



Wyoming Department of Education

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MEMORANDUM NO. 2009-100

TO: School District Superintendents

FROM: Joe Simpson
Deputy Superintendent of Public Instruction

DATE: July 2, 2009

SUBJECT: Secondary School Course Coding – Recommended Procedures

TIME SENSITIVE INFORMATION

The Wyoming Common Course Code Implementation Taskforce was established in December of 2008 to identify best practices for mapping local courses to the nationally recognized School Codes for the Exchange of Data (SCED), developed by the National Center for Education Statistics (NCES). For detailed information about the project, please refer to State Superintendent Memorandum No. 2009-002 of January 9, 2009.

The attached document, Best Practices – Mapping Secondary School Courses to SCED, outlines lessons learned during the pilot project undertaken by nine school districts earlier this year. The WDE believes review of this document by non-pilot districts, prior to undertaking their own course code mapping process, will be extremely valuable. The last page of the document lists WDE and school district personnel from the taskforce that may be contacted if certain questions arise that are not addressed in the Best Practices guide. (Please note that Appendix A is not attached to the document due to its size. Appendix A can be downloaded from <http://nces.ed.gov/pubs2007/2007341.pdf>)

As mentioned in the State Superintendent Memorandum referenced above, **the goal is to have SCED codes appear on the transcripts for 2010 graduates.** The Best Practices document provides a WDE progress review timeline, which includes a completion date of May 1, 2010.

Please direct all general questions about the course code implementation project to Geir Solvang, Project Analyst, at 307.777.6218 or gsolva@educ.state.wy.us. Again, please refer to the Best Practices document for topic-specific contacts.

The Department thanks all members of the Common Course Code Implementation Taskforce and all participants from the pilot districts for their invaluable contributions in helping our state move towards the national course code standard.

JS:gs:tw

Attachment

Cc: District Curriculum Coordinators
Technology Directors
High School Principals
High School Counselors
Post-Secondary Admissions Officers
Wyoming Community College Commission

Best Practices

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

Prepared by:

**The Wyoming Common Course Code Implementation
Taskforce**

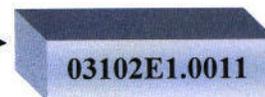
6/15/2009

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Appendix A - "Secondary School Course Classification System: School Codes for the Exchange of Data" (<http://nces.ed.gov/pubs2007/2007341.pdf>)

Appendix B - "CourseWalk™ District User Guide"



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.

WCCCIT members:

Alex Ayers, Campbell 1, **Bart Kunz**, Lincoln 2, **Bill Pannell**, WDE, **Cassandra Celaya**, WDE, **Cheryl Johnson**, Albany 1, **Curtis Cook**, Platte 2, **David Holt**, Sweetwater 2, **Don Bartels**, Weston 7, **Erin Buchanan**, WDE, **Erin Cartwright**, Laramie 1, **Geir Solvang**, WDE, **Jodi Wiley**, Campbell 1, **John Crouch**, Uinta 4, **Julie Magee**, WDE, **Katie Logan**, Fremont 21, **Ken Griffith**, Platte 2, **Kristi Hibbert**, Fremont 2, **Kyle McKinney**, Laramie 1, **Lachelle Brant**, WDE, **Lyla Downey**, Campbell 1, **Myron Peabody**, Fremont 25, **Norma Dufek**, Fremont 1, **Patty Coursey**, Teton 1, **RJ Kost**, Park 1, **Scott Bullock**, WDE, **Sean Moore**, WDE, **Shadd Schutte**, WDE, **Sherri Stucki**, Uinta 4, **Tom Collins**, WDE, **Tony Czech**, Albany 1

Taskforce Advisory Team: **Laurel Ballard**, WDE, **Vince Meyer**, WDE

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; manually or electronically.

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.

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 Course Description, Course Level and Available Credit (Elements 1, 2 and 3) are sufficient in the Appendix. (Please refer to [page 14](#) 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 4th element of the code and/or the 11th and 12th 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.:*

Math 1 = 02001G1.0011 and Math 2 = 02002G1.0011

or

Math 1 = 02001G1.0011 and Math 2 = 02001E1.0011.

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.

Scenario 1

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 both courses:

Chemistry 1, Semester 1: 03101G0.5012 (course 1 of 2)

Chemistry 2, Semester 2: 03101G0.5022 (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: 03101G0.5011 (course 1 of 1)

Chemistry 2, Semester 2: 03102G0.5011 (course 1 of 1)

Scenario 2

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 both 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:	03101G0.50 <u>12</u>	(course 1 of 2)
Chemistry 1, Semester 2:	03101G0.50 <u>22</u>	(course 2 of 2)
Chemistry 2, Semester 1:	03102G0.50 <u>12</u>	(course 1 of 2)
Chemistry 2, Semester 2:	03102G0.50 <u>22</u>	(course 2 of 2)

