

Open Administration for Schools 4.75

User Documentation

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Getting Started with OpenAdmin

This is an outline of the things to do to get started using Open Admin (OA), *after* a network administrator has installed it for your school. As part of the installation process he/she may have imported the student information into the system if you had information stored previously.

Add the Students

If he/she did not, then you may also enter student records by uploading a spreadsheet file containing student data. This will be somewhat faster than entering student information one record at a time.

Start a spreadsheet program and type in student information with one row for each student. It should include lastname, firstname, birthdate, gender, grade, homeroom, and any other important student information. This spreadsheet can be saved (normally in a comma separated value (CSV) format).

The button/script to do that is located on the Export page (the Export tab on the top of the screen. Then select the 'Import Students' button, and upload your data file using the next screens.

There is also an older import program provided (called studentupload.pl) that can import csv data. It must be used by your system administrator and is found in the utility folder of the OA download.

If your system already has student information, then you only have to do a couple of things to get ready to start using the program. These are both located on the Start of Year / End of Year Page which is the farthest right tab on the top of the screen.

Add the Staff

You add staff members by clicking on Add a Staff Member and filling in the fields. The **userid** is a single word to identify that person (ie. rich, dougd) and **must** be unique within all staff records.

The **password** is single phrase (with no spaces) which is not a dictionary word. (fastrust, bigtree) It can be letters or numbers based on a phrase or sentence (All Cows Eat Grass - aceg). The system has a password policy (set by the installer) in terms of the maximum and minimum length a password must be as well as the use of capital letters and symbols. The system will suggest a password, which you may override with your own (but you must pass the password policy for it to be accepted when saving the staff member information.

The userid and password are used by the staff member (normally a teacher) to enter attendance and assessments, print reports, etc. on the teacher admin site and are **required**.

The *homeroom* field can be up to 8 characters long and **matches** the homeroom field in some

of the student records. If more than one teacher teaches the same homeroom (ie. job sharing) then one record should be entered for each teacher with the same homeroom value in this field. Both of these names will then show up on the report card.

If the teacher teaches a multi-graded classroom (ie. a split) then the homeroom field would have a single value such as '5/6' for a grade 5 and grade 6 split; both grade 5's and 6's in the same room). However, there should be two grades entered; one for 5 and one for 6. For example, Mr. Fine, teaches a 5/6 split in a homeroom called *fine5/6*. He should have a homeroom field that has *fine5/6* both a 5 and a 6 in the grade field separated by spaces 5 6.

The basic idea is that for all students in the school there will be at least one teacher that has a homeroom matching a student (in an elementary school). This is not necessarily the case in high schools and middle schools with subject specialists, but not a homeroom, per se.

As a result, in elementary schools, we can match teachers to students since they will have the same homeroom fields.

As well, the combination of homeroom and grade allows us to break these students into groups for reporting, attendance, etc.

For high school teachers and subject specialists, they will not have any values in class or grade, unless they have a homeroom. Normally subject enrollments will link these teachers to particular student groups.

The *email field* is the email address for that teacher and the *grade field* has been dealt with above.

The *Does Attendance* field is used by the teacher attendance checking script to make sure that this staff member will be entering attendance daily. If the attendance is done by the office, or attendance is only done weekly, or it is the teacher's responsibility and the office doesn't care, etc. this field may be ignored. (and left at Y or N)

The *Certificate* is used by Saskatchewan schools to record the teacher's certificate number, if she/he is submitting marks to Saskatchewan Learning via the SDS system (built into this software). Otherwise, this field may be ignored. The new versions have 8 certification fields in the staff table and may be used for a variety of purposes. The names associated with these fields may be changed by the network admin (or secretary) using a simple web interface.

The *position* field describes that person's job/role in the school. You may pull down additional positions for administrators who are also classroom teachers, etc. If a necessary job description is missing for some staff members, it can be added by editing the metadata for the staff on the Start/End of Year page. Use the 'Edit Metadata' button, and put in another value for the position field in the 'staff_multi' table.

This position information is used by the division wide IEP (Special Ed) system when building *teams* for special ed students, as well as teacher site access, etc.

The *address* fields are used to store staff address information, if required. Other emergency contact information and vehicle and driver information is also available.

The staff table also has additional contact information for *international schools* for permanent

teacher contact information in his/her home country including phone and email information. This is not included by default in distributed staff templates, but can easily be added. See the section on *Customization*.

Complete adding all staff members.

Adding School Dates

The school year should already be correctly defined in the master configuration file. Check this, by using the **View Dates** button, to make sure that *schoolyear*, *schoolstart* and *schoolend* are correctly defined. As well, the variables defining the term start and end dates (g.termstart and g.termend) should be defined for each term. These are seen in the View Dates screens, and also in the View Configuration files screen (in the lower part of the admin.conf file).

A **Term**, as defined by OA, is a period of time that has a reporting event at the end of it (i.e. exams, and possibly parent-teacher interviews). Report cards are printed at the end of each term.

There should be no holes in these term dates between terms. If a term ends on Friday, the 12th, then the term start entry for the next term may be either Saturday, the 13th or Monday, the 15th (the next school day). However, if set to Monday, teachers working on Sunday would be 'between terms'.

Failure to do this may result in confused date calculations, and problems with attendance entry by teachers when the date is in the 'hole'.

This system assumes that school runs Monday to Friday from *schoolstart* (defined above) to *schoolend*. Any holidays, inservices, etc. that a school is not in session (Mon-Fri) **must be added** as dates that school is *out*. Do this with the *Add Dates* function. For example, if the Christmas Holidays run from Saturday, December 20th to Monday, January 5th, you would have to put in dates for Monday, Dec 22, then Dec 23, 24, 25, 26 as well as the following week (Dec 28 - Jan 2). One record for each day. **Hint:** One you have saved one day for this, use the web browser's Back Button, change the date and save again. This speeds up the date entry process.

The description fields are used to describe that date, such as a couple of words about the nature of the inservice, etc.

The **Day In Cycle** field is used to indicate whether this date is included as a date in a rotating schedule such as a 5 day or 6 day cycle or not. Normally when the school year is designed, inservice days do not count as days in the cycle. If a Thursday is an inservice day with no students, and the day before (Wednesday) was Day 2, then Friday will be a Day 3.

However, if a school sets a professional development day later, after the division wide schedule is already set, then the Thursday PD would have a Y for Day in Cycle value. This would mean that Wednesday is Day 2, and Friday is now Day 4. Thursday was Day 3, even though no students came. This is done in order to stay in sync with a division wide schedule.

If there is no division wide schedule, then all dates can be safely left at *N*, the default.

Student Attendance

Student Attendance is normally done by teachers in OA. However, on the attendance tab, there is button to add attendance for a single day (New Attendance Entry) or a week (Multiple Date Entry). You can also enter attendance for a missing teacher using the single date method.

Using Partial Functions

The main core of OA is the demographics section with information stored in a student table. Enrollment changes (students coming or going) are stored in a separate transfer table. Once you have done the things outlined above, you can go ahead and use the demographics system and the attendance system. (both on the main admin site and the teacher site), assuming no use of the *subject* method for attendance. The discipline system may be used as well, if desired, with no further setup.

If you wish to use the attendance method that tracks subject attendance or would like to use the report card system or the schedule function that tracks where students are located now (if parents come to pick up students, etc), further setup is required. You must create the subject records, and then enroll the students in those subjects. This process is outlined in the report card system documentation.

You are now ready to begin. Attendance may be entered and reports printed. Student reports of various kinds may be printed. New students may be enrolled and others withdrawn. Discipline information may be entered, etc.

Student Demographics

The student demographics information is stored in tables called **student** for current students and **studentwd** for withdrawn students. Pre-registered students are stored in a separate table called **prereg**. All three tables have identical structure.

When a student is enrolled, his/her information is stored in the student table. If they withdraw, this information is simply transferred to the withdrawn student table (studentwd) from the student table. If he/she returns and re-enrolls, the information is transferred back into the student table (from the withdrawn table). No student information is erased in this process. Withdrawn students may be permanently deleted using a button on the Start/End of Year (EOY) page.

The preregistration table (prereg) holds student information for students coming into the school in the next school year. This is typically used for Kindergarten enrollment to see what the student numbers will be like for the next year, in order to plan for staffing, etc.

These are fairly large tables and contain the following information. They can also have additional fields added to track other information important to the school (more on this later).

Basic Student Information

First Name (given name), Last name (family name) and Middle Name identify the student. The names should be entered with initial capitals (as all proper nouns), but **not all capitalized**. This makes the name harder to read and may upset report printing due to the larger size. There are also additional prefixes and suffix fields as well as a 'known as' field (ie. common name)

The **Local Student Number** is a unique number that identifies the student within the school or school division. It is simply a small number that is stored in a file and increased by one for each new student enrolled. For small schools, a good starting number might be 100 and reset the number when 999 is reached. For larger schools a four or 5 digit number might be chosen. There is no requirement that the number remain a certain number of digits; it's simply an identifying number and smaller numbers are better (easier to type).

Within a school division, students may move from school to school. If the local student number is unique within the division, then she/he may be enrolled within the new school by simply entering the local student number from the previous school. All demographic information will then be automatically imported. It is highly recommended that **student numbers be unique within the division**, since it solves many identification problems, particularly in shared systems like the IEP (Special Education) system.

In order to ensure uniqueness, different schools are usually assigned large blocks of numbers for student numbers (ie 10 000 - 19 999 for school 1, 20 000 to 30 000 for school 2, etc. OA doesn't currently automate the wrap around process for schools. (ie. once 19999 is reached the next student doesn't automatically become 10 000.)

The next available number can be seen from the Start/End of year page using the *View Configuration Files* button.

The local student number is not visible while doing data entry during student enrollment. It is assigned as soon as the student information is stored. This field is not editable since it is used to link together large amounts of information about that student including attendance, marks, discipline, etc.

The **Provincial student number** is a government number given to each student. In Saskatchewan, it links the local system to the government system by means of an Internet data transfer (found on the export page). This digit is 9 digit number in Saskatchewan, and contains a parity digit to check for data entry errors. This may be checked by using the *Check Prov# Parity* on the bottom of the Export page. It will be useful in other jurisdictions to store the State / City assigned educational identity number.

The **Birthdate**, like all dates in OA, follow the ISO standard of yyyy-mm-dd. The pop-up Calendar app generates this date format. Birthdates are also used to identify students, so correct entry is important.

The homeroom field and grade field are particularly important to locate and group students. In a multigraded classroom, every student would have the same homeroom field (ie. 567 or Rich... the grades or teachers name or some combination) but a different grade value. The smallest grouping would be a *grade* grouping in this classroom. John is a student in a 3/4 split grade. John is in grade 3 and the homeroom is 34JW (taught by Janet Wilson). Tyler is also a student in that room. He is in grade 4, but still have a homeroom of 34JW. Jane Wilson in the staff table has 2 records (with the same userid and password), with both a homeroom of '34JW' but one record has grade 3 and the other has grade 4. This will link Janet to all of her students. She will appear as their homeroom teacher on the report card (if this function is turned on in the report card).

In a large school with many grade 2 classrooms, the smallest grouping would be the homeroom, with all grade 2's having the same grade field. Freddy would be in Grade 2 in the homeroom 2RR, while other grade 2's are in the 2FS homeroom, etc.

Notice that the *homeroom* field can contain up to 8 characters and the only *rule* is that the teacher and students fields match. This homeroom teacher information appears on the report card, also. If a teacher teaches a multi-graded classroom, two (or more) entries may be made in the staff information... one for each grade. They will be identical in all other fields. This way each grade will have a homeroom teacher listed. You may **not** combine several grades in the grade field.

High school teachers and subject specialists normally won't have any values in their grade and homeroom fields, but they are matched to students by the student subject enrollment. As a result, high school teachers will not normally have a grade field or homeroom field filled.

The **Grade** field has the grade information, and should **not** store other information. Don't confuse this field with the homeroom. For grades lower than 1, use K (capital) for kindergarten and PK for prekindergarten. For preschool use P3 to indicate 2.5 to 3.5 year olds. Otherwise we use numbers from 1 to 12. Other jurisdictions may have alternate values for early childhood education.

The **House** field is used for grouping students into larger groups than classrooms for intramural sports programs, etc.

The *Health ID* is a government identifier associated with health care identification. It is normally entered **without** any separators (like hyphens or spaces). For Saskatchewan, the 9 digit health number has a check digit which verifies whether any digits have been transposed, etc. Use the *Check Health# Parity* button on the bottom right of the Export page.

The **Password** field is a password that the student (and his/her parents) may use to view the student's gradebook and report card marks and attendance on the Parent Site (ie. Parent Portal). It is autogenerated, but may be changed. It must pass the password policy of the school.

The **Email** field stores the student's email address so that teachers (and administrators) may contact the student.

The **Program** field is used in Saskatchewan to identify the program of instruction. The default value for an English program is 10. Alternate languages have different values as do certain special education programs.

The **Ethnic Category** field gives the cultural and ethnic background of the student. In Saskatchewan, these map to Aboriginal status and would include *Non Native*, *Status Native*, *Non-status Native*, *Metis*, etc.

The **CIS Number** or **Treaty Number** or **Status Number** is a federal government number uniquely identifying a status native student to the federal government, as found on the CIS card (Certificate of Indian Status) (or it Treaty Card) from the IRS (Indian Registration System) of INAC (Indian Northern Affairs Canada).

The **Band Name** and three digit **Band Number** identify the band to which the student belongs.

The **Reserve Resident** identifies students living on First Nations reserves. This is a Y/N (Yes/No) field. In Saskatchewan it will be sent as part of the demographics information to Sask Education for native schools.

The **Single Parent**, **Youngest**, and **Internet** fields are single character fields that contain a 'Y' if true. It identifies a single parent family, a student allowed on the Internet, or the youngest child in the family.

The **youngest student** in each family is typically given information to go to the home (ie. Newsletters, etc) since it will be placed in the student backpack by the teacher. The enrollment reports list the number of youngest in family in each classroom so the secretary knows how many to make and how many go to each classroom.

The **Mail Contact field** is a place where you may place information that would normally be found on a letter going home above the address. It could say, for example, *Parent(s) of John Smith* or it Fred and Wilma Flintstone, etc.

The **Medical Notes** section is an unlimited text field for describing any medical conditions that a student might have. Values in this field can be searched for with the medical report. It would typically contain allergy information, any medication the student is taking on a permanent basis, and any medical conditions that teachers and administrators should be aware of.

The final fields in this section are related to the religion of the student and his/her parents, as well as mother's maiden name. The last four fields are again Y/blank fields indicating whether student has been baptised, etc. In a public school these fields may be hidden by your network administrator by changing a value in the stylesheet.

Parent/Guardian Information

There are two sections... one for each parent. Parent 1 is considered to contain the *primary contact information* for the student, such as home phone number, address, etc. Thus single parents should have values filled in under Parent 1. For two parent families, it doesn't matter whether the mother or the father is the first parent filled in, although the contact information (ie. address, city, postal code, etc) must be filled in for parent 1. The *relationship* field identifies the nature of parent 1 and parent 2 (ie. father, mother, guardian, etc).

The **contact** field is a field that would describe any limitations on student contact with that parent (normally the *secondary* parent). This would be the case with separated parents and some sort of court order in effect. Otherwise these fields are blank.

The rest of the parent information is quite self explanatory. The parent's names field should have both the firstname and the lastname fields filled in.

Other Information

Additional fields storing information include:

- **Emergency Contact** – This is information for emergency contact (assuming that the parents are unavailable). This includes their relationship to the child and other information. These fields are quite large to accomodate several phone numbers, etc. (even though their width may not show all of the information).
- **Doctor** information provides the doctor name and the phone number.
- **Family** is an identifier that will be common for all students in a family in the school. Not yet implemented.
- **Pic** is a picture field to indicate that the student has a picture in the system. If it contains a 'Y' value, then his/her picture will be used in certain functions such as student search.
- **Alias** is no longer used.

There are some other fields that have other uses and are not normally included in forms for editing. These include:

- **Studid** - a unique id field for each record. Ignore. Don't place in any templates.

-
- **Entry** - An obsolete field. It may be used for other purposes if desired. (ie. simply give it properties with the metaedit program and add it into the templates.)
 - **Field1, Field2 and Field3** - other older fields that are no longer needed since the tables can be extended and templates changed.

Customization and Metadata

Currently, both the student information and the staff information can be customized to capture any additional data that is required by the school. The adding, displaying and editing of data in these tables is controlled by two things:

- **Templates** - these are text files stored in a template directory that have HTML markup (tags with angle brackets) with special non-html markup that is replaced with field names and values.

