

# Technical Specification

## Outcome API



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## 1 Introduction

The Outcome API provides services that make it possible to get and set the students outcome, i.e. grades, assessments and national tests. The services in the Outcome API are accessed via URIs.

This document describes following:

- Which grade, assessment and national test information that a user can get and set via the Outcome API.
- How the grade, assessment and national test information is divided into entities and how these entities are structured.

### 1.1 Prerequisites

Before you can get access to the Outcome API you must request a license key from Tieto. You should have basic knowledge on Swedish school system and W3C XML before you start using the API.

## 2 Supported school types

The table below describes the supported types of school.

| School type                                      | Description  | Code |
|--|--|------|
| Compulsory School                                | Primary school organization for younger students             | GR   |
| Compulsory School For Learning Disabilities      | Organization for compulsory school for learning disabilities | S    |
| Upper Secondary School                           | Secondary school organization 3-4 years education            | GY   |
| Upper Secondary School For Learning Disabilities | Organization for secondary school for learning disabilities  | GS   |
| Swedish For Immigrants School                    | Organization for Swedish immigrants                          | SF   |
| Adult School For Learning Disabilities           | Organization for adult school for learning disabilities      | SV   |
| Municipal Adult School                           | Municipality school organization for adults                  | KV   |
| Higher Vocational Education                      | Organizations for Higher Vocational Education                | YH   |

### 3 Grade reports

#### 3.1 Outcome

##### 3.1.1 Supported outcome for the different school types

This chapter describes the supported outcome for the different types of school.

| School type                                      | Outcome   |
|--|---|
| Compulsory School                                | Final report,<br>Semester report  |
| Compulsory School For Learning Disabilities      | Final report,<br>Semester report  |
| Upper Secondary School                           | Diploma certificate report,<br>Study certificate report,<br>Catalog extraction report,<br>Upper secondary school certificate report |
| Upper Secondary School For Learning Disabilities | Diploma certificate report,<br>Catalog extraction report  |
| Swedish For Immigrants School                    | Catalog extraction report   |
| Adult School For Learning Disabilities           | Catalog extraction report   |
| Municipal Adult School                           | Diploma certificate report,<br>Study certificate report,<br>Catalog extraction report   |
| Higher Vocational Education                      | Diploma certificate report,<br>Study certificate report,<br>Catalog extraction report   |

##### 3.1.2 Final report

Final report is given to students who finish the ninth grade at compulsory school and compulsory school for learning disabilities.

### 3.1.3 Semester report

Semester report is given to students twice a year, at the end of each semester. The first semester report is given at the end of the first semester in the sixth grade. The last semester report is given at the end of the first semester in the ninth grade.

The semester report is used for compulsory school and for compulsory school for learning disabilities.

### 3.1.4 Diploma certificate report

Diploma certificate report is given to students finishing last grade, with approved study result.

### 3.1.5 Study certificate report

Study certificate report is given to students finishing last grade, with not approved study result.

### 3.1.6 Catalog extraction report

A catalog extraction report contains the grades that have been set for a student at the time the catalog extraction report was created.

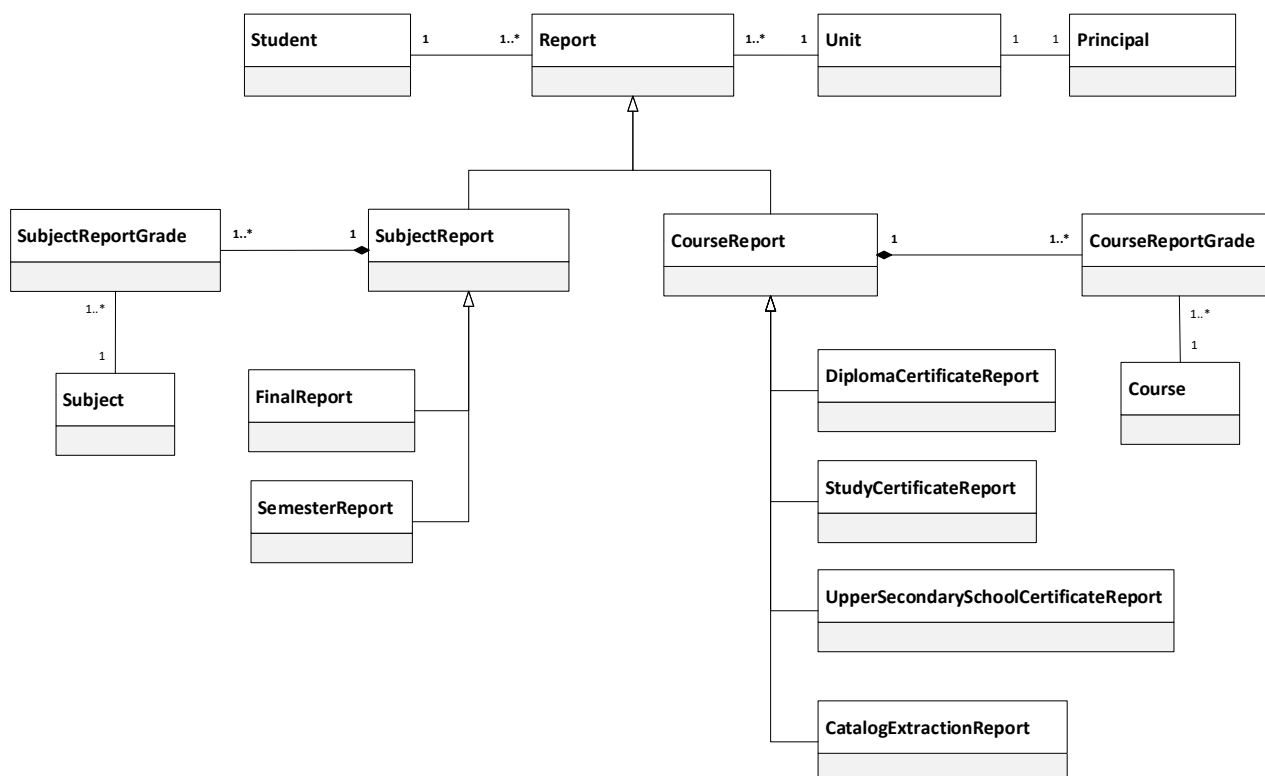
### 3.1.7 Upper secondary school certificate report

Upper secondary school certificate report is given to students that have finished an introduction program at upper secondary school.

