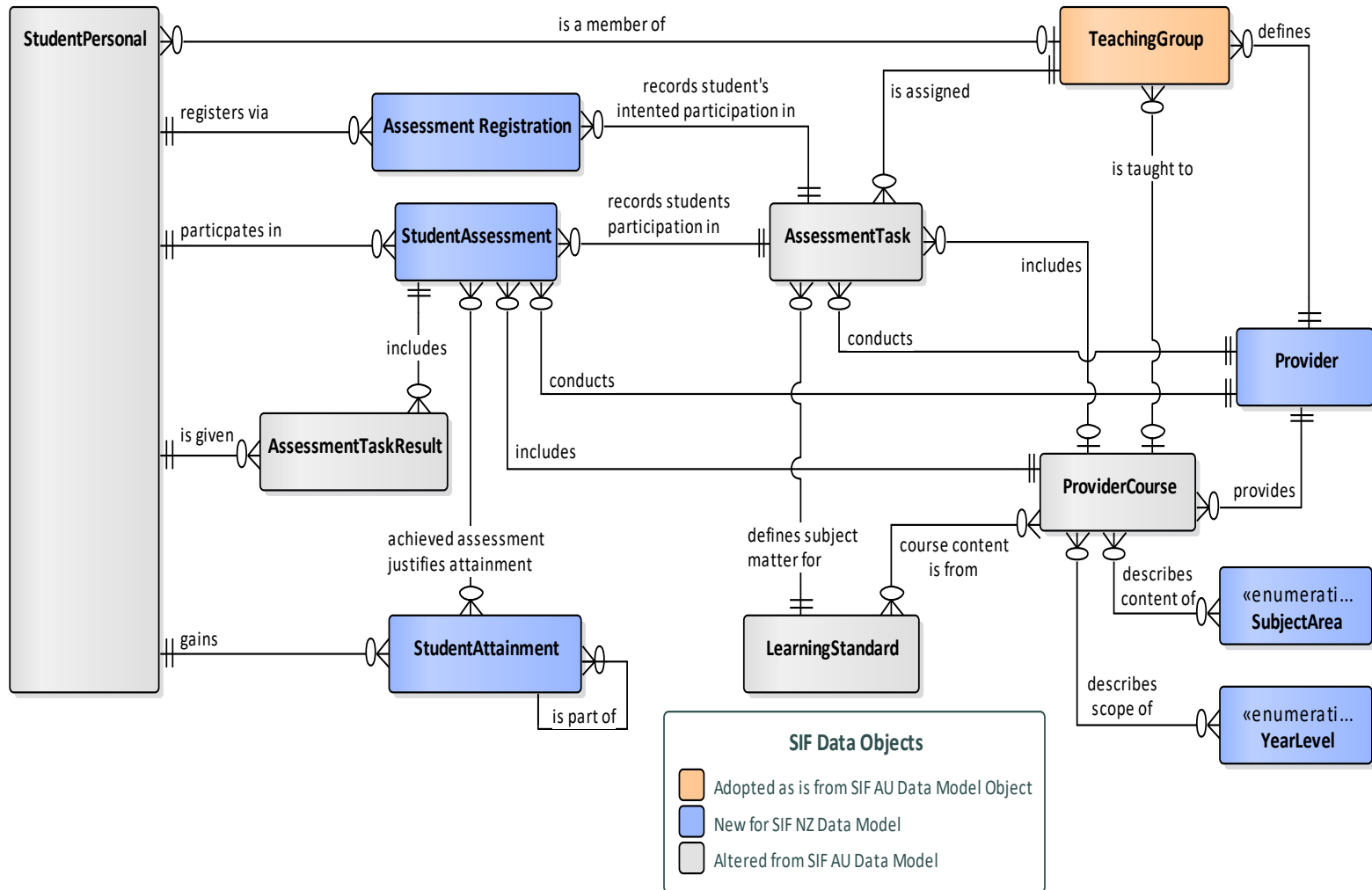
- The StudentDailyAttendance data object is only applicable to the primary sector of schooling; and is therefore not included in the SIF NZ data model.
- The StudentPeriodAttendance data object is only applicable to the secondary sector of schooling; and is therefore not included in the SIF NZ data model.
- So what did we replace them with?