The fieldnames within asterisks (<lastname>) are replaced with the fieldname labels from the meta table (which you can change; mentioned below). The field names within the at symbols (<lastname>) will be replaced with the field values in whatever format is defined by the meta data (also mentioned below).

- **Metadata** - this is information stored in a meta table that controls the way that you view and edit any values in the student and staff table. This can be changed by going to the Start/End of Year page and clicking on *Edit Metadata*. You can then edit either Staff or Student table information. You can change the descriptive text for a field, the kind of default values allowed, selection box values, etc. For example you put in a default city and province or state for those fields, etc.

The Student Demographics Information

Any school or division may add additional fields of information to the student table to allow for other information that a school may need in different jurisdictions. You can also *repurpose* other fields so that you use them to store different information, such as using the provincial number to store another local or state educational identifier. I would avoid using some of the first 10 or 15 fields since a few reports are *hard wired* to use particular fields.

Note: Just because you have added in these new fields, doesn't mean that they will then automatically show up in a report. A new report would have to be constructed (hopefully template based) to show this specific information. Upcoming versions of OA will have the ability to create and reuse custom report formats.

When these fields are added to the 3 student tables (student, studentwd, prereg), the layout of the template that is used for student enrollment and editing of student information must also be updated to reflect these additional fields. This is located in the templates directory of OA and is called *student.tpl*. Open this file with a normal text editor and add and change values as required.

The student view report (top right on main page), which also use templates, can also be updated to add these new fields to the report. This template is called *studentview.tpl*. The student roster reports don't use templates, yet.

As well as adding new fields, the type of entry method, defaults, etc. can also be adjusted by secretaries or administrators, if desired. This is changed by using the Meta Edit button on the Start/End of year page. The Meta Update button is used after you have changed the student or staff table (with additional or fewer fields) to synchronize the fields in these tables with matching records in the meta table (to control these fields).

The metaedit program allows you to change information about how each of the fields in the student and staff table is handled. Once you have the program running you should select the table to edit. You will then have the following choices for each field:

- **Fieldname** The text description that will be put into the entry form before the field value. (ie. *Last Name* for the lastname field, etc.)
- **Defaults** These are the default values that will be used when the form type is *select*. One of these values, and only these values, can be selected. They are separated by spaces. An initial tilde character (the squiggly line) will make a blank entry at the start.
- **Formtype** This is one of the standard HTML entry form types which can be either:
 - text - a input box that allows text to be typed in.
 - select - a selection list to choose from.
 - textarea - a larger multiline text entry box.
 - checkbox - allows a check to be placed in the field.
- **Viewsize** - for a text formtype, it controls the length of the field in characters. For a textarea formtype, it can set the size of the text box in terms of rows and cols (8x60). This field is ignored for the other form types since the checkbox and selection menus don't require this.
- **Required** When a student is first enrolled, any fields marked with required (Y) will have to be filled in before you can save the student information.

This information is used both when adding new students, but also when editing student information.

Student Enrollment and Withdrawal

There are 3 basic operations when dealing with student enrollment:

1. **Enrolling New Students** that have not been enrolled in your school (or possibly your division) before.

You **enrol** a student in your school by clicking on the Enrol/Withdraw button (right side of main page) while leaving the student number box *blank*. The student does not yet have a local student number. This button is located on the right side of the main page in the Student Enrollment/Withdrawal section.

The next screen asks for information about the reason for enrollment. This is set in a configuration file and as distributed is specific for Saskatchewan. It can easily be changed to fit your jurisdiction. Other fields include the province and country where this student has come from. The *description* field will allow the entry of other information such as the status of Cum folders, mailing address for old school to request cum folders, etc. This information is stored in the transfer (ie. enrol/withdraw) record for the student, and can be edited at a later date as well. Most secretaries use this space to store cum folder information when student is withdrawn. (and the cum folder is sent to his/her next school).

The final screen lists the student information fields to be filled in as discussed above. Once this information is saved with all required fields filled in, the student number is saved along with the record.

The system will automatically assign a local student number to the student. If there are multiple schools in a division, this number should be unique within the division. This will allow the student to transfer schools and also be uniquely described within the IEP system (Special Ed). The student number is assigned based on a value stored in a small file. It is increased by one as each student number is assigned. You can view the next available value by using the View Configuration Files button on the Start/End of Year page.

If you are entering several family members with the **same parent information**, you can simply click the back button on your browser and change the student name, birth-date, etc. while leaving the parent, emergency contacts, etc. identical. This will allow easy entry of entire families of students.

If the student was **already enrolled in another school in your division**, and is transferring to your school, you can easily enrol them. First find their student number at their previous school. Your schools must be using division unique school numbers. You can look this up by clicking on *Withdrawn Students - Division* and view the list of withdrawn students throughout the division. Once you have his/her student number, simply enter this into the student number field above the Enrol/Withdraw button in the Student Enrollment section of the main page. Their student information will be copied into a local student record and automatically enrolled in your school.

You can view the enrollment record (called Transfers in OA) by clicking on the *View/Edit Transfers* button in the same section as above. When sorted by Date (the default) your latest enrollment record should be at the top. Click on the name to edit the record (and put in description information above schools, cums, etc.)

The Saskatchewan SDS script of OA now synchronize student data with the provincial data system.

2. **Withdrawing Enrolled Students** that have moved to other schools, possibly in your division.

In order to withdraw students, you simply enter their local student number into the student number input box and click the Enrol/Withdraw button. This is located in the Student Enrollment area on the right side of the main page, as mentioned previously. The next screen will indicate a student withdrawal with withdrawal reasons to select,

etc. These reasons are initially set for Saskatchewan, but may be changed in the global configuration (*global.conf*) file.

When the student is withdrawn, his/her information is **not** erased. It is simply moved to another table called *studentwd*. You can see (and edit) the withdrawn student information by clicking the *Edit Student Records* button. This is located on the right side of the main screen in the View/Edit Students section.

Before the student is withdrawn, you should make sure that you print all attendance reports, report cards, etc. that will be required. His/her attendance information, report card marks, gradebook marks, discipline records still exist (and are not transferred anywhere). However, most reports will not display this information for withdrawn students (unless there are options to allow this).

If a student is withdrawn before this is done, then she/he may be re-enrolled and then withdrawn again....**However**, you **must** immediately remove the extra transfer records that have been created by doing this. Click the View/Edit Transfers button and delete the two records (one re-enrol and one withdraw) that you created while doing this.

If a student has withdrawn from school several years previously and will never return (graduation, too old, etc.), you can permanently remove most information about him/her from the local system by using the *Permanent Student Deletion* button on the Start/End of Year page. This will delete them from the withdrawn student table, and also remove any attendance, discipline, report card and gradebook information. The transfer table information (enrollment/withdrawal records) as well as subject enrollments will be kept beyond this date. Other information is deleted. Transcript information will also not be deleted. You must make sure that you have posted all student report card information into the transcript system before erasing it.

3. **Re-enrolling Students** that have returned to your school and were previously enrolled in your school.

You enter the currently withdrawn student's student number into the student number box and click the Enrol/Withdrawn button. The withdrawn student's number can be found by simply clicking the Edit Student Records button and then finding the student's name in the withdrawn student list. His/her local student number will be in brackets beside the name.

Once you give reasons, etc. for re-enrollment, his/her student information will be moved from the withdrawn student table (*studentwd*) to the student table. A new enrollment record will also be added to the transfer table.

In summary, when you enter the student number of a student into the student number field of the enrol/withdraw script (rather than leaving it blank for a new student), it searches both the current student table (*student*) and the withdrawn student table (*studentwd*). If the student exists in the student table, he/she must be withdrawing. If the student exists in the *withdrawn* table, he/she must be returning to the school. If the student number does not exist in either table, it must be a *new* student. A new student entry screen is displayed to allow entry of student information. If a blank number is entered, the system picks a new number for that student.

Preregistration

When enrolling students for the **next** school year, we add them to a separate *preregistration* table so that they will not show up in the normal year end student reports. This is done so that, before school end, we can, if necessary:

- print the next school year projected enrollment reports.
- assign students to particular classrooms.
- assign teachers to particular classrooms.

You preregister a student by choosing a blank student number, as usual for new students, but check the box *Pre-registration Entry*. Once the student information is entered, it will save the student record not in the normal student table but in the pre-registration table. This will be confirmed by the button at the bottom of the new student entry saying *Save Record to Preregistration Table* and a confirmation to that effect once this had been done.

Once regular school reports, etc. have been run for the year, these students may then be added to the normal student table as part of the preregistration process (outlined on the Start/End of Year page).

Outlining this process, there are basically two methods:

1. The simpler approach is used when there is no need to create projected enrollment reports from this system or teaching assignments and classroom enrollments **before** the end of the current school year.

The method is to:

- (a) Promote current students to the next grade (using the Grade Update script on the Start/End of Year page).
 - (b) Copy the preregistered students into the student table (using the copy script on the Start/End of Year page).
 - (c) Use the Homeroom Update script to assign all students to new homerooms.
2. The more complex approach is required when it is desired to assign homerooms, etc. for the next school year before the end of the current school year. This necessitates the creation of a temporary student and staff table to allow updates, and homeroom assignments to be done to these students and allow reports to be printed for these rooms (and teachers). The entire process is outlined on the Start/End of Year page (along with the appropriate scripting).

After either method is complete, please **delete all students from the preregistration table** so that more students can be added to this table at the end of the following year. Use the script provided at the bottom of the Start/End of Year page to do this.

If you see any students in the preregistration table near the start of the school year, when doing Edit Student Records, this has not been done (and should be).

Student Transfers

Whenever a student enters or withdraws from school, a record of this is stored along with the date, reasons, and description. The reasons are set in a master configuration file for all schools in a division (although single stand-alone schools must set this as well) called `global.conf`. The default reasons are set for Saskatchewan, but any values required can be set in this file.

The *View / Edit Transfers* script shows the student transfers and allows changes to some fields (or deletions in the event of mistakes of enrollment / withdrawal). This information is also displayed in the Attendance Profiles report (along with attendance records). The entry and exit codes are those set in the configuration file.

The Update tag is no longer used.

The description field can be used to store information about where/when Cumulative Folders were sent or received, etc. It is a 255 character field. The Prov / Country field is used to indicate the location that the student went to or came from (and is associated with the entry/exit codes). The Type is either withdraw or enrol (entering or leaving).

The **Withdrawn** buttons are used to view the local withdrawn students or the withdrawn students in the entire division (to find out the student number of the student for enrollment in your school). The local withdrawn students can be erased once any possible use for this demographic data has passed. (using the **Permanent Student Deletion** button on the Start/End of Year (Eoy) page. The advantage of this approach is the ability to enrol a student in your school that has transferred from another school in your division by simply putting their local student number into the Enrol/Withdraw input box.

Student Reports

These are reports that are located on the main administration page and print out information from the student table in various formats. The Adobe Acrobat PDF reports are designed to be printed while the HTML web pages are designed for on-screen viewing. This is certainly not mandatory; web pages can be printed and pdf files can simply be viewed. The pdf reports give us better control over page breaks and other page based layout.

The problem with the printed reports is remaining current. They may easily become out of date. The online web reports do not have this problem since they are always using the most up to date information from the student table.

Several of these same reports are also available to teachers on their teacher site.

There are basically three blocks of reports on the main admin page:

1. Student Rosters - upper right.
2. Student Reports - lower left.
3. Enrollment Reports - lower right.

The student rosters include:

-
1. **Full Student Roster** – a complete listing of each student’s data in a format suitable for printing. (PDF format). It can be printed sorted by student lastname or by homeroom. There are 3 records per page, normally (but depends on template and script settings).
 2. **Short Student Roster** – a short form containing the most important student information in a printing format (PDF format). The number of students per page is selectable, in case of particularly long student records. It is printed sorted by homeroom.
 3. **Short Student Roster, Selected** – This prints the same information as the short roster report above, but allows you to select certain students for inclusion on the list. This might be useful for small groupings of students in alternative educational settings, etc.
 4. **Short Student Roster, Web** – Another short student roster, but designed for onscreen viewing, with sorting by lastname as well as homeroom.
 5. **Mini Student Roster** – An even smaller student roster report for screen viewing (ie. web based). This is quite useful for checking simple student values.
 6. **Student Confirmation** – A printed report designed for parents to allow them to confirm student and other information in the database.
 7. **Custom Classlist** – A printed PDF report with a grid to allow teachers to enter values for evaluation or other purposes. There are several options to control the groupings, the size of the cells in the table, and also allow column headings with rotated text.
 8. **Custom Stafflist** – A printed PDF report analogous to the Custom Classlist. It provides options to print a grid report on all or selected staff.
 9. **Print Mailing Labels** – A report printer to print student information in a variety of formats on standard mailing label stock. The main entry screen shows the available formats, and then allows selection of sortorder, student grouping and font size. Multiple groups (ie. 10,11,12 by simply entering them separated by a space 10 11 12) may be selected. The following screen allows a per student selection to print. (since, in many cases, only a few are needed).

The various **Student Reports** include:

1. **Birthday Lists** – These reports sort birthdays suitable for office or homeroom ordering them by month and day throughout the year. These are both web reports but can be printed and posted.
2. **House Report** – A pdf report listing membership in school houses for intra-murals athletics, etc.
3. **Medical Report** – This reports information in the medical field of each student. Both PDF and Web versions are available. You can also search for values in this field to give a more customized version (ie Fluoride use, allergies, etc.).
4. **Phoning Report** – A report showing all phone numbers for a student, similar to the attendance phoning report.

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5. **Religion Reports** – The *Religion by Grade* report gives the breakdown by grade and summary statistics at the end of the report. Web based. The *Sacramental* report gives parish based information including parent information. This is mainly designed to be used by religious coordinators in the schools. The *Religion Details by Name* lists all of the religion fields in each student record (confirmation, baptism, etc.).
 6. **Reserve Report** – A report showing aboriginal students in the school, grouped by their band affiliation.
 7. **Track Report** – This report creates a grouping of students based on their ages (suitable for splitting into age groups for track). It includes name, birthdate, house, gender, homeroom and age. The aging date can be selected to whatever you want.
 8. **Youngest Report** – A report showing all of the youngest in the family (a field in each student record). This is also visible as a *Y* in the student roster reports. This will allow the secretary (and teachers) to know how many forms are required by each classroom to go home, etc.

The **School Enrollments** report include:

1. **Enrollment by Class** - shows summary enrollments for the school broken down by class.
2. **Enrollment by Age** - shows enrollments by... age. The aging date is normally 'today', but may be set to any date value. (ie. to start of school year, calendar year, etc.)
3. **Enrollments by Ethnic Categories** - this shows grade ethnic compositions or total school composition.
4. **Monthly Transfers** is a PDF report normally used to track enrollment changes for central office.
5. **Monthly Enrollment Change** is a web based report that shows changes based on a particular month's enrollment changes.

Student Search, View and Edit

The **Student Search** button can quickly find a student record using either the student's lastname, lastname and firstname (separated by a comma), or just the student's initials (or less often, student number). The search is case insensitive since MySQL (the database engine we are using to search) is compiled this way in most cases. This function may also be used to view the student's school picture if uploaded into OA. The functions to do this are on the Export Page.

It will display the student records that match the search and display most fields of interest. By clicking the Edit button, you can edit the student record. The fields displayed are controlled by a template, so additional fields can be added and unused fields removed by your system administrator.

The **View Students** button, like the search above, allows you to look at student records. In this case, by grade or class and sorted by lastname or birthdate. This is controlled by template also, and can be changed.

The **Edit Student** Records button, as the name suggests, allows you to make changes to the students demographics information, such as changes to phone numbers, addresses, etc. The screen layout is identical to the one used to add students. You may edit information on current students, withdrawn students, and preregistered students.

The Attendance System

The attendance system is based around tracking student **absences**, since there should be fewer of them than **presences**. An attendance record is stored for a student only when they are absent (or late) from school. No record is stored when they are present. This is the easiest approach in terms of record entry. This system is also designed to accommodate the problems of K-12 schools that may have different attendance periods per day for different grades. (K-6 may have 2 attendance periods per day (Morning and Afternoon) while 7-12 have 6 periods per day, that correspond to teaching periods).

The attendance record contains:

- The **Date** and the **Period** of the absence.
- The local **Student Number** of the student.
- The **Reason** for the absence.
- The **Subject-Section** of a subject for subject based attendance.
- A Late field to track minutes late (little used).

Since elementary schools normally don't have subject based attendance, the subject field in their records will be blank. Only subject based attendance methods normally used in high schools fill in this field.

Attendance Entry Methods

Depending on the school, attendance may be entered by the secretary or by the teachers, or possibly, both.

