



Wyoming Integrated Statewide Education Record ID (WISER ID)

Data Guidelines



Wyoming Data Guidelines for the WISER ID

WISE will require clean, accurate data from the SIS to function properly. Specifically, each student record must contain (blanks are not acceptable) the following fields:

1. Legal Last Name
2. Legal First Name
3. Gender
4. Date of Birth
5. Current Grade Level
6. Local Student ID
7. Race / Ethnicity
8. Current District ID
9. Current School Year

In addition, WISE will use the following fields, if data exists to assist in matching:

1. Legal Middle Name
2. Legal Name Suffix
3. Social Security Number
4. State ID
5. Current School ID

Districts should go through the following guidelines to ensure that their data conforms prior to submitting data. All these data elements are carried by the Student Locator object in SIF.

Student Locator Data Element Table

Element Name	Length	Data Type	Format Rules	Allowable Values	Blanks Allow?
Last Name	25	varchar2			n
First Name	15	varchar2			n
Gender	1	varchar2	- only one value	M, F	n
Date of Birth	10	ISO-8601 date	- must be between 3 and 22 years old - YYYY-MM-DD format	YYYY-MM-DD	n
Current Grade Level	2	varchar2	- grades 1- 9 must have a leading zero - no "KG"	PK, HK, FK, 01 ... 13	n
Local Student ID	10	varchar2	- the SIS ID number	any	n
Race/Ethnicity	1	varchar2	- only one value	A, B, H, I, W	n
Current District ID	7	varchar2			n
Current School Year	4	varchar2	- must be in "YYYY" format - School Ending Year -> '2005' for 2004-2005	YYYY	n
Middle Name	15	varchar2	- use full name		y
Name Suffix	8	varchar2	- use roman numerals for numbers (i.e. "the third" becomes "III") - use "Jr." for Junior	Jr., II, III	y
Social Security	9	varchar2	- no hyphens	XXXYYZZZZ	y
State ID	8	varchar2	- only integers - passes check digit formula		y
Current School ID	7	varchar2			y



Guidelines

(1) **State Student Record ID Field**

All Wyoming Student Information Systems (SISs) will need a field in which to hold the Record ID. We recommend that if you use Powerschool or SASI XP that you contact your user group to determine which field in the SIS you should utilize. It will make supporting the process much easier if everyone using the same vendor uses the same location in which to store the ID. In South Carolina, for instance, the SASI XP users aligned on the *AltID1* Field.

The ID field should be cleared of all data. Important data should be moved to other fields. WISE will write over all data in this field. When checking for students without state IDs, it is important that this field not contain any data. In addition, it is recommended that this field be locked down to casual user input so no data can be entered directly into this field in the future.

The state student record ID number is 8 digits long: 7 digit number plus a check digit (“Checkdigit”). A Checkdigit is a digit added to a number for the purpose of detecting the sorts of errors humans typically make on data entry.

No ID will have leading zeros.

Any number that contains a string 3 or more characters long of the same digit are removed. That is, no ID will contain the string ‘333’ or ‘7777’.

The Checkdigit algorithm is based on the International Standard Book Number (ISBN) check digit system. Each digit is weighted according to its position in the number and the Checkdigit is chosen so the weighted sum is evenly divisible by 11. The Checkdigit is the rightmost digit in an 8-digit number. The first, that is to leftmost, digit is multiplied by 8, the second digit is multiplied by 7, the third is multiplied by 6, all the way through to the seventh. The weighted sum is divided by 11. Since the remainder resulting from division by 11 can be any number between 0 and 10, student ID’s that generate a Checkdigit of 10 are eliminated from the pool.

This scheme detects any single error and the transposition of any two digits at any distance.

Steps to validate an ID

The above into broken into steps. We will use the example number: 31524478

1. Begin with an ID in the form of :

Digit1, Digit2, Digit3, Digit4, Digit5, Digit6, Digit7, Checkdigit

Digit1 cannot equal zero.

No three or more consecutive digits can be the same number.

2. Apply the below formula:

$Digit1*8 + Digit2*7 + Digit3*6 + Digit4*5 + Digit5*4 + Digit6*3 + Digit7*2 + Checkdigit*1$





3. Divide the result of the formula by eleven (11).
4. If the result has a non-zero remainder after dividing by eleven (i.e. does not divide evenly by eleven) the ID is bad.