## 3.2 Domain model

The diagram below describes how the grade information is divided into entities and how these entities are structured. The entities are grouped into course and subject oriented grades.





### 3.3 Entities

#### 3.3.1 Report

| Name    | Description                  | Read-only |
|---------|------------------------------|-----------|
| date    | Date and time for the report | No        |
| unit    | The issuing unit             | No        |
| student | Student                      | No        |

#### 3.3.2 SubjectReport

| Name       | Description            | Read-only |
|------------|------------------------|-----------|
| schoolyear | School year for report | No        |

### 3.3.3 SubjectReportGrade

| Name           | Description  | Read-only |
|----------------|--|-----------|
| subject        | SCB subject code   | No        |
| grade          | Grade for the subject  | Yes       |
| finalgrade     | Indicates if the subject grade refers to a final grade, enumerated as True, False. (This attribute is only used for semester reports.)   | Yes       |
| trialperformed | Indicates that a trial of the subject knowledge has been performed   | Yes       |
| remark         | Indicates eventual remark of the grade. Is an enumeration. (This attribute is only used for semester reports.)<br>AdaptedStudyPlan      Adapted study plan<br>GradeNotSet77          Goal not reached according to Grf 7:7<br>GradeNotSet1018       No grade set, Education Act 10:18<br>GradeNotSet1120       No grade set, Education Act 11:20 | Yes       |
| period         | Period when grade was set as finalgrade  | Yes       |

### 3.3.4 FinalReport

| Name   | Description                       | Read-only |
|--------|-----------------------------------|-----------|
| grades | One or more subject report grades | No        |

### 3.3.5 SemesterReport

| Name     | Description                            | Read-only |
|----------|--|-----------|
| semester | Autumn or spring semester              | No        |
| absence  | Total absence in hours for the student | No        |
| grades   | One or more subject report grades      | No        |

### 3.3.6 CourseReport

| Name             | Description       | Read-only |
|------------------|-------------------|-----------|
| program          | The program code  | No        |
| basiceligibility | Basic eligibility | No        |

### 3.3.7 CourseReportGrade

| Name           | Description   | Read-only |
|----------------|---|-----------|
| course         | SCB course code   | No        |
| grade          | Grade for the course  | Yes       |
| trialperformed | Indicates that a trial of the course knowledge has been performed | Yes       |
| date           | Grade date  | Yes       |
| courselevel    | Level of course   | Yes       |

### 3.3.8 DiplomaCertificateReport

| Name   | Description                      | Read-only |
|--------|----------------------------------|-----------|
| grades | One or more course report grades | No        |

### 3.3.9 StudyCertificateReport

| Name   | Description                      | Read-only |
|--------|----------------------------------|-----------|
| grades | One or more course report grades | No        |

### 3.3.10 UpperSecondarySchoolCertificateReport

| Name   | Description                      | Read-only |
|--------|----------------------------------|-----------|
| grades | One or more course report grades | No        |

### 3.3.11 CatalogExtractionReport

| Name    | Description                            | Read-only |
|---------|--|-----------|
| grades  | One or more course report grades       | Yes       |
| absence | Total absence in hours for the student | Yes       |

**Comment:** Since all attributes are read-only, the whole CatalogExtractionReport is read-only and therefore import of CatalogExtractionReport is not supported.

### 3.3.12 Unit

| Name           | Description                             | Read-only |
|----------------|---|-----------|
| id             | Id for the unit                         | No        |
| schoolname     | School name                             | Yes       |
| schoolunitcode | School unit code                        | Yes       |
| schoolunitname | School unit name                        | Yes       |
| schooltype     | School type, see supported school types | Yes       |
| principal      | Principal                               | Yes       |

### 3.3.13 Principal

| Name | Description        | Read-only |
|------|--------------------|-----------|
| id   | Principal identity | No        |
| name | Principal name     | Yes       |

### 3.3.14 Student

| Name | Description  | Read-only |
|------|--|-----------|
| id   | Student identity. The id can be GUID or PID for the student. | No        |
| name | Student name   | Yes       |

### 3.3.15 Assessor

| Name | Description       | Read-only |
|------|-------------------|-----------|
| id   | Assessor identity | No        |
| name | Assessor name     | Yes       |

### 3.3.16 Course

| Name | Description | Read-only |
|------|-------------|-----------|
| code | Course code | No        |
| name | Course name | Yes       |

| Name   | Description                           | Read-only |
|--------|---------------------------------------|-----------|
| points | Total number of points for the course | Yes       |

### 3.3.17 Subject

| Name | Description  | Read-only |
|------|--------------|-----------|
| code | Subject code | No        |
| name | Subject name | Yes       |

## 4 Grades

### 4.1 GradeOutcome

#### 4.1.1 Supported outcome for the different school types

This chapter describes the supported outcome for the different types of school.

| School type                                      | Outcome                           |
|--|-----------------------------------|
| Compulsory School                                | Grade outcome with subject grades |
| Compulsory School For Learning Disabilities      | Grade outcome with subject grades |
| Upper Secondary School                           | Grade outcome with course grades  |
| Upper Secondary School For Learning Disabilities | Grade outcome with course grades  |
| Swedish For Immigrants School                    | Grade outcome with course grades  |
| Adult School For Learning Disabilities           | Grade outcome with course grades  |
| Municipal Adult School                           | Grade outcome with course grades  |
| Higher Vocational Education                      | Grade outcome with course grades  |