On the main admin site, the single date method is designed for missing teacher entry of attendance since the secretary is entering attendance for the entire school rather than a particular homeroom or subject (which is the normal teacher approach).

The best approach to attendance entry depends on the school. I have tried to provide a rich enough *set* of methods to cater to all needs.

Attendance Entry - Admin

There are two general types of attendance entry. One is a single day entry system with a variety of methods and the other is a multiple day entry system.

The first system, called **New Attendance Entry**, has several methods for entering attendance. They include:

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1. **Grade** – One, several, or all grades may have attendance entered using this method. Leave blank for all grades or put in a space separated list of grades to enter their attendance for the day.
 2. **Homeroom** – This method will have buttons for all homeroom teachers, so that you can enter attendance for them. Typically for when they are away.
 3. **Subject** – This method will have buttons for all subject based teacher attendance entry. Click for attendance entry for that teacher.

The second attendance entry approach, **Multiple Day Attendance** entry, is used to enter attendance on a weekly or biweekly basis. This is normally done in smaller elementary schools where each teacher is effectively in charge of attendance entry. They will fill in a weekly or biweekly form and then the secretary keys in this information. This method is designed for this kind of entry.

In order to select a smaller grouping of students (rather than the entire student body), selection may be based on Class (Homeroom) or Grade. If this is the approach, then the particular Class or Grade should be entered in the input form after *Class / Grade* and the correct group type (Class or Grade) selected from the menu. Otherwise, if left empty, all students in the school will be displayed. The type of entry method may be selected to be either weekly or biweekly.

Once entered, the periods missed by students may be clicked (selected). Previous or the Next Week may be chosen by clicking the appropriate button. The next screen will allow selecting the reason for the absence.

Check Teacher Attendance – When attendance is done by teachers on a daily basis (or several times per day), a method is required to make sure all attendance has been entered by teachers before reports are generated since we have to track absences and a missing absence due to a teacher not filling this in would mean that the student was present.

One of the fields in the staff screen (on EOY page) is **Does Attendance**. For all teachers that have this field set to *Yes*, this program checks to make sure that they have entered an attendance record for today. If there is perfect attendance, a blank entry (no one selected), should still be made to create a *Teacher Did the Attendance* entry (which is stored in a different table than normal student attendance).

This script will also display the time as well as the date of the attendance entry (in case of multiple required entries per day).

Attendance Editing - Admin

This section has options to edit or delete existing attendance records. These include:

- **Edit Today's Attendance, Edit PrevDay Attendance, Edit Attendance Range, Edit All Attendance** – all of these functions are identical with a different subset of attendance records being visible. They are placed on different buttons to speed up the process.

For the date range, make sure that all dates are entered in year-month-day format. There is also a new calendar popup which will allow date entry (and generates the correct entry format).

Once you have the attendance records displayed, you can edit or delete any individual records desired. If you have many records to delete the *Power Delete* function is more appropriate (whose button is located further down the page).

- **Reason Reset** – this enables the resetting of all reasons for attendance for one day in one simple operation (rather than editing individual records using the functions mentioned above).
- **Power Delete** – this enables the rapid deletion of a large number of attendance records entered by mistake. This can happen as teachers are learning to use the system. Make sure that that date (if not today) is entered in correct format (if entering manually).
- **Check Attendance Records** – Periodically you should click this button in order to check for duplicate attendance records (same date, period, and student), blank reasons and blank dates. This will ensure data integrity of the attendance records. The new attendance entry methods should trap most of these mistakes in current versions of OA.

Attendance Scanning & Discipline Form Letters

Every attendance reason can be assigned a *point* value in the configuration file and when the points accumulate to certain *trigger values* a discipline event may be recorded and form letters may be automatically generated. For example, an unexcused absence might be 3 points while an unexcused late might be 1 point. Other reasons could be set to 0. When points accumulate to configured values (ie. 20), a letter might go home to the parents. The settings would be set based on school policy.

The settings for these **points** and **trigger values** and their matching **discipline events** is set in the main configuration file (admin.conf). These can be seen from the Eoy page using the View Configuration files button.

The attendance scanning script (attscan.pl) (Attendance Scan button in middle column of attendance page) scans a date range and adds up the points in that range. (ie. today or this week, etc). It then compares this to previous points totals and looks for any values that would go over a trigger point.

These triggered events generate a check box selection so that the attendance officer may select (possibly all) students for discipline action. When selected and submitted, a discipline entry is created and form letters are also generated for printing, signing, and mailing. These form letters are based on templates that may be edited by your system administrator.

Student Attendance Reports

The first report, called the **Daily Attendance Report**, will report on all students absent on the selected date, and generate some cumulative attendance (and discipline) records. This

attempts to try to give a snapshot of this student, so that administrators can pick out any growing attendance problems (particularly combined with discipline issues).

The second report, called the **Check Student Days** is also useful in tracking students with problem attendance. One it day is the largest periods per day defined for any grade. The starting and ending dates should be in yymmdd format (as indicated). It checks for students exceeding a certain number of days in a given date range. (as perhaps set out by policy). The monthly attendance report might, in most cases, be a better solution. But it depends on the school and its attendance policies.

Subject Based Attendance

For high schools, attendance is usually tracked also on a *per subject* basis. The following two reports are used to track this:

1. Student – displays all the classes missed sorted by subject.
2. Subject – displays a listing by class, with student and number of classes missed.

Other Attendance Reports

Attendance Phone List – a phone list report for those students missing on that day. Used by people responsible for attendance checking (ie. attendance officer).

View Attendance Records – a report that can view student attendance records by student number, date range, or class. The student number version will show the attendance records for withdrawn students. It includes phone numbers for the student. Clicking on the student name will show all attendance records of that student.

Monthly/Term Reports

Monthly Attendance Report – will report on student attendance for the month. One version prints a web based report, while the other outputs a pdf (Adobe Acrobat) report more suitable for printing. The web report will highlight withdrawn students in red. Both reports categorize attendance into 5 categories: Absent Unexcused, Absent Excused, Absent Other, Late Unexcused, and Late Excused. The Absent Other category is a *catch all* for all categories of *Absent Something or Other* that the school has added.

It produces a listing including Days Enrolled and Days Attended, and percentage stats for the categories listed above. It allows grouping of students by Class or Grade. It produces a listing of grand totals at the bottom of the report (with a link at the top to jump directly to those totals).

Attendance Profiles & Other Reports

The **attendance profile** is a comprehensive report that draws data from the attendance table as well as the transfer table (for enrollments and withdrawals) and summarizes this information on one (or more) pages. It will report on all students, *including withdrawn students*. *Other reports normally don't report this*. This kind of attendance report may be used by schools not using the report card system, but would like to include attendance information to parents and guardians. It is designed for printing since it is a PDF (Adobe Acrobat) report. Normally the date range chosen for reporting would be the range of dates for the current report card period (ie. term).

The report card attendance information includes attendance information in terms of days missed (absences and lates). It will also report on periods missing for subject attendance). It does not include transfer (enroll/withdraw) information. As a result, the attendance profile is a more comprehensive source for attendance information. The Parent Online parent site also provides comprehensive attendance information (as well as gradebook and report card marks).

The **Ethnic Attendance Report** categorizes attendance records on the basis of the ethnic field of the students. It is a summary report and includes Students Enrolled in the date range chosen, Student-Days Absent, Student-Days Enrolled and Percentage Attendance (for each ethnic group).

The **Perfect Attendance Check** finds all students who have perfect attendance in a particular date range (and will ignore certain attendance reasons, if set).

The **Year End Attendance Report** is a PDF report similar to the Attendance Profiles, but created in a more compact format for longer term storage, etc. It contains all information on attendance for the year for the school.

Attendance Information Storage - Technical

The **Attend** table is the primary table that stores information about attendance, the periods missed by students. If there are two periods per day (am/pm), and the student missed the entire day, then there are two records added to the table. A 6 period day would result in 6 records added if the student missed all day.

The attendance table (*attend*) has the following fields:

1. **Studnum** – the local student number of the missing student. (called studid in this table... a mistake). The student number (studnum) field in the student table links the student name, etc. directly to the attendance record by this field.
2. **Absdate** – the date of the absence (or late). The reason, below, will outline the reason for the absence or late. Like all stored dates, this is in ISO 8601 standard year-month-day format (most significant to least).
3. **Period** – the period of the absence. For a 1 period school day, this would be all day. For a two period day, this would be morning or afternoon, (1 or 2). The periods per day for

each grade are stored in the master configuration file (admin.conf). In a K-12 school, the elementary students may be using a 2 period day (AM/PM) while the high school uses a 5 or 6 period day. As a result, when an elementary student is absent all day, only 2 records are stored. If a high school student on a 6 period day is missing all day, 6 records are stored.

4. **Subject-section** – for schools doing subject based attendance entry, this is the subject-section code of the period missed. (ie. 8514-1) This will allow tracking of classes missed in any particular class (ie.subject-section).
5. **Reason** – the reason for the absence or late. The reasons are stored in the master configuration file (admin.conf) also. The reason should include the text it Absent at the start in order for some of the programs to correctly count the number of absences (for whatever reason). The same is true for the *Late* reasons. Only the reasons located in the configuration file may be entered since they are chosen from a selection list. A smaller list rather than a larger one may be better, since each must have some sort of justification in policy.

The **Absent** reasons can be classified into several categories (and are printed this way in the monthly attendance reports):

- (a) Absent Unexcused - self explanatory.
- (b) Absent Medical, Absent Illness, Absent Cultural - excused absences for particular reasons (and that need tracking)
- (c) Absent Excused - an excused absence with no particular need to be tracked for a reason. (ie. Cows got out and had to go get them...)

The **Late** reasons are not categorized other than being excused or unexcused (although, of course, this may be changed).

6. **late** – a numeric field storing, normally, the number of minutes late. This is currently not stored by any of the entry methods (due to lack of interest). However, the field does exist.

Other Table Structures

Open Admin has, besides the **attend** table, the following tables supporting attendance:

tattend table – A table to make sure teachers have entered their attendance. A single record is added every time a teacher adds attendance records (to the attend table). The office can then tell that all attendance has been entered for the day (or portion of the day), and that attendance reports can be run.

The fields of this table include:

- attid - int(11) - the record number; used to edit/delete.
- date - datetime - the date and time of the attendance entry.

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- `techid - char(20)` - the teacher userid (from the `staff` table) (which is why each teacher must have a userid).

If the teacher is entering attendance for a previous day, the system will add that as the date, and place a 0:00 time for that day. This will make it easier to follow what dates have been entered for elementary attendance (where teachers are responsible for their own attendance in many cases).

Teacher Attendance Entry requires support from the `staff` table) to indicate which teachers are actually responsible for entering attendance. There are a couple of important fields:

- *Position* – shows their role in the school (teachers, aides, principal, etc.)
- *Attentry* (Does Attendance) – indicates that this person is responsible for attendance entry.

Teacher Attendance

The attendance buttons allow teachers to enter attendance records, change these records (if desired), and print reports on the attendance of their homeroom or subjects (courses).

Attendance Entry and Login

In order to do attendance, each teacher must have a userid and password set in the `staff` table. This is set by the secretary/administrator on the main admin site. It is a *different* userid/password from the shared userid and password all teachers use to get into the teacher site. **Note:** The new versions of OA can use a mysql authentication package that will allow them to be the same. However, a double login is, unfortunately, still required. All teachers must have a unique userid and password.

When you login, one of your options is the *duration*. This is the length of time that you have to enter your attendance before your login *times out* and will require you to log in again. This length of time is **reset** while you are actively working on attendance every time you do a submission, etc.

Once you are done with your attendance entry you may exit your web browser (Firefox, Internet Explorer) or Log Out so that no one else may change your attendance (or other values).

Student Attendance Entry - Term 3

Teacher Att Entries

UserID	Date
123	2006-01-23 00:00:00

Previous Attendance Entries

[Edit Attendance](#)

Name	Date/Per
Cyr, Eric	2006-03-03/1
Cyr, Eric	2006-03-03/2
Cyr, Eric	2006-03-02/1
Cyr, Eric	2006-03-02/2
Cyr, Eric	2006-03-01/1
Cyr, Eric	2006-03-01/2
Cyr, Eric	2006-02-28/1
Cyr, Eric	2006-02-28/2
Flintstone, Pebbles	2006-02-28/1
Cyr, Eric	2006-02-27/1
Cyr, Eric	2006-02-27/2
Flintstone, Pebbles	2006-02-27/1
Flintstone, Pebbles	2006-02-27/2

Enter Checks and Reasons for Students Missing **ONLY**
Time Limit **15 Minutes**

[<= Previous Week](#) [Next Week =>](#)
Date(dow, yy-mm-dd): Mon, 2006-2-27

Teacher: **Ms. Joe Blow** Room: **123**

Clear Prev Attendance		Submit Attendance	
Student	AM	PM	Reason
Cyr, Eric	<input type="checkbox"/>	<input type="checkbox"/>	Absent Unexcused
Flintstone, Pebbles Sandy	<input type="checkbox"/>	<input type="checkbox"/>	Absent Illness
Holman, Shawn Christopher	<input type="checkbox"/>	<input type="checkbox"/>	Absent Moved
Lilly, Lyle L.	<input type="checkbox"/>	<input type="checkbox"/>	Absent Moved
quinn, michael leroy	<input type="checkbox"/>	<input type="checkbox"/>	Absent Illness
Sample, Joseph A	<input type="checkbox"/>	<input type="checkbox"/>	
Santos, Dilbania	<input type="checkbox"/>	<input type="checkbox"/>	
Clear Prev Attendance		Submit Attendance	

There are several attendance **entry methods** for teachers depending on their needs:

1. **Student Name, Period** (called *SNAP* for Student Name, Am/Pm) – this presents the teacher with her/his homeroom student list, with checkboxes for the periods of the day, and a pulldown list of reasons for absence or lateness. The current date is in a pull down box listing all the days of the week. There are also two other buttons for changing the date to the Next Week or Previous Week. This method is only used for a single day attendance entry.
2. **Student Name, Period** (multi-day) – this method provides the same information that the snap method does (student, period, reason) but allows attendance to be done on a weekly basis. (biweekly is also easily possible if the script is changed by your admin). The first web page allows for date and period selection, while the second page allows the selection of the absence reason for each period. The third page allows for confirmation.
3. **Subject Based Entry** (subject) – this method is used by high school and/or subject specialist teachers to enter subject specific attendance. This information includes the student, period, subject, and reason. It will list all of the subjects that a teacher has in the current term and the students in each. It is similar to the snap method in this regard.

If the teacher has a timetable entered in the schedule system, then his/her day will be displayed with only those subjects that he/she teaches today. As well, they will have the

correct periods for those subjects only. This will minimize attendance entry errors. If there is **no** scheduling information, then the script will show all of the teachers subjects (for this term) and all possible periods. This, of course, is much more prone to errors.

4. **Student Alias** (sa4, and sa6) – Their use is Deprecated. (ie. don't use). This is a student alias entry method similar to the methods used for administrative attendance entry. The alias shortens the required length of number used to identify a student. However, these methods are less desirable than the previous methods which are faster and easier to use. You will need a printed list of student names and their alias numbers. These methods will capture more or less information about attendance depending on the schools needs.

There are several features to note about the entry screen:

- On the left side, we can see previous teacher attendance entries (from the teacher attendance table) so that you can verify times that you have done attendance (to ensure they are up to date).

Below that are found previous student attendance entries. This will allow teachers to see what they have already entered and when, so that they don't add double entries. By clicking on them, they may be edited.

- The date of entry is in a pull-down box for the entire week. The buttons on either side will allow changing to the next or previous weeks. This is present since, in some schools, attendance may only be entered on a weekly or biweekly basis.

The subject attendance entry method uses a slightly different layout for dates because of the timetabling issue that requires only certain subjects be displayed depending on what day in the cycle it is. (for those using a non 5 day (ie. weekly) cycle.

- The am/pm or period checkboxes enter the period(s) missed. The pulldown reason box is used to enter the reason for absence or lateness. The reasons are stored in a configuration file (admin.conf) for the school. They can easily be changed to suit the school's needs.

They are generally categorized into Absences: Unexcused, Excused for a variety of reasons, or Excused (no reason). Unexcused absences will generally trigger some sort of discipline event (using the Attendance Scan function), while the other reasons are more for tracking by staff (and parents). Lateness tracking is similar.

- If a teacher has more than 1 group of students (ie. a split class), they can do both at the same time; they are listed vertically, one after another. Similarly for subjects in subject entry mode.

Attendance Editing

There are two general methods for editing student attendance based on whether you are doing **homeroom based attendance** or **subject based attendance**. Both methods still require that you have logged in using the Login button at the top of the main teacher screen. Set a reasonable time for the duration so that you will have time to complete your work (although in most cases this time will continue to be reset to this duration as you work).

