



MyEducationBC

PEN Procedures and Reports

January 2023 v1.0

Version History

Version	Date	Description
1.0	Jan 2023	New documentation

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Table of Contents

1.0 OVERVIEW.....	4
1.1 What is PEN?.....	4
1.2 PEN Assignment.....	4
2.0 REAL TIME PEN PROCESSES.....	5
2.1 PEN Contact and PEN Contact Add-On Role.....	5
2.2 Parts of the Real Time Pen Processes.....	6
2.3 Request Student PEN Procedure.....	7
2.4 PEN Request Report.....	10
2.5 Validate Student PEN and Demographic Data Procedure.....	13
2.6 PEN Validation Report	15
APPENDIX A – PEN REQUEST REPORT ERROR CODES.....	18
APPENDIX B – VALIDATION ISSUE FIELD CODES	19

1.0 Overview

1.1 What is PEN?

The Personal Education Number (PEN) is a unique nine-digit number assigned to each student enrolled or registered with any; B.C. Early Learning (Strong Start program), Public or Independent school, B.C. Certified Offshore School, Yukon School, or public Post-Secondary Institution by the Ministry.

The student's original PEN record is assigned the first time the student is registered by any B.C. or Yukon school. This could be by a StrongStart Centre, Elementary School or even a student entering a Public Post-Secondary Institution that never attended a B.C. K-12 school. This number stays with the student, for their entire career in the Pre K-12 education system in B.C.

Follow the registration guidelines outlined in the MYEDBC Enrollment and Demographics documentation on the MyEducationbc.info site and the Standards Manual that can be found on the L1 Information and MyEducationbc.info site

1.2 PEN Assignment

Users have no ability to enter a Student PEN in MYEBC.

PEN assignment occurs as follows:

- After Registration is completed in MYEDBC, an automatic process for students without a PEN runs. Those students who need A PEN are automatically submitted to the Ministry's PEN system each night for processing.
- A PEN is automatically assigned to the student, or a PEN error is generated and sent to the school district's PEN contact.

Note: This process does NOT need the PEN Contact Add-On Role

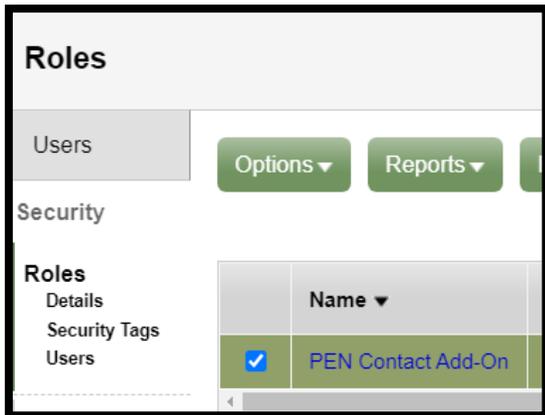
2.0 Real Time PEN Processes

The following procedures and reports have been implemented to give users the ability to request real time PEN information from the Ministry PEN Registry.

2.1 PEN Contact and PEN Contact Add-On Role

The PEN Contact person listed on the PEN Request Report and the PEN Validation Report is the School or District level contact who is registered with the Ministry as the person who receives the PEN Activity Report. This is the School or District PEN Contact person determined by your district process.

The security role, **PEN Contact Add-On**, must be added to any MyEducation BC user's account to run the **Request Student PEN** and the **Validate Student PEN and Demographic Data** Procedures but is not needed to run the reports. The PEN Contact Add-On role is not needed for the automatic nightly PEN retrieval process.

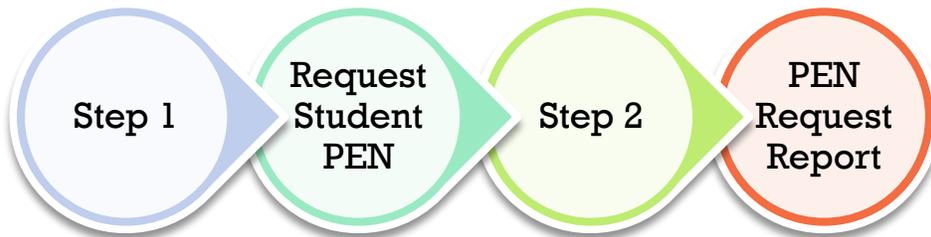


2.2 Parts of the Real Time Pen Processes

This document describes two procedures used to retrieve information from the Ministry PEN Registry and update student records. There are also two reports that can be run to provide output to the user after the procedures have been run.

