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SIS Configuration Options

Academic Years

The school creates a record for each academic year in operation, and may choose any academic year start and end dates

Term Label Records

The school creates Term Label records to define the number of terms, start and end dates, and what the term will be called. The number of term label records is the number of terms to school operate

Vacation Days

The user specifies all vacations days the school is not in operation. Vacation days are used to calculate total education time provided.

Schools

The school creates jurisdictional definitions of school by making school records an linking to the various grade spans. A grade span should not be longer than a school

Other Schools

Other schools are the schools you student transfer in from or transfer out to. If class credit is given from a transcript from a different school, the school is recorded.

Grade Levels

A list of grade levels taught in this instance of the PEMS. Add grade level record for each grade level the school operates.

Grade Spans

Grade spans are planning horizons for academic goals. Create a grade span record for each span and specify the start and end grade in the span.

Class List

The school creates a class for each class in the course catalog. The name of the class appears on the official transcript.

Curriculum List

The school creates their own classes in Moodle and has complete control over each and every activity the students will do. These Moodle Course list is related to the School's class list. The user specifies which Moodle Courses should be related to which classes. Class names appear on the student transcript, curriculum course names do not appear on the transcript.

Compliance Tags

Compliance tags are user-defined and reflect the various authorizations at the curriculum level, such as AP courses. The same tags may be applied to the class. For the class list, the tags reflect a requirement for a specifically authorized curriculum. For the curriculum list the tags reflect the authorizations that have been achieved.

Marks System

Every Jurisdiction has a its own way of recording final grades, some schools use scores of 1 though 10, other schools use grades A through F, where some schools only provide pass/no pass options for grades. All schools must produce a grade point average for the student, in he USA this is a 1 through 4 scale. The marks system records related the transcript final grade to the grade points for each school.

Sections

The number of students taking a Moodle course is not limited in any way. However the number of students assigned to a specific teacher of the Moodle Course may be limited using section records. The user may define multiple section records per curriculum record (Moodle Course) to manage the number of students each teacher has to look after.

Subjects

Create an subject list the school would like to track. Subject records are specified in each class. Subjects are defined to sum of requirements needed for programs of study.

Programs of Study

Create a plan record that add the template records. There are unlimited number of plans that can be defined. As part of the plan, define "*template*" records that specify which classes students should take in which term for each plan.

Assessment Codes

Create an assessment code record for every assessment test or exam the school intends to use. As part of the assessment code, define "*marks matrix*" records that normalize test scores for grade level equivalents.

Teacher Credential Types

Each jurisdiction and grade level required different types of credentials. Create a list of credential types that authorize teachers to teach various classes.

Parameters

TBD

PEMS System-Wide Work Flow - ARCHIVE

Before Any Student May be Enrolled

School Configuration

1. Configure grade levels, grade spans, and schools
2. Configure term label database
3. Create academic year records sufficient to graduate the youngest student at the highest possible level
4. Configure time delays for automation
 - For teachers to grade final assignments at the end of term - 1 week minimum
 - For student promotion after end of year - two week minimum

Academic Program Configuration

1. Define **subjects** to be taught
2. Create/Upload **Class** List - *each linked to one subject record*
3. Create/Upload **Curriculum** list (Moodle course List) - *each linked to one subject record*
4. Build a program **plan**
 1. insert multiple related **subject requirement** records - *each linked to one subject record*
 2. under each subject requirement, insert multiple related **template** records
 - *NOTE: template records are related to one plan, one subject requirement, and one class, and one curriculum record.*
 - *The subject requirement record, the class record, and the curriculum records are all linked to the same subject record. Subject relationship between these records is used to filter the options, but is not used to restrict the options, at this point.*
5. Complete building all the program plans so that there is at least one plan per grade span.