Scenario 3

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:	02051G1.00 <u>11</u>	(course 1 of 1)
Algebra Intermediate,	Year 2:	02052G1.00 <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:	02051G0.50 <u>12</u>	(course 1 of 2)
Algebra Basics,	Semester 2:	02051G0.50 <u>22</u>	(course 2 of 2)
Algebra Intermediate,	Semester 1:	02052G0.50 <u>12</u>	(course 1 of 2)
Algebra Intermediate,	Semester 2:	02052G0.50 <u>22</u>	(course 2 of 2)

Scenario 4

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:	01001G1.00 <u>11</u>	(course 1 of 1)

Language Arts 10:	01002G1.00 <u>11</u>	(course 1 of 1)

Language Arts 11:	01003G1.00 <u>11</u>	(course 1 of 1)

Language Arts 12:	01004G1.00 <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 9, Semester 1:	01001G0.50 <u>12</u>	(course 1 of 2)
Language Arts 9, Semester 2:	01001G0.50 <u>22</u>	(course 2 of 2)

Language Arts 10, Semester 1:	01002G0.50 <u>12</u>	(course 1 of 2)
Language Arts 10, Semester 2:	01002G0.50 <u>22</u>	(course 2 of 2)

Language Arts 11, Semester 1: 01003G0.5012 (course 1 of 2)

Language Arts 11, Semester 2: 01003G0.5022 (course 2 of 2)

Language Arts 12, Semester 1: 01004G0.5012 (course 1 of 2)

Language Arts 12, Semester 2: 01004G0.5022 (course 2 of 2)

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.

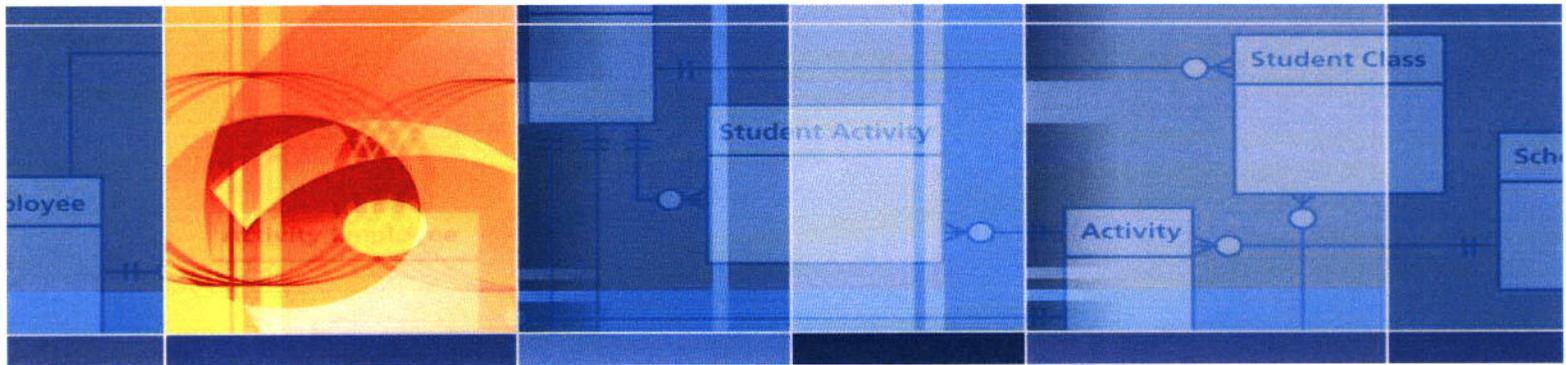
Resources

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



CourseWalk™ District User Guide

Draft as of January 27, 2009



ESP Solutions Group

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1 Background

CourseWalk™ is a tool that facilitates the matching of local school or district course codes to state or national course codes. The tool can also be used by a state education agency to match the state's set of secondary course codes to the national coding system called **Secondary School Course Classification System: School Codes for the Exchange of Data (SCED)**.

SCED was developed by the National Center for Education Statistics to aid in the standardization of course information exchanged between

- school districts and state education agencies (SEAs),
- school districts when a student moves to another district or school, and
- school districts and postsecondary institutions on high school transcripts.

SCED consists of a comprehensive listing of secondary school courses and a set of codes to provide unique identifiers for the courses. It also provides a framework for recording detailed information about the nature and structure of the courses. More detail about SCED will be provided in the following section. Additional information about SCED and the framework is available on the NCES website at <http://www.nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2007341>.

CourseWalk provides districts with the capability to electronically compare local course descriptions to find matches in the state or SCED coding system. Thus it will be possible to maintain a crosswalk, or map, between local and state course codes and/or SCED codes. CourseWalk also allows district users to record detailed coded information about your courses using the SCED Framework.