2.2.1 Procedure 1

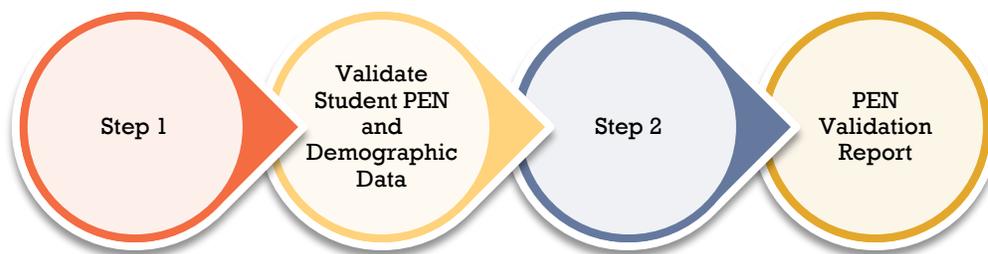
Note: These procedures require the user to have the PEN Contact Add-On role



The Request Student PEN Procedure must be run prior to the PEN Request Report.

2.2.2 Procedure 2

Note: These procedures require the user to have the PEN Contact Add-On role



The Validate Student PEN and Demographic Data Procedure must be run prior to the PEN Validation Report.

2.3 Request Student PEN Procedure

School View > Student top tab > Options > Request Student PEN

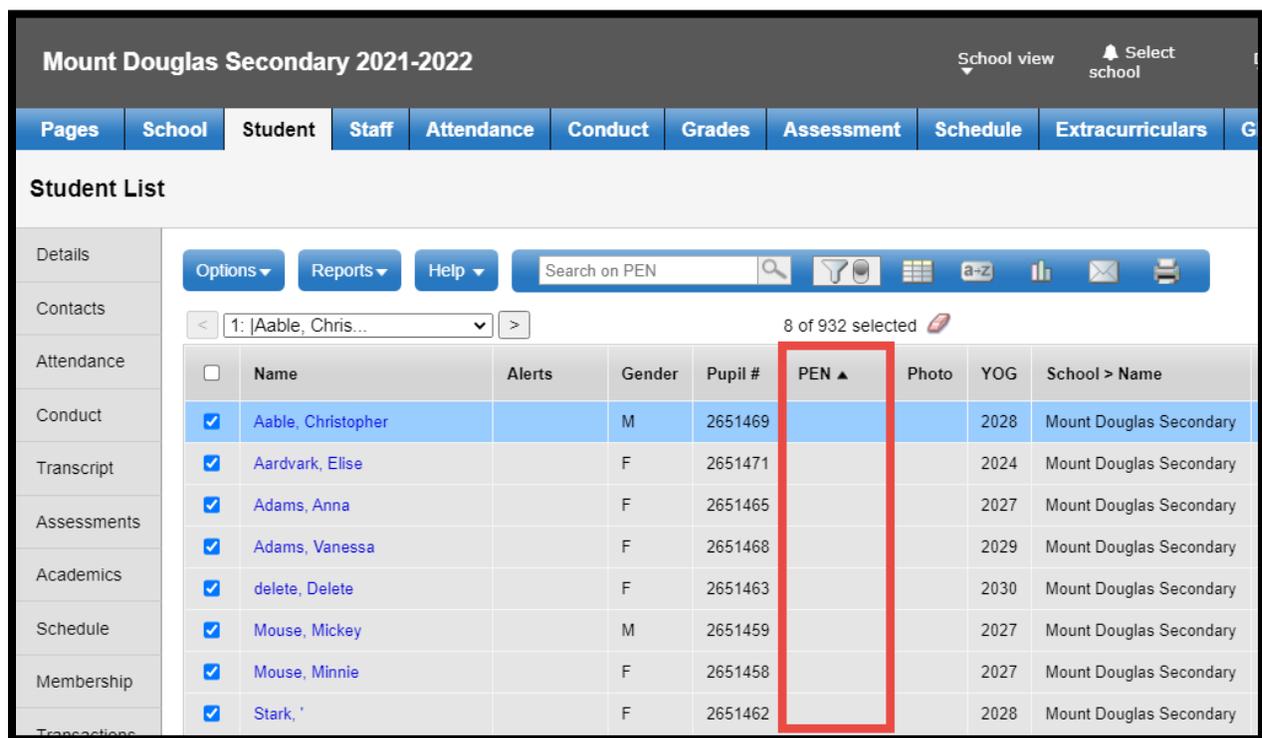
The Request Student PEN procedure allows a school to **instantly** request a missing PEN for a student. The PEN field will be populated automatically when the request is submitted.

Run this procedure prior to running the PEN Request Report (Step 2).

This functionality is in addition to the automatic procedure that runs each night for all schools in the province that updates missing PENs and identifies potential duplicates for all schools province wide.