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- **Homeroom Attendance Editing** will automatically select those students in your homeroom, and display them in descending order by date. You can then edit them or delete them and then return to this screen to make other changes.
 - **Subject Attendance Editing** will automatically select those students in each of your classes and display them in descending date order. You can then edit or delete them, the same as the homeroom method.

Attendance Reporting

There are two ways of looking at student attendance:

1. **Group Attendance** - This allows you to look at attendance by either *grade* or *home-room*. You may also enter a date range to select for only particular dates. If the dates are left blank then all attendance records from the start of the school year to the present are displayed. By selecting a later start date you may see only more recent records.

Once viewing the student attendance records, you may click on the student name in order to see only his/her records. This will show all of this student's records. There is no date selection to limit the number of records shown. The bottom of the screen also displays a search box for individual student searching as well.

2. **Individual Attendance** - This allow for individual student attendance reporting. You may enter a lastname and then all students with this lastname are displayed. From this screen a single student is selected for display.

A more selective approach is to use the *lastname, firstname* with a comma separating the two parts of the name. Initials are also a very fast approach to searching. If more than one student with these initials, a screen will again allow selection of a single student. The local student number may also be used, if known.

Discipline

The discipline system is a system for tracking student *errors in judgement*. It will allow the addition of discipline records, viewing and categorizing of discipline events (records), and the deletion of groups of records over time. These records are not normally removed on a year over year basis, while the student remains enrolled in the school.

In order to use the system, infraction types should be defined first (and of course may be added and removed as required). Select **Add Infraction Types** from the Discipline page. Up to 6 infraction types (categories) may be defined at a time and there may be an unlimited number in total. These infraction types will then be visible in a list when entering discipline reports. These types may also be viewed or deleted (but not edited since they are so easy to create) using the buttons on the discipline page.

When planning to enter a new discipline record/event, you can search for the student using the same methods as student search (lastname or lastname, firstname or initials normally). Once the correct student is found, click the *Add* button to start entering the information.

The record includes the current date (which may be changed to suit). It includes a description of the event, the action taken and any followup that will be required. It also includes the nature of the parental/guardian contact.

The *private (to admin)* checkbox indicates whether this record should also be visible to the teacher site (which can also author and view discipline entries). If selected, it won't be seen from the teacher site.

The author list is created from the staff list. If anyone is missing from this list, they have not been updated in the staff list (on the Start/End of Year (Eoy) page).

Discipline Reports

There are several different types of reports:

1. Student Discipline Reports – lists all infractions, consequences, etc. for a single student. The student may be searched for like the student search on the main page (by lastname or lastname, firstname or initials). If multiple students are viewed, then by clicking on the Student Name Title, only his/her records will be shown. The summary checkbox also allows only the names to be seen, so that a single student may be selected in this fashion.
2. School Summary Report – creates a school based report for a certain time period (one month, a term, a quarter, etc.). The layout is the same as for the other discipline reports.
3. School Statistical Reports – creates statistics for a certain time period (as the report above). These reports can be by infraction category, grade, or class to help categorize particular types of problems in the school.

Attendance and Discipline

The attendance scanning script (outlined in the attendance section) will look for students that have passed certain defined attendance points and automatically allows the generation of discipline reports and form letters.

In order to use this function, certain values have to be set in your configuration file. First, all attendance reasons have to have a defined point value (which would be 0 for excused absences normally). Then, based on your school attendance policy, you can define certain trigger points that will cause the creation of the discipline records and form letters.

Once this has been done, you can run the attendance scanning script daily or weekly to look for students passing these trigger points. You can then print the results form letters and mail to parents. The wording of the form letters is stored in the system (in your schools template/forms folder) and can be changed by your network administrator.

The Report Card System

Overview

The report card system is designed to report on student progress using up to 20 objectives per subject and an unlimited number of subjects. As such, it is suitable for use in both elementary and secondary grade levels. The report card system can print these subject results (along with unlimited size comments) in any desired order in a high quality PDF. It includes a tabular design, with subject shading and table lines. Since the source to the report card layout is available, report cards can easily be customized for individual school needs. The report card script has been rewritten several times and will continue to improve and evolve.

The use of the word *subject* is roughly equivalent to the word *course*. When you define a subject and a section you are really defining a course in a particular subject area taught to a particular group of students. We will use the word *subject* in this context.

Getting Started

The main steps in getting started with the report card system are:

1. Entering the Subjects - only has to be done once to setup (although they will likely be changed slightly every year as teachers change or terms taught differ).
2. Enrolling Students in Subjects - done yearly or per semester.

After that, the teachers will enter student evaluations for each class (subject-section). Report cards are then printed after that.

Once the subjects are setup for your school, there should not be a lot of work maintaining them. In a particular year, the teacher for a subject may change or a particular object, etc. Otherwise, subjects only require adding, **once**.

However, student enrollment in subjects is done at least once a year, and likely twice or more often if semestered. As well, there will be subject drops and enrollments on an ongoing basis as well.

At the end of the school year (after all report cards and other reports have been run), all subject enrollments should be erased by your system administrator, before you begin a new year of school. The subject enrollment records store all the students' evaluations for the year. These should also be posted into the transcript system (and other reports run), before being deleted.

Once a student is enrolled in a subject, they will also appear in the gradebook in that subject for the teacher of this course.

Terms or Reporting Periods

In this program, a **Term** or reporting period is a period of time with exams or tests of some kind at the end. A report card / progress report is generated for parents.

Most scripts can figure out the current term by using the current date and values stored in the configuration file.

There is also a term setting button on the report card page. It has a different purpose. This is used to lock mark entry by teachers into a particular term. It can also turn off mark entry by teachers (and also posting from the gradebook) if set to 0.

In a multi-track school where different grade levels have different numbers of terms (with different start and end dates), the terms for different tracks may be set separately. This is a configuration setting controlled by your system administrator. This will be an issue if you have a grade K-12 school with 3 terms K-9, and 4 terms 10-12. Setting these separately allows report cards (and mark entry) to be done separately for these 2 groups (Elementary and High School). This will ensure that teachers put their evaluations (marks and comments) in the *correct term*.

Entering the Subjects

The subject is entered using the button called **Add a Subject** on the report card page.

If the subject you are entering is similar to an existing one, you can *clone* it using the clone button after entering the subject-section (subjsec) of the existing one. This might be an advantage if there is a large amount of text in objectives, etc. Of course your new subject (or course), must have a different subject code and/or section code. Typically we use a one (1) for a section code and a 4 digit number for a subject code. Some schools include teacher initials in the section code '1LR' to give it some mnemonic value if there are several sections of the same subject. The subject code for schools in Saskatchewan (Canada) have to use the Saskatchewan Learning subject codes in order to use the online xml transfer system for synchronizing data with the provincial SDS (student data system). Other jurisdictions may have similar requirements for the subject codes. I have also provided a link to online codes that may be used if desired. This is on the top of the subject entry page and is called *Other Codes*.

You enter values as outlined below.

- The **course code** is a number that uniquely describes the subject being taught. It would normally be a number assigned by some sort of educational authority such as a provincial or state body. Links have been added for Saskatchewan schools to allow them to look up these numbers. You may use any numbers (or alphanumerics) that you like if you are not so bound. **No hyphens are allowed** since this is used as a separator between the course code and the section to create the subject-section field (mentioned below).
- The **section code** is used to describe a particular course of that subject, (ie. a particular group of students taught this course by a particular teacher at a particular place and

time) . There may be several sections of any subject (ie. Science 6 or Chemistry 12). We typically use a one (1) for this value.

The system automatically joins the course code and section code together with a hyphen to create a unique subject-section code to uniquely describe a particular class. As a result, course codes and section codes should **not** themselves contain hyphens.

- The **description** is normally the textual name of the subject (ie. Chemistry 12). Again keep it as meaningful and short as possible. Avoid the use of capitals to improve the readability of these values in reports, gradebook, mark entry, etc.
- The **short description** is a short form of a word to describe the subject. This condensed version is needed to create compact reports for summative marks, etc. Don't forget to add it since if missing some reports will also not work correctly. In some cases the full description will be truncated to take the place of this value (with not entirely useful results).
- The **Grade** is the normal grade level taught with this course. This is used when enrolling students since some of the enrollment scripts look for all subjects set with a particular grade. However, if this is a grade 12 course being taught to grade 11's and 12's, then it won't help for this type of student subject enrollment. In any case, the grade level is a property of the course content.
- The **Start and End Term** are those parts of the school year in which this particular course (subject-section) is taught. A **Reporting Period** or **Term** is a block of time which has testing of some sort at its end (and a report card generated). A record from the evaluation table stores this result for each term.

For example in a semestered system with a midterm and a final exam period, there would be two reporting periods. If this was the first semester we would have:

Starting Term 1
Ending Term 2

If in the second semester, we would have:

Starting Term 3
Ending Term 4

If there was a full year course with 4 reporting periods:

Starting Term 1
Ending Term 4

In a Quad system with 4 Quads and 8 terms (2 report cards per quad), the second quad subjects would have:

Starting Term 3
Ending Term 4

- The **Teacher** is the userid of the teacher. This course will be listed under the teacher's name on the staff mark entry pages while entering evaluations. It will also appear in his/her gradebook.

-
- The **Sequence** is a number that controls the order that this subject prints on a report card. If, for example, you wanted particular core subjects listed first, they would have lower numbers. It is suggested that one go up by tens (10,20,30) when entering sequence numbers to simplify the process of re-ordering subjects or adding in new ones. That way you won't have to edit a large number of existing subjects.
 - The **Web Visible** field controls whether this subject could be visible on the web to authorized individuals (ie. Parents). This would, of course, mean only their own child and not all students taking the class.
 - The **Instructional Mode** field is required by Sask Learning when registering a subject (course) on their system. Other folks may ignore this. This data is sent as XML markup to SL during registration.
 - The **Exam Mix** is also required by Sask Learning for course registration. Other folks, please ignore.
 - The **Faculty** field lists which faculty offers this subject. It will help classify subjects for academic requirements. Currently unused.
 - The **Location** field lists where this subject-section is offered. Currently unused, but upcoming for scheduling use.
 - The **Mark Scheme** is a text block that describes the evaluation process used by this subject. This is used by the gradebook to store the groups of assessment items and their relative weight. Normally leave this alone, unless you want to add the weightings for this subject. There is one line per group and has the form of group=percent (tests=50%).
 - The **Credit** field holds the credit value that this subject/course. This value is used in the calculation of the GPA (Grade Point Average). Normally a full course has a credit value of 1. This value is used by the transcript system for printing of transcripts. The values allowed are normally set in the transcript configuration file.
 - The **Difficulty** is another value used by the transcript system in the calculation of GPA (Grade Point Average). It is also sometimes called the *Quality* factor and will have a larger value for more difficult subjects (AP or IB Courses).
 - The **Subject Area**, as the name suggests, is the area the course is a member of as defined in the transcript system configuration. These would typically be Math, Sciences, etc. Any values may be used in the configuration file. The configuration file also stores the required number of credits for each area so that the transcript will show student progress toward fulfilling graduation requirements.
 - The **Calc Average** field stores whether this subject uses an average of term marks to display the overall average in the report card or not. OA favors the ongoing evaluation approach where each term mark represents the student's entire progress to date. This value will alter the report card average for this subject. If defaults to a **No** value.
 - The **20 Objectives** describe different particular objectives, etc. that a teacher is using to evaluate his/her course. These will be printed on the report cards and are also present when teachers are entering student evaluations (on teacher site). The first field should

be used for *any numerical mark value* since several reports use this value. The transcript system also posts the final value of this field into the transcript system.

The subject table also has other fields that cannot be seen from this form that are used to control scheduling of this subject. These are accessible from the schedule page.

Subjects can also be edited, deleted, and cloned using the **Edit/Delete Subjects** button. Deleting subjects can only be done if there are no students registered in that class.

The **View Subjects** button allows a view of all subjects in the school. It can be viewed in several different orders.

The **Subject Aliases** are deprecated. They are small numbers that uniquely identify a subject-section and are used only for doing particular types of subject based attendance. They are not used by the report card system at all. This section, below the subject management area, allows the management of subject aliases (if required in your school).

Entering Subject Enrollments

Students must be enrolled in particular sections of particular subjects before report card marks can be entered, subject based attendance done, or the gradebook used.

There are several ways that students may be enrolled depending on your school situation:

1. **Enrollment by Grade** – In most schools at the lower grade levels students are grouped by grade and classroom (homeroom). The *By Grade* approach works well at these levels. All students are listed for all subjects of that grade. By checking/unchecking the checkboxes for each subject, appropriate enrollments can be made for students.

The **Chk** selection box is used to set whether all students are initially checked or unchecked in checkboxes. Use whatever state (checked or unchecked) is faster to select subjects and students for enrollment. (ie. Use **chk** and then uncheck the ones you don't want or vice versa)

2. **Enrollment by Homeroom** – This option will be faster for those schools that have several sections of the same class. These scripts allow you to first pick the subjects/sections that you're enrolling students in (and also choose if you want them all checked). At the next screen you can then check (or uncheck if you have them all checked) those students that you wish to enroll in each of your subjects.

If you have several sections of the same subject, it might make sense to give section names that are somewhat mnemonic. (6FS for Grade 6 Fred Smith).

Both of these methods check that enrollment/evaluation records don't already exist. It will skip over existing records. If you put a wrong term into a subject (term 1 to 3 instead of 1 to 4), you can simply re-enroll that subject, and it will add in the term 4 records while skipping the term 1, 2, and 3 records. This is **not** a recommended approach, but it does work.

3. **Enroll a Single Student** – Invariably, a student will turn up just after all subject enrollment is done. This method is for him/her. It will find all subjects in their grade and allow subjects to be checked off for enrollment. This also does existing record checking.

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4. **Enroll a Single Subject** – All students in the school are listed and can be checked off for enrollment in that subject. This approach is appropriate for high school subjects, although slower than the other methods.
 5. **Matrix Entry** – *Deprecated*. This option is little used, so will be withdrawn in future versions. A group of subject-section codes and a group of local student numbers are entered. A list of checkboxes is produced that list those subjects and allow all students entered to be enrolled in those subject-sections. This is a fast way to enter a heterogeneous group of students into several subjects with significant overlap. You can simply unselect (uncheck) those that do not take particular subjects.

Note: When a student is enrolled in a particular section of a particular subject (course), multiple records are added to the eval(uation) table. There is one record for each reporting period of that subject. If there are 4 terms (quarters, reporting periods) in that subject then 4 records will be entered... one for term 1, term 2, etc. These are, of course, required to record the marks/evaluation for each of those terms.

Editing Student Subject Records

Students drop courses. Students change courses. This will allow you to make those necessary adjustments.

Click on **Edit/Delete Student Subject Records**, and choose the subject-section that you would like to change. These are sorted by grade and then subject. There are two options:

1. An *Edit/Delete* function to change or drop individual records.
2. A *Power Delete* function which can delete large numbers of records at one time. If a student drops a course, then all of his/her records must be deleted for that course. The number of records will vary depending on how many terms a course runs over. (ie. all year or semestered, etc.)

Notice that these records are the records used by teachers to record their evaluations of students.

Delete Individual Student Enrollments is used to search for the enrollments for a single student. Like the student search function on the main page, you may search by Lastname, Lastname and Firstname, or Initials (my favourite). You can then make the required changes to enrollment. Do not remove subject enrollments until you are certain the student is not returning, etc. These records contain all of the student's evaluations and would have to be re-entered if she/he returned, in order to print their report card.

View / Report Subject Enrollments

There are a couple of reports used to view various aspects of subject enrollment:

-
1. **Enrollment Summary - Web** is a web based report listing subjects with students enrolled and a count of students enrolled (although no individual names are listed). It also lists those subjects with no students enrolled.
 2. **Empty Subject List - PDF** is a pdf report that prints a report suitable for teachers to use for recording marks. From a secretaries perspective, it is also useful to give to teachers to verify that all students have been added correctly. (none missing, no extras)
 3. **Subject Enrollment - by Grade** is a web based report similar to the above but listing only students enrolled in subjects by grade. It also lists the terms that records are stored for. So for a 3 term school year, each student should have a 1, 2 and 3 listed as terms.
 4. **View Student Enrollments - by Term** gives a listing by term for enrollment records. This conveys less information than the report above, but may be used for checking missing term records.
 5. **View Individual Student Enrollments** – As the name suggests, this will allow the viewing of all subject enrollment records for any student.
 6. **The Enrollment Journal** is no longer used. It is a table which records changes in subject enrollments just like the transfer table records changes in school enrollments. The *Enrollment Journal View* button allows you to see those transactions (changes).

