## **Educational Service District 113**

Capital Region Information Service Center

# **Data Mining**

## **Advanced Data Mining**

November 2016



**My Partner for Learning Solutions** 

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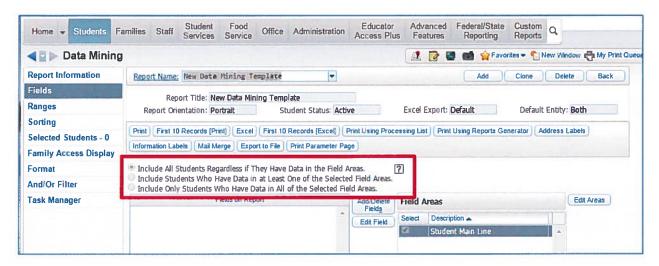




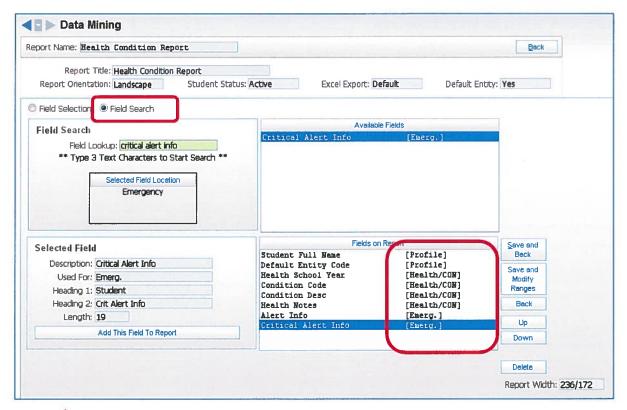
## Fields Tab - Student Inclusion

#### WS/ST/DM

**Student Inclusion** give you flexibility to narrow the selection of students who are included in your report, sometimes significantly improving the quality and usefulness of the data in the report.



**Note**: This functionality works in conjunction with the "Selected Field Areas" on the Fields tab. The illustration below gives a clear example of what that means:







The **Student Inclusion** feature gives you more flexibility in determining which students are included in your report. A detailed explanation of this functionality is available under the ?.

#### Students Included on Report

#### Information:

- A Data Mining report must contain at least one Student Main Line field in order to print.
- Student Inclusion criteria is based on Fields Areas. A Field Area is a common group of related fields.
   Examples of Field Areas: Student Main Line Info, Student Attend Info, Discipline Info, Scheduling Info.
- If at least one of the fields in a Field Area has a value, then that area is considered to have data.
- A field from any area can be considered part of the Student Main Line Field Area. A field is determined
  to be part of the Student Main Line Field Area if only one value can be entered for the Student.
- If a report has the Student's Name, their Advisor, and their Obligations, the Student's Name and their Advisor are one Field Area, and their Obligations are another Field Area.

#### Example:

	Has Attend	Has Discipline			
	Records	Records			
John	Yes	Yes			
Mary	No	Yes			
Tom	Yes	No			
Jane	No	No			

#### Include All Students, Regardless if They Have Any Data in the Selected Field Areas

- The report will include all Students even if they do not have any records in the Attend or Discipline tables.
- John, Mary, Tom and Jane are all included on the report.

#### Include Students Who Have data in at Least One of the Selected Field Areas

- The report will include all Students who have a record in the Attend or Discipline table.
- John, Mary and Tom are included on the report.
- Jane is excluded from the report because she does not have any records in either the Attend or Discipline table.

#### Include Only Students Who Have Data in All of the Selected Field Areas

- The report will only include Students with a record in both tables.
- Only John is included on the report.