Note - Ensure you are in the MyEducation BC Production environment (not SDTest) prior to running the Request Student PEN procedure.

Scenario: There is a missing PEN for several student records, and you want to request a PEN immediately, outside of the automatic, overnight procedure.



Mount Douglas Secondary 2021-2022

School view Select school

Pages School Student Staff Attendance Conduct Grades Assessment Schedule Extracurriculars G

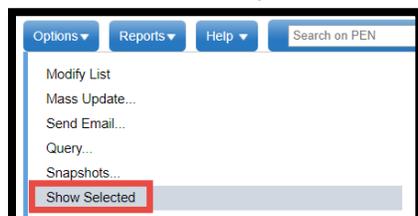
Student List

Details Options Reports Help Search on PEN

Contacts 1: |Able, Chris... 8 of 932 selected

<input type="checkbox"/>	Name	Alerts	Gender	Pupil #	PEN ▲	Photo	YOG	School > Name
<input checked="" type="checkbox"/>	Aable, Christopher		M	2651469			2028	Mount Douglas Secondary
<input checked="" type="checkbox"/>	Aardvark, Elise		F	2651471			2024	Mount Douglas Secondary
<input checked="" type="checkbox"/>	Adams, Anna		F	2651465			2027	Mount Douglas Secondary
<input checked="" type="checkbox"/>	Adams, Vanessa		F	2651468			2029	Mount Douglas Secondary
<input checked="" type="checkbox"/>	delete, Delete		F	2651463			2030	Mount Douglas Secondary
<input checked="" type="checkbox"/>	Mouse, Mickey		M	2651459			2027	Mount Douglas Secondary
<input checked="" type="checkbox"/>	Mouse, Minnie		F	2651458			2027	Mount Douglas Secondary
<input checked="" type="checkbox"/>	Stark, *		F	2651462			2028	Mount Douglas Secondary

Select the students you want to retrieve a PEN for: Options > Show Selected

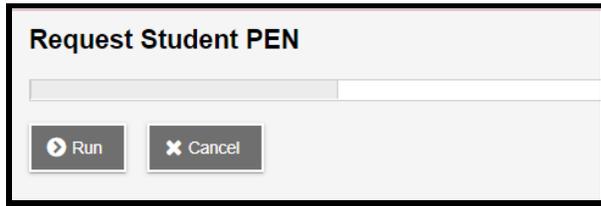
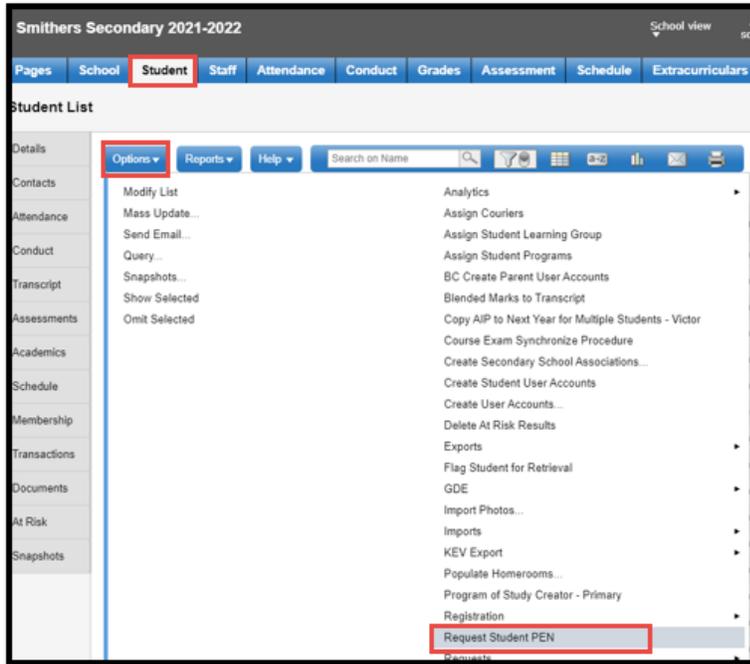


Options Reports Help Search on PEN

- Modify List
- Mass Update...
- Send Email...
- Query...
- Snapshots...
- Show Selected

Run the Request Student PEN procedure:

School View > Student top tab > Options > Request Student PEN



The Student PEN is immediately populated in the student record.



