# Student Achievement
# Data Exchange

# 2018/19

# User Instructions
# For Submitters

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# 1. Overview

The purpose of the Student Achievement Data Exchange (SADE) is to collect course level achievement data through a single collection that can be used for multiple purposes.  SADE data will support policy development, monitoring, and compliance, as well as establish a flexible, core dataset that will support the integration and streamlining of legacy systems.  Beginning in May 2012 SADE will now be used to verify course completion for funding graduated adults under the Education Guarantee.

SADE data will be collected from the following schools:

- Independent Distributed Learning Schools (all grades)
- Public Distributed Learning Schools (all grades)
- Summer Schools (grades 1 to 12)
- Other public schools (including Continuing Education and Alternate Education Centres) teaching any courses in grades 8 to 12.

SADE is collected from Public schools and Districts under the School and Student Data Collection Order (M152/89).  SADE is collected from Independent Schools as per section 11.01 of the Independent School Distributed Learning Agreement. Under these respective orders and agreements, school boards/authorities are legally responsible for collecting and submitting achievement information to the Ministry.

## 1.1. General Process

The submitter's role in the collection of data through SADE generally follows five steps:

1) **Review**: Schools will use a local Verification Report or other local tools to review and verify the data to be extracted.  This report may contain some or all of the same tests for errors and warnings as are found in the SADE File Specifications posted online: http://www2.gov.bc.ca/gov/content/education-training/administration/kindergarten-to-grade-12/data-collections/sade.

2) **Extract**: Schools will extract a copy of their data from their local student information system (like MyEd BC), to load into the SADE system.  If a school doesn't have a formal student information system, this file can be created using Excel (see file specifications for details).

3) **Submit**: Log into the SADE system, browse for the file, and submit the file for validation.

4) **Check**: Check the results to review any error or warning messages.  Correct if necessary in your source system, and repeat steps 2 and 3.

5) **Release**: Contact your district SADE Releaser to let them know your data is ready to be released to the Ministry.  The person responsible for releasing the data can have a final look, and then simply releases the data.

The data collection windows are generally open for 31 days four times per year, in January, April, July, and October.  Actual dates may vary, depending on technical changes, holidays, weekends, etc.  Collection dates will be posted on the Ministry's data collection website at: http://www2.gov.bc.ca/gov/content/education-training/administration/kindergarten-to-grade-12/data-collections.

## 1.2.    Logging into DX$^2$ and SADE

From the link on the data collection website, click on the DX2 Application link, in the right hand column.

The system will take you first to the BCeID logon page (below), where you will enter your Business BCeID and password.

The next screen will be the Data Exchange (DX$^2$) screen below, listing the applications to which you have access.  You will only see this screen if you have access to more than one application: select "Student Achievement Data Exchange (SADE)" to continue:



When a SADE specific message has been posted by the Ministry SADE administrator, it will take you to the Memo screen to view the posting.  Click "Continue" to move to the next screen.

If you only have access to one application, and no memos have been posted for SADE, you will automatically go to the SADE Home screen where files can be submitted and errors/warnings reviewed:



# 2. Submitting a File

## 2.1.      General Process

For users with the role of "Submitter", the Home screen will display the submission status for your school or schools, for the reporting period specified.

This screen allows you to view submission status from previous reporting periods by selecting the arrow to the right of the current reporting period and choosing a different reporting period from the dropdown list.

By selecting Data Submission in the left hand column, you can begin your new submission. The following Submission screen will appear.



All fields in this window are required fields (as indicated by the * ).

The Submission Type will allow you to choose from SADE Standard (to submit a regular SADE File) or SADE Corrections (to submit a Correction file, containing corrections to previously submitted SADE records).

The Reporting Period will be pre-defined and not editable.

The School/School District drop down option will list the school or schools for which you are designated the Submitter. Select the school for which you want to submit data. If you may submit for only one school, then this field will be pre-defined for that school, and is not editable.

Notice the "Source File" field has a Browse button beside it. By clicking on this button, you can search your computer for the file you wish to submit. A "Choose File" window will appear, allowing you to navigate to where you have stored your file. Select the file, and click on the Insert or Open button at the bottom of the window.

Back on the Data Submission window, click the "Add Submission" button. Your file will be added to the "Submit Data for Validation" list as shown below.