The Report Card

The report card is normally generated on a per grade or per class basis to keep the size of the files generated to a reasonable size. This PDF file can be saved for reprinting later in the event of problems in printing (although it can also be easily regenerated). As well, individual report cards can be printed from this single file by being selective in the printing dialogue box of the Adobe Acrobat Reader client. (You can also find the record of interest by doing a search for his/her name in the PDF. Click the binocular icon.)

The starting screen for this script includes the following options:

1. Student Group - Select the appropriate group, either homeroom or grade. Then enter the name of the group in the entry box.
2. Font Size - Sets the base font size for the report card. Options are 10pt, 11pt and 12pt.
3. Show Withdrawn Students - Students who have withdrawn do not have their report cards printing unless this is checked. Of course, their subject enrollments must not have been removed, since these contain the evaluations.
4. One Student per File - When this is selected, each report card is put into it's own file. Then all of the pdf files together are zipped up into a single file for downloading. Once downloaded, they can be extracted and then printed all at once by selecting them all and then printing them.

The reason for this is so that printers and digital photocopiers that have duplexing can then correctly generate the report cards on both sides of the paper, saving a lot of paper. The other advantage is the most digital photocopiers can also staple the report cards at

the same time. This saves secretaries a lot of stapling time. They can simply be taken out of the photocopier and distributed.

5. **Alternate Report Card System** - this option will generate a Pre-Kindergarten (Alternate) report card using an entire different system of tables. This system is described below.
6. **Override Term Days** - will allow the entry of alternate days in each month that the school was open. These are often needed in Kindergarten and PreK classes where students do not come on a full time basis. The values below this are the current months in the school year.

Other reports in this section include:

- **Empty Mark Records** - is a web report that reads in the current term set for report cards and looks for any empty values in evaluations for that term. These would be records that teachers may have forgotten to enter marks for. Before printing the report cards for the school, this report should be checked to make sure all marks have been entered.
- **View Subject Marks** - is a PDF report of student marks with the ability to print all of the objectives of a subject in an elementary school (which may be many). The choices include:
 - **All** - This will allow you to print the marks **for all subjects** in the school for the current term or all the marks for the subjects in a particular grade.
 - **Teacher, Grade, Subject** - This will allow printing for **only a single subject**, and will alter the ordering of the subject so that they are sorted by teacher, grade, or subject.
- **View Crosstab Subject Marks** - similar to the previous report but allowing for multiple subjects to be aggregated on a single report. This prints per grade or per class.
- **Student Marks** - is a PDF report with all student marks together in a table, suitable for use during PT Interviews.
- **Year End - Final Evaluation Record** A one page summary of all marks for 1 grade or class. Names down the left and subjects across the top.
- **Year End - Student Summary Marks** A single page per student report for insertion into cum folders. All students in the school are in the report (and is therefore takes a minute or so to generate).

Pre-Kindergarten (Alternate) Report Card System

This is an alternate report card system with predefined choices for all objectives. This makes it quite simple for teachers to quickly enter assessments for their students without large amounts of writing (since the objectives and choices themselves are quite long). The other

goal was to have a less formal appearing report card for parents, while still maintaining good reporting practices to parents, including attendance, etc.

All of the scripts for this system are accessed from the report card page. Most of the scripts are on the bottom left of this page, in blue. The process of setting up this system consists of:

1. **Add the Subjects** - similarly to the normal system, we first create 'subjects' (or perhaps more correctly, groupings of objectives) appropriate for these beginning grade levels. This includes a subject-section to uniquely identify it (See main subject entry section for more details).
2. **Add Objectives to the Subjects** - enter descriptions of your objectives in the description field. Add a group name to control the grouping of objectives on the report card. This is currently unused. The sequence number is the ordering of the objectives within the group on the report card.
3. **Add Choices to the Objectives** - you then add choices to your objectives. Use the 'View Objectives' button, which gives a screen where you can add/edit/delete objective choices.
4. **Add Subject Enrollments** - you then enrol students in your subjects, using the 'Add Subject Enrollments' button in the same section.

You first select the type of group: homeroom, grade, or alt grouping, and then put in the value for that group in the next field. Separate multiple groups with spaces (ie. both grade 2 and 3 would be '2 3'). You then select the subjects for this student group either based on their group value (which you put in as one of the fields of the subject) or else just select 'All' to show all subjects in this system (not the main report card system). The students and subject check boxes will mean that the next screen will have them all selected (to speed up the selection process). You could first select all and then simply uncheck a few on the next screen if this is faster than just selecting some students and subjects on the next screen.

The next screen will show the students matched with each subject in turn. Uncheck (deselect) those who are not taking a particular class. Once this is done and submitted, your enrollments are done.

5. **Add Assessments** - on the teacher site, when logged in as the teacher giving these classes you will see these subjects below any existing subjects from the main report card system. You may select multiple subjects to enter at the same time and once you've selected the ones to enter, click the Continue button. You will be in an entry screen for this system with students in order with all the subjects you've selected. Each has only pull down selection choices for all objectives. Use the tab key to navigate to the next objective and use the up/down arrow keys to select particular choices. Click the 'Save Assessments' button to save your work. You may return later to change or add to these entries.
6. **Main Office - Change Assessments** - the main office site can also make changes to the assessments entered (usually at the last minute before printing report cards). Use the normal 'Edit/Delete Student Subject Records' button, and at the bottom of the screen will be these PK/Alternate subjects. Edit and Change these as normal to the main report card system.

-
7. **Print Report Cards** - Click the 'Print Report Cards' button as normal, but select the Alternate Report Card checkbox, and as well the group that is using this system. If you have large classes and a lot of text, it may crash the PDF generator due to limits built into the program. This is solved simply by using the 'One Student per file' option. There are several options that can be changed to alter the look and feel of the report card.

Report Card Configuration

There are several options for controlling report cards, now stored in a separate configuration file called **repcard.conf**. These settings may be viewed by using the View Configuration Files button on the EOY page. All new settings will be placed at the top of the file to make it easier to update.

It is shown below:

```
# New for 3.50 release
#-----
$r_Divlogfile = 'divlogo.jpg';
$r_Divlogowidth = '18mm';

$r_Showlogo = 1; # Show School Logo rather than school name.
$r_Logofile = 'schoollogo.jpg';
$r_Logowidth = '42mm'; # Printing width of the school logo.
$r_Schooladdresswidth = '70mm';
$r_AddressSpacer = '5mm'; # adds space below the address to align logo.

# Pre-kindergarten report cards (or Alternate system)
$r_Altlogfile = 'bus.jpg';
$r_Altlogowidth = '96mm'; # width of bus logo.
$r_Altdivlogowidth = '20mm'; # smaller div logo.
$r_Altaddresswidth = '70mm'; # width of division name
$r_Altspacer = '10mm'; # pushes up division name

# show provincial education number (or state #)
$r_Showprovnum = 1;
# Show administrators in the page header; names must be set.
$r_Showadmins = 0;
$r_Principal = 'Principal';
$r_Viceprincipal = 'Vice-principal';

$r_ShowMonthlyAttendance = 1;
# 3 Lates = 1 Absent; for calc subject absences.
$r_LateAbsentRatio = 3;
# default periods per day for teacher mode report cards.
$r_defaultppd = 4;
```

```
# Personal Development Section

# Subject that these evaluation keys apply to.
$r_personal_growth = 'Personal and Social Development';

# PD (Personal Development) Evaluation Keys
$r_pdevalgrp{PK}='c';
$r_pdevalgrp{K}='c';
$r_pdevalgrp{1}='a';
$r_pdevalgrp{2}='a';
$r_pdevalgrp{3}='a';
$r_pdevalgrp{4}='a';
$r_pdevalgrp{5}='a';
$r_pdevalgrp{6}='b';
$r_pdevalgrp{7}='b';
$r_pdevalgrp{8}='b';

$r_pdeval{a}[0]='I - Independent - Student is able to demonstrate
appropriate social and personal behaviours independently and
consistently';
$r_pdeval{a}[1]='M - Meeting Success - Student demonstrates
appropriate personal and social behaviours in the school
environment.';
$r_pdeval{a}[2]='P - Progressing with Support - Student is progressing
towards an awareness of appropriate personal and social behaviours in
the school environment. He/She often requires guidance.';
$r_pdeval{a}[3]='D - Experiencing Difficulty - Extensive guidance is
required for student to display appropriate personal and social
behaviours in a school environment.';

$r_pdeval{b}[0] = 'O - Outstanding';
$r_pdeval{b}[1] = 'G - Good';
$r_pdeval{b}[2] = 'A - Acceptable';
$r_pdeval{b}[3] = 'NI - Needs Improvement';

# New for 3.25 release
#-----
# All values here are replaced in 3.50

# New for 2.50 release
#-----
# Calculate GPA ( 0 = no, 1 = yes )
$r_calcgpa = 1;

# Values for Paper Size: letterpaper, a4paper, legalpaper removed
# since new 'defaultpapersize' defined in admin.conf for ALL pdf
```

```
# reporting. NOT USED $r_papersize = 'letterpaper';

# Change to match your paper size setting (in admin.conf)
# Letter Paper: 279mm x 216mm; shorter and fatter than a4.
# A4 Paper: 297mm x 210mm
$r_textwidth = '184mm'; # 32mm hor margin total - letter size
$r_textheight = '244mm'; # 35mm vert margin total - letter size

$r_fontsize = '10pt'; # 10pt, 11pt, or 12pt only
$r_voffset = '-15mm';
$r_hoffset = '-8mm';
$r_grayscale = '0.90';

$r_NewPageBeforeAttendance = 1; # (0 = No, 1 = Yes)

$r_ShowAdditionalComments = 1; # (0 = No, 1 = Yes)

# room for parent signature at bottom of report card;
$r_PrintParentSig = 1;
# normally below a tear off line.

# last term printout with special graduation box.
$r_PrintYearEnd = 1;

# 2.40 and earlier -----

$subjspace = '8';
# cm width of subject field in tables. Used in calcs so no unit.
$markspace = '1.5'; # centimeter width of mark field in tables.

# Assessment Key printout widths
$assesskeycols = 3; # keys are 3 columns wide...
$assesskeywidth = '5.5in'; # 5.5in is used for assessment keys

# Show a 'final' column and calculate average from term values
# (ie. NO summative evaluation.)

# Calculate Final Average from term values.(0=no, 1=yes)
$calcfinal = 0;

$clasavg = 0; # Show Class Average (0=no, 1=yes)

# Show homeroom teachers on report card.(0=no, 1=yes)
$showHomeroomTeacher = 1;

# Show tearoff line for parent signature return (0=no, 1=yes)
$showTearoff = 1;
```

```
# Show grading scheme on the report card. (0=no,1=yes)
$showGradeScheme = 1;

# No Longer used in 3.50 and later; remove with version 4.00+ release.
#$showLogo = 0; # Show School Logo rather than school name.
#$logoLocation = '../..etc/schoollogo.jpg'; #left in etc folder...
#$logoWidth = '2.5in'; # Printing width of the school logo.

$finalterm = 3; # The last term to print assessment values.

# Descriptive Text for each term. Note: no zeroth term.
$term[1] = 'Term 1';
$term[2] = 'Term 2';
$term[3] = 'Term 3';
$term[4] = 'Term 4';
#$term[5] = '';
#$term[6] = '';

# Teacher/Admin Signature Line
# Select who signs the report card (except for the final term)
# Accepted values: teacher, principal, or combo.
$teachersign = 'teacher';

# Skip printing of any report cards which
# have no assessment values for the current term.
# 0 = 'Show Everything' 1 = skipBlanks
$skipBlankReportCard = 0;

# The position of the staff member who show up on report cards...
# They have to be a teacher, and have grade and class set correctly
# in the teacher data area.
$position = 'Classroom Teacher';

# The subject that is 'hidden' on the report card and is used to place
# additional comments at the end of the report card. This MUST be the
# name of the subject, otherwise it will show up as a normal subject.

$additionalcomments = 'Additional Comments';

# The field that is used as a mark. Normally the first one... a1.
# It is used to calculate class averages, etc.
$markfield = 'a1';
```

```

# Evaluation Keys for Various Grades
$g_evalsch{PK}="b";
$g_evalsch{K}="b";
$g_evalsch{1}="a";
$g_evalsch{2}="a";
$g_evalsch{3}="a";
$g_evalsch{4}="a";

$g_eval{a}[0]="E - Excellent";
$g_eval{a}[1]="G - Good";
$g_eval{a}[2]="S - Satisfactory";

$g_eval{b}[0]="VG - Very Good";
$g_eval{b}[1]="G - Good";
$g_eval{b}[2]="I - Improving";

# Notes=====

# A note section just below evaluation outline on report card.
$note1 = 'All comments are those of the Homeroom teacher, unless
otherwise indicated.';

# AR Filtering - students who have a failing mark, but teacher doesn't
# want to show that mark but only an 'AR' for 'At Risk'. She/He puts
# in the mark with a trailing AR (ie. 45AR ). The report card script
# will then strip the 45 and display only the AR.
$arFilter = 1; # (0=no, 1=yes)

```

Technical - How the Main Report Card System Works


The report card system makes use of a couple of tables as well as the main student table. They are:

1. The **subject** table – this table stores the subject information. It lists the subjects, who teaches them, the course code and section number and the starting and ending reporting periods and up to 20 objectives. Each subject-section is identified by a unique subject-section code which is the subject code, a hyphen, and a section code (ie. 8415-1)
2. The **eval(uation)** table – this table stores the teacher evaluations for a student in a particular class and section. When a student is enrolled, one record is entered for each reporting period in that class and section. For example, if there are 4 reporting periods (terms) for a particular subject-section, then 4 records are added for each student enrolled in that subject-section.

The Fees System

The Fee System is designed to provide a school specific Accounts Receivable (A/R) system to track all student billing and payments.

Main	Attendance	Discipline	Fees	Report Cards	Schedule	Export/Xfer	Start/End of Year
-------------	-------------------	-------------------	-------------	---------------------	-----------------	--------------------	--------------------------

 Student Fees	Fees System	
	Add Predefined Fees	View Predefined Fees
	Assess Fees	View Assessed Fees
	Print Outstanding Invoices	

Lunch Program		
Add Lunch	View Lunch	Lunch Report
Change Paid Status		

Lunch Search	<input type="text"/>
Identity (Last,First/Last/Initials/Student Number)	

Payments	Print Receipts
----------	----------------

The process is one of:

- Set Predefined Fees (if desired).
- Assess Fees - charge fees to students.
- Print Invoices - notify parents.
- Collect Payments
- Print Receipts (if desired or required).
- Export summary transactions to the school accounting system periodically (monthly).

Set Predefined Fees

Predefined Fees are fees that may be stored along with all of their characteristics and periodically reused to quickly bill for certain fees.

The two main operations in this section are to:

1. **Add Predefined Fees** - Add a new fee to be stored with other fees already defined. The characteristics are outlined below.
2. **View Predefined Fees** - View existing fees. It also allows for the deletion of any unused fees. There is no edit function since fees can be easily added and deleted.

Predefined fees have the following characteristics (most of which are common to other fees as well):

1. **Name** - A short phrase describing this fee or billing item.
2. **Description** - A text field that may be used to describe the fee in more detail.
3. **Amount** - The monetary value of the item or service.
4. **Discount** - The percentage discount that may apply to certain individuals or groups (not used currently).
5. **Tax Flags** - The taxes that may apply to this item or service in your tax jurisdiction. These are defined in your fees system configuration file and are set by your system admin. OA can have up to 4 taxes defined. Only values defined in this file will be visible in the form.
6. **Group Name** - The name of a group of individuals that this fee applies to. If it can apply to all student then this and the group value would be left blank. The values of this field include Grade, Homeroom, Subject-Section, and Student Number. This would allow the application of this fee to certain groups based on their values in the group value field.
7. **Group Value** - This may be a single value or a space separated list of values. If the Group Name above was Grade, then this list could be a list of grades: 9 10 11 12. If a Subject-Section, it could be a list of subjects that this applies to: Bio20-1 Bio20-2 Bio30-1 Bio30-3.
8. **Profiles** - These are group names and values that are stored in the fees system configuration file. They replace the Group Name and Group Value above with a predefined group. This makes the creation of predefined values faster and less error prone. If using a profile, leave the group name and value *blank*. The profile value will override any values in these fields.

Assess Fees

This allows the addition of new student fees. When the *Assess Fees* button is clicked, you have 2 options:

1. **Create New** - to create a new fee from scratch.