Ready to Enroll Students

Enrolling a new student

1. CRM side completes required information, sends invoice and gets all forms signed, clicks a button to enroll student - leads/contacts database of the out-of-the-box Krayin config
2. Student record created in the SIS side, status = planned
 1. *Student email, password and user IDs are created in Moodle, Key Cloak and Next Cloud*
 2. *Form letter is emailed to guardian with log-in directions and other information*
3. Student field calculations are automatically estimating time to graduation.

4. Student term records created by automation
5. Student term records added/deleted if the start date moves
6. Student Plan is assigned
7. Student enrollments records are created for the plan and related to the student terms created in step 4.

Changing the Plan

1. The current plan is deactivated - Incomplete enrollment records are deleted
2. A new plan record is created /activate
 - Enrollments for classes that have not been deleted are added
 - If the student already completed an enrollment for a class, the enrollment records are not added.

At the End of Term

1. *After time delay specified in user configuration- show a button that allows the admin to Import grades from Moodle to the SIS and default grades based on Moodle raw scores*
2. Alert user to review grades - teachers and admins may adjust final grades manually
3. *Allow user to select 'continue curriculum' for each enrollment where the student will work on the same Moodle class in the next term. The student did not complete enough of the work to get credit (note field exist yet)*
 1. Excludes this enrollment from automatic Moodle course dis enrollment
 2. Marks the enrollment record complete the enrollment record, and award half the units
 3. Create a duplicate enrollment record for the very next term (optional or required)
4. After review complete, user selects a button that sets all the term's enrollment records to complete
 1. *This step automatically suspends access to Moodle courses for any completed enrollment records*
5. Automatically activate the next term's enrollment records
 1. *When an enrollment record is made active, this triggers the enrollment is the Moodle course*
6. View set of poorly performing students - one failing enrollment (F) or 2 nearly failing (D)
 1. Allow user to select 'repeat' in the student promote field, to stop end of year automatic promotion.

Promoting Students

1. After time delay specified in user configuration- automatically advance all students 'current grade level' by one
2. Do not promote students who have 'repeat' selected in the promote field, the default for all new students is 'promote'

3. After promotion, show the students who have not been promoted and allow the user to adjust if needed.
4. Automation will update the grade span of the student
 1. When a student has a grade span change, new student term records will automatically be create for that student
 2. If the student has a student plan record found for the new grade span, and if only one record has been found, and if that record has a status = future, activate the student plan
5. Automation will create the student's new enrollment records - note this happens after automation creates the new student term records

Assigning New Student Plans

When students enter a new grade span, their old plan will not cross-over, a new plan must be assigned. This only happens at the end of the official end of the academic year.

1. Create a filtered view of students who do not have plans assigned and who have been promoted into a new grade span.
2. Allow user to work on assigning new plans, this must be completed before the start of the next academic year
 - *Need a default plan - create a field for this - recurring students that do not have a plan selected by the user will be automatically assigned the default plan prior to start of the next school year. If only one plan is create for a grade span, it is marked default.*
3. When a new student plan is assigned, create the enrollment records automatically

Dis-enrolling a Student

1. Create a button/view specifically for dis-enrolling a student
2. Set the date of dis-enrollment
3. Set the status field to graduated, dis-enrolled, or expelled.
 1. *Deleted all enrollment records that will be no be completed by the dis-enrollment date*
 2. *Create a current transcript record, showing current enrollments as incomplete*
 3. *email current transcript record to guardian*
 4. *On date of dis-enrollment, suspend user from Moodle and Next cCoud.*

Recording Assessments - TBD

4. Create Set of School Terms - Ready

Purpose

For every academic year, there needs to be a user-specified number of term records, so when a new academic year record is added, the program should automatically create the associated term records for that year. The program knows how many term records to make, and how they should be configured from the records in the term label table.

Term Labels

The user adds one “term label” record to represent each term in a general school year. The number of records in the term label table equals the number of terms in a year. There are start days and start months fields in the term label records, but there are no actual years since the term label is general in nature and applies to any year. The **Terms** records are created using the information in the term label records.