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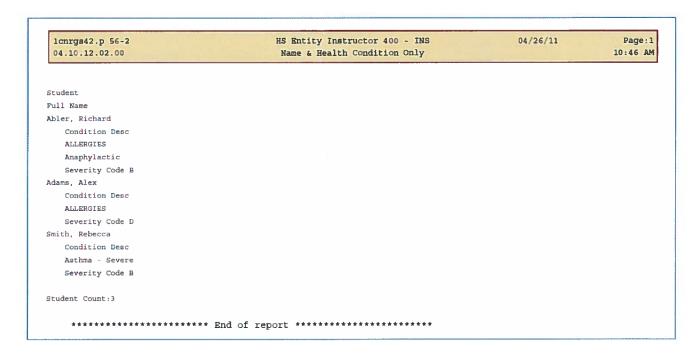
### **Format Tab**

WS/ST/DM

The Format Tab allows you to print multiple records on one line per student.

In the example below, the Data Mining report is pulling **Student Full Name** and **Health Condition Description** only. The students have multiple **Health Conditions** entered on their student records.

When the report is printed WITHOUT using the new Format tab functionality it displays as shown below:



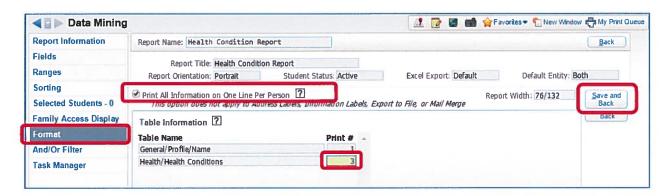
When the same report is exported to Excel it displays as shown below:

Z	A	8	С	D	E	F
1	Student Full Name	Condition Desc				
2	Abler, Richard	ALLERGIES				
3	Abler, Richard	Anaphylactic				
4	Abler, Richard	Severity Code B				
5	Adams, Alex	ALLERGIES				
6	Adams, Alex	Severity Code D				
7	Smith, Rebecca	Asthma - Severe				
8	Smith, Rebecca	Severity Code B				
9						
10						

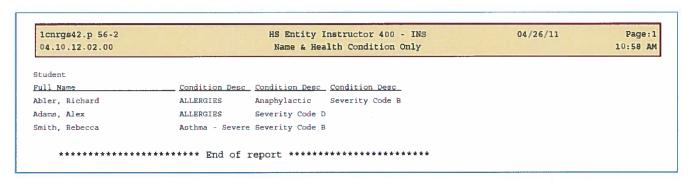


To make all of these Health Condition records display on one line, edit the Data Mining report

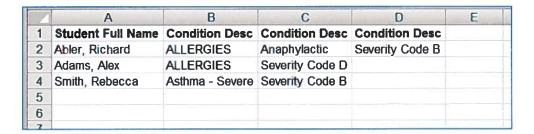
- Click on the Format tab.
- Click Edit and check the box beside "Print All Information on One Line Per Person".
- Any field that can contain multiple records becomes editable and you can enter the number of records to print per student. Choose a number large enough to include all of the possible records you wish to include in your report. In the example below we have selected to print 3 Health Condition records.
- Click Save and Back.



When the same report is printed using the Format tab as described, the report displays as shown below:



When this report is exported to Excel it displays as shown below:





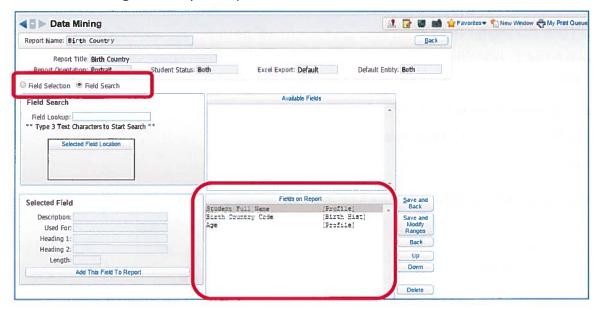


## **And/Or Filter Tab**

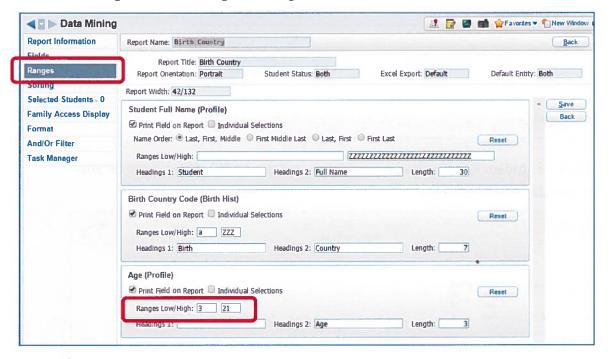
WS/ST/DM

The **And/Or Filter** Tab allows you to build filters for the fields in your report. These fields supplement the settings in the Ranges tab. In the example below we will build a report to select students, age 3-21, who were born outside of the USA.

Add the following fields to your report:



Under the Ranges Tab, select age 3 through 21.



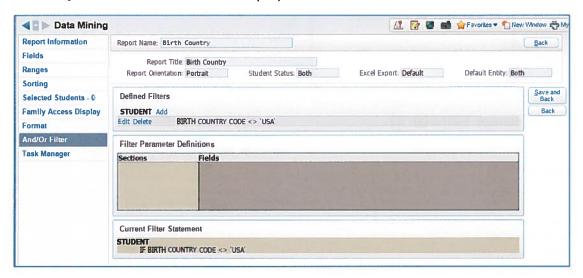


Under the Fields tab, select the **Student Inclusion Option** to "Include Only students who Have Data in All of the Selected Field Areas." This will remove any records for students who have a blank Birth Country Code.

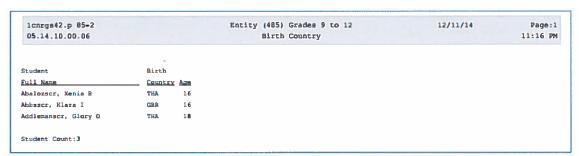
Click the **And/Or Filter Tab**. The filter you want to build will select those students who were not born in the USA.

- 1. Click Edit.
- 2. Under the **Defined Filters** area, add a **Student** filter by clicking **Add**.
- Under the Filter Parameter Definitions area your cursor will be under the word Fields and a dropdown arrow is available for field selection. Using the dropdown arrow choose Birth Country Code.
- 4. Using the dropdown arrow in the field to the right choose **Not Equal.**
- 5. In the blank field to the right of **Not Equal** type USA.
- 6. Click Accept.

The And/Or Filter screen will now display as shown below:



With the combination of Student Ranges, Student Inclusion, and the And/Or Filter, your records will only include those students ages 3-21, born outside of the USA:



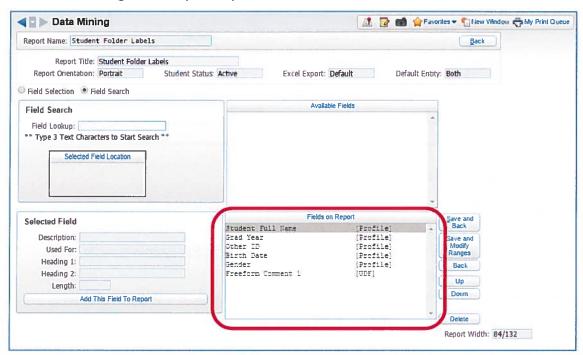


## **Information Labels**

#### WS/ST/DM

**Information Labels** allows to you to create labels using student-specific information, such as Name, Advisor, Grad Year, etc. In the example below, we are creating labels to place on student folders for quick and easy identification.