# ASSESSMENT

## DEVIATIONS from SIF AU Data Model

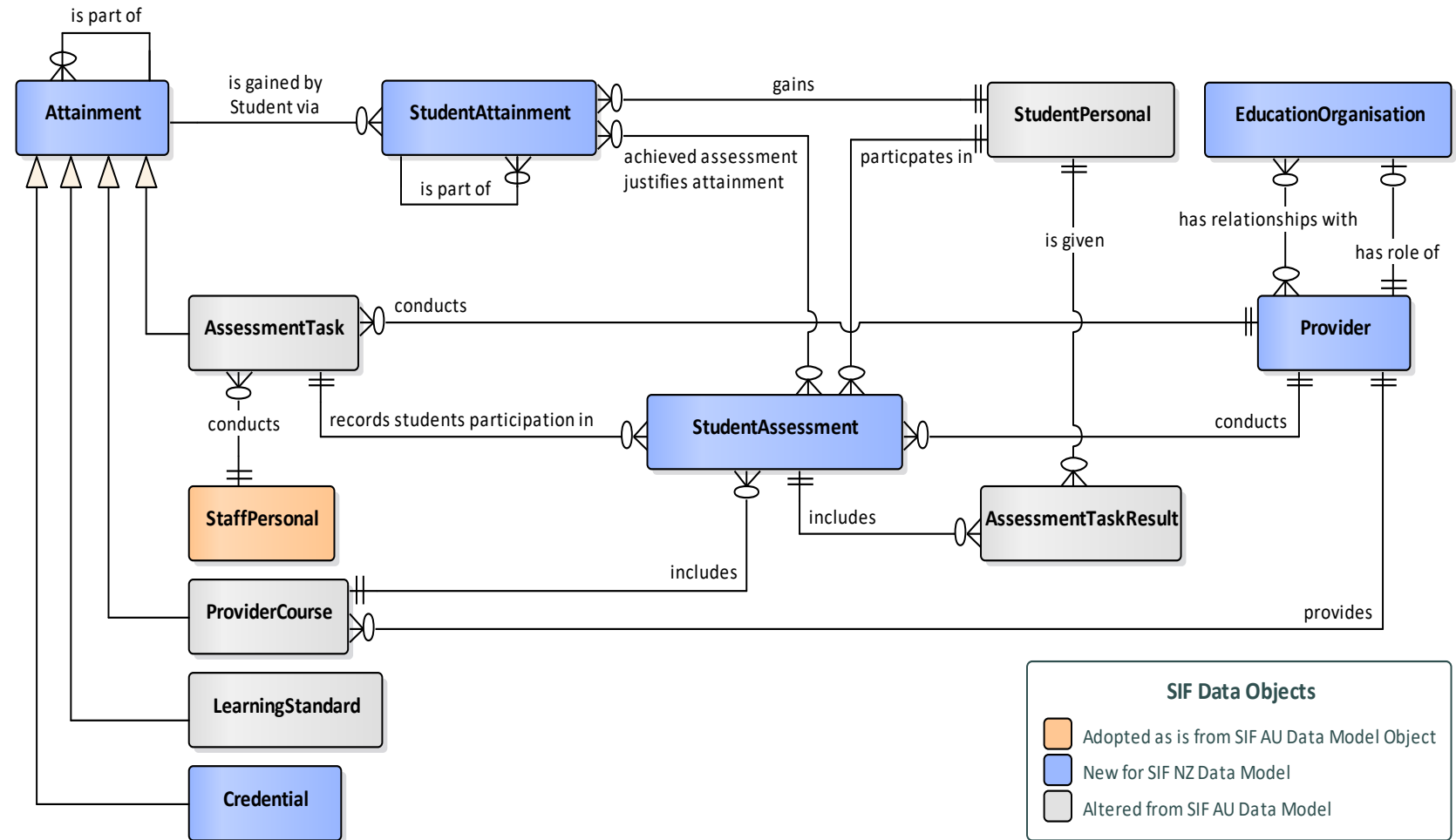
- Renamed the GradingAssignment and GradingAssignmentScore data objects to AssessmentTask and AssessmentTaskResult. Enables recording of the details of an individual assessment task, (be it a grading assignment, course exam, or an end of year course or programme final grade).
- Addition of AssessmentRegistration data object to record a student's registration for assessments that are to be conducted by external agencies at some future date; (e.g. NZQA Learning Standard entries, Cambridge exam entries).
- Addition of StudentAssessment data object to record a Student's participation in a particular assessment task, including the applicability of special assessment conditions.



# ATTAINMENT

## DEVIATIONS from SIF AU Data Model

- Addition of the StudentAttainment data object that:
  - Records a Student's attainment of a qualification, credential, course achievement or learning standard pass
  - Is based upon having achieved the requisite assessment results, e.g. achieving NCEA Level 1, by gaining sufficient learning standard credits







# DRAFT **SIF** NZ DATA MODEL OVERVIEW

1

Domain Maps

2

Background Documents

3

Inclusion of Logical Data Models

4

JSON Schemas / Examples

5

API Definitions