Term labels records can not be associated with a year since, so there can not be a date field in the term label records.

The term label sequence shows the order of the terms as the academic year progresses.

Terms (or School Terms)

Terms are a list of actual terms the school is/was/will be in operation. They have a start date and an end date, and are associated with an Academic Year and a **term label**.

The term sequence, the **ordinate** field, continues from 1, the very first term in the system, continuously through all terms of operation. These will follow the term start dates as the start dates will also indicate the order of the terms.

Setting the default term start and end dates

Information in the term label record and the academic years are used to set the default term start and end dates. The user may manually adjust these dates year to year, as the same date may fall on a Monday one year but a Tuesday the next year. Setting the default term dates helps the user to pick an appropriate date for each term.

While the term record must contain the actual start and end dates, the term label record only contains a general start day and start month.

Academic Years generally cross over a calendar year, so the actual year of the term is difficult to figure out.

For this reason the following two fields must be added to the **Term label** record:

Add the fields "Term Starts" & "Term Ends" to the term label table

For each of the fields above, menu options are the same: in academic start year, in academic end year

The user selects academic start year if the term begins in the same year as the academic start year or selects academic end year if the term starts in the same year as the academic end year. The same applies to the end year.

Create (School) Terms

Based on the information in the Term Label table, Terms are automatically made for each academic year added to the school. The term label records contain the sequence of terms, the names of terms, and the number of records indicated the total number terms.

For every new academic year record, PEMS makes a number of term records equal to the number of Term Label records and updates the ordinate of the terms to match the sequence of the term label records.

Make a new set of term records when an academic year is created

Key trigger is the creation of a new academic year record.

Create a term record and associate it to the academic year record and the term label record with flag = **official start** and status = **active**. If no record is found, stop.

Set the (school) term **ordinate** to maximum term ordinate value + 1

If the **term label** start year field is set to 'academic start year' then use the academic year's start year field for the **term** start year. If the **term label** start year field is set to 'academic end year' then use the academic year's end year field for the **term** end year.

If the **term label** end year field is set to 'academic start year' then use the academic year's start year field for the **term** end year. If the **term label** end year field is set to 'academic end year' then use the academic year's end year field for the **term** end year.

Calculate the term record's start date from the term label record "start day" and term label record "start month" and the start year found above.

Calculate the term record's end date from the term label record "end day" and term label record "end month" and the end year found above.

Calendar days - TBD

School days - TBD

Term Name = concatenate Term Label name and Term Start Year.

Set the Term Flag = Term Label Flag

Set the term status = the status of the associated academic year. *note: if the user triggers this automation mid year, all terms will be set to current, regardless of actual status, the user will need to manually update them.*

Find the next **active** term label record with sequence equal to the last term label record sequence + 1. If there are no records that meet this criteria, add 1 to the sequence value. Repeat.

If the term label record flag value is "**Official End**" and status = "**active**", then this is the last term record to be made.

Note: Add an additional exit criteria as a back-up in case this loop goes on for ever, for example, if the user did not configure the term label records properly.

Checking for student terms already created

There is a case where some terms may have been created for the grade span but not all terms. This may happen when data is migrated into PEMS but the information is incomplete or not properly related to other records.

Student term records should not be created automatically if there are any student term records in that grade span already. Student term records exist in a grade span based on their at_grade field.

If the at_grade field is equal within the start and end grades of the grade span, then there are existing records, the automation should not run.

The user will have to manually add the student terms or delete the existing records and be provided a means to manually launch this process

Check for student term records with at_grade field between the grade span start and end grades

If any records found, then do not automatically create student terms.

Provide users a means to manually launch this process if they delete student term records

Potential for Errors

The user may choose to delete the student terms and start over or add the missing terms manually. If the user adds terms manually, then the student sequence may not be ordered according to the actual start date