Mapping local courses to state or SCED codes is relatively easy using CourseWalk. CourseWalk provides recommended matches based on the contents of the subject area, course name and course description. However, there are many matches that must be confirmed. States often have 1000+ courses in their coding systems, and SCED has over 1500 codes for secondary school courses. Districts often have even more courses in their course catalog. Most of those secondary courses, however, can be expected to be similar or the same across districts and states. Advanced Placement and International Baccalaureate courses have required descriptions and curricula, so matching their codes to a state or national coding system should be the easiest.

The following section provides a description of the components of the SCED framework as it is used in CourseWalk. This is followed by the step-by-step directions for using CourseWalk to map your course codes.

1.1 Elements of the CourseWalk Coding Structure

CourseWalk is based upon the SCED course coding structure because ultimately we expect all states to use the national codes. Each course in the SCED coding system, just as each course at the district level, has two essential components, a Course Title and a Course Description. *[Please note: The terminology we use in CourseWalk is slightly different from the terminology used in SCED. Our terminology, however, is consistent with the screens you will see in CourseWalk.]*

Two important content areas not associated with a “code” are:

1. **SCED Course Title.** This is the name of the course. Courses may have different titles, but be identical in content. For instance, a course called Math I in one district may be called Algebra I in another. The title is a useful guide to what is included in the course, but it is clearly not necessarily the most useful.
2. **SCED Course Description.** The description provides enough specificity to identify the course’s topic and to distinguish it from other courses in that Subject Area. However, the Course Descriptions do not include course objectives.

As mentioned above, the CourseWalk coding structure is based on the SCED framework, and consists of four basic elements. Taken together, they create a unique identification code for any secondary course. The four component elements are SCED Code, course level, available credit, and sequence.

1.1.1 Element 1. SCED Code

SCED Code consists of two parts, a Subject Area Code and a Course Identifier (ID) within that Subject Area. For example, the course General Math is coded as 02002—Subject Area Mathematics (02) and Course ID (002).

Subject Area. There are 22 general content categories, each represented by a two-digit code. The categories are mutually exclusive and can include any course offered in secondary schools. The Subject Areas are listed in the exhibit below.

Exhibit 1. Secondary subject areas and codes in the SCED

Subject area	Code
English Language and Literature (secondary)	01
Mathematics (secondary)	02
Life and Physical Sciences (secondary)	03
Social Sciences and History (secondary)	04
Fine and Performing Arts (secondary)	05
Foreign Language and Literature (secondary)	06
Religious Education and Theology (secondary)	07
Physical, Health, and Safety Education (secondary)	08
Military Science (secondary)	09
Computer and Information Sciences (secondary)	10
Communications and Audio/Visual Technology (secondary)	11
Business and Marketing (secondary)	12
Manufacturing (secondary)	13
Health Care Sciences (secondary)	14
Public, Protective, and Government Service (secondary)	15
Hospitality and Tourism (secondary)	16
Architecture and Construction (secondary)	17
Agriculture, Food, and Natural Resources (secondary)	18
Human Services (secondary)	19
Transportation, Distribution and Logistics (secondary)	20
Engineering and Technology (secondary)	21
Miscellaneous (secondary)	22

Course Identifier. Courses within a Subject Area are distinguished by a three-digit code. The codes carry no meaning within themselves. The code “999” is reserved for courses coded as “other.” Only some numbers between 001 and 999 have been used in this system; unused numbers can accommodate new courses as these are added to the SCED.

These two components are essential parts of the SCED coding structure and both subject area and course identifier are required. The following three elements are optional, for use in describing local courses.

1.1.2 Element 2. Course Level

Course Level conveys the course’s level of rigor. There are four options for coding this element:

- *B* for basic or remedial. This is a course focusing primarily on skills development, including literacy in language, mathematics, and the physical and social sciences. These courses are typically less rigorous than standard courses and may be intended to prepare a student for a general course.
- *G* for general or regular. This is a course providing instruction in a given subject area that focuses primarily on general concepts appropriate for the grade level. General courses typically meet the state’s or district’s expectations of scope and difficulty for mastery of the content
- *E* for enriched or advanced. This is a course that augments the content and/or rigor of a general course, but does not carry an honors designation.
- *H* for honors. This is an advanced level course designed for students who have earned honors status according to educational requirements. These courses typically include additional content not found in general courses, and are formally designated as honors courses.

The majority of courses that schools offer are general: intended for any student in the proper grade level range. However, some courses are distinguished by having more or less rigorous requirements than the “usual” course and are designated as advanced/ enriched, honors, or basic/remedial. Some school systems place students in, or allow students to select from, different “tracks”—particularly in academic subject areas—while others do not use such distinctions, holding all students to the same standards. The coding structure enables schools to portray such differences.

1.1.3 Element 3. Available Credit

Available Credit identifies the amount of Carnegie unit credit available to a student who successfully meets the objectives of the course. A course meeting every day for one period of the school day over the span of a school year offers one Carnegie unit. A Carnegie unit is thus a measure of “seat time” rather than a measure of attainment of the course objectives.