Assess Fees

Date

Fee Name

Description

Amount

GST

PST

Group

Checked

Once you click this button, you can fill in the values:

- (a) Date of this fee.
 - (b) Name - A short descriptive name for this fee or item. Words like tuition, lab fee, textbooks, etc.
 - (c) Description - A longer text description of the fee - such as Tuition - term 1, 2008 or Science Lab Fees - Chemistry.
 - (d) Amount - the cost of the item.
 - (e) Tax Checkboxes - depending on your jurisdiction, there may be from zero(0) to four (4) tax checkboxes that are applied to the amount above. If you have no taxes, no check boxes will appear. These are the taxes that will be added on to the above amount.
 - (f) Group - the group of students that this fee applies to. The selection list includes grade, homeroom, and student number. If you select *grade* and put a space separated list (10 11 12) then all students from grades 10 to 12 may have this fee applied to them. Later screens will allow you to unselect certain students from these grades. If only certain students have this fee applied you may leave this blank and only select certain students in later screens. You choose whichever method is faster for you.
 - (g) Checked - if checked, the next screen with student names will be *all* selected. If this box is unchecked, then the next screen will have *none* selected.
2. **Use Predefined** - Clicking this button presents you with a list of the predefined fees. You click the select button for one of them and continue on to the next screen showing student lists and the characteristics of this fee.

The next screen will show your entered values for fees and a list of all students this fee may apply to.

Assess Fees

Date	2007-7-15
Fee Name	Lab Coats
Description	Lab Coats for Science Labs
Amount	12
GST	0.72 (12 x 0.06)
Continue	
Student	Select
Alic , Adis (172)	<input checked="" type="checkbox"/>
Alvarez , Adrian (106)	<input checked="" type="checkbox"/>
Britton , Mathew (185)	<input checked="" type="checkbox"/>
Cooper , Shawn (10025)	<input checked="" type="checkbox"/>
Cyr , Eric (10008)	<input checked="" type="checkbox"/>

This screen shows the options chosen in the previous screen (including a gst tax) for lab coats, and then a list of selected students. Unselect students this doesn't apply to and click the *Continue* button at the bottom of the screen.

The final screen confirms the storage of the fee records and provides links back to the main fees system page or to allow the addition of more fees.

View Assessed Fees is a simple viewing script to show the current fees journal files (and also looks up the student name in the second column). It will be replaced with a more sophisticated script based on school needs.

Invoices

The **Print Outstanding Invoices** is a script to create paper based (pdf) invoices for delivery to parents.

The first screen requests the date to appear on the invoices. The second screen provides the link to download the generated pdf (and print them, if desired). The *View Log File* link provides access to the log file generated along with the pdf (and will contain any errors in the process).

The invoice pdf prints only outstanding fees due. It is a single page per student report. It includes the values for each outstanding fee and a total at the bottom. Simple stuff.

Payments

The payments script starts out with a student search with the usual lastname, firstname *or* lastname *or* initials *or* student number input. Once entered, the search results screen shows all matching students with an *Accept Payment* button for each.

[[Main](#) | [Fees](#)]

Payments

Student	Action
Adrian Alvarez (106)	Accept Payment
Ahem Afro (167)	Accept Payment
Adis Alic (172)	Accept Payment
Abdullah Asad (10017)	Accept Payment

Once one of the buttons is clicked, the next screen provides information about the outstanding fees and the total amount due.

[[Main](#) | [Fees](#)]

Payments

Date	2007-7-15
Student	Adis Alic (172)
Testing - Another test	<input checked="" type="checkbox"/> 1332.00
Lab Coats - Lab Coats for Science Labs	<input checked="" type="checkbox"/> 12.72
Payment Amount	1344.72
Recalculate	Accept Payment

The payment date is the date of payment (normally today). The next line identifies student (including local student number). The next line(s) list the outstanding fees and the name, description, and amount of each. A checkbox indicates that this fee is to be paid.

If are not going to pay that fee, uncheck the box. Then click the recalculate button and the total payment will be recalculated. The screen now looks like the one below:

Payments

Date	<input type="text" value="2007-7-15"/>
Student	Adis Alic (172)
Lab Coats - Lab Coats for Science Labs	<input checked="" type="checkbox"/> 12.72
Payment Amount	<input type="text" value="12.72"/>
<input type="button" value="Recalculate"/>	<input type="button" value="Accept Payment"/>

Once you click the *Accept Payment* button, the payment is made and all fees are marked as paid. The next screen confirms payment and provides a link to print out a receipt for this payment (although this may be done later also).

Your payment is now complete.

Print Receipts - a script to allow student searches, and the printing of individual receipts.

Export Monthly Summary

This script will export monthly summary transactions so that they may be imported into an accounting system used by the school. The summaries are downloaded in a CSV (Comma Separated Value) format that can easily be imported into accounting systems or spreadsheets.

There are 2 simple steps in using the script. The first is to indicate the year and month you wish to export. It will default to the current month if near the end of the month and to the previous month if near the start of the month. You enter in a yyyy-mm format (no day of month is required).

The second step is to click on the link and download the CSV file and save it on your local computer to input this information into your accounting system. The fees system is designed to provide simple A/R (Accounts Receivable) functions.

Work Flow - Technical

The fees subsystem workflow is:

1. Fees are charged to students. These could include tuition, books, labs, etc. Each fee adds a record to the fees journal (fees_jrl) and fills in the id, studnum (student number), transaction date (trans_date), transaction type (trans_type is chg), and information about the fee (name, description, subtotal, and the shortnames and values for up to 4 taxes, and then a total for these values).

The paid field (paid_id) remains NULL. This field holds the id of the payment record when payments are made.

-
2. The invoicing process is simply a reporting process. Print invoices will normally be run and mailed. The parent site should also allow viewing of outstanding charges, etc.
 3. The payment process will create a new payment transaction record in the fees journal (fees_jrl). It will only fill in limited fields and leave the rest NULL. The fields added are id (auto), student number (studnum), date of payment (trans.date), and a transaction type (trans.type) = *pay*. The name field will be *Payment* (or alternate language equivalent). The *total* field will store the amount of the payment (as a negative number). The description field lists id's of the fees paid.

The *paid_id* field for payments stores the *receipt number* for the payment. This number is obtained from the *receiptnumber* file in */etc* and is incremented for each payment. It works exactly like the *studentnumber* file in the same location which holds the next available student number for student enrollment.

The other fields will remain NULL in the record (subtotal and all tax fields).

All fees records that are paid will have their *paid_id* field filled in with the id of the payment transaction that does this.

Operations

1. Printing/Reprinting payment receipts

- Find all pay transactions for this student in descending date order.
- Once a particular payment is selected, get it's id and total.
- Find all transactions that have this id in their *paid_id* fields (both charge and also roa transaction as well).
- Add them up and make sure they add to the total of the payment. Verify the total. If not flag an error.
- Now with all of the charge/roa transactions and the single payment transaction, print out a receipt.

2. Printing an Account Statement

- Find all transactions lacking a *paid_id* value (ie. NULL). These will all be charge (chg) types and received on account(roa) types. The roa transactions are created when a payment is larger than the fees (or is not sufficient to pay all fees). They have the payment id in the name field. The *paid_id* field is blank in these records also. Payment transaction will have the *paid_id* fields set to the receipt number.
- Print all of these records out in date order and add to give an outstanding balance. ROA transactions are also be included since they will reduce this outstanding balance.

3. Printing a historical bill of transactions

- Pick a starting date. Check for any outstanding values before this date to figure out a starting balance owing for this child.

-
- Print transactions in date order. If paid, the balance, if any, will remain unchanged. Unpaid transactions will alter the printed balance.
 - Print total outstanding.

Table Structures

```
CREATE TABLE fees_jrl (  
  id int(11) NOT NULL auto_increment,  
  studnum int(11) default NULL,  
  trans_date date default NULL,  
  trans_type varchar(8) default NULL,  
  name varchar(255) default NULL,  
  description text,  
  subtotal decimal(10,2) default NULL,  
  tax1 decimal(10,2) default NULL,  
  tax1_name varchar(16) default NULL,  
  tax2 decimal(10,2) default NULL,  
  tax2_name varchar(16) default NULL,  
  tax3 decimal(10,2) default NULL,  
  tax3_name varchar(16) default NULL,  
  tax4 decimal(10,2) default NULL,  
  tax4_name varchar(16) default NULL,  
  total decimal(10,2) default NULL,  
  paid_id int(11) default NULL,  
  PRIMARY KEY (id)  
) TYPE=MyISAM;
```

The second table stores predefined fees to allow quick application to particular students or student groups.

```
CREATE TABLE fees_predefined (  
  id int(11) NOT NULL auto_increment,  
  name varchar(16) default NULL,  
  description varchar(255) default NULL,  
  amount double default NULL,  
  discount double default NULL,  
  tax1_flag char(1) default NULL,  
  tax2_flag char(1) default NULL,  
  tax3_flag char(1) default NULL,  
  tax4_flag char(1) default NULL,  
  group_name varchar(32) default NULL,  
  group_value varchar(32) default NULL,  
  profile varchar(32) default NULL,  
  PRIMARY KEY (id)  
) TYPE=MyISAM;
```

The Schedule System

Overview

The scheduling system includes both a manual entry schedule storage system and a timetable generation system based on the FET timetabler version 4. An update is coming to support version 5.

The schedule system stores information about the schedule/timetable for each grade. It can produce reports to show grade timetables and teacher timetables. It can also locate teachers and students using Where's Waldo (for students) and Where's Ms Nelson (for teachers).

It stores schedule information for the subject-section (ie. class/course) including the Day (in school cycle), Period, Term, and Grade.

Manual Schedule Entry

This may be done by *grade* using the **Add Schedule - Grade** and also by teacher using the **Add Schedule - Teacher** buttons on the left side of the schedule page.

1. **Grade Entry** – You first select the grade that this entry is for (ie. Grade 8). When selecting the subjects to enter into the timetable, you would normally include the same grade (Grade 8), but if subjects from other grades (as marked in the subject information) are also being offered to this grade, you would put that grade in also. Each grade would be separated by a space.

You next select the term(s) that this schedule applies to. In a semestered system there are normally 2 terms per semester and thus you would select the 2 terms that apply. In a full year situation, you would select 3 or 4 terms depending on the grade levels, etc. in your school.

Once selected, the next screen shows your timetable with selection menus for each period and day in your cycle. Please select the correct values. For any backings (this class/grade grouping of students is split and some go to one class and some to another), please select these as well as their day and period as well. The backings can be done a couple of times to add all of the required records, if necessary.

2. **Teacher Entry** – Similarly to the grade entry, you first identify the teacher by putting in his/her userid. This will allow the system to find the subjects taught in the terms selected. The term selection is identical as explained above for grade entry.

The next screen then shows the timetable with selection boxes for each day and period. Select the subjects required and click the *Save* button. Backings may be added as outlined above.

The **Edit Teacher Schedule** button allows you to edit teacher schedules by putting in the teacher userid and the term to edit. The next screen then shows the current subjects enrolled. To remove existing ones, select a blank field. To change the subject, simply select the appropriate one from the selection list.

The **View Teacher Schedule** button provides a listing of all teachers and their timetables for each term.

The **View / Delete Student Schedules** button shows the timetables for all grades and terms and also allows the deletion of a timetable item for a particular grade and period.

Automated Schedule Entry

In order to generate an automated master timetable, you have to make sure that all subjects are set up correctly with starting terms and ending terms, etc. Once this is complete, you may then go ahead and add the scheduling information about each subject into their records. These fields are not shown on the normal subject edit screens, and are only used for timetabling.

Click on the *Subject Schedule Edit* button, and add a *Y* to the active field where necessary and put in the number of periods per cycle (PPC). The four fields (PPC1 to PPC4) are used for each of the scheduling periods of the school year. Normally this would only be PPC1 and PPC2 for 2 semesters, but schools using a quad system (8 terms) would need all 4 fields. If more than 4 are required then just reuse PPC1, etc. since they are not normally all scheduled at the same time. You could also just change the PPC1 field at each new scheduling period, if desired. (which should require very little adjustment if your school scheduling periods are somewhat similar.

Once this information is entered, you may also use the *Subject Schedule View* to view these values, either by Grade or by Teacher. You use the selection box at the top of the report to alter your view.

Once this step is complete, you may now export a data file for use with the FET Timetabler software. Click on the *Export FET Data* button, to create a file for use with the FET timetabler. Save this file on your local computer. Then start the FET software and use it to create a master timetable for your school. The software may be downloaded from <http://lalescu.ro/liviu/fet>.

Once you have a usable timetable, then you can use the *Import FET Data* button to import the data into OA for use as a master timetable.

Student and Teacher Location

The **Where's Waldo** function allows you to search for a student's timetable to find their location in the current period. You enter the student's lastname (and all students with that lastname will be returned) or his/her lastname and firstname separated by a comma. The student number could also be used if you know it by heart!

The **Where's Ms Nelson** function provides similar functionality for teachers so that central office will know where they are and what they are teaching at any time (particularly if they teach in several classrooms). It also provides their timetables to allow this.

The Transcript System

This system is designed to allow the printing of student transcripts on demand for parents or other educational institutions. It will also allow the tracking of student progress toward fulfilling graduation requirements.

The system will store student course information (course final marks) for several years while the student is attending school. Every year, at the end of a reporting period (ie. semester, quad) when a course is finished, student marks are 'posted' or copied into a transcript data table. This information can then be stored as long as desired.

This multi-year data can then be printed into a customizable PDF transcript report which includes his/her performance over several years. The data can be viewed in other ways as well, such as to track student progress towards completion of graduation requirements.

The outline for workflow:

1. **Post** the current report card marks (for courses ending in the current reporting period) into the transcript system using the **Transcript Post** function.
2. **Print** the transcripts as required.

Transcript System Functions

The system is located on the report card page at the top right hand corner. It consists of:

1. Post Marks - copy marks from a current year term for courses ending in that term into the transcript system. The first step is to select the term number that we want to post. The checkbox to *Check Subjects* will cause all subjects on the next page to be selected.

Select Posting Term

Select Term

Check Subjects

Next, we have the displayed the courses that finish in that term (and have already had all final marks entered into that term). This previous checkbox was selected, and so all courses are selected in this screen.

Select Subjects to Post to Transcript System

Select Subjects	
Computer Literacy 9	<input checked="" type="checkbox"/>
Robotics	<input checked="" type="checkbox"/>
Science 10	<input checked="" type="checkbox"/>
Industrial Arts 9	<input checked="" type="checkbox"/>
Physics 20	<input checked="" type="checkbox"/>
Personal Development	<input checked="" type="checkbox"/>

Next, I deselected all courses but Science 10 and clicked the Select Subjects button.

Posting to Transcript System

Student	Subject	Mark
michael quinn	Science 10	87 (B)
Eric Cyr	Science 10	82 (B-)
Dilbania Santos	Science 10	94 (A)
Lyle Lilly	Science 10	72 (C-)
Joseph Sample	Science 10	65 (D)

The students in that class then have their final mark from term 4 posted into the transcript system. This includes storing a record in the transcript data table for this course and adding their personal information to the transcript identity table which includes their name, birthdate, and provincial or state, etc. student number. This last step is only done if they do not already have an identity record.

This information will now appear in all of his/her transcripts.

Note: For classes that are marked on a Pass/Fail basis, a letter mark of 'P' will be posted into transcripts using this letter value. Normally numeric grades are submitted and then converted to a letter grade using values in the transcript configuration file.

Any letter values posted will be passed through into transcripts, but will not correctly function in terms of graduation requirements (if this matters). A 'P' value (or the value of the \$passletter in the config file) will be included as a credit in the transcript report, but will not affect the GPA (Grade Point Average).

Any other letters in the letter scores that aren't in the configuration file will be ignored for calculation purposes, and will have the credit set to zero (but it will print on the transcripts). This is useful for withdraw pass (W/P - withdrew while passing). It will handle the W/F (Withdraw while Failing) in the same way.

2. **Print/View Transcripts** - Once student course and identity information has been added to the transcript system, the results of student progress can be viewed and printed.

The first screen allows student selection. For students in the transcript system, you can search for them by name, initials, or student number. The 'initials' approach is certainly the fastest approach.

For **current** students, the lower box will allow selection by grade or homeroom. Again, this report only shows values in the transcript system (and not current courses only in the report card system, and not yet posted).

Transcripts Report

Lastname/Lastname,Firstname/Initials/StudentNumber

Select Student

Select Group Grade

The next screen will then show the students that match your search. If you did a Name search, the students that have values in the transcript system matching your search are displayed. If you did a Grade/Homeroom search, current students in that group are displayed (if they have transcript information).

[[Main](#) | [Report Card](#)] [Edit Transcripts](#)

Joseph Stamper (102)

Joy Stebner (113)

Joel Schmitz (127)

Jasmine Smith (141)

The last screen will display the actual student transcript system values, along with a link to the PDF version of the transcript.