#### 4.1.2 Subject outcome

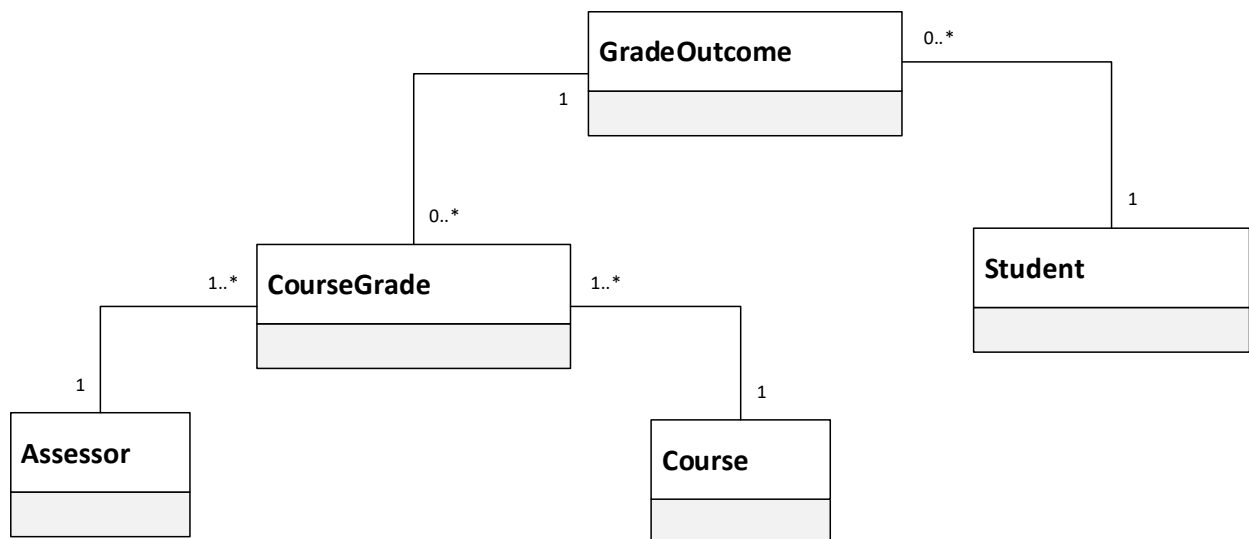
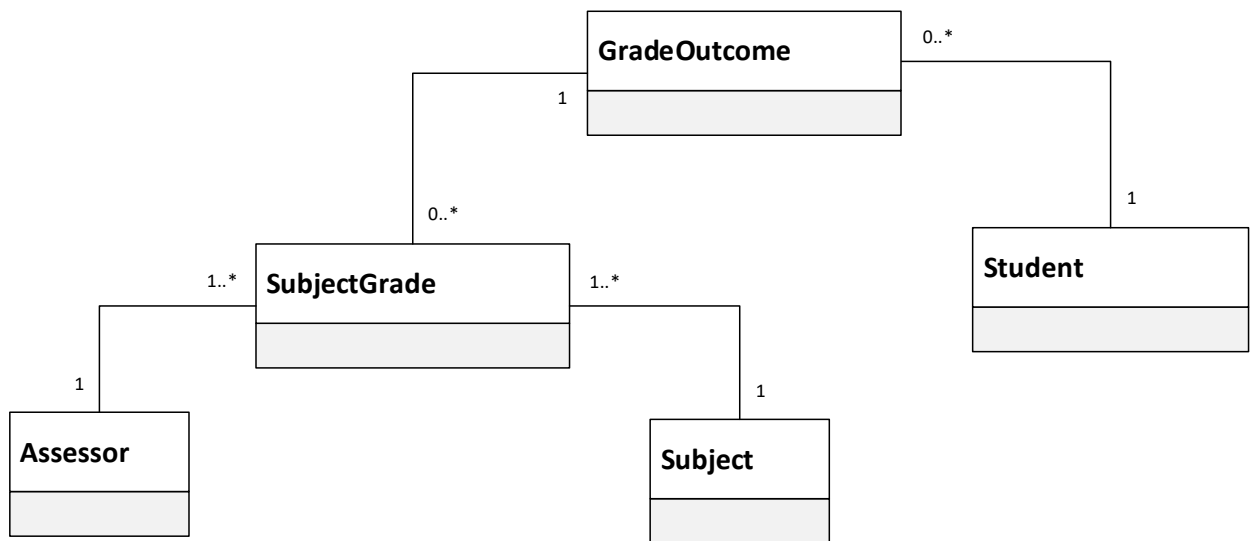
A student's grades in a subject

#### 4.1.3 Course grade

A student's grades in a course

### 4.2 Domain model

The diagram below describes how the grades information is divided into entities and how these entities are structured.



## 4.3 Entities

### 4.3.1 GradeOutcome

| Name         | Description                                | Read-only |
|--------------|--|-----------|
| student      | Student                                    | No        |
| subjectgrade | The students subject grades                | No        |
| coursegrade  | The students course grades                 | No        |
| complete     | If all the students grades are in the list | No        |

### 4.3.2 SubjectGrade

| Name           | Description  | Read-only |
|----------------|--|-----------|
| assessor       | Assessor for the subject   | No        |
| unitid         | Unit id, use EXTERNAL for external grades  | No        |
| schoolname     | School name  | Yes       |
| subject        | Subject  | No        |
| grade          | Grade for the subject  | No        |
| finalgrade     | Indicates if the subject grade refers to a final grade, enumerated as True, False. (This attribute is only used for semester reports.)   | No        |
| trialperformed | Indicates that a trial of the subject knowledge has been performed   | No        |
| remark         | Indicates eventual remark of the grade. Is an enumeration. (This attribute is only used for semester reports.)<br>AdaptedStudyPlan      Adapted study plan<br>GradeNotSet77          Goal not reached according to Grf 7:7<br>GradeNotSet1018       No grade set, Education Act 10:18<br>GradeNotSet1120       No grade set, Education Act 11:20 | No        |
| date           | The date when the grade is set   | No        |
| semester       | The semester the grade belongs to  | No        |

### 4.3.3 CourseGrade

| Name           | Description   | Read-only |
|----------------|---|-----------|
| assessor       | Assessor for the course   | No        |
| unitid         | Unit id, use EXTERNAL for external grades                         | No        |
| schoolname     | School name   | Yes       |
| groupid        | Group id  | No        |
| course         | Course  | No        |
| grade          | Grade for the course  | No        |
| trialperformed | Indicates that a trial of the course knowledge has been performed | No        |
| date           | Grade date  | No        |

