Best Practices

Mapping Secondary School Courses
To
School Codes for the Exchange of Data
(SCED)

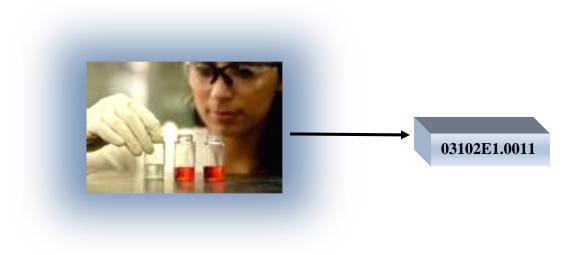
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The Wyoming Common Course Code Implementation
Taskforce

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Overview

The need for a common course coding system in Wyoming high schools evolved as a result of state and federal reporting requirements. However, the adoption of a common course system also provides several other benefits to educational institutions:

- -increased efficiency in determining class placement for transferring students between high schools;
- -increased efficiency in enrollment, financial assistance, and placement decisions at the postsecondary level;
- -more possibilities to perform longitudinal studies that will assist policy makers in their efforts to increase student performance;
- -evolution of a full course catalog that will potentially eliminate other data collections

The School Codes for the Exchange of Data (SCED) developed by the National Center for Education Statistics (NCES) of the U.S. Department of Education was adopted by the Wyoming Department of Education (WDE) as the secondary school course classification system to be used in Wyoming (see WDE Superintendent Memorandum No. 2009 – 002 of 1/9/2009).

The Wyoming Common Course Code Implementation Taskforce (WCCCIT), consisting of WDE and school district personnel, was established in December of 2008 to facilitate the process of instituting the NCES codes state-wide.

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Pilot Study

The taskforce included nine pilot districts to help identify potential obstacles in the common course coding mapping process, which include the steps involved in assigning a SCED code to an existing course. Based on information gathered from the pilot districts, the taskforce developed this *Best Practices* document to help the remaining districts map their existing courses accurately and efficiently.

Common Course Code Implementation Pilot Districts:

- Albany #1
- Fremont #1
- Fremont #2
- Fremont #21
- Laramie #1
- Lincoln #2
- Park #1
- Sweetwater #2
- Weston #7

A Brief Introduction to the Course Classification System

The SCED code consists of 12 characters that are divided into 4 basic elements;

Element 1, Characters 1-5: Course Description (Subject Area and Course

Identifier)

Element 2, Character 6: Course Level

Element 3, Characters 7-10: Available Credit

Element 4, Characters 11-12: Sequence

Example of a complete SCED code: "02052G0.5012"

1. Characters 1-5: 02052 = Subject Area Math: 02

= Math Course Identifier for Algebra I: 052

2. Character 6: G = Course Level of "General"

3. Characters 7-10: 0.50 = Credit of one-half Carnegie unit

4. Characters 11-12: 12 =1st part of a 2-course sequence

Note: NCES SCED codes are not intended to be replacements for local, district-assigned Course Names, Course IDs, Course Content descriptions, or Section IDs. Do not delete this information from your Student Information System or other databases that your district uses to manage course information.

Some schools have replaced their current school IDs with the NCES SCED codes. It is recommended that you have an in-depth discussion with proper district authorities if you are thinking about eliminating current school codes.

Please refer to Appendix A for a comprehensive explanation of each element, their valid values and examples.

Additional scenarios and illustrations of the Sequence element (Element 4) start on page 6.

Methods of Mapping Courses to SCED Codes

There are two alternatives for assigning a SCED code to a local course; <u>manually</u> or <u>electronically</u>.

Manual Mapping:

Manual mapping simply means that district staff compares the content for each local course to course descriptions listed in the SCED guide book (Appendix A) and identifies and documents the best match. Once a match is found, the five digit SCED course description code is recorded (first element of the entire code). The next step is to determine the Course Level, Available Credit and Sequence to complete the twelve character code (the remaining three elements). This process continues until all courses in the current course catalog have an associated SCED code.

Electronic Mapping:

Districts have the option to use an application called "CourseWalk" supplied by the WDE to map their local courses and/or validate manually mapped courses. CourseWalk is free and is available through Fusion at http://edu.wyoming.gov/.

WDE will offer hands-on training sessions on this application around the state. Locations, dates and times for these trainings will be announced as soon as they are set. Additionally, complete step-by-step instructions for the CourseWalk application can be found in Appendix B.

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Most pilot districts found the manual method to be sufficient. Courses were divided into groups by academic department and submitted to the department heads for SCED Course Description matching, which accounted for the first five characters of the code. The remaining parts of the code were completed by Curriculum Coordinators, Counselors, or Administrators.

Based on feedback from the pilot districts on the CourseWalk application, the software has been enhanced to reflect the functionality the users were looking for. Although its use was limited during the pilot study, an improved version is available through the WDE for districts who want to explore both methods of matching their courses to SCED.