Add the following fields to your report:



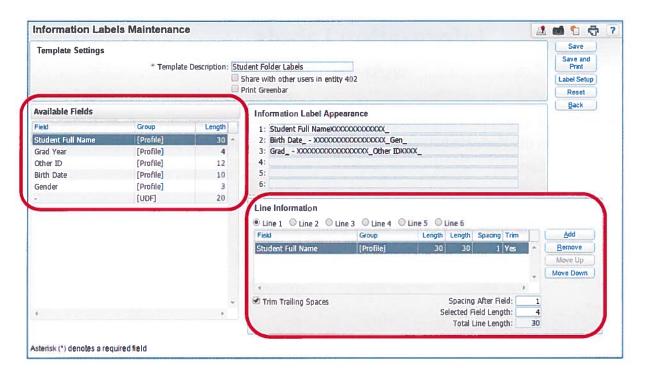
Click Save and Back - then select Information Labels.

Note: Information Label templates are specific to the Data Mining report you are working within; this is because the fields on the report impact the outcome of the Information Label output.

- 1. Click Add
- 2. Type a description
- 3. In the Line Information area, click Line 1
- 4. In the **Available Fields** list, double-click the desired field to add to line 1 of the label; repeat to add additional fields to Line 1
- 5. Continue adding fields to Line 2 through Line 6

If you add multiple fields to an Information Label line, you can insert a space or add a comma between the fields using a UDF Freeform Comment field.





At the bottom of the screen, specify spacing and field length options:

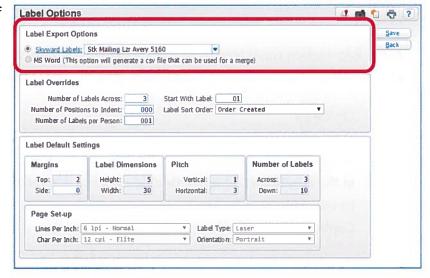
- <u>Trim Trailing Spaces</u> removes extra spaces between each selected field. This option is selected by default; if you clear this checkbox, it resets when you add a new field
- Spacing After Field allows you to add extra space between fields. For example, type "3" to separate fields by three spaces
- <u>Selected Field Length</u> adjusts the length of fields. For example, Age is a three character field. To reduce it to two characters, type "2" over the original default value of "3"

Select **Label Setup** to choose the type of label (such as Avery 5160)

- Click on Skyward Labels hyperlink for available label types of click MS Word (this option generates a CSV file to use for mail merge in Word)
- Select your label choice and save.

#### Sample information label:

```
Abbruzzesescr, Kathey T
11/24/2001 - F
2020 - 44894
```



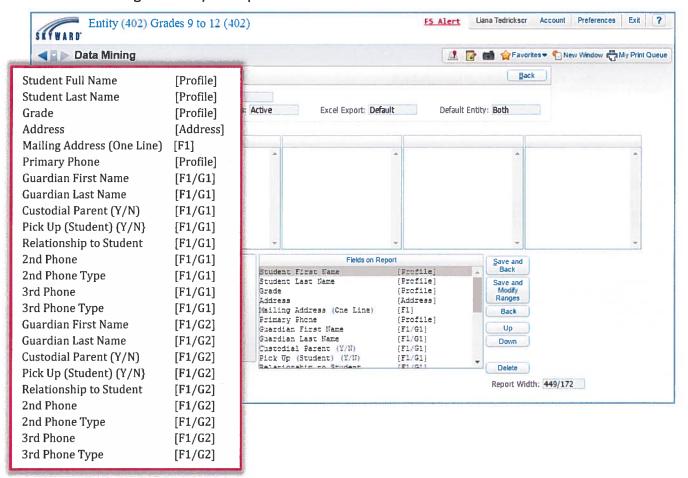


## Mail Merge

#### WS/ST/DM

Mail Merge allows you to merge student data gathered in a Data Mining Report with another document. In the example below, we are creating a letter providing emergency information for to send home for review.