### 4.3.4 Student

| Name | Description  | Read-only |
|------|--|-----------|
| id   | Student identity. The id can be GUID or PID for the student. | No        |
| name | Student name   | Yes       |



#### 4.3.5 Assessor

| Name | Description       | Read-only |
|------|-------------------|-----------|
| id   | Assessor identity | No        |
| name | Assessor name     | Yes       |

#### 4.3.6 Course

| Name   | Description                           | Read-only |
|--------|---------------------------------------|-----------|
| code   | Course code                           | No        |
| name   | Course name                           | Yes       |
| points | Total number of points for the course | Yes       |

#### 4.3.7 Subject

| Name                   | Description                   | Read-only |
|------------------------|-------------------------------|-----------|
| code                   | Subject code                  | No        |
| recommendedsubjectcode | Generated scbcode for subject | No        |
| name                   | Subject name                  | Yes       |

#### 4.3.8 Semester

| Name | Description  | Read-only |
|------|--|-----------|
| type | Enumerated value describing the semester:<br>VT first half of the year<br>HT second half of the year | No        |
| year | The year of the semester. Format YY or YYYY  | No        |

## 5 Assessment

### 5.1 AssessmentOutcome

#### 5.1.1 Supported outcome for the different school types

This chapter describes the supported outcome for the different types of school.

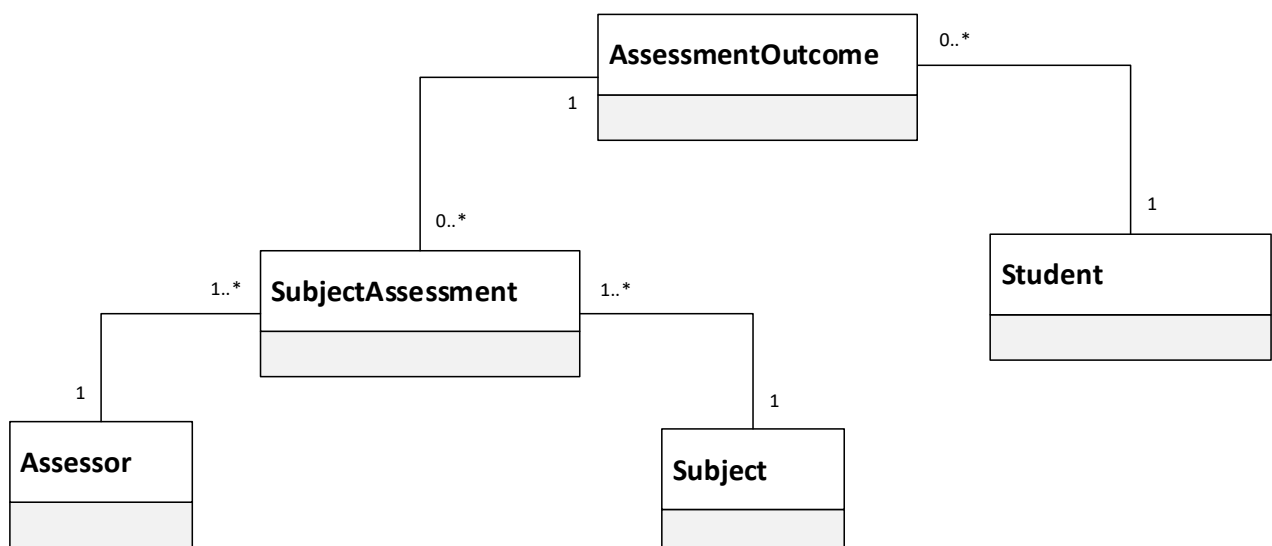
| School type                            | Outcome                                   |
|--|---|
| Swedish For Immigrants School          | Assessment outcome with course assessment |
| Adult School For Learning Disabilities | Assessment outcome with course assessment |
| Municipal Adult School                 | Assessment outcome with course assessment |
| Higher Vocational Education            | Assessment outcome with course assessment |

#### 5.1.2 Course assessment

A student's assessment in a course

### 5.2 Domain model

The diagram below describes how the assessment information is divided into entities and how these entities are structured.



## 5.3 Entities

### 5.3.1 AssessmentOutcome

| Name             | Description                                | Read-only |
|------------------|--|-----------|
| student          | Student                                    | No        |
| courseassessment | The students course assessments            | No        |
| complete         | If all the students grades are in the list | No        |

### 5.3.2 CourseAssessment

| Name       | Description                                    | Read-only |
|------------|--|-----------|
| assessor   | Assessor for the course                        | No        |
| unitid     | Unit id, use EXTERNAL for external assessments | No        |
| schoolname | School name                                    | Yes       |
| groupid    | Group id                                       | No        |
| course     | Course   | No        |
| assessment | Assessment for the course                      | No        |
| date       | Assessment date                                | No        |

### 5.3.3 Student

| Name | Description  | Read-only |
|------|--|-----------|
| id   | Student identity. The id can be GUID or PID for the student. | No        |
| name | Student name   | Yes       |

### 5.3.4 Assessor

| Name | Description       | Read-only |
|------|-------------------|-----------|
| id   | Assessor identity | No        |
| name | Assessor name     | Yes       |

### 5.3.5 Course

| Name   | Description                           | Read-only |
|--------|---------------------------------------|-----------|
| code   | Course code                           | No        |
| name   | Course name                           | Yes       |
| points | Total number of points for the course | Yes       |