Mount Douglas Secondary 2021-2022 School view

Pages School Student Staff Attendance Conduct Grades Assessment Schedule Ex

Student List

Details Options Reports Help Search on Name 0 of 1 selected

Name	Alerts	Gender	Pupil #	PEN	Photo	YOG	School > Name
<input type="checkbox"/> Aardvark, Ella		F	2651466	191046325		2024	Mount Douglas Secondary

Other messages that might be received with the Request Student PEN procedure:

Messages
=====

Student 2651458 is not updated with a PEN, due to DOB_FUTURE issue. Please contact PEN Coordinator for correction. 1

Student 2651463 is not updated with a PEN, due to SAMENAME issue. Please contact PEN Coordinator for correction. 2

Student 2651469 has PEN 191046341 assigned already, will not be processed. 3

Student 2651459 is not updated with a PEN, due to BLOCKEDNAME issue. Please contact PEN Coordinator for correction. 4

Student 2651462 is not updated with a PEN, due to APOSTROPHE issue. Please contact PEN Coordinator for correction. 5

Multiple potential matches. PEN for student 2651468 will need to be updated as part of nightly batch processing. 6

Student 2651465 has PEN 191046358 assigned already, will not be processed. 7

Multiple potential matches. PEN for student 2651471 will need to be updated as part of nightly batch processing. 8

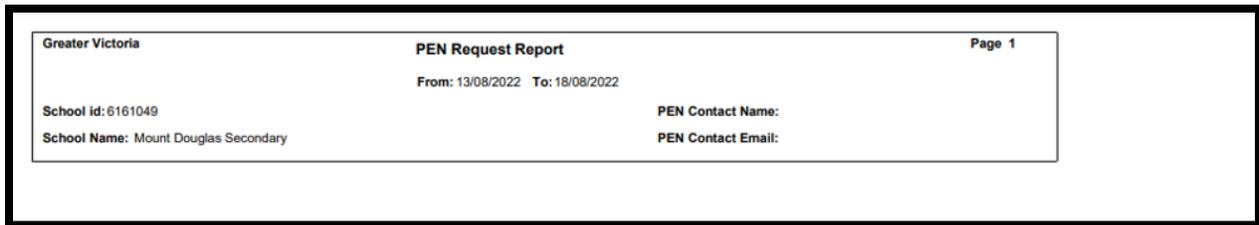
- Student record is not updated with a PEN (1, 2, 4, and 5)
- validation errors (summarized in Appendix A)
- Student record already has PEN (3 and 7)
- PENs have already been assigned
- Multiple potential matches found. PEN for student records will need to be updated as part of nightly batch processing (6 and 8)
 - the one-off PEN request process provides an immediate response so there is no opportunity for any human intervention on the PEN side
 - the nightly batch process will pick up the student and submit it via the batch process which allows it to go into a queue in the PEN Registry
 - the Ministry PEN coordinator will look at the multiple matches and determine which is the correct one to send back to the requesting school

2.4 PEN Request Report

This report should be run after the **Request Student PEN** Procedure. Reports are updated by the Procedure.

Note: The reports do NOT need the PEN Contact Add-On Role

The PEN Request Report summarizes the status and results of the PEN Requests submitted to the PEN Registry using the PEN Request Procedure, provides information about each student record that was submitted, and outlines details on both the successful and failed PEN assignments.

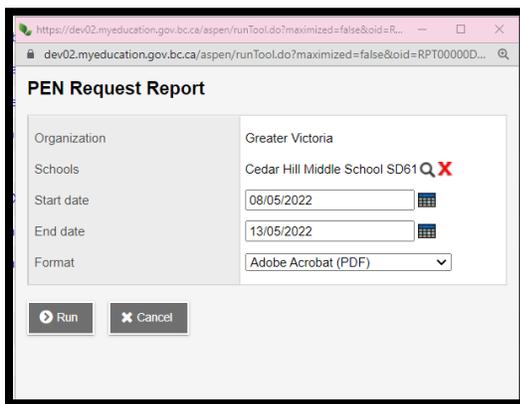


District View > Student top tab > Reports > PEN Request Report

When running this report from the District View, you have the option of choosing a single school, multiple schools, or all schools.

School View > Student top tab > Reports > PEN Request Report

When running this report from the School View, the report will default to the current school.



The report will display the following sections:

- New PEN assigned to students
- PEN cannot be assigned – It is already assigned to another student
- PEN cannot be assigned – Pupil number does not exist
- PEN request received validation errors
- PEN request received no response

2.4.1 New PEN assigned to students

If a student registration meets all validation requirements, a PEN will be assigned to the student record and the following message will display in the report:

New PEN assigned to students								
This section lists students whose PEN number assigned by the Ministry was successfully updated in MyEducation BC								
Date	Submission#	PEN	Pupil#	Legal Surname	Legal Given Name	Legal Middle Name	Birth Date	Gender
15/02/2022	M0491665	190828590	2599682	Malaga	Qasemahmed		12/02/2006	F
15/02/2022	M0491665	190828608	2599684	Jackson	Ayana	Kaur	11/09/2008	F