Example:

Given the number 3 1 5 2 4 4 7 8 the check equation is:

$$(3 \times 8 + 1 \times 7 + 5 \times 6 + 2 \times 5 + 4 \times 4 + 4 \times 3 + 7 \times 2 + 8) / 11 = 121 / 11 \text{ [remainder} = 0 \text{]}$$

Thus it is a valid ID.

Steps to create a Checkdigit

When generating a new student record ID, the following steps are used to determine the Checkdigit:

1. Begin with a pre-Checkdigit ID in the form of :

Digit1, Digit2, Digit3, Digit4, Digit5, Digit6, Digit7

Digit1 cannot equal zero.

No three or more consecutive digits can be the same number.

2. Apply the below formula:

$$Digit1 * 8 + Digit2 * 7 + Digit3 * 6 + Digit4 * 5 + Digit5 * 4 + Digit6 * 3 + Digit7 * 2$$

3. Divide the result of this formula by eleven (11).

$$(Digit1 * 8 + Digit2 * 7 + Digit3 * 6 + Digit4 * 5 + Digit5 * 4 + Digit6 * 3 + Digit7 * 2) / 11$$

4. Identify the remainder from the formula in step three (in this example 3/11ths is the remainder value, so the remainder is “3”).

5. Subtract the remainder from 11 to get the Checkdigit.

$$Checkdigit = 11 - Remainder$$

Example:

If the pre-Checkdigit student record ID is 3152447 then the Checkdigit is calculated as:

11 - (3x8 + 1x7 + 5x6 + 2x5 + 4x4 + 4x3 + 7x2)/11 [determine the remainder] So:

$$11 - (113/11) \text{ [determine the remainder, in this case "3"]}$$

$$11 - 3$$

$$8$$

(2) RECOMMENDATION: Use Complete Legal Names.

VERY IMPORTANT: All name changes must be made at the local level.

All name fields should be in formal case. Formal case indicates that the first letter of the first and last names are capitalized. There may be exceptions for hyphenated, apostrophized, or compound names.

The “LastName”, “FirstName”, and “MiddleName” fields should contain the student’s legal name. The fields should not be used to contain nickname, generation code or any information other than the name as it appears on the birth certificate or subsequent legal document, if available.

If legal name contains more than one word in first, middle or last names, the name should appear with a space in between the words or a hyphen as it appears in the legal document. Although most SIS student display screens only display a limited number of characters, the SASI database, for instance, can accommodate up to 40 characters in last name field (20 characters in the first name field and 13 characters in the middle name field). The full name as it appears on the birth certificate should be entered.

All name fields including “MiddleName” should include the full name, not an abbreviation or initial unless that is what appears on the birth certificate. “NMN” should not be used to signify no middle name. In this case, the field should be left blank.

(3) Separate nicknames from formal names.

Make sure that nickname (i.e. “Buddy”) is in the nickname field on the student screen.

(4) Put generation code in correct field.

Make sure that generation suffix (Jr., II, III, etc.) has been removed from the name fields and placed in your SIS’ “Generation” field.

(5) Remove special characters. --> , * () “

Remove all commas (,), asterisks (*), parenthesis (“(“or”)”), and quotes (“”) from name fields. Periods should only be used when they appear on the birth certificate.

Apostrophes (’), hyphens (-), and spaces between multiple words in a name field are acceptable.

Special characters that are part of ethnic/cultural names (such as the "n" with a tilde over it in many Hispanic names, accented “e” in some French names, vowels with two dots) can be used as long as they use the ASCII US/DOS US standard.

(6) Use of Caps.

Use of ALL caps, all small case, or any combination in name fields will not impact the WISER ID System. We do however recommend using formal case.



(7) Gender, ethnicity and DOB.

- The gender field should only contain “M” or “F”.
- The ethnicity field should contain “A”, “B”, “H”, “I”, or “W”.
- Date of birth must be in the ISO 8601 format (<http://www.w3.org/TR/NOTE-datetime>): “YYYY-MM-DD” and must use a valid date range for a student (ages 3-22).

(8) School and District ID

This is the School ID where the student is currently enrolled. School must be located in the district that the submitting user has set as his/her current location. If not, the system will consider that record invalid upon submission and the user will have to repair the record.

This is the District ID where the student is currently enrolled. District must be the same as the district that the submitting user has set as her/her current location. If not, the system will consider that record invalid upon submission and the user will have to repair the record.

(9) Local Student ID

ID used in the local Student Information System to uniquely identify the student. The primary purpose of this field is to provide a mechanism to import student data from the Uniq-ID System back into the local Student Information System. In addition, this field is used in a limited capacity to match student records within the Uniq-ID System.