If you are authorized to submit files on behalf of multiple schools, you can repeat the Browse function to select the additional extracts you wish to submit.

Important Note: if you have previously submitted a file for a school which validated without any errors, a warning will pop up to ask you to confirm that you want to over-write the previously submitted file. If you press OK, it will add the file to the bottom section, ready to be submitted.

Once you are ready to submit your file(s), check the box to the left of the file(s) in this bottom section, and click the Submit button. The files will then be submitted for validation. You will be returned to the Home screen, where the new submission status will be displayed next to the corresponding school. Depending on the size and number of files submitted, SADE may take a few minutes or up to an hour to finish the validation process. You may wish to Refresh the home screen occasionally to see whether the validation has completed, by either pressing F5 or selecting View / Refresh.

# Checking Your Data in DX[2]

## 2.2. Reviewing Error Reports

Once the validation process is complete, the Home screen will show your submission and a Status. The table below shows the list of possible values for status, and what they mean:

| Status Code | Meaning |
|---|---|
| S | Submitted, Validation not complete |
| SF | Submission failed |
| V | Validation completed without errors (but may still contain warnings) |
| VF | Validation complete, but file contains errors |
| U | (Uploaded) File has been added to the 'Submit for Validation List' but has not yet been Submitted |
| R | File has been successfully validated and released |

*A status of SF means the DX2 system could not read your file and validation was not performed. If you see this status code you should check that you have uploaded the correct file and that your file complies with the* SADE file specification. *Files created or edited on a Macintosh computer may also produce this status code due to file format differences. If you are using a Mac and encounter this situation see the workaround outlined in section 1.1.3 of the* Tips & Tricks document.

If the validation process finds errors in the submission files, these will be identified in the Errors column on the Submission Status screen:

Similarly, any warnings will be identified in the Warnings column.  This error and warning report can be opened using Excel for review, sorting, saving and printing.  See section 5 for detailed explanations of each error and warning message.

*Note: Unless a file contains more than 100 warnings, warnings will not stop a file from being accepted and released, but they are meant to highlight unusual data found to be outside normal limits.  Files containing more than 100 warnings will generate an error and will not be able to be released.  By clicking on "View" in the Message File column, you will be presented with a display of the errors and warnings found.*

| | A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|---|
| 1 | Name of File Submitted | SADE_Content11-14_06715002.csv | | | | | |
| 2 | School District Number | 67 | | | | | |
| 3 | School District | Okanagan Skaha | | | | | |
| 4 | School | Penticton Secondary | | | | | |
| 5 | School Number | 6715002 | | | | | |
| 6 | Reporting Period | Jul 2008 - Dec 2008 | | | | | |
| 7 | File Submitter | Gnech, Eva EDUC:EX | | | | | |
| 8 | Date Submitted | 12/11/2008 | | | | | |
| 9 | Time Submitted | 12:25:33 | | | | | |
| 10 | # of Records | 49 | | | | | |
| 11 | # of Errors | 5 | | | | | |
| 12 | # of Warnings | 0 | | | | | |
| 13 | | | | | | | |
| 14 | | | | | | | |
| 15 | RECORD# | SCHOOL ID/FILE NAME | PEN | COURSE CODE | ACTIVE DATE | Severity | Message |
| 16 | 1 | | 123456782 | A3DP-12 | 20080903 | ERROR | 11: School id (MINCODE) must be included. |
| 17 | 2 | 6715002 | | ACSF 11 | 20080828 | ERROR | 13: PEN must be included. |
| 18 | 3 | 6715002 | 100000133 | AF   12 | 20080828 | ERROR | 14: The PEN provided is not a valid PEN, it does not pass the Checkdigit Validation. |
| 19 | 4 | ABC | 116263849 | ACHE-12 | 20080903 | ERROR | 30: The school id (MINCODE) must be alphanumeric to a maximum of 8 digits. |
| 20 | 5 | SADE_Content11-14_06715002.csv | | | | ERROR | 2: The submission contains records for a school other than the one you selected and/or are autl |
| 21 | | | | | | | |
| 22 | | | | | | | |
| 23 | | | | | | | |
| 24 | | | | | | | |
| 25 | | | | | | | |
| 26 | | | | | | | |
| 27 | | | | | | | |
| 28 | | | | | | | |
| 29 | | | | | | | |
| 30 | | | | | | | |
| 31 | | | | | | | |

.csv]SADE_Content11-14_06715002(2)

## 2.3.    Corrections to SADE files not yet released

Any records with Errors need to be corrected before they can be accepted by SADE for release to the Ministry.  These errors should be fixed in the local student information system, and a new extract created.  This new extract can then be submitted again, as described in section 2.