2.4.2 PEN cannot be assigned – It is already assigned to another student

PEN cannot be assigned - It is already assigned to another student											
This section lists students whose PEN number could not be updated in MyEducation BC because the PEN is already associated to another student in MyEducation BC											
Date	Submission#	PEN	Pupil#	Legal Surname	Legal Given Name	Legal Middle Name	Birth Date	Gender	Conflicting Pupil#	Conflicting School Name	Is Archived
14/02/2022	M0491673	134458207	2599684	Jackson	Ayana	Kaur	11/09/2008	F	1278977	Cougar Canyon Elem	N

In this case the student was not assigned a PEN:

- 1) A student was registered in MyEducation BC with Pupil # 2599684
- 2) There is a suspected duplicate student record with Pupil # 1278977
- 3) The duplicate student record is at Cougar Canyon Elem. Contact the Conflicting School to resolve the issue.
- 4) If “Is Archived” = Y, the duplicate student record exists in the Archive and the process for retrieving the student from the student archive should be followed. (Refer to the Enrollment and Demographics document on the Myeducationbc.info site for information on the “Flag for Retrieval” process.

2.4.3 PEN cannot be assigned – Pupil number does not exist

PEN cannot be assigned - Pupil# does not exist								
This section lists students whose PEN number could not be updated in MyEducation BC because the student no longer exists in MyEducation BC. For example, the student record was deleted via the “Delete Duplicate Student Record” process								
Date	Submission#	PEN	Pupil#	Legal Surname	Legal Given Name	Legal Middle Name	Birth Date	Gender
11/02/2022	M0491665	190828582	2599669	SCOUTTOOTOOSIS	JOYCECIARA		09/11/2004	F
14/02/2022	M0491665	190828582	2599669	SCOUTTOOTOOSIS	JOYCECIARA		09/11/2004	F
15/02/2022	M0491665	190828582	2599669	SCOUTTOOTOOSIS	JOYCECIARA		09/11/2004	F

In this case, a duplicate student record was identified and prior to the PEN being applied to the MyEducation BC record, the duplicate was deleted. The system then tried to apply the PEN to the student record, but the student registration is missing.

2.4.4 PEN request received validation errors

In this case, several students are registered that should return validation errors from the PEN Registry:

<input type="checkbox"/>	Name	Alerts	Gender	Pupil #	PEN	Photo	YOG	School > Name
<input type="checkbox"/>	Aasebo, Jago		F	2651464			2025	Mount Douglas Secondary
<input type="checkbox"/>	delete, Delete		F	2651463			2030	Mount Douglas Secondary
<input type="checkbox"/>	Fudd, Elmer		M	2651461			2034	Mount Douglas Secondary
<input type="checkbox"/>	Mouse, Mickey		M	2651459			2027	Mount Douglas Secondary
<input type="checkbox"/>	Mouse, Minnie		F	2651458			2027	Mount Douglas Secondary
<input type="checkbox"/>	Stark, '		M	2651462			2028	Mount Douglas Secondary

PEN request received validation errors											
This section is to list the records where a PEN request returned validation errors from the Ministry PEN system.											
Date	Submission#	Pupil#	Legal Surname	Legal Given Name	Legal Middle Name	Birth Date	Gender	Field	Type	Severity	
16/08/2022		2651458	Mouse	Minnie		01/01/2023	F	LEGALLAST	BLOCKEDNAME	ERROR	
16/08/2022		2651463	delete	Delete		01/01/2011	F	LEGALFIRST	SAMENAME	ERROR	
16/08/2022		2651459	Mouse	Mickey		01/01/2020	M	LEGALLAST	BLOCKEDNAME	ERROR	
16/08/2022		2651462	Stark	'		01/01/2010	M	LEGALFIRST	APOSTROPHE	ERROR	

Refer to Appendix A and B for a full list of Validation Fields and Error codes.

2.4.5 PEN request received no response

PEN request received no response							
This section is to list the records where a PEN request received no response from the Ministry PEN system.							
Date	Submission#	Pupil#	Legal Surname	Legal Given Name	Legal Middle Name	Birth Date	Gender
07/04/2022	M0504348	2599778	Khese	Shenjaqi		29/07/2009	F

The PEN request has not been processed by the PEN registry. The request is still in queue.