Configuring the Transcript System

This system is controlled by a configuration file called **transcript.conf** located in the etc folder along with the other configuration files for that school. This file will be maintained by your network / system administrator. It can be viewed from the Start/End of Year page by using the View Configuration Files button on the left hand side of the screen.

It contains the following:

```
# Description under course and credits on right side of transcript
$section1 = "Honours classes receive extra +0.5 grade point.\n\n" .
  "AP classes receive +1.0 extra grade point\n\n";

# Pass / Fail Categories

# The failletter is the letter grade for which no credit will be
# granted for the course. It is assigned as part of the transcript
# posting process and uses the markToLetter settings below.

# The passletter has a different use. It is only used for Pass/Fail
# courses to indicate a pass has been achieved. A pass/fail course will
# not affect the grade point average at all. It will only add to the
# student credits.

$failletter = 'F';
$passletter = 'P';

# Translates a letter grade into a quality score for GPA calculations
```

```

%letterToQual = (
'A+' => '4.00', 'A' => '4.00', 'A-' => '3.67',
'B+' => '3.33', 'B' => '3', 'B-' => '2.67',
'C+' => '2.33', 'C' => '2', 'C-' => '1.67',
'D+' => '1.33', 'D' => '1', 'D-' => '0.67',
'F' => '0');

# Translates a numeric score to a letter grade

# Mark values greater than or equal to ('>=') a value on the left receive the
# letter grade on the right. For example, an 82.6 on this scale would
# receive a 'B', as would an 82.5. An 82.4 mark would receive a 'B-'
# letter grade. More decimals may be used if desired.

%markToLetter = (
'97.5' => 'A+', '92.5' => 'A', '89.5' => 'A-',
'87.5' => 'B+', '82.5' => 'B', '79.5' => 'B-',
'78.5' => 'C+', '72.5' => 'C', '69.5' => 'C-',
'67.5' => 'D+', '62.5' => 'D', '59.9' => 'D-',
'0' => 'F'
);

# Categories of Courses and Requirements

# This lists the required areas of study and the requirements for
# graduation. It is used as the selection list of subject areas when
# adding or editing a subject on the report card page. It is also
# used when editing existing transcript records.

# In transcript printing, this section prints on the right hand side
# of the transcript and controls which areas are checked as being
# complete on finished transcript.

%gradRequirements = (
'English' => '4', 'Social Studies' => '3.5', 'Science' => '3',
'Math' => '3', 'Languages' => '2', 'Bible' => '2',
'Worldview' => '1', 'Fine Arts' => '1', 'Phys Ed' => '0.5',
'Health' => '0.5', 'Logic' => '1', 'Other' => '0'
);

# Term Descriptions

# This section defines the values that are used when posting
# descriptions of particular terms into the transcript system from the

```

report card system. These two lists, the Term Descriptions, and the
Term Keys, together 'map' a particular term to a particular description.

```
# Term Descriptions    use $term_desc{ $term_key{1} }
```

```
%term_desc = (  
'a' => 'Fall Semester',  
'b' => 'Spring Semester',  
'c' => 'Undefined'  
);
```

```
%term_key = (  
'1' => 'a', '2' => 'a', '3' => 'b',  
'4' => 'b', '5' => 'c', '6' => 'c',  
'7' => 'c', '8' => 'c'  
);
```

The Locker System

The locker system is designed to allow the staff to manage both locks and lockers in the school. An outline of it's use would be:

1. **Add Locks and Lockers.** These will be assigned to students and must be created before they can be used. A lock has some characteristic values:
 - Lock Number - uniquely identifies the lock.
 - Combination - allows the lock to be opened.
 - Pool - a member of a group of locks, that may be physically kept together and assigned to particular student groups, if desired.
 - Comment - a short note about this lock; may be left blank.

Lockers and Locks

A locker has several characteristics:

- Locker Number - uniquely identifies this locker.
- Cleaned - is this locker cleaned? (ready for next user)
- Area - where the locker is located. Can be used to group lockers for assignment, just like Lock Pools.
- Comment - a short note about this locker; may be left blank.

The scripts to add locks and lockers will allow multiple entries to be made at one time, to speed up the entry process. By default, the lock add script will allow you to add 8 locks at a time. You can increase this number, by using the input box on the top left of the screen to enter a larger value (ie. 20). Then click the *Add Locks* button beside it.

In order to add lockers to the system, the start screen shows a starting and ending value to enter. If you are entering lockers in a particular location that are sequentially added, this would be the easiest approach. You would enter this location in the *Area* field, and leave the comment field blank. Clicking the *Cleaned* checkbox will indicate that all of the lockers are cleaned. You can unclick (unselect) any that aren't in the next screen. The same is true for all other fields. If you use starting and ending values, these will be inserted into your locker number field. If you simply use the *Number to Add* field instead, they will not be added into the locker number field.

Once you click the *Save* button, all lockers will be saved. You would normally only have to update your school inventory of locks and lockers once, unless you add more lockers or additional locks due to normal attrition of locks by students. The lock is normally linked to the locker rather than the student(s), since there can only be 1 lock per locker, but there may be more than one student per locker. The student(s) are linked to their locker.

-
2. **View/Edit/Delete Locks and Lockers** These buttons allow the user to periodically make changes to records in the event of a lost lock or changes in a locker value, etc. due to mistakes in entry. This is **not** the place to change locker assignments, etc.

In the lock script you can delete the lock (if not assigned to a locker). You would have to unassign the lock first before deleting its record. You can also edit the record to fix an incorrect combination, etc. You click on the lock number (normally highlighted in blue) to edit the record.

In the locker script, you can do exactly the same things. Click on locker number to edit. Click on *Delete* to delete (but unassign first if assigned to students before deleting). You might do this if the locker was damaged and not suitable for student use.

3. **Assign Lockers and Locks** Both locks and students are linked to lockers. First click the *Assign Lockers* button. When you are assigning lockers to students, you first of all select the students. Select Grade or Homeroom and then enter values for the groups. For example if you want to assign lockers to the grade 9's and 10's together, then enter 9 10 in the entry field.

Next you choose the lockers to assign. If you have added *locations* for the different groups of lockers you can then select them by this means. Use the selection menu to choose the appropriate location. Alternatively you can simply choose a number range for the lockers to assign. The starting locker number should be smaller than the ending locker number.

Finally, you can assign locks to the lockers at the same time. If you wish, first select the *Assign Locks* checkbox. In order to use a certain group of locks, from a particular 'pool' of locks (we have pails filled with locks for each group (pool)), select the appropriate pool. Otherwise, the next available lock will be assigned to a locker.

The next screen does the actual assignment of lockers (and locks). Unselect (uncheck) any locker assignments that you don't want. Do the same thing for any lock assignments you don't want to occur.

The lock assignment process can be separate from the locker assignment process. For example, the secretaries can do the locker assignment and the teachers, from the teacher site, can then assign and pass out the locks in a separate procedure (after lockers were assigned).

Special Education - IEP System

This system is designed to aid in the creation of IEP(Individual Education Program) documents for special needs students. It has the following parts:

1. Enrolling students in the IEP system from existing school enrollments.
2. Creating a team of individuals responsible for the student's program.
3. Adding assessments (ie. specialized testing of various kinds) that the child has had.
4. Creating Evaluation Masters selected from the different *subjects* or categories of objectives.
5. Printing of IEP Master Reports and submission to authorities.
6. Entering student progress information throughout the year and printing student progress reports.

Enrollment

A student must first be enrolled in one of the division's schools.(or in a single school if not *in* a division) before (s)he can be added to the special education (iep) system.

The simplest approach to enrolling a student is to use the **Division Student Search** function on the main page. You can search by lastname, firstname or just lastname. Once (s)he is found, you can click on the **Add** button and automatically add this information from their school records into the IEP system.

You may also use the **Add Student** function, if you already know the student's division student number (assigned when (s)he is enrolled in a school).

You may also make changes to the student's information using the **View/Edit Student** button. The student's information, although copied from the school data initially, is totally independent of his/her student information in the school. It is stored in the IEP database, not in the school's database (although some reports pull that information from the school database).

Teams of School and Division Personnel

The student **Team**, as mentioned above, is made of individuals (including the child's parents) who are responsible for the execution and evaluation of the student's program.

Teachers, Administrators and EA/TAs in the schools have their names and locations stored along with other school information (students, attendance, etc.) in a particular school's database. A teacher must be entered in a school's database, before they will become *visible* in the IEP system. This is normally done by the school secretary at the start of the year.

These school based personnel can be identified uniquely in the IEP system by a school:userid identifier since the userid is only guaranteed to be unique within the school. For example a teacher in a school called St Mary might be stmary:fredflintstone.

Other school division staff *not* associated with a school are stored in a single table in the IEP system listing their userid, name, agency (if not central office), and phone, email, and designation (psychologist, etc.). This table is called *personnel* and can be added to from the administration page (which is normally password protected separately from the IEP site) for use with only designated personnel.

The **Add Team Members** button is used to create a team or add new members to an existing team. They are added by simply clicking the selection button beside their name. The *signer* box is used to specify whether or not they will have to sign the IEP report.

The **View/Edit Team Members** button is used to view the members of particular teams and also modify which members are on a team. Since it is easy to add new members to a team (with the function above), there is only a *delete* option.

Assessments

Student Assessments are records of the results of specialized tests by Educational and Health professionals. These may include various kinds of educational testing as well as medical and psychological test results.

The *categories* for these results are first setup on the administration page. These may include commonly used educational tests, etc. Once these have been added, then assessments may be entered.

The **Add Assessments** function adds an assessment for a student in a particular category (as outlined above) on a particular date. An unlimited size text box can be used to enter as much description about this as required.

The **View/Edit/Delete** function will allow any required changes to be made to a student's assessment records.

Subjects and Evaluation

We have divided educational expectations into different *subjects* (although they are not subjects in the normal usage of the word) or categories. Some are traditional subjects; many are not. Each subject was initially broken down into smaller subcategories. However, due to implementation difficulties, this is no longer used. Every category has a unique number that identifies its name and the objectives listed under this category number.

Each particular task or outcome will then have a unique subject/category number as well as a unique number within that category. For example, if Level A reading was 305, then the second expectation, *Retell the content in random order*, would be identified by 305-2.

When setting up an evaluation program for students, these particular learning outcomes are

added to a student evaluation record for each subject. (S)he will then be evaluated throughout the year on that basis.

Evaluation Workflow

When an student is added to the IEP system, information is pulled from his/her demographic record in the school where he/she attends. This is stored in a local table in the IEP system.

A team is chosen that will work with this student.

Assessments are added for this student, on an ongoing basis.

Evaluation records are added for each student in an evaluation master table (evalmst). There will be one record for each of the *subjects* or categories that the student is enrolled in. Each of those subject records can have **up to 32 objectives** from that subject area stored with it.

When evaluations are done each term, a student and a subject are chosen. If a record for this term for this student and this subject already exists, its values are read. If no record exists for this term, a new one is created. Values and commentary are entered for this record and then it is stored. An evaluation record is stored separately for each term for this student in this subject.

Evaluations:

1. **Enter Evaluations.** All students are listed, with options to add evaluations to existing ones or edit existing ones (all listed).
2. If Add, a new blank record with values for subject displayed for entry. If Edit, an existing record may be changed.

Report cards will be generated for this student and all evaluation records for this and previous terms will be read and used to create a simple report card or progress report.

Technical – Table Structures

In general we can link to other information in the school's database for contact information, etc. Otherwise, the system is largely standalone.

- **Special**

A table of student data, some retrieved from his/her school student information on enrollment in the IEP system.

id - record id

lastname - char(40) - student lastname

firstname - char(40) - student firstname

birthdate - date - birthdate

studnum - integer - division student number
provnum - varchar(12) - provincial student number
desdate - date - date of designation
ddpfvl - char(6), - ddpf level
designation - char(60) - designation
grade - char(6) - grade placement
school - char(60) - school (Name and code)
sex - char(1) - gender of student
medical - text - description of medical condition.
medication - text - medication required.
equip - text - required equipment for student.
adapt - text - school physical adaptations required by this student.

- **Personnel**

A table listing central office staff and other agency personnel not located in a school database.

id - record number
UserID - a short field identifying this person.
Lastname
Firstname
JobTitle
Agency
Phone
Email

- **Team**

A table listing the members of each team. There will be one record for each team member for each student. The entire table will therefore hold all team listings.

id - record number
studnum - number of the student whose team this member is on.
userid - userid and school/agency identifying this person.
jobtitle - role
phone - redundant contact info
email - redundant contact info

- **Assess**

A table listing assessments done on students.

id - record id
student - char(255) - student name(number)
category - char(255) - matching category from assesscat.
reqdate - date requested.
resdate - date completed.

comment - text - commentary.

- **CatAssess**

A table of assessment categories used by the assess table in “category”.

id - record id

category - char(255) - text specifying category

- **Subject**

A table listing subject categories and objectives for students.

id - record id

catnum - integer - a number specifying the category of this objective. This is the same same number used in the evaluation master (evalmst) to identify the subject or category.

category - text - a word or phrase describing this subject.

idnum - int - a number for the objective/expectation.

grade - char(8) - possibly the grade level of the expectation (some subjects)

description - description of the objective/expectation

commentcodes - char(255) - codes linking to a comment table.

- **EvalMst**

The evaluation master record for students; one for each student in each subject.

id - record id

studnum - integer - the student number

subnum - integer - the subject number

method - text - a brief description of the teaching techniques used.

responsible - text - who is responsible for implementing this subject.

obj1, obj2, ... obj32 - objectives/expectations. - text - contain text description of the subject and idnum (105-8).

- **Eval**

The evaluation records for students; one per student per subject per term. Thus each student will have many eval records for each term of the year. For each subject there will be one evalmst (evaluation master) record and up to 4 eval (evaluation) records. Note: First fields common with the master; only term and commentary extra.

id - record id

studnum integer - the student number

subnum integer - matches subject in EvalMst table.

obj1, obj2, ... obj32 - char(16) objective results

term - the term number for this record.

comments - text; a long text field for commentary

LDAP - Directory Management

LDAP is an acronym for Lightweight Directory Access Protocol. A **directory** in this sense is like a telephone directory which stores user information and other things rather than just phone numbers.

Open Admin can be used to manage an external LDAP server which contains student and staff accounts. Open Admin stores information including the uid (userid), uidnumber (number of the user account), and gid(primary group number that the user belongs to). This information is used to create entries in the LDAP server for each student and staff member.

In turn, this directory information can be used by other applications to authenticate the users. This includes library systems, online learning applications, etc.

LDAP Scripts

There are several scripts that OA provides:

- Synchronize Student (syncstudent.pl) - This script is used to synchronize students in OA with student entries in the directory server. It is used to add students from OA into the directory or remove them from the directory. It will have no effect on students enrolled in OA. It is simply used to keep the directory up to date with OA, as students are enrolled and withdrawn from OA.

The first screen will ask whether to add or delete, as well as whether the next screen should have entries 'Checked' (ie. selected).

If you select 'Add', the script will compare users in both systems (OA and LDAP) and find students not found in LDAP but present in OA. You will see a list of those students with checkboxes. Select (ie. check) those you wish to add to the LDAP directory server. Clicking 'Continue' will add them to the directory.

If you select 'Delete', all entries in the directory are loaded and you may first select (by clicking checkbox) and then delete the student entries by clicking on 'Continue'. You may add these students again later, if desired, by using the 'Add' function to put them back into the directory.

- Synchronize Staff (syncstaff.pl) - This script is used to synchronize staff in OA with staff entries in the directory server. It is used to add staff from OA into the directory or to remove them from the directory. This script has no effect on the staff records in OA; it only keeps the directory up to date, as desired (ie. some staff may not be entered into the directory).

This script is similar to the student script. The first screen will ask whether to add or delete, as well as whether the next screen should have entries 'Checked' (ie. selected).

If you select 'Add', the script will compare users in both systems (OA and LDAP) and find staff not found in LDAP but present in OA. You will get a list of those staff with checkboxes to select those you wish to add to the LDAP directory server. Clicking 'Continue' will add them to the directory.

If you select 'Delete', all entries in the directory are loaded and you may first select (by clicking checkbox) and then delete the staff entries by clicking on 'Continue'. You may add these staff again later, if desired, by using the 'Add' function to put them back into the directory. This will not affect the staff records in OA, only the external directory server.

- Reset LDAP (resetldap.pl) - This script will allow the user to lock accounts or reset password on accounts. In order to unlock user accounts, you would simply reset the password.

The first screen allows you to select to either Reset Password or Lock User (which sets the password to a locked value). Selecting (checking) the appropriate checkboxes and clicking 'Continue' will result in the desired action and a confirmation box for each selected action.