## 6 National tests

### 6.1 NationalTestOutcome

#### 6.1.1 Supported outcome for the different school types

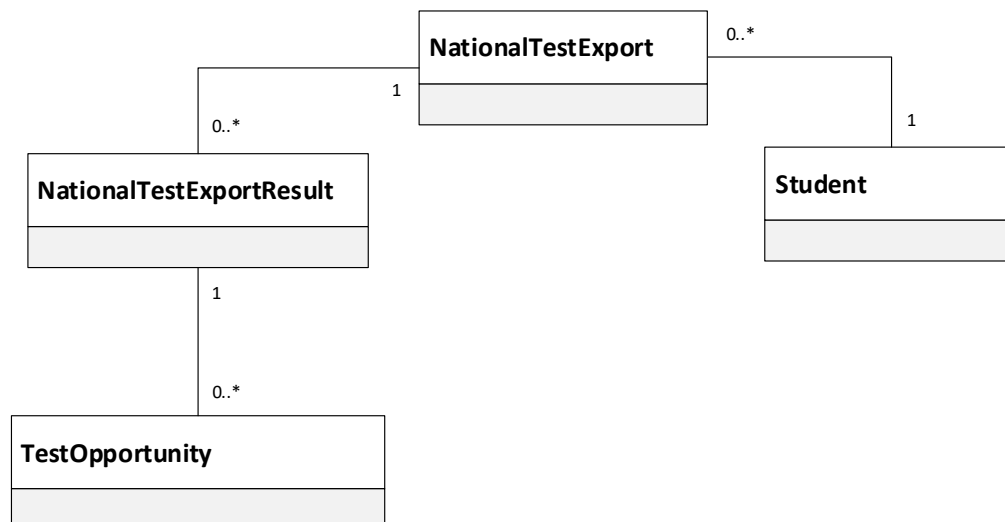
This chapter describes the supported outcome for the different types of school.

| School type                   | Outcome             |
|-------------------------------|---------------------|
| Compulsory School             | NationalSubjectTest |
| Upper Secondary School        | NationalCourseTest  |
| Swedish For Immigrants School | NationalCourseTest  |
| Municipal Adult School        | NationalCourseTest  |

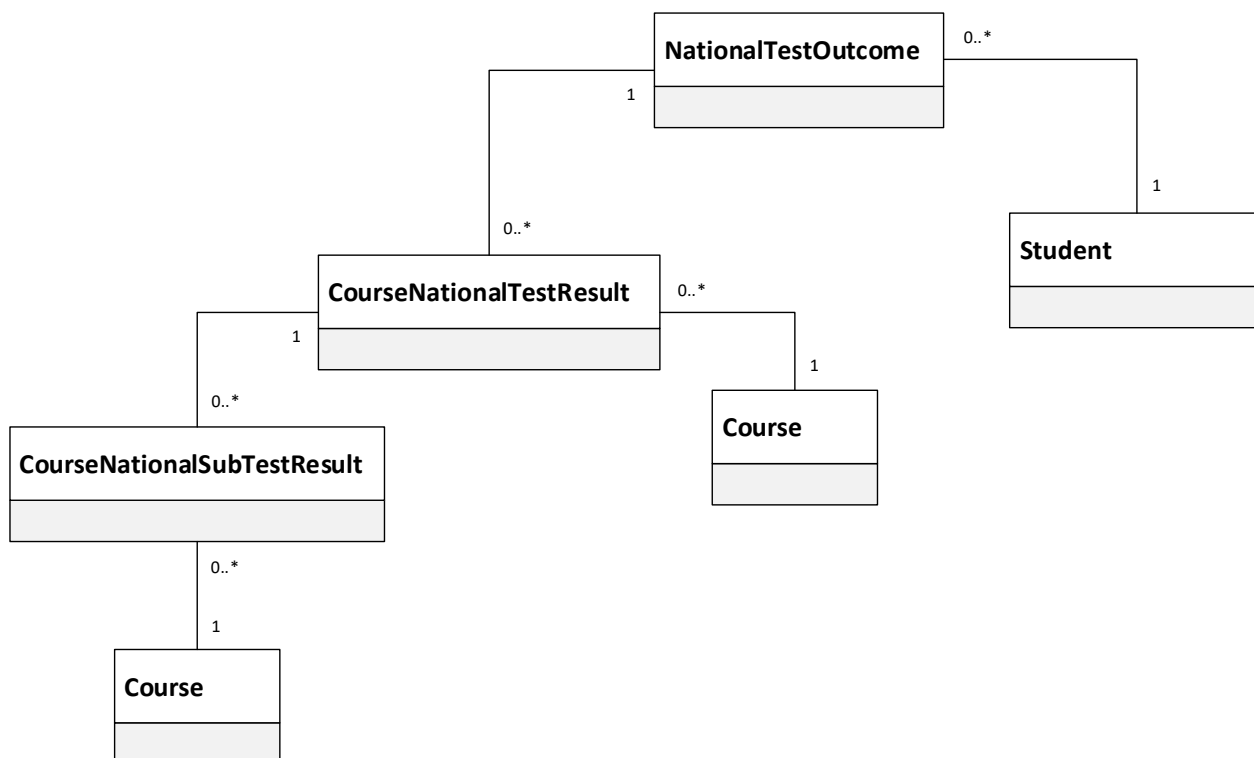
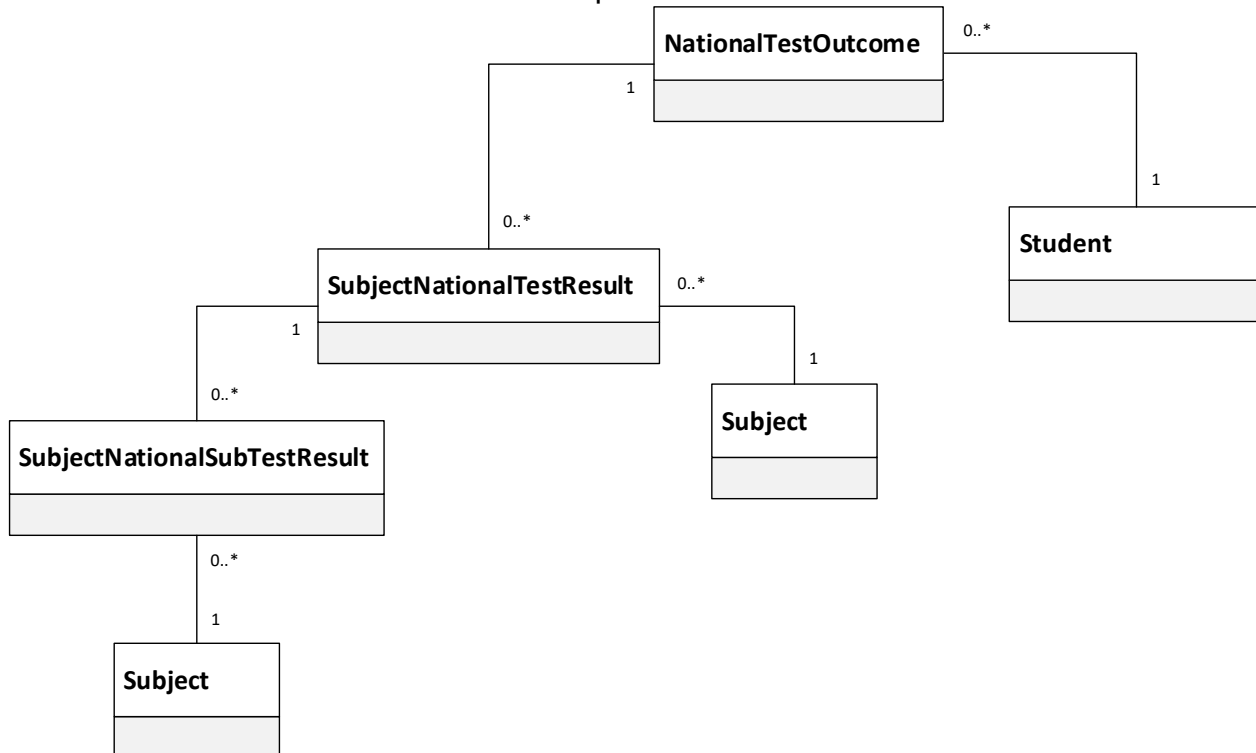
### 6.2 Domain model