Available Credit is coded as a one-digit number carried out to two decimal places, with an explicit decimal. That is, one Carnegie unit would be coded as 1.00. A half-unit of Carnegie credit would be reported as 0.50.

1.1.4 Element 4. Sequence

Sequence describes the manner in which school systems may “break up” increasingly difficult or more complex information. School districts operating on a semester or trimester schedule frequently offer consecutive courses fitting one course description. For example, Accounting may be broken into two different courses that together make up a complete Accounting course. Or, the requirements for studio arts could include Creative Arts-Comprehensive (SCED #05154) and two additional studio arts courses selected from a number of choices (drawing, ceramics, sculpture, painting, etc.)

Sequence is a two-character element that should be interpreted as “part ‘n’ of ‘m’ parts.” In the example given above, if each course were a year in length, Creative Arts-Comprehensive would be course “one of three,” or “1 3.” It is important to remember that sequence describes only the order in which the courses are taken. If the arts sequence in this example required six semester-long courses, the second semester

of the introductory Creative Arts-Comprehensive could be shown with the sequence “2 6,” or, “part 2 of 6 parts.” The Sequence indicated for a given course can vary from school district to school district.

Exhibit 1 is an example of how the four SCED coding elements are used to identify a specific course, and the Level, Credit, and Sequence that can differ for the same course.

Exhibit 1. Course code structure: United States Government—Comprehensive

SCED Code		Course Level	Available Credit	Sequence
04	151	H	1.00	1 1
Social Sciences and History	U.S. Government —Comprehensive	Honors	one Carnegie unit	“1 of 1”—not part of a sequence
SCED Code		Course Level	Available Credit	Sequence
04	151	G	0.50	1 2
Social Sciences and History	U.S. Government —Comprehensive	General or Regular	one-half Carnegie unit	“1 of 2”—1st part of a 2-course sequence

1.2 Special Identifier

SCED provides standard course descriptions that are widely understood. However, there will undoubtedly be additional information about courses and their outcomes that states, districts, and schools will want to add to a course code. This could include, for example, grade at which the course is expected to be taken, means of delivery, or a flag identifying the course meets State high school graduation or college admission requirements. CourseWalk provides a 2 character field called Special Identifier to enable states or districts to indicate additional coded information. This field will be increased to a 6 digit field in the next version of CourseWalk.

1.3 Other Guidelines

1.3.1 Treatment of AP and IB Courses

Advanced Placement (AP) and International Baccalaureate (IB) courses are assigned individual codes in SCED, rather than being identified by the Level element. This is because the College Board and International Baccalaureate Organization define the content and set the performance standards for AP and IB courses. Unlike “honors” or “advanced” classifications, a course’s designation as IB or AP is not at the discretion of the school or district using SCED.

1.3.2 Treatment of Foreign Language Courses

Obviously, SCED does not include every language other than English that could be taught in secondary schools. The languages for which there are course descriptions were those most likely to be found in the high school course catalogs reviewed for the development of SCED. For each language, there are five course descriptions that progress from introductory to higher levels of fluency; separate course descriptions for native speakers, field experience, study of conversation and culture, and the language’s literature; and two courses preparing the student for the IB level A and level B examinations, respectively.

1.3.3 Miscellaneous Subject Area

This set includes courses that can not be assigned to any of the other subject areas. Miscellaneous courses often include activities or skills that are applicable to a range of topics. Standardized test preparation (22001) and study hall (22006) are examples of this. Other miscellaneous courses, such as family living (22208) or community service (22104) address what may be perceived as important but non-academic areas.

SCED does not at this time have course codes for elementary and middle school courses. But CourseWalk™ can still be used to house the state and local codes or to allow for local codes to be matched to state codes.

2 How CourseWalk™ Works

CourseWalk™ is designed to find course matches based on the subject and name of the course (Course Subject Area and Course Title) and on the description of the course (Course Description). Text comparisons are made between courses entered by a school or district and the national code set called SCED (or the state courses, if SCED matches are not desired). Courses that are near matches are identified and the SCED code recommended. Recommended course matches will be indicated to you to review and decide if there is a close enough match to do the mapping. Often you will receive multiple possible matches (coding options) from which to choose. If there is no immediately obvious match, you will be provided with all of the courses within a subject area from which you may choose a likely match. All of this will become clearer to you when you begin using the tool.

CourseWalk™ allows a school or district to upload an existing set of courses rather than requiring each course to be hand-entered. In the future, however, you might want to take advantage of the capacity to hand-enter a new course or change the content of a course.

There are two important assumptions inherent in CourseWalk.

- Courses must be mapped from the lowest level (e.g., school or district) to the highest level (e.g., state or SCED) because the course identifiers get progressively less specific. As a result, there may be multiple courses in a district listing that map to the same SCED code (e.g., Harmonica Performance and Violin Performance might both map to Individual Technique - Instrumental Music).
- In order for a District to get SCED codes, the SEA should first map its codes to the SCED codes, if state codes exist. Then the District can map its codes to the State codes and get the SCED codes as well.