External User Management

Since the secretary and/or administrators maintain a list of enrolled students, it makes sense to use this information to manage users on external servers. This would allow a student, once enrolled, to have his/her login to workstations, email accounts, and other school based resources added from this information.

This system consists of 2 parts:

1. Buttons that run scripts to copy the user information (ie. name, student number and password) and/or account changes (reset password, lock or unlock account) to an account on another server.
2. A script that runs periodically on the external server, to take this user information and add missing user accounts on the external server or reset password or lock/unlock the account.

Add/Reset User Accounts on Other Servers

1. Click the 'Add' button beside 'External Users'. It will list all students and staff and then below that, in bold, say 'File Copy Complete'. The user file has now been copied to the external server. In 10-15 minutes, any new users will have accounts on the external server. The time it will take for the accounts to appear depends on the time your system administrator has set on the external server between checks for the user file.
2. Click the 'Reset' button beside 'External Users'. It will show a list of all students with checkboxes to allow passwords to be reset or to lock or unlock user accounts. Check boxes based on the user and what you want to do. Then click any of the 'Continue' buttons (it doesn't matter which one), and the next page will show 'File Copy Complete' when the reset file has been copied to the external server. Again, this will take the same time as the 'Add' process to occur on the external server.

The Saskatchewan SDS System

The Student Data System of Saskatchewan Education is an online system that has several components including:

- A *secure online website* that allows an administrator or secretary to update a variety of information about their school as well as generate reports about school information.

The button on the top right side of the Export/Xfer page called *SDS Web Site* opens a new window in your browser for this site. Typically we use the **Enrollment** button on the left side of this page to locate students and find out information about them.

- A special Sask Education (SaskEd) site where OA sends and receives information when we click the buttons to update enrollment, etc. SaskEd calls this *real-time transfers* since it does the updates *while you wait*. The other system is a batch system where your local software (not OA) creates files of transactions that you upload by a web interface. OA does not use this approach since real-time is superior (and was the original system that SaskEd described). Batch mode was a later addition since other school admin systems couldn't do real-time.

The messages are sent using text marked in special way called *xml*, which is similar to HTML (tagged text), and stands for eXtensible Markup Language.

Open Admin (OA) has a section on the export/transfer page to allow you to update the SaskEd database, using information from your local OA database, by simply clicking a button.

The information in your local database is considered to be authoritative and SaskEd only has a copy of some of this information. Your role will be to **keep this information up to date** so when changes occur locally (students withdraw from school or classes, etc.) these changes are sent to SaskEd immediately. You do this by simply clicking a button.

School Enrollments and Demographic Changes

OA has the following functions:

1. **SDS Web Site** - will open a new window in your web browser with the SaskEd SDS website. This site will allow you to query for student information and verify student provincial numbers, etc. This is a useful site to use in conjunction with the OA SDS scripts.
2. **Get Student Numbers** – This is the first step in synchronizing your data with SaskEd. It will try to enrol any of your students without provincial numbers with SaskEd. If this step cannot be accomplished you will have to use the SDS Website to query for your students. If this also fails, then you must contact SaskEd directly to get a provincial number. YOU then enter this number into the students records and continue with the next step.

The script will locate all students without provincial numbers locally and provide a list of students to select in order to enrol them with SaskEd. Once selected and *Update*

Enrollments clicked, the next screen will allow the selection of the enrollment reason and enrollment date. Once the *Update Student Enrollments* is clicked the data will be sent to SaskEd and a response back will indicate the result of the transaction. Hopefully this will indicate *Transaction Successful*, and the script will automatically put the provincial number into the appropriate student field. The student is now enrolled.

If there was any error message, you may click on the student name to update any fields in his/her record. You may then click back twice and click reload in your browser to run this script again to try to get a successful transaction.

Once successful, you may continue with the second button,

3. **Sync Student Enrollment** - This script will query SaskEd for all students on record for your school and compare this list with your local records. It will then create two lists of students to attempt to synchronize SaskEd with the local records (which are considered to be authoritative).

The first list contains all students in the SaskEd records that are not in the local records. These students will have to be withdrawn. The second list contains all students that are in the local records but not in the SaskEd records. These students will have to be enrolled.

Once you click the Sync Student Enrollment button, you will see the students in both lists (after a delay during which the SaskEd records are downloaded and processed). Any students still without provincial numbers are excluded from these lists and are listed at the top of the screen. Any empty lists will be indicated with *No Students...* Ideally you want both of these to be empty lists.

The **Students to be Withdrawn** list will have checkboxes to indicate the date for their withdrawal from school. Click the most recent date (normally) for those records. Dates that are more than one school year old won't be allowed in any case. You may have to manually remove these students using the SDS Web Site.

The **Local Students to Enrol with SaskEd** list will also have checkboxes for their effective dates. Check off the most recent date here, also. Again, old dates won't work, but you may try. If this doesn't work, you may again have to resort to using the SDS Web Site for checking this student's current enrollment status.

Click the *Update Selected Students* button. The next screen allows you to select the reason for the enrollment or withdrawal. Once set, click the *Update Student Enrollments* button. This information will then be sent to SaskEd, and the results returned. If the transactions were successful, the student(s) are now added to or removed from the SaskEd records and synchronization with SaskEd has been achieved (in terms of student enrollments).

If you have an error code such as *Individual not found for DeptAssignedPersonId / Birthdate combination*, then you will have to use the SDS Web Site to resolve the issue. In this case, open up another windows with the SDS site by clicking the green button. Click on the Enrollment item on the left menu menu, and then the *Student Enrollment* link near the top of the screen. Log in using your school information. Move back to your previous screen (with the error messages) and click on the student's provincial number to select it. Then right-click and copy it (Ctrl-C). Then move back to the SDS site window and paste this into the box called *Saskatchewan Education Id* and click the Search button.

If you cannot get any student information, you must contact SaskEd - Student Records at: student.recordssasked.gov.sk.ca

Otherwise, use the information provided to fix your local records (ie. birthdate errors are common). If the mistake is in the SaskEd records, then contact them to fix the mistakes.

4. **Check Students Demographics** – This will check all student records for missing data or other kinds of errors that should be fixed before you try to click the 'Update Student Demographics' button to send this information to SaskEd. It will fail in any case, so should be fixed first. Print out the list of errors and then edit student records and add or fix student information. Then click this button again to make sure all is well. Once this is correct (and no errors show up), then go on to the next button.
5. **Update Students Demographics** – Click the *Force Bulk Updates* checkbox. This will send all information from the local records to SaskEd and force them to update everything. The main problem is updating the student grade at the start of the year. But this can be done at any time to ensure all student addresses, etc. are correct at the SaskEd end. Of course, the local records have to correct, first!

Any errors in this process will be indicated in red. Typically these are mistakes in the Health Services Number, but there are instances of Legal Name issues, mistakes in Postal Codes (a zero (0) is a letter Oh (O); double spaces are not allowed between the two triplets in the postal code), etc. These must be corrected by clicking on the student name and editing their records to correct the errors. You may then rerun the script to make sure it comes up it clean.

Background Theory and Errors

Student transfers (enrollment, withdrawal) are recorded in a transfer table (which can be viewed from the Main page (**View/Edit Transfers**)). It keeps track of the date of transfer, type of transfer (ie. enrollment or withdrawal), description (normally name of school, etc. she/he came from or went to), exit and entry codes, student name and birthdate. These dates and codes are used when synchronizing student enrollments with SaskEd.

The transaction sent to SaskEd includes codes explaining the reasons for the student transfer (enrol or withdraw), if known. This is done when the *Update Student Enrollments / Withdrawals* button is clicked.

The entry (enrollment) codes are:

(Note: don't forget the leading zeros on the first two!) 01 = Transfer from another Saskatchewan School

03 = Transfer from out-of-province schooling within Canada

10 = Transfer from out-of-country schooling

13 = Transfer from home-based schooling in Saskatchewan

15 = Continuation of enrollment at the same school

16 = Readmission

18 = New; no previous schooling

50 = Exchange Student

99 = Not base school

The exit (withdrawal) codes are:

(Note: don't forget the leading zeros on the first two!) 01 = Transferred to another Saskatchewan School

03 = Transferred to out-of-province schooling within Canada

10 = Transferred to out-of-country schooling

13 = Transferred to home-based schooling in Saskatchewan

15 = Completed schooling

17 = Deceased

18 = Discontinued schooling, with a reason of "health reasons"

19 = Expelled

21 = Discontinued schooling, with no reason

24 = Discontinued schooling, with a reason of "other education"

50 = Discontinued schooling, with a reason of "employment"

52 = Discontinued schooling, with a reason of "dissatisfied with school"

60 = Enrollment cancelled/no show

When errors are returned, you have several options, depending on the nature of the problem. If it appears to be a demographic problem with an address, etc. then simply click on the student name and edit his/her record to fix the problem. Typically these problems include:

1. Missing Address - the Parent 1 information (primary parent) is used as the students address information. (ie. address1, city1, pcode1). This information is used for official transcripts. The home phone (hphone1) information is also sent to SaskEd, if present.
2. Missing or incorrect Postal Code, etc. The error message will tell you this directly. An invalid postal code typically has a letter O, rather than the number zero. They look the same, but aren't.

Another problem is the spacing between the two triplets. There can only be a single space between them. More than 1 space will flag an error.

Unfortunately, in both cases above, the code *looks* correct. It just isn't.

The postal codes can also be looked up. Open a new tab (CTRL-T) or a new window (CTRL-N) and go to the Canada Post website at:

www.canadapost.ca/tools/pcl/bin/advanced-e.asp

You can also find the site by looking in Google for *Canada Post postal code search*. There is also a link provided on the student edit page beside the postal codes.

Highlight and then copy the address (CTRL-C) from the Student Edit page. Move to the Canada Post tab or window and paste (CTRL-V) the address into the street field. Edit the other address information and find your postal code. Highlight it and copy (CTRL-C) it. Then move back to the Student Edit page and paste it in. Verify that there is only 1 space between the triplets.

3. The correct abbreviation for Saskatchewan is *SK* and **nothing else**. Normally the system administrator can change all province codes directly at the database level if you

have many wrong province values.

4. Incorrect grade - using a lowercase *bf k*, instead of the correct uppercase one. Don't confuse the grade with the homeroom. The grades have values of PK, K, and 1 to 12. Nothing else is allowed.

If the error is one of an inconclusive student match, legal name issues, etc. there are a couple of options. If you have a provincial student number for this student, there will be a *Qry* button to query SaskEd for the student information. Click this button to compare your data with SaskEd data for that student. If you don't have a provincial student number for this student, then you cannot query for information (since you can't identify the child).

Instead, click the SDS Website button to enter their website to find the student information that they have about this student. (Look under Enrollment and then Student Enrollment). Use the student number or lastname, firstname and birthdate to find your student information. If your school has an end date for enrollment or is registered as non-base, you should contact SaskEd to get them to change your information. Similarly for mistakes in student name or birthdate. If this information is incorrect, then you **will** have problems enrolling or withdrawing students, since the information must be identical between the local system and SaskEd.

If you are getting XML validation errors, then further steps are necessary. In the location box on your web browser that contains the web address (URL) for this script, add a question mark followed by *debug=1* so that the end of the URL looks like: */sasklrn/updatetrans.pl?debug=1* This will place the script into debug mode and will allow you to see the information sent to SaskEd (in blue) and received from SaskEd (in green). By looking at the data contained in the blue section (sent to SaskEd) you should be able to figure out what is wrong with a particular enrollment(transfer) record. This is the reason that smaller chunks of data (3000 characters) are sent... to try to narrow the problem down to one particular transfer record so that the data error can be fixed. A common problem is using "Sask" for the province or some non-allowed value for a grade (ie. KL,KB, etc rather than just K(kindergarten or PK (pre-kindergarten))

High School Functions

Only those three buttons above are required by elementary schools, since they do not submit any marks to SaskEd. The following functions are used to:

1. Register classes with SaskEd.
2. Enrol students in those classes and
3. Submit marks for those classes to SaskEd

1. **Synchronize Class Enrollments** – When setting up Open Admin for classes, all subjects are first added on the report card page. Then students are enrolled in those subjects. All subject enrollments are stored in an evaluation table (and contain student evaluations for each term.).

When you click this button, the student subject enrollments are compared with (any) existing subject enrollment records in the SaskEd database. Any differences will cause updates to be sent to SaskEd to either enrol or withdraw the student in each course to make the SaskEd records agree with local records.

2. **Query Class Enrollments** – will query SaskEd and compare them with local records and prepare a comprehensive report. (since the previous function is very terse in its output).
3. **Student Mark Submission** – This will send the mark information entered by teachers to SaskEd. Teachers will have to include their certification numbers with their other information (on the teacher page) so that marks can be successfully submitted for accredited subjects. The first screen will indicate the subjects that may be sent, while the second screen allows per student selection of submissions.

The mark submission process uses the mark in the final term for the subject. In a four term subject, this would be term 4. In a 2 term subject (ie. semestered), this would be term 2.

The **Provincial Student Number** and the **Health Services Number (HSN)** contain a *check digit* at the end that can help detect if any digits have been transposed or are incorrect when entered. This check digit will not detect all errors but is an aid in data integrity.

These checks are run as part of the Check Student Demographics script.

Translation - Other Languages

The translation of Open Admin into other languages is done by replacing all English text in html pages and scripts with values from a translation table.

There will be no 'language lookup' during normal program operation since this will slow down program operation. Instead, the HTML files are generated from html templates, with the text to be replaced marked with tags. Every script (or nearly every script as of the 3.50 release) has a section at the top of the file called %lex and it contains the lexicon of phrases and matching, possibly translated, values. The translation process will replace the English words with equivalent phrases in other languages.

The translation tools are located on the Start/End of Year page and have the following roles:

- **Extract Phrases** - this will look through the web page templates, meta table (information about staff and student fields), main admin site and teacher site scripts. It will find all phrases that need a translation, and will also store the location they came from. These are stored in a table called xlat_phrase.
- **View Phrases** - this button will allow you to look at all of the phrases extracted by the Extract Phrases script. The *Summary View* only shows the phrase and a count of how many times it occurs. The *Full View* shows all locations where the phrase is used.
- **Import Translated Phrases** - will allow the user to upload a .po (portable object) file containing translations of phrases mentioned above. This translation can then be used to rewrite the main web pages and scripts with these alternate language version (or possibly newer updated values). These values can be used to replace existing values if the matching checkbox is selected. Otherwise they are ignored. These imported value are placed in a table called xlat_lang.
- **Edit Translated Phrases** - will allow the translation of phrases to occur directly within OA rather than being downloaded as a .po file to be edited with an external program such as kbabel or poedit. These edits will add or change values in the xlat_lang table mentioned above.
- **Export Translated Phrases** - will create a .po file that can be downloaded for use with other translation software. This is an alternative approach to using the editing function, mentioned above. There are 3 options for this process.
 1. All Phrases + Translation - puts all phrases from the xlat_phrase table and any translations of these from the xlat_lang table into the file.
 2. All Phrases + No Translation - only phrases are added to the file, but no existing translation. This would normally be done in order to start a new translation in another language.
 3. Only Phrases with No Translation - will create a smaller file with only missing translations. This would then be uploaded, once a translation is added, to complete the translation process.

Another important reason for this is for the sharing of your translation with others. You can email this to others or the Open Admin site to allow others to benefit from your work.

- **Insert Translated Phrases** - is one of the most important processes, since this rewrites the web pages and scripts using the translated values in the `xlat.lang` table. Effectively, OA rebuilds itself.

There are several options to control what is rebuilt. The first is `HTML` which rebuilds all of the web page (`HTML` files) using the templates in your `templates/html` folder. The encoding option controls what kind of the encoding/character set is used for the characters on these pages. The second is the meta table for controlling the naming of student and staff fields in scripts, etc. The third and fourth are the scripts in the main admin site (`cgi`) and teacher site (`tcgi`).

As time goes on, the phrases in the phrase table will change as the underlying scripts and `html` files change. The `extract phrases` script will be able to remove phrases that no longer exist in the underlying files. As well, the translation table will also have to change to match the changes in the phrases table. The translation process will be, to a limited extent, an ongoing process. The translation hints table will also have to match the underlying phrases, so that as phrases disappear and new ones are added, the hints table will also have to be updated by the translation scripts. Phrases would normally only disappear as phrases are streamlined to reduce the number of phrases and the associated translation work. New phrases will appear as new features are added to OA.

In summary, these scripts should allow the user to control the language use in OA. Other settings in the configuration files must be changed in order to complete the process of translation. One important setting there controls the encoding in the scripts, just like the encoding/character set setting in the `HTML` pages.