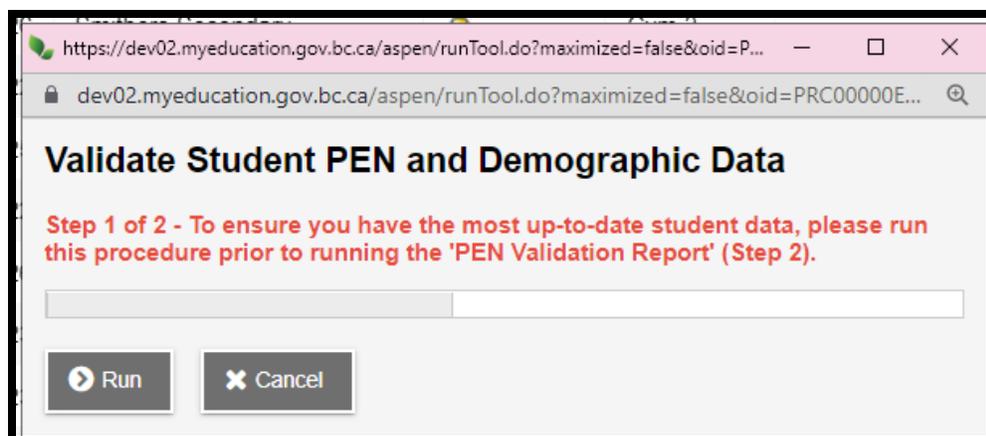
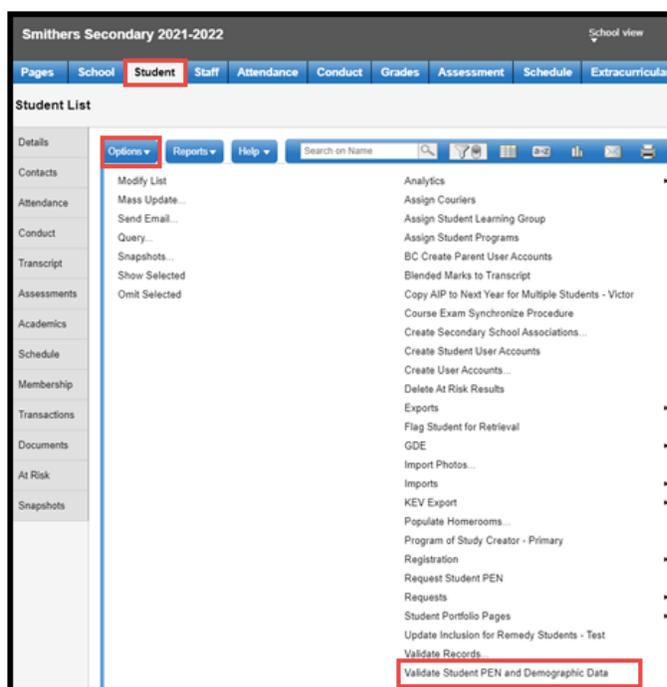
2.5 Validate Student PEN and Demographic Data Procedure

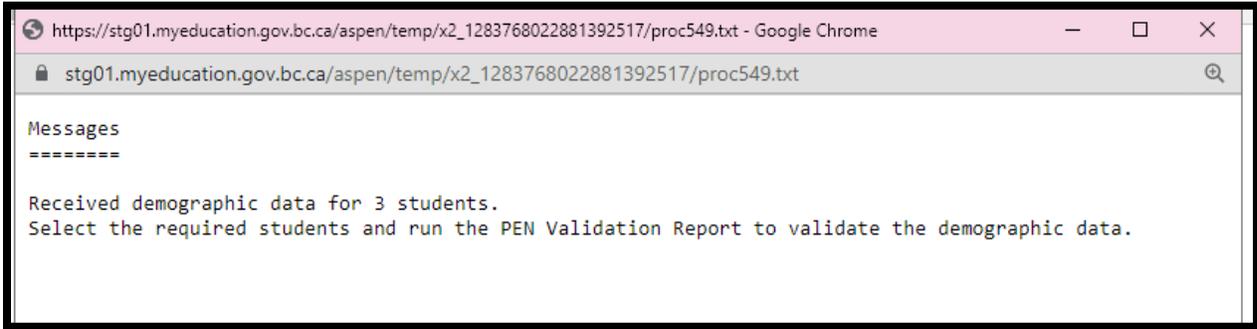
The Validate Student PEN and Demographic Data procedure pulls PEN student demographic information from the Ministry PEN system and should be run as 'Step 1 of 2' before the 'PEN Validation Report' (Step 2) to ensure you have the most up-to-date student data from the Ministry database

The demographic data that is retrieved from the Ministry PEN system database can then be displayed in the PEN Validation Report and compared to what is in MyEducation BC so users can update student demographic data as required.

Run this procedure prior to running the PEN Validation Report (Step 2).