If a school doesn't have a student information system, these corrections can be made in Excel, or in whatever software was used to create the extract.  These schools should ensure that any associated records held within the school are also updated, so the same errors are not produced in future extracts.

If needed, a file for a school can be resubmitted as many times as necessary.  Each resubmission will over-write the old version, so only the current copy is kept in $DX^2$.

Once the file is released to the Ministry by your board, no further changes can be made to the file.

# 3. Releasing Files to the Ministry

The release function in SADE is an authorization step that indicates to the system that you are confident the data submitted is complete and accurate, and that you are releasing this data to the Ministry.  For public schools, this authorization should be completed by the Superintendent or delegate.  Submitters need to contact their district releaser when the files are ready for release to the Ministry.  For independent schools, this is typically done by the school principal.

# 4. SADE Correction type files

Most corrections to student course records will be collected through the normal SADE process, by collecting both the current and previous quarter's data in each submission.  If a change is required outside of the normal collections, you should submit a file through the SADE Corrections.  Any changes to records closed more than 6 months before the current reporting period can be made using this tool.

A Corrections file should also contain any records that should be deleted from previous submissions, such as a record where the wrong course code was submitted for a student, or a duplicate record exists in the Education Data Warehouse you would like to have removed.

A SADE Corrections file is a separate submission type.  The SADE Corrections file is similar to the regular SADE submission but includes one additional column identifying whether the record is an Update or a Deletion.  When you are creating the Corrections file be sure to name the file so you can easily identify it as a Correction file when you are browsing to upload.  See the file specifications on the data collections web site for details on the file format.

## 4.1.    Submitting a Correction File

For users with the role of "Submitter", the Home screen will display the submission status for your school or schools, for the reporting period specified.

By selecting Data Submission in the left hand column, you can begin your new submission.

The Submission Type drop down list will allow you to choose the submission type. In this case you would choose SADE Corrections (to submit a Correction file, containing corrections to previously released SADE records). Please note: You must have the correct authorization to submit a "C" correction type file.

The School/School District drop down option will list the school or schools for which you are designated the Submitter of a Corrections file. Select the school for which you want to submit data. If you may submit for only one school, then this field will be pre-defined for that school, and is not editable.

The upload function is the same for Corrections as it is for Standard SADE files. Click the Browse button and a "Choose File" window will appear, allowing you to navigate to where you have stored your file. Select the file, and click on the Insert or Open button at the bottom of the window.
** Remember Standard files and Correction files have slightly different file layouts. You must choose the correct option and the correct file so your submission does not fail.

Back on the Data Submission window, click the "Add Submission" button. Your file will be added to the "Submit Data for Validation" list. If you are authorized to submit files on behalf of multiple schools, you can repeat the Browse function to select the additional extracts you wish to submit.

**Important Note:** if you have previously submitted a Corrections file for a school which validated without any errors, a warning will pop up to ask you to confirm that you want to over-write the previously submitted file. If you press OK, it will add the file to the bottom section, ready to be submitted.

Once you are ready to submit your Corrections file(s), check the box to the left of the file(s) in this bottom section, and click the Submit button.  The files will then be submitted for validation.  You will be returned to the Home screen, where the new submission status will be displayed next to the corresponding school.

Once the validation process is complete, the Home screen will show your submission and a Status.

If the validation process finds errors in the submitted files, these will be identified in the Errors column on the Submission Status screen.  Similarly, any warnings will be identified in the Warnings column.  This error and warning report can be opened using Excel for review, sorting, saving and printing.  See section 5 for detailed explanations of each error and warning message.

## 4.2.    Corrections to SADE Correction files not yet released

Any records with Errors need to be corrected before they can be accepted by SADE for release to the Ministry.  These errors should be fixed in the .csv file.  The corrected file can then be submitted again, as described in section 4.1.

If needed, a Correction file for a school can be resubmitted as many times as necessary.  Each resubmission will over-write the old version, so only the current copy is kept in $DX^2$.