Add the following fields to your report:

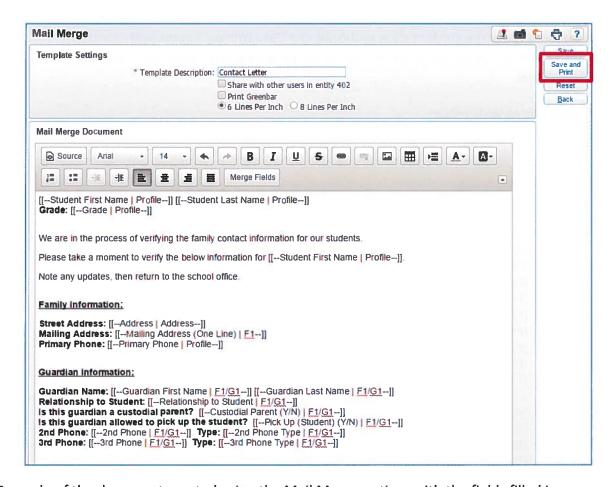


#### Click Save and Back - then select Mail Merge

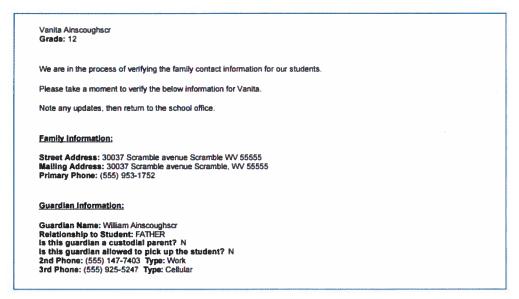
- 1. Click Add.
- 2. Enter a Template Description.
- 3. Click Merge Fields.
- Click the drop-down arrow in the Add Merge Fields area and select fields.
- 5. Begin typing your document, or copy and paste and existing document.



- 6. You may use the formatting features to modify your document.
- 7. Finish creating your document, inserting merge fields as necessary.
- 8. Click Save and Print



Example of the document created using the Mail Merge option, with the fields filled in:



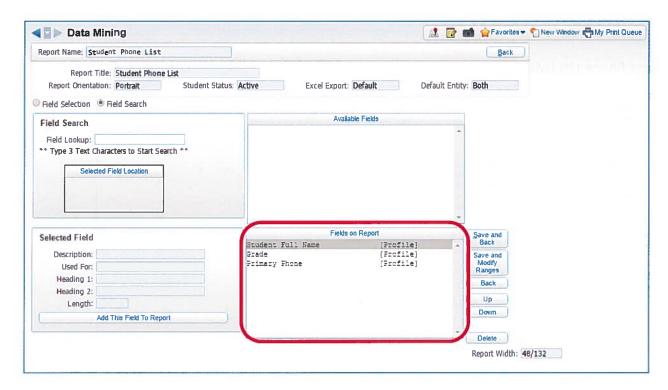


## **Reports Generator**

WS/ST/DM

The **Print Using Reports Generator** feature allows you to refine the range of information that appears on your report. This allows you to maintain your original list of students, but narrows it down to a specific group of students without having to modify your original report.

Add the following fields to your report:

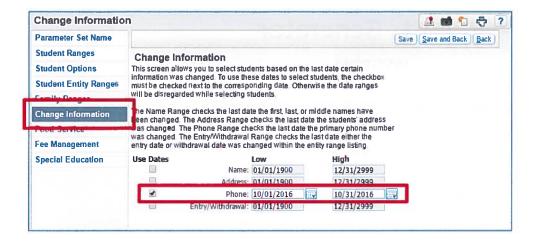


#### Click Save and Back – then select Print Using Reports Generator

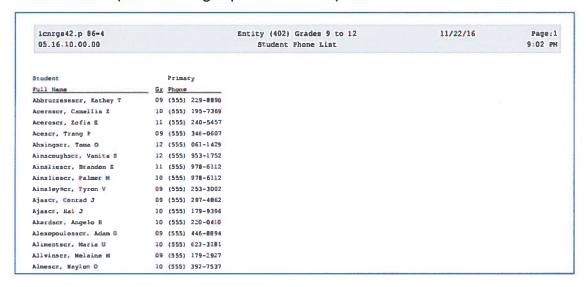
- 1. Click Add
- 2. Type a Description in the Parameter Set Name
- 3. Select Change Information
- 4. Select **Phone** Low Date = 10/01/16, High Date = 10/31/2016
- 5. Click Save and Back
- 6. You can now either **Print**, or Print Student List to preview