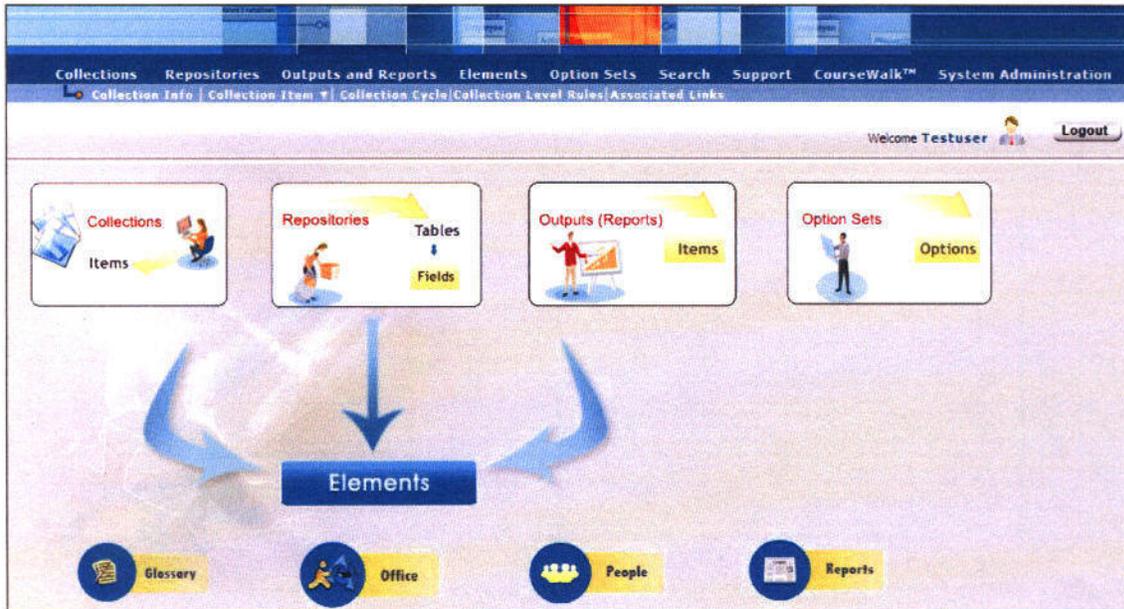
All of these possibilities will be spelled out in greater detail in the pages that follow.

CourseWalk™ is built on the ESP Solutions Group tool called DataSpecs. DataSpecs™ is a metadata repository. Use of DataSpecs™ is not a requirement for using CourseWalk™.

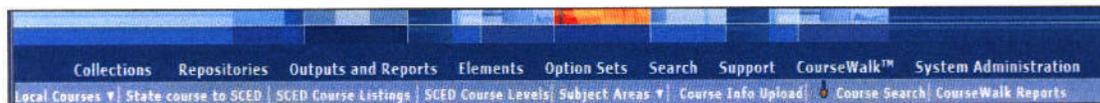
For the sake of clarity, complete lists are provided where multiple options exist. The options in the list that are not applicable to schools or districts are noted in italics.

2.1 Starting-up and the Navigation Screen

CourseWalk is accessed from the DataSpecs start-up screen. To start CourseWalk, select **CourseWalk™** located to the right on the menu bar.



When you select CourseWalk, you will be given a set of eight high level options on the second level menu bar.



The options are:

- Local Courses – Match local (school or district) course codes to state or SCED course codes.
- State Course to SCED – Match state course codes to SCED course codes. – Not applicable for schools or districts.
- SCED Course Listings – Show a listing of all SCED courses and their codes. This option is used primarily for revising SCED Course Listings. – Not applicable for schools or districts.
- SCED Course Levels – Show a listing of all SCED course levels. This option is used primarily for revising SCED Course Levels. – Not applicable for schools or districts.
- Subject Areas – Show a listing of all local, state or SCED subject areas and match local subject areas to state or SCED subject areas or state subject areas to SCED subject areas.
- Course Info Upload – Upload a local or state listing of courses, subject areas or other information into the tool.
- Course Search – Search for a course.
- CourseWalk Reports – Provide reports on the contents of CourseWalk.

When you roll over or select Local Courses or Subject Areas, you will get pull-down menus with additional options.

- **Local Courses ▼**
 - Local Course to State – Allows a set of local courses to be mapped to the state codes.
 - Local Course to SCED – Allows a set of local courses to be mapped to the SCED codes.

- **Subject Areas ▼**

SCED Subject Areas – Allows the user to view SCED Subject Areas. *Changes to the SCED Subject Areas, however, will not be allowed except by a system administrator based on changes made by NCES.*

Local Subject Areas – Allows the user to view or revise local subject areas.

State Subject Areas – Allows the user to view state subject areas. *However, changes can only be made by authorized state users.*

Local to SCED Subject Area Mapping – Allows the user to map local subject areas to SCED subject areas.