Once the Corrections file is error free it may be released to the Ministry—this release needs to be done in addition to the release of the Standard files.  Once the file is released to the Ministry by your Superintendant or delegate, no further changes can be made to the file.

# 5. Error and Warning Message Descriptions

| MESSAGE | TYPE | DESCRIPTION |
|---|---|---|
| 1: This file is not of the correct file type, it must be a CSV file. | ERROR | SADE data files must be in CSV format.  See the SADE file specification for more details. |
| 2: The submission contains records for a school other than the one you selected and/or are authorized for to submit. | ERROR | One or more school codes in the file do not match the school chosen when originally submitting the file or are not recognizable to the system. |
| 4: School id (MINCODE), PEN, Course Code, Active Date and Class Identifier combination must be unique.  There is more than one record in this submission with the same combination of these fields. | ERROR | If you see this error it means you have duplicate records or have not properly identified that the record is unique using the Class ID field.  For example, a student is taking two blocks of PE, both starting on the same date.  In this case you must use the Class ID field to make each record unique because the PEN, course code and start dates are the same in both records.  See page 3 of the SADE file specification. |
| 5: Mark Type, Mark Value and Completion date must all be entered, or must all be blank. | ERROR | If Mark Type, Mark Value or Completion date has been provided, all three fields must be completed. |
| 7: If school mark type is 1, then school mark value must be a valid letter grade. | ERROR | If a Mark Type of 1 has been entered, a valid letter grade must be entered in the Mark Value field.  See page 5 of the SADE file specification for a list of valid values. |
| 8: If school mark type is 2, then school mark value must be an integer from 0 to 100 inclusive. | ERROR | If a Mark Type of 2 has been entered, a number from 0 to 100 must be entered in the Mark Value field. |
| 9: If school mark type is 3, then school mark value must be a valid value on the three-point scale. | ERROR | If a Mark Type of 3 has been entered, a number from 1 to 3 must be entered in the Mark Value field. |
| 10: If school mark type is 4, then school mark value must be a valid value on the four-point scale. | ERROR | If a Mark Type of 4 has been entered, a number from 1 to 4 must be entered in the Mark Value field. |
| 11: School id (MINCODE) must be included. | ERROR | The ministry school code must be included in each record. |
| 13: PEN must be included. | ERROR | A PEN must be provided for each record. |
| 14: The PEN provided is not a valid PEN, it does not pass the Checkdigit Validation. | ERROR | The PEN provided is not a valid PEN.  If you are confident the PEN is correct it is possible the PEN has been merged by ministry staff.  Contact the PENS Coordinator to confirm the PEN. |
| 15: Course Code must be included. | ERROR | A course code must be provided for each record. |
| 17: The course-code provided is not a valid course-code. | ERROR | Please check that the code has been entered correctly or validate that it is correct using the Course Registry.  Ensure that you have entered the correct number of spaces or dashes as described in section 1.5 of the Tips & Tricks document. |
| 18: The course provided was not valid for the date on which the student became active in this course. | ERROR | The course was not open on the student's active date.  You can verify the correct open/close dates for courses using the Course Registry. |