Scenarios and Examples

Pages 7 – 10 of Appendix A provide explanations and a few examples of each of the four elements of the SCED code. It is the opinion of the taskforce that the explanations for <u>Course Description</u>, <u>Course Level</u> and <u>Available Credit</u> (Elements 1, 2 and 3) are sufficient in the Appendix. (Please refer to <u>page 14</u> for contact information if additional information is needed on these elements).

Several questions arose during the pilot study regarding sequenced courses and how to apply Sequence, the 4^{th} element of the code and/or the 11^{th} and 12^{th} characters. The taskforce determined that additional scenarios and examples need to be provided in this document to give better direction on how to correctly populate this part of the SCED code based on the relationship between the sequenced courses.

Sequencing applies to courses that are broken down into multiple parts. In other words, all parts must be completed in order to fulfill the requirements for a certain course. The Sequence code (the last two characters of the SCED code) indicates the order in which those parts/courses are taken and has no other meaning.

For instance, if a math course consists of Math 1 and Math 2, where Math 1 is offered in the fall semester and Math 2 in the spring, the courses must be sequenced as "12" (course 1 of 2) and "22" (course 2 of 2) respectively. Sequenced courses will always have the same Course Description and Course Level code, which combine for the first six characters of the SCED code.

On the other hand, if Math 1 and Math 2 are independent of each other, the Sequence element for both courses will be "11" (course 1 of 1), and they must be differentiated by either the Course Description element and/or the Course Level element, i.e.:

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Math 1 = 02001G1.00<u>11</u> and Math 2 = 02002G1.00<u>11</u> or Math 1 = 02001G1.00<u>11</u> and Math 2 = 02001E1.00<u>11</u>.
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Another note: SCED provides some subject areas with different levels of courses. For example, Language Arts has a Course Description for each level (grade) of the course (see page 12 of Attachment A). The sequencing is essentially taken care of within the Course Description code. Therefore, sequencing would only be needed if these courses are broken down by semester.

The following 4 pages illustrate scenarios with SCED coding solutions for each.

A school district provides a one year chemistry course where the content is broken down into two semesters. The local course names are "Chemistry 1" and "Chemistry 2". Each course provides 0.50 credit (Carnegie unit) for successful completion.

Example (a)

The first element of the SCED code, Course Description "03101" (page 37 of Appendix A), is determined to be the best content match for <u>both</u> courses:

Chemistry 1, Semester 1: 03101G0.50<u>12</u> (course 1 of 2)

Chemistry 2, Semester 2: 03101G0.50<u>22</u> (course 2 of 2)

Example (b)

It is determined that Course Description "03101" is the best content match for Chemistry 1 and "03102" is the best content match for Chemistry 2 (see page 37 of Appendix A). Since the two courses have different description codes, sequencing does not apply. Consequently, they will each have a sequence element of "11":

Chemistry 1, Semester 1: 0310**1**G0.50<u>11</u> (course 1 of 1)

Chemistry 2, Semester 2: 0310**2**G0.50<u>11</u> (course 1 of 1)

This scenario is similar to Scenario 1, but a two-year chemistry course is provided where the content is broken down into four semesters. Each course provides 0.50 credit (Carnegie unit) for successful completion.

Example (a)

The first element of the SCED code, Course Description "03101" (page 37 of Appendix A), is determined to be the best content match for <u>both</u> courses:

Chemistry 1, Semester 1:	03101G0.50 <u>14</u>	(course 1 of 4)
Chemistry 1, Semester 2:	03101G0.50 <u>24</u>	(course 2 of 4)
Chemistry 2, Semester 1:	03101G0.50 <u>34</u>	(course 3 of 4)
Chemistry 2, Semester 2:	03101G0.50 <u>44</u>	(course 4 of 4)

Example (b)

It is determined that Course Description "03101" is the best content match for Chemistry 1 and "03102" is the best content match for Chemistry 2 (see page 37 of Appendix A). Since the two courses have different description codes, sequencing is only applied within each course and not across the two year program:

Chemistry 1, Semester 1:	0310 1 G0.50 <u>12</u>	(course 1 of 2)
Chemistry 1, Semester 2:	0310 1 G0.50 <u>22</u>	(course 2 of 2)
Chemistry 2, Semester 1:	0310 2 G0.50 <u>12</u>	(course 1 of 2)
Chemistry 2, Semester 2:	0310 2 G0.50 <u>22</u>	(course 2 of 2)

In this scenario, a school district provides a two-year algebra program consisting of a one-year "Algebra Basics" course followed by a one-year "Algebra Intermediate" course. Both courses are required to complete the two-year algebra program It is determined that Course Description "02051" is the best content match for "Algebra Basics" and "02052" is the best content match for "Algebra Intermediate" (see page 22-23 of Appendix A).