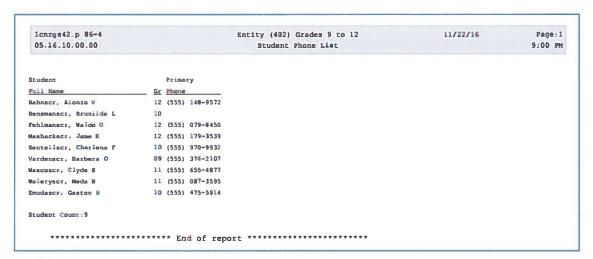




#### Student Phone List (without using Reports Generator)



Student Phone List (Using Reports Generator Selecting Phone Number Changes between 10/1/16 and 10/31/16):



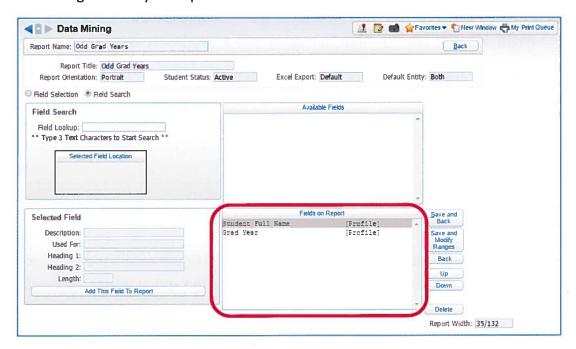


## **Processing Lists**

#### WS/ST/DM

**Processing Lists** allow you to assemble a list of student names in one area to run a report, and use that same student list to generate another report in another area.

Add the following fields to your report:



#### **Click Save and Modify Ranges:**

Specify a range on the **Grad Year** field – select **Individual Selections**, then select each grad year ending with an odd-digit

Click Save and Back – then select Print Using Processing List

- 1. Click Create New Processing List
- 2. Enter both a Description and Long Description for your Processing List
- 3. Click Save and Print
- 4. Your report will be generated as normal, but in addition, a list of student names will be generated that can be used in another report.
- 5. Go to Student Management/Advanced Features/Processing Lists to view your list of student names (WS/AF/PL).
- 6. Expand to see the list of names.



## **Export Options**

WS/ST/DM



**Print** – generates the report in PDF report

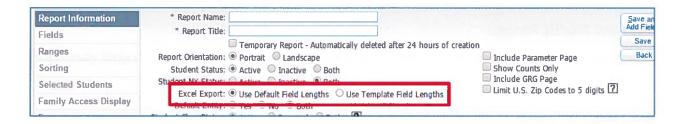
Excel – generates the report in Excel format

**Export to File** – generates an exportable file of the Data Mining report using a comma, Fixed Width, Space or Tab delimiter. This option also allows you to specify letter case.

**Export Layout** – exports a layout of the selected Data Mining report template in a .txt format. (The Import Layout button allows you to import a layout).

#### **Using Excel Export:**

On the Report Information tab of your Data Mining report, the Excel Export option provides two choices: Use Default Field Lengths and Use Template Field Lengths. The option selected here will impact the field length if the report is exported to Excel.



- Use Default Field Lengths includes all of the characters of the selected fields when you export the report to Excel. For example, Student First Name has default field length of 17 characters and Student Last Name has default field length of 30 characters. With this option, the Excel columns for these fields contain 17 and 30 characters respectively; the fields do not truncate.
- Use Template Field Lengths automatically adjusts Excel's column widths based on the width specified in the field ranges and is commonly used to export less than the default field length. For example, Student Middle Name has a default field length of 15 characters. With this option, if you change the Middle Name field length to one character on the Ranges tab, only the first character would export to Excel.