The diagrams below describe how the national test information is divided into entities and how these entities are structured.

#### 6.2.1 Domain model for National Tests registered in Tieto Education



## 6.2.2 Domain model for National Tests imported into Tieto Education



## 6.3 Entities

### 6.3.1 NationalTestOutcome

| Name                | Description   | Read-only |
|---------------------|---|-----------|
| student             | Student   | No        |
| coursenationaltest  | The students national test course results (valid for GY, KV and SF) | No        |
| subjectnationaltest | The students national test subject results (valid for GR)           | No        |
| complete            | If all the student's results are in the list                        | No        |

### 6.3.2 SubjectNationalTestResult

| Name             | Description   | Read-only |
|------------------|---|-----------|
| subject          | SCB subject code  | No        |
| subtestresult    | A list of sub test results                                | No        |
| registrationdate | Date when test result is registered                       | No        |
| schoolyear       | The school year in which the national test was performed. | No        |
| grade            | Grade for the national test                               | No        |
| Participated     | Indicator whether the student participated in the test    | No        |

### 6.3.3 SubjectNationalSubTestResult

| Name   | Description  | Read-only |
|--------|--|-----------|
| Points | Points of the subtest  | No        |
| Type   | The type of the test, enumerated as Read, Speak, Write, Listen, A, B, ..., H         | No        |
| Grade  | Grade for the national sub test  | No        |
| Status | Status of the subtest, enumerated as approved, notapproved, notparticipated and lost | No        |

### 6.3.4 CourseNationalTestResult

| Name   | Description     | Read-only |
|--------|-----------------|-----------|
| course | SCB course code | No        |

| Name             | Description   | Read-only |
|------------------|---|-----------|
| subtestresult    | A list of sub test results                                | No        |
| registrationdate | Date when test result is registered                       | No        |
| grade            | Grade for the national test                               | No        |
| participated     | Indicator whether the student participated in the subtest | No        |

### 6.3.5 CourseNationalSubTestResult

| Name   | Description  | Read-only |
|--------|--|-----------|
| points | Points of the subtest  | No        |
| type   | The type of the test, enumerated as Read, Speak, Write, Listen, A, B, ..., H         | No        |
| grade  | Grade for the national sub test  | No        |
| status | Status of the subtest, enumerated as approved, notapproved, notparticipated and lost | No        |

### 6.3.6 Student

| Name | Description  | Read-only |
|------|--|-----------|
| id   | Student identity. The id can be GUID or PID for the student. | No        |
| name | Student name   | Yes       |

### 6.3.7 Course

| Name   | Description                           | Read-only |
|--------|---------------------------------------|-----------|
| code   | Course code                           | No        |
| name   | Course name                           | Yes       |
| points | Total number of points for the course | Yes       |

### 6.3.8 Subject

| Name | Description  | Read-only |
|------|--------------|-----------|
| code | Subject code | No        |
| name | Subject name | Yes       |



### 6.3.9 Testopportunity

| Name           | Description   | Read-only |
|----------------|---|-----------|
| description    | A description of the test opportunity   | Yes       |
| result         | Value for this test opportunity. Follows the rules of the SCB file for the period. An example can be 99 for did not participate | Yes       |
| resulttype     | A textual description of the type of the result   | Yes       |
| scbexportorder | The column order in SCB export file. Order is only relevant within a single subject.  | Yes       |

### 6.3.10 NationalTestExportResult

| Name        | Description  | Read-only |
|-------------|--|-----------|
| periodstart | Start date of the period associated to the national test   | Yes       |
| periodend   | End date of the period associated to the national test   | Yes       |
| periodname  | Name of the period associated to the national test   | Yes       |
| coursecode  | The official course code the student is studying when taking the test. Not used for compulsory           | Yes       |
| subjectcode | The subject code the student is studying when taking the test. Used for compulsory only                  | Yes       |
| schoolyear  | Only for compulsory, 3, 6 or 9 are the valid values  | Yes       |
| unitid      | The id of the school where the student made the test. Value is calculated on a best effort assumption.   | Yes       |
| unitname    | The name of the school where the student made the test. Value is calculated on a best effort assumption. | Yes       |
| testtype    | The name of the test type  | Yes       |
| testname    | The name of the test, if applicable  | Yes       |

### 6.3.11 Nationaltestexport

| Name                      | Description                    | Read-only |
|---------------------------|--------------------------------|-----------|
| student                   | Student information            | Yes       |
| nationaltestexportresults | List of student's test results | Yes       |

## 7 Services

All services are based on HTTP REST technology and organized in school types to match each school structure. "Update services" are using the method HTTP POST and "Get services" are using the method HTTP GET.