Local to State Subject Area Mapping – Allows the user to map local subject areas to state subject areas.

State to SCED Subject Area Mapping – Not applicable for schools or districts.

All CourseWalk functions will be accessed from this list of options, which are explained in more detail below.

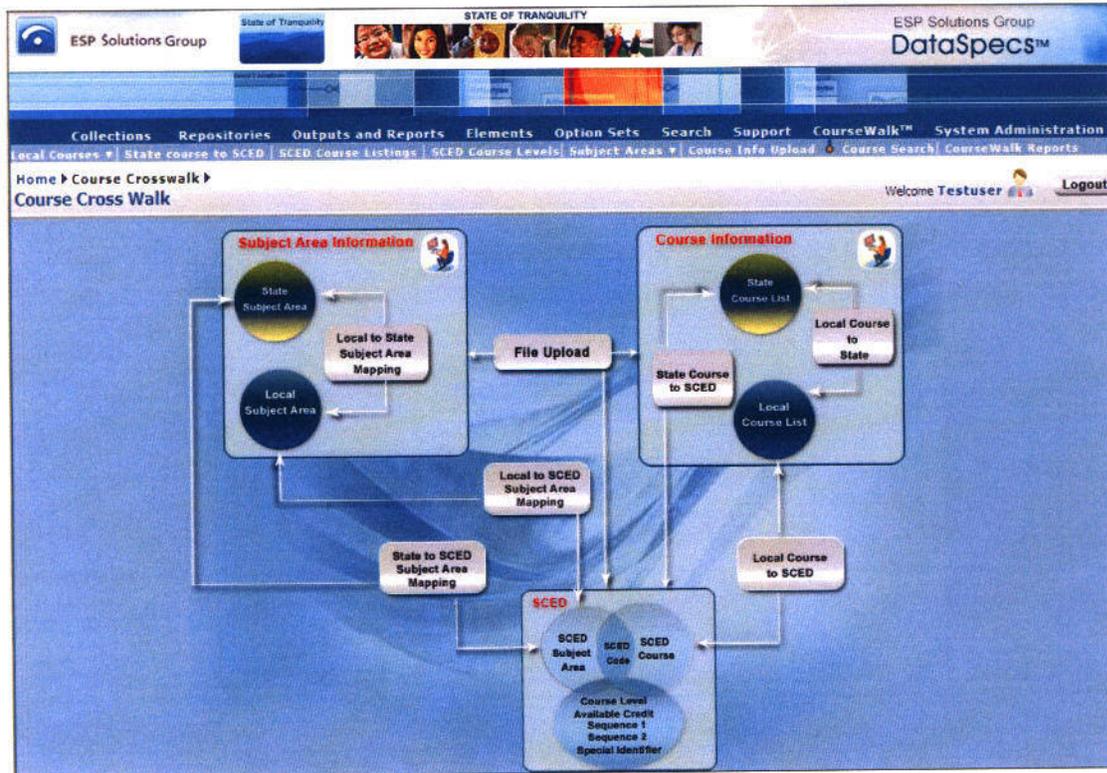
2.2 General Features of CourseWalk

This section describes common features provided throughout the CourseWalk offering.

2.2.1 Screen Button Definitions

There are buttons that appear on many screens, including:

- Add New – Click on this button when you want to add a new course or subject area.
- Save – Click on this button to save your new or revised entry.
- Delete – Click on this button to delete an entry.
- Cancel – Click on this button to erase what you have entered or cancel an operation. Clicking on “Cancel” will take you to the following screen.



This graphic provides a high level description of how CourseWalk works. To continue working, select an option from the second level menu bar.

Active Only

CourseWalk allows you to decide if you want to view all items that have been entered into the system or only those that are currently active. Active items are those used currently within the education system. Expired items remain in the system, but are not generally used, and, therefore, are rarely viewed. If you want to see only active items, click on the **Active Only** box.

Data Grid View

This feature renders a data grid view of your information, such as subjects or courses. This view provides you a means to edit, remove, or download data. CourseWalk offers you the capability to sort according to whichever column you desire. Simply click on the header for the column on which you will sort.

ESP Solutions Group STATE OF TRANQUILITY DataSpecs™

Home > State Subject Area

Number of rows to display:

Edit	Remove	State Subject Area Code	State Subject Area Title	SCED Subject Area	Effective Date	Expiration Date	Version
		ENGL	English	01	02/03/2008		1

To see all of the rows of data (in this case, the State Subject Areas), click on **View All** located at the bottom of the screen.