Example (a)

The syllabus is for a one-year study for each course; hence 1.00 Carnegie unit is available for the successful completion of each course:

Algebra Basics, Year 1: 0205**1**G1.00<u>11</u> (course 1 of 1)

Algebra Intermediate, Year 2: 0205**2**G1.00<u>11</u> (course 1 of 1)

Example (b)

The syllabus for each course is broken down into semesters, hence 0.50 Carnegie unit is available for successful completion of each semester course:

Algebra Basics, Semester 1: 02051G0.5012 (course 1 of 2)

Algebra Basics, Semester 2: 02051G0.5022 (course 2 of 2)

Algebra Intermediate, Semester 1: 0205**2**G0.50<u>12</u> (course 1 of 2)

Algebra Intermediate, Semester 2: 0205**2**G0.50<u>22</u> (course 2 of 2)

A school district has 4 levels of Language Arts, one course for each grade level.

Example (a)

The courses are one year long resulting in a 1.00 Carnegie unit for each course. Each course has a unique Course Description code that indicates a sequence, so sequencing does not take place (1 of 4, 2 of 4, etc.). Instead, each course receives a Sequence code of "11":

Language Arts 9:	0100 1 G1.00 <u>11</u>	(course 1 of 1)
Language Arts 10:	0100 2 G1.00 <u>11</u>	(course 1 of 1)
Language Arts 11:	0100 3 G1.00 <u>11</u>	(course 1 of 1)
Language Arts 12:	0100 4 G1.00 <u>11</u>	(course 1 of 1)

Example (b)

The courses are broken into two semesters with $\frac{1}{2}$ available credit each. SCED provides a unique Course Description code for each course that indicates a sequence, so the Sequence code is only used to distinguish between the semesters for each course:

Language Arts 10, Semester 2:	0100 2 G0.50 <u>22</u>	(course 2 of 2)
Language Arts 10, Semester 1:	0100 2 G0.50 <u>12</u>	(course 1 of 2)
Language Arts 9, Semester 2:	0100 1 G0.50 <u>22</u>	(course 2 of 2)
Language Arts 9, Semester 1:	0100 1 G0.50 <u>12</u>	(course 1 of 2)

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Language Arts 11, Semester 1:	0100 3 G0.50 <u>12</u>	(course 1 of 2)
Language Arts 11, Semester 2:	0100 3 G0.50 <u>22</u>	(course 2 of 2)
Language Arts 12, Semester 1:	0100 4 G0.50 <u>12</u>	(course 1 of 2)
		(000=00 = 01 =)

Frequently Asked Questions

How do I assign a SCED code to Special Ed courses? SCED does not include course codes for Special Education courses.

How do I assign a SCED code to Basic Study Skills classes, i.e. an Independent Living course? On page 230 of Appendix A, you will find a course in Subject Area 22: Miscellaneous (secondary) for Study Skills. The course number is 22003.

Can I assign SCED codes to 8th Grade classes that provide credit towards graduation? Courses that provide credit towards graduation can be assigned SCED codes. SCED does not take into consideration when courses are taken.

Can I assign SCED codes to dual enrollment classes that provide credit towards graduation? Courses that result in high school credit even though they are taken at a college or university may be assigned SCED codes.

Can I assign SCED codes to concurrent enrollment classes that provide credit towards graduation?

Courses that result in high school credit even though they are taken at a college or university may be assigned SCED codes.

How do I assign SCED codes to AP and IB courses?

AP and IB courses have their own codes in SCED. For example, 02132 is IB Mathematics, and 02124 is AP Calculus AB.

Should I assign SCED codes to transfer courses?

SCED courses may be assigned to transfer courses if you are sufficiently sure of the content and level of the course.

What course name will appear on the WTC transcripts, the local course name or the SCED Course Description name?

WTC will carry the local course name in transcripts.

Timeline

The goal is to have NCES SCED codes tied to each course and loaded to the respective Student Information Systems (SIS) by the end of the 2009-10 school year. This seems to be a very realistic goal given that the process does not seem to be overly complicated, and all SIS's across the state are capable and ready to store the data.

The WDE will assess the progress within each school district during the following months:

November 2009 January 2010 March 2010

The Department will provide technical assistance as needed during this timeframe to ensure all school districts have their courses mapped and loaded to their SIS's by May 1, 2010.

Resources

CourseWalk

CourseWalk is a tool provided by the WDE that assists in the mapping of existing courses to SCED codes. This application can be accessed through the Fusion website at http://edu.wyoming.gov

Contacts

Name	Entity	Phone	Email	Question
Geir Solvang	WDE	307.777.6218	gsolva@educ.state.wy.us	General questions about course mapping to SCED and CourseWalk issues
Sean Moore	WDE	307.777.8595	smoore@educ.state.wy.us	General questions about course mapping to SCED
Shadd Schutte	WDE	307.777.3656	sschut@educ.state.wy.us	CourseWalk issues
R.J. Kost	Park #1	307.754.2215	rjkost@park1.k12.wy.us	Course mapping processes
Bart Kunz	Lincoln #2	307.885.7100	bkunz@lcsd2.org	Course mapping processes
Kristi Hibbert	Fremont #2	307.455.2323	khibbert@fremont2.org	Course mapping processes
Katie Logan	Fremont #21	307.332.2380	klogan@fremont21.k12.wy.us	Course mapping processes