School View > Student top tab > Options > Validate Student PEN and Demographic Data





2.6 PEN Validation Report

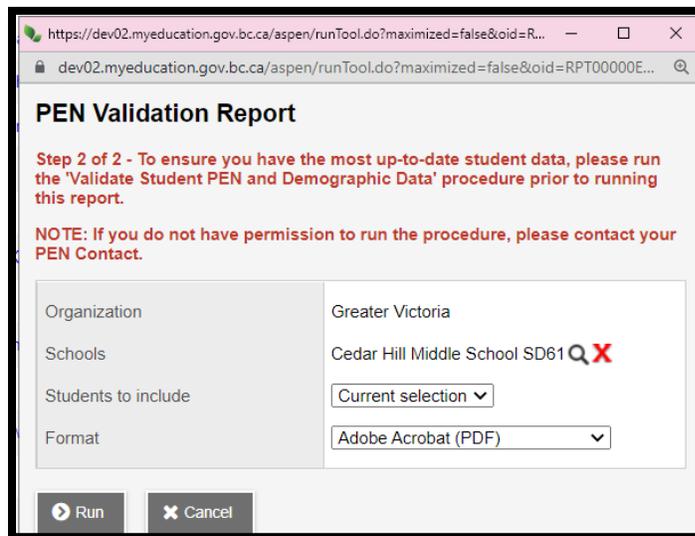
This report should be run after the Validate Student PEN and Demographic Data Procedure to ensure you have the most up-to-date student data from the Ministry database.

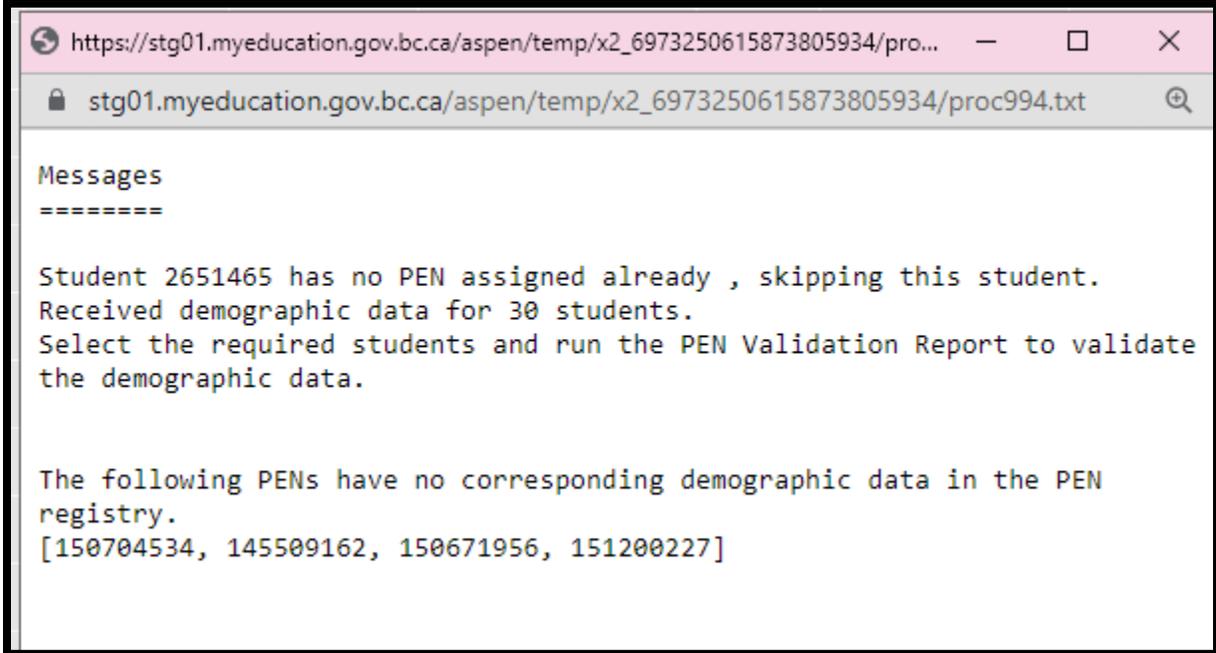
The PEN Validation Report displays student demographic data in MyEducation BC that is different than what is stored in the Ministry PEN system.

Differences between MyEducation BC data and the PEN registry data are highlighted with **BOLD** text.