ESP Solutions Group STATE OF TRANQUILITY DataSpecs™

Home > State Subject Area

Number of rows to display:

Edit	Remove	State Subject Area Code	State Subject Area Title	SCED Subject Area	Effective Date	Expiration Date	Version
		ART	Art	05	02/03/2008		1
		DANC	Dance	03	02/03/2008		1
		MARK	Marketing	12	02/03/2008		1
		JAG	Jobs for America's Graduates	12	02/03/2008		1
		CSCI	Computer Science	10	02/03/2008		1
		TECH	Materials and Technologies	21	02/03/2008	07/08/2008	1

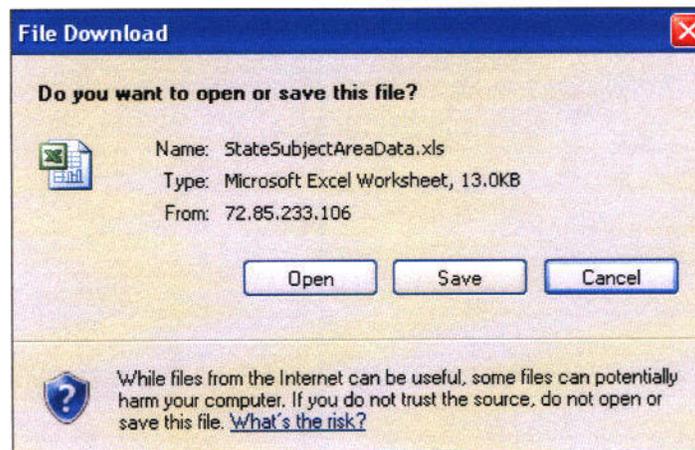
1 2 3 4 5 6

The number of lines rendered may be adjusted by entering the desired number of rows in the **Number of rows to display** field and clicking on the **Set** button. The window will refresh with a rendering consistent with the number of lines specified.

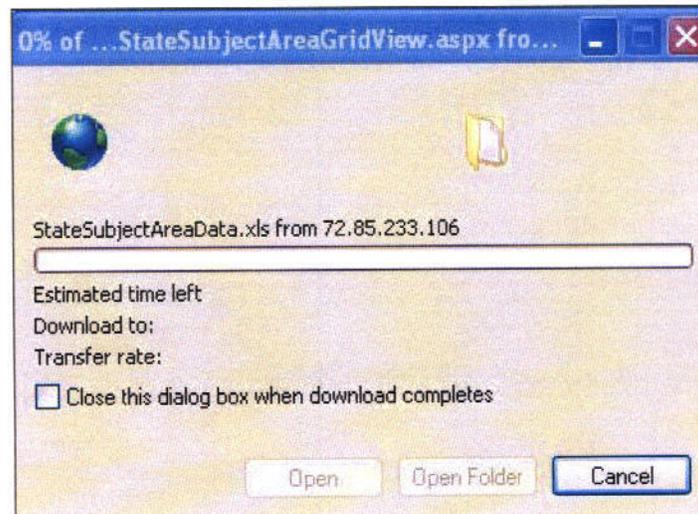
- **To Edit**

1. Click on the **Edit** indicator on the screen (icon of pencil and paper). The screen will refresh to the item screen while displaying the data associated with the item clicked.

2. Make any necessary modifications.
 3. Click the **Save** button at the bottom of the window to save the data.
- **To Remove**
 1. Click on the remove indicator on the screen (the icon of an X); you will be prompted to verify that this action is wanted. Click **OK** to continue or **Cancel** to stop. On continuing, the window will refresh and the deleted item will no longer be in the item inventory.
 - **To Download**
 1. Click on the **Download** button at the bottom of the screen. A screen prompt will appear querying whether the data file should be saved or opened. Click on the button indicating the desired function.



A data transfer screen, shown below, will indicate the data transfer progress and a means to cancel the download if desired.