| MESSAGE | TYPE | DESCRIPTION |
|---|---|---|
| 19: Active date must be included | ERROR | An active date must be provided for each record. |
| 20: Active Date must be in the format YYYYMMDD. | ERROR | Active Date must be in the format YYYYMMDD. |
| 21: Active date must not be after the end of the current quarter: Report this record in a later submission. | ERROR | Active date must not be after the end of the current reporting period. Check that the active date is correct or report this record in a future submission. |
| 23: The number of credits awarded is not a valid number of credits for the course listed. | ERROR | Invalid or missing number of credits for the course code provided. Check the Course Registry for the correct credit value. Note that credit values are only valid for Ministry and BAA 10 - 12 courses. This field must be blank if the course has no credit value (i.e. LD or courses for grades under 10). |
| 24: The School Mark Type provided is not valid. | ERROR | The School Mark Type provided is not valid. See the SADE file specification for a list of valid values. |
| 25: The Equivalency/Challenge entered is not a valid value; valid values are E to indicate Equivalency, or C to indicate Challenge. | ERROR | The Equivalency/Challenge entered is not a valid value; valid values are E to indicate Equivalency, C to indicate Challenge or blank if Equivalency/Challenge does not apply. |
| 26: The completion date entered must be greater than or equal to the active-date. | ERROR | The completion date for the course cannot fall before the active date. |
| 27: The completion date entered must be in the format of YYYYMMDD. | ERROR | The completion date must be in the format YYYYMMDD. |
| 28: The completion date cannot be greater than the end of the submission window. | ERROR | The completion date cannot fall after the end of the current submission window. |
| 29: The student must have been actively taking this course during the current or previous reporting period. | ERROR | The completion date must fall within the current or previous reporting period. You must use a Correction file to update a record with a completion date prior to the start of the previous reporting period. |
| 31: The PEN must be a numeric of 9 digits | ERROR | The PEN must be a 9 digit number. |
| 32: The Course Code must be alphanumeric to a maximum of 8 digits. | ERROR | The course code provided is not a valid course code. Please check that the code has been entered correctly or validate that it is correct using the Course Registry. Ensure that you have entered the correct number of spaces or dashes as described in section 1.5 of the Tips & Tricks document. |
| 34: The credits must be a valid numeric of 1 digit. | ERROR | Credit value must be a one digit number. |
| 35: Mark Type must be a valid numeric of 1 digit. | ERROR | Mark Type must be a one digit number. |
| 36: Mark Value must be a valid alphanumeric of maximum 3 digits. | ERROR | Mark Value must be alphanumeric to a maximum of 3 digits. |
| 37: Equivalency/Challenge must be a valid alphanumeric of 1 digit. | ERROR | The Equivalency/Challenge entered is not a valid value; valid values are E to indicate Equivalency, or C to indicate Challenge. |

| MESSAGE | TYPE | DESCRIPTION |
|---|---|---|
| 38: The completion date must be a valid date. | ERROR | The completion date for this record is not a valid date. Usually due to a typo or reversal of the day/month. All dates must be formatted YYYYMMDD |
| 40: This submission is not a valid SADE submission. Please see the SADE specifications for the columns that must be included in a SADE submission. | ERROR | Data has not been validated. Ensure that the fields and formatting in your file comply with the SADE File Specification and resubmit. (This message may also appear when submitting SADE files edited on a Macintosh computer. In this case see the workaround outlined in section 1.1.3 of the Tips & Tricks document.) |
| 41: Student has exceeded the maximum number of courses within this reporting period. | WARNING | The number of courses reported for this student exceeds the reasonable allowed in a reporting period (25). |
| 42: Your completion date is past the end of the reporting period. | WARNING | Course completion date is past the end of the reporting period. While it is allowed to report a course completion date that falls within the current release window, this warning message is provided to flag potential errors. |
| 43: An I is not a final mark. If the final school mark is not yet known, please remove this mark or ensure this mark is updated and included in the next submission. Any I left uncorrected may be converted to an F. | WARNING | An I is not a final mark. If the final school mark is not yet known, please remove this mark or ensure this mark is updated and included in the next submission. Any "I" left uncorrected will be converted to an "F" in the next reporting period. |
| 51: Correction Type must be provided. | ERROR | A Correction Type must be provided for each record in a correction submission. The field was left blank. Valid values are U for Update and D for Delete. |
| 52: Correction Type must be set to U or D. | ERROR | Correction Type must be U for update or D for delete. The field contains an incorrect value. |
| 53: The course was completed when the school was no longer open. | ERROR | The course completion date cannot fall after the school's close date. |
| 54: The course was started when the school was no longer open. | ERROR | The course active date cannot fall after the school's close date. |
| 55: The Class Identifier must be a maximum of 10 characters. | ERROR | The Class ID has exceeded the maximum of 10 characters. |
| 56: The Class Identifier must be all uppercase. | ERROR | All characters in the Class ID must be uppercase. |
| The number of errors exceeds the maximum. Please correct the data in your source system and re-extract before resubmitting. | ERROR | If the system encounters more than 100 errors it stops validating further and returns this message. (You may actually have more than 100 errors.) Correct the data in your source system and resubmit. |
| The number of warnings exceeds the maximum. Please correct the data in your source system and re-extract before resubmitting. | ERROR | If the system encounters more than 100 warnings it stops validating further and returns this message. (You may actually have more than 100 warnings.) Correct the data in your source system and resubmit. |