District View > Student top tab > Reports > PEN Validation Report

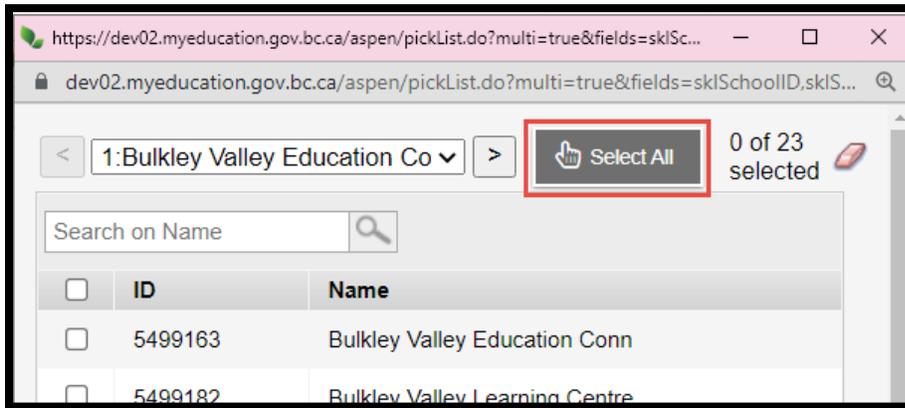
School View > Student top tab > Reports > PEN Validation Report





Greater Victoria		PEN Validation Report					Page 1		
School id: 6161025			PEN Contact Name: Tracey Cronk						
School Name: Cedar Hill Middle School SD61			PEN Contact Email: PENTEST@Victoria1.gov.bc.ca						
Students Whose Demographic Data is Different Between MyEducation BC and PEN									
If there is no PEN data for student, please run the 'Validate Student PEN and Demographic Data' procedure									
Date	PEN	Pupil#	Data Source	Legal Surname	Legal Given Name	Legal Middle Name	Birth Date	Gender	
13/05/2022	136472768	1384548	MyED	Alkhamis	Roclouie	Yinsum	29/12/2008	F	
			PEN	THOMAS	VERONICA	LOUISE	24/05/2009	F	
13/05/2022	139693303	1545055	MyED	Barve	Thanojan	Chazmineayze	05/04/2010	F	
			PEN	PETERS	JACOB	M	16/06/2010	F	
13/05/2022	138041611	1467720	MyED	Abdulhussain	Rebanta	Talyea	19/06/2009	M	
			PEN	MEHRA	ASHLEY		14/08/2009	F	
13/05/2022	136473279	1384795	MyED	Adamoski	Kristoferson	Anmoljeet	02/02/2008	M	
			PEN	LADEROUTE	ANGELA	AMANDA RITA	02/06/2008	M	
13/05/2022	139692610	1545181	MyED	Aguirremendoza	Xuelin	Livjit	03/10/2010	F	
			PEN	BEUGIN	SARAH	MARIE	25/03/2011	M	

Note – If you run this report from the District View for a list of students from multiple schools, you must choose “Select All” in the report parameter screen.



Appendix A – PEN Request Report Error Codes

Validation Issue Type Codes: a list of possible validation errors:

Code	Description
1CHARNAME	Field consists of just one character
APOSTROPHE	Field contains only an apostrophe character
BEGININVALID	Field begins with one of several special characters
BLANKFIELD	Required field is blank
BLANKINNAME	Field has embedded blanks
BLOCKEDNAME	Field value is on the list of blocked names, that are flagged as an error
CHKDIG	PEN not valid because check digit is invalid
DOB-INVALID	Birthdate is not a valid date
DOB_PAST	Birth date is before 1900
DOB_FUTURE	Birthdate is in the future
EMBEDDEDMID	The middle name is part of the first name
GENDER_ERR	Invalid Gender code
GRADECD_ERR	Invalid Grade code
INVCHARS	Field contains invalid character
INVPREFIX	Field starts with XX or ZZ
NUMBERNAME	The legal given name contains a number
OLD4GRADE	Age is too old for Grade
ONBLOCKLIST	Name matches one of the values on the block list: PEN_NAME_TEXT
PC_ERR	Postal Code is not in the format of a Canadian postal code
REPEATMID	Middle name is a repeat of the First of Last name
SCHARPREFIX	Field starts with an invalid special character
YOUNG4GRADE	Age is too young for Grade

Appendix B – Validation Issue Field Codes

When a student is registered in MyEducation BC and a PEN Request is sent to the PEN Registry, the system will perform validation checks on the following list of fields to ensure the validity of the data and the student information before assigning a new PEN to a student record.

Code	Description
LOCALID	Local identifier used by the school for the student
SUBMITPEN	Value provided by the school as a suggestion for the matching PEN
LEGALFIRST	Legal First Name or Names
LEGALMID	Legal Middle Name or Names
LEGALLAST	Legal Last Name or Names
USUALFIRST	Usual First Name or Names
USUALMID	Usual Middle Name or Names
USUALLAST	Usual Last Name or Names
POSTALCODE	Canadian Postal Code of student, or for offshore schools, postal code of the BC contact managing the school
GRADECODE	Code used to indicate the grade-level of the student at the time of the request
BIRTHDATE	Date of birth of the student
GENDER	Gender of the student