### 7.1 Grade reports

#### 7.1.1 Export

The services below give grade reports for a student or grade reports created within a specified date interval. The output is XML information with grade reports.

Parameters – Alternative 1:

| Parameter | Mandatory | Description  |
|-----------|-----------|--|
| Id        | Yes       | Student identity. The id can be GUID or PID for the student. |

Parameters – Alternative 2:

| Parameter | Mandatory | Description   |
|-----------|-----------|---|
| StartDate | Yes       | Start date in the format YYYY-MM-DD.  |
| EndDate   | Yes       | End date in the format YYYY-MM-DD.<br>The maximum allowed difference between start date and end date is one year. |

Services:

| Service  | Description   |
|--|---|
| GetCompulsorySchoolGradeReports                            | Get grade reports for compulsory schools student                                |
| GetCompulsorySchoolForLearningDisabilitiesGradeReports     | Get grade reports for compulsory school with learning disabilities student      |
| GetUpperSecondarySchoolGradeReports                        | Get grade reports for upper secondary school student                            |
| GetUpperSecondarySchoolForLearningDisabilitiesGradeReports | Get grade reports for upper secondary school with learning disabilities student |
| GetSwedishForImmigrantsSchoolGradeReports                  | Get grade reports for Swedish for immigrants student                            |
| GetMunicipalAdultSchoolGradeReports                        | Get grade reports for municipal adult school student                            |
| GetAdultSchoolForLearningDisabilitiesGradeReports          | Get grade reports for adult school with learning disabilities student           |
| GetHigherVocationalEducationGradeReports                   | Get grade reports for higher vocational   |

| Service | Description       |
|---------|-------------------|
|         | education student |

## 7.1.2 Import

The services below update or add new grade reports. The services take no parameters.

Services:

| Service   | Description   |
|---|---|
| UpdateUpperSecondarySchoolGradeReports                        | Update or add new grade reports for upper secondary school student                            |
| UpdateUpperSecondarySchoolForLearningDisabilitiesGradeReports | Update or add new grade reports for upper secondary school with learning disabilities student |
| UpdateSwedishForImmigrantsSchoolGradeReports                  | Update or add new grade reports for Swedish for immigrants student                            |
| UpdateMunicipalAdultSchoolGradeReports                        | Update or add new grade reports for municipal adult school student                            |
| UpdateAdultSchoolForLearningDisabilitiesGradeReports          | Update or add new grade reports for adult school with learning disabilities student           |
| UpdateHigherVocationalEducationGradeReports                   | Update or add new grade reports for higher vocational education student                       |

## 7.2 Grades

### 7.2.1 Export

The services below give grades for a student or grades created within a specified date interval. The output is XML information with grades.

Parameters – Alternative 1:

| Parameter | Mandatory | Description  |
|-----------|-----------|--|
| Id        | Yes       | Student identity. The id can be GUID or PID for the student. |

Parameters – Alternative 2:

| Parameter | Mandatory | Description                          |
|-----------|-----------|--------------------------------------|
| StartDate | Yes       | Start date in the format YYYY-MM-DD. |
| EndDate   | Yes       | End date in the format YYYY-MM-DD.   |

| Parameter | Mandatory | Description   |
|-----------|-----------|---|
|           |           | The maximum allowed difference between start date and end date is one year. |

Services:

| Service  | Description  |
|--|--|
| GetCompulsorySchoolGrades                            | Get grades for compulsory school students                                |
| GetCompulsorySchoolForLearningDisabilitiesGrades     | Get grades for compulsory school for learning disabilities students      |
| GetUpperSecondarySchoolGrades                        | Get grades for upper secondary school students                           |
| GetUpperSecondarySchoolForLearningDisabilitiesGrades | Get grades for upper secondary school for learning disabilities students |
| GetSwedishForImmigrantsSchoolGrades                  | Get grades for Swedish for immigrants school students                    |
| GetMunicipalAdultSchoolGrades                        | Get grades for municipal adult school students                           |
| GetAdultSchoolForLearningDisabilitiesGrades          | Get grades for adult school for learning disabilities students           |
| GetHigherVocationalEducationGrades                   | Get grades for higher vocational education students                      |

## 7.2.2 Import

The services below update or add new grades for students. The services take no parameters.

Services:

| Service   | Description  |
|---|--|
| UpdateCompulsorySchoolGrades                            | Update or add new grades for compulsory school students                                |
| UpdateCompulsorySchoolForLearningDisabilitiesGrades     | Update or add new grades for compulsory school for learning disabilities students      |
| UpdateUpperSecondarySchoolGrades                        | Update or add new grades for upper secondary school students                           |
| UpdateUpperSecondarySchoolForLearningDisabilitiesGrades | Update or add new grades for upper secondary school for learning disabilities students |
| UpdateSwedishForImmigrantsSchoolGrades                  | Update or add new grades for Swedish for immigrants students                           |
| UpdateMunicipalAdultSchoolGrades                        | Update or add new grades for municipal   |

| Service  | Description   |
|--|---|
|  | adult school students   |
| UpdateAdultSchoolForLearningDisabilitiesGrades | Update or add new grades for adult school with learning disabilities students |
| UpdateHigherVocationalEducationGrades          | Update or add new grades for higher vocational education students             |

## 7.3 Assessments

### 7.3.1 Export

The services below give assessment for a student or assessment created within a specified date interval. The output is XML information with assessments.

Parameters – Alternative 1:

| Parameter | Mandatory | Description  |
|-----------|-----------|--|
| Id        | Yes       | Student identity. The id can be GUID or PID for the student. |

Parameters – Alternative 2:

| Parameter | Mandatory | Description   |
|-----------|-----------|---|
| StartDate | Yes       | Start date in the format YYYY-MM-DD.  |
| EndDate   | Yes       | End date in the format YYYY-MM-DD.<br>The maximum allowed difference between start date and end date is one year. |

Services:

| Service  | Description   |
|--|---|
| GetSwedishForImmigrantsSchoolAssessments         | Get assessments for Swedish for immigrants school students          |
| GetMunicipalAdultSchoolAssessments               | Get assessments for municipal adult school students                 |
| GetAdultSchoolForLearningDisabilitiesAssessments | Get assessments for adult school for learning disabilities students |
| GetHigherVocationalEducationAssessments          | Get assessments for higher vocational education students            |

### 7.3.2 Import

The services below update or add new assessments for students. The services take no parameters.

Services:

| Service   | Description  |
|---|--|
| UpdateSwedishForImmigrantsSchoolAssessments         | Update or add new assessments for Swedish for immigrants students                  |
| UpdateMunicipalAdultSchoolAssessments               | Update or add new assessments for municipal adult school students                  |
| UpdateAdultSchoolForLearningDisabilitiesAssessments | Update or add new assessments for adult school with learning disabilities students |
| UpdateHigherVocationalEducationAssessments          | Update or add new assessments for higher vocational education students             |

## 7.4 National tests

### 7.4.1 Export

The services below give national test results for subjects and courses. The output is XML information with the national test results.

There are two sets of services for exporting national tests. Any method starting with Get exports only results imported from another system through the API in 7.4.2. Any method starting with Export exports the results entered into Tieto Education by administrators.

#### 7.4.1.1 Get methods

Parameters – Alternative 1:

| Parameter | Mandatory | Description  |
|-----------|-----------|--|
| Id        | Yes       | Student identity. The id can be GUID or PID for the student. |

Parameters – Alternative 2:

| Parameter | Mandatory | Description   |
|-----------|-----------|---|
| StartDate | Yes       | Start date in the format YYYY-MM-DD.  |
| EndDate   | Yes       | End date in the format YYYY-MM-DD.<br>The maximum allowed difference between start date and end date is one year. |

Services:

| Service                          | Description  |
|----------------------------------|--|
| GetCompulsorySchoolNationalTests | Get national test result for a compulsory school subject |

| Service                                    | Description   |
|--|---|
| GetUpperSecondarySchoolNationalTests       | Get national test result for an upper secondary school course       |
| GetSwedishForImmigrantsSchoolNationalTests | Get national test result for a Swedish for immigrants school course |
| GetMunicipalAdultSchoolNationalTests       | Get national test result for a municipal adult school course        |

#### 7.4.1.2 Export methods

Parameters:

| Parameter  | Mandatory | Description  |
|------------|-----------|--|
| id         | No        | Limit the searches to a specific student, identified by his/her national identifier or GUID  |
| schoolYear | No        | Limits the searches to test performed a certain school year. Valid values are 3, 6 or 9. Only supported for compulsory                                   |
| startDate  | No        | Limits the searches to periods ending after startDate  |
| endDate    | No        | Limits the searches to periods starting before endDate   |
| unitId     | No        | Limit the searches to schools associated to the national tests.<br>Note: national tests where no school can be deduced will not appear with this option. |

Services:

| Service                                       | Description   |
|---|---|
| ExportCompulsorySchoolNationalTests           | Get national test result for a compulsory school subject            |
| ExportUpperSecondarySchoolNationalTests       | Get national test result for an upper secondary school course       |
| ExportSwedishForImmigrantsSchoolNationalTests | Get national test result for a Swedish for immigrants school course |
| ExportMunicipalAdultSchoolNationalTests       | Get national test result for a municipal adult school course        |

#### 7.4.2 Import

The services below update or add national test results for subjects and courses. The services take no parameters.

Services:

| Service                                       | Description   |
|---|---|
| UpdateCompulsorySchoolNationalTests           | Update or add new national test result for a compulsory school subject      |
| UpdateUpperSecondarySchoolNationalTests       | Update or add new national test result for an upper secondary school course |
| UpdateSwedishForImmigrantsSchoolNationalTests | Update or add new national test result for Swedish for immigrants course    |
| UpdateMunicipalAdultSchoolNationalTests       | Update or add new national test result for municipal adult school course    |

## 7.4.2.1 Use cases

### 7.4.2.1.1 Import with the complete-attribute set to false (default behaviour)

| Imported student  | Results in                                  |
|---|---|
| If there is no existing test result with same course/subject, registration date, school type - and school year for subject test results - exists in the Tieto Education system                                | Test result is saved                        |
| If there are existing test result(s) with the same course/subject, registration date, school type - and school year for subject test results - in the Tieto Education system                                  | The existing test result(s) are overwritten |
| If there are existing test result(s) with course/subject, registration date, school type - and school year for subject test results - in the Tieto Education system that does not exists in the imported data | The existing test results are untouched     |

### 7.4.2.1.2 Import with the complete-attribute set to true

| Imported student  | Results in   |
|---|--|
| If there is no existing test result with same course/subject, registration date, school type - and school year for subject test results - exists in the Tieto Education system                                | Test result is saved                                       |
| If there are existing test result(s) with the same course/subject, registration date, school type - and school year for subject test results - in the Tieto Education system                                  | The existing test result(s) are overwritten                |
| If there are existing test result(s) with course/subject, registration date, school type - and school year for subject test results - in the Tieto Education system that does not exists in the imported data | The existing test results are removed from Tieto Education |



## 8 Appendix

### 8.1 References

| Name                                 | Address   |
|--------------------------------------|---|
| Outcome API XML schemas and examples | <a href="https://github.com/ExchangeServices">https://github.com/ExchangeServices</a> |

### 8.2 Vocabulary

| Word    | Description                                 |
|---------|---|
| Child   | Children below 6 year                       |
| Student | School student 6 year and older             |
| PID     | Personal identity, formatted [YYYYMMDDNNNN] |
| GUID    | Global unique identifier                    |