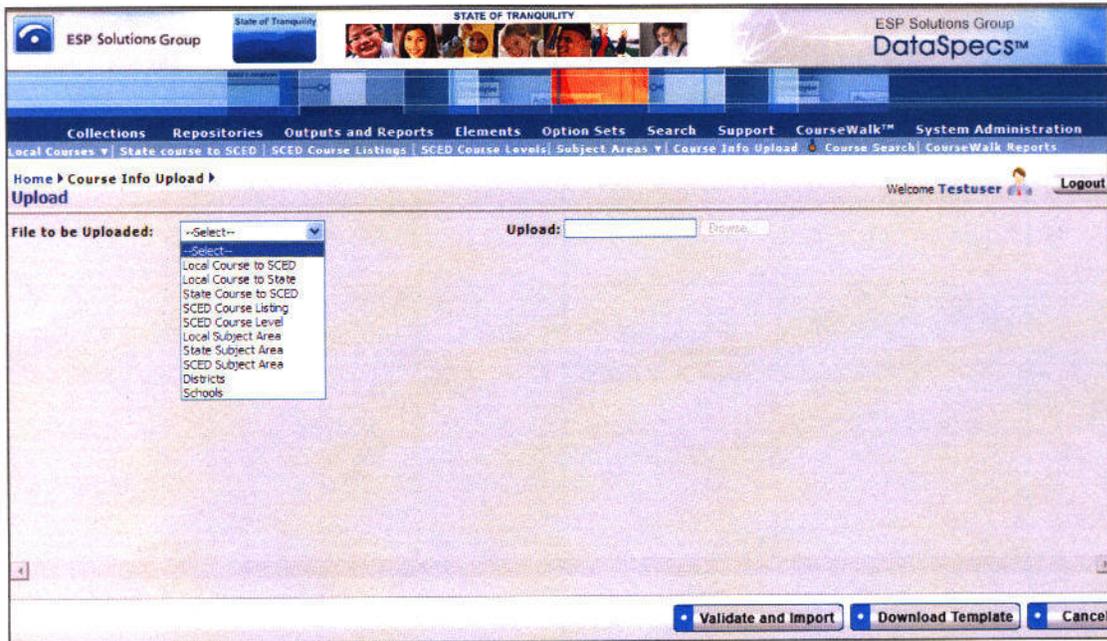


If you want to save the file, you will be prompted further with a **Save As** screen for the location and name the file is to be saved under.

2.3 Course Info Upload

In order to begin the process of matching subject areas and course codes, you will upload your list of subject areas first, then the list of courses with associated subject areas. CourseWalk assumes that these lists are in Excel files.

In the Course Info Upload screen you will see two boxes. First, select which type of file you are uploading.



Your choices are:

- Local Course to SCED – the complete file of local courses with course number, subject, title, and description ready to be mapped to SCED. SCED courses are already entered into CourseWalk.
- Local Course to State – the complete file of local courses with course number, subject, title, and description ready to be mapped to state codes. State codes should be already entered into CourseWalk before this can happen.
- State Course to SCED – the complete file of state courses course number, subject, title, and description ready to be mapped to SCED codes. SCED courses are already entered into CourseWalk. – Not applicable for schools and districts.
- SCED Course Listing – this is the SCED course file already entered into CourseWalk. – Not applicable for schools and districts.
- SCED Course Level – this is the SCED course levels file already entered into CourseWalk.
- Local Subject Area – the complete file of local subject areas ready to be mapped to state or SCED subject areas.
- State Subject Area - the complete file of local subject areas ready to be mapped to SCED subject areas. – Not applicable for schools and districts.
- Districts – the complete file of districts that are entered by the State Education Agency for tracking district mappings to state codes. – Not applicable for schools or districts.
- Schools - the complete file of districts that are entered by the State Education Agency for tracking school mappings to state codes if they are different from district codes, or if the school is not a part of a district. – Not applicable for schools or districts.

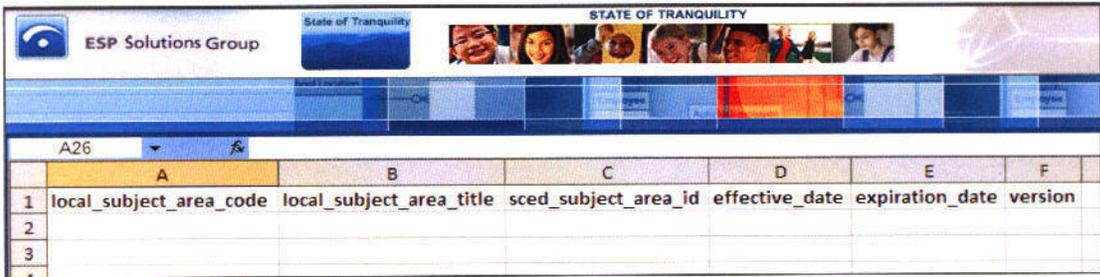
The second box allows you to either enter the name of the file you are uploading or browse to find the file you would like to upload. You will not need to use the SCED Course Listing, SCED Course Level, or SCED Subject Area, as they are preloaded into CourseWalk.

Once you have selected the file you would like to upload, you may do one of two things:

- Download Template
- Validate and Import

2.3.1 Download Template

If you need the template for a particular file, select the file type from the pull down menu, then press the **Download Template** button. A pop-up screen will give you the choice of opening the file or saving it. It is better to save the template than to open it in this instance. Include the template headers in your file when you upload your file. Below is the template for Local Subject Area.



	A	B	C	D	E	F
1	local_subject_area_code	local_subject_area_title	sced_subject_area_id	effective_date	expiration_date	version
2						
3						

Not all of the Excel fields in the template are required. Following are the possible fields and the required fields (in bold) for each template.

- Local Course to SCED
 - local_course_id
 - local_course_name
 - local_course_description
 - local_subject_area
 - sced_code
 - sced_course_number
 - sced_subject_area
 - sced_course_level
 - sced_available_credit
 - sced_sequence_1
 - sced_sequence_2
 - special_identifier
 - ib_indicator
 - a_indicator
 - not_ib_not_ap
 - elementary_mapping_allowed
 - secondary_mapping_allowed
 - other_mapping
 - comment
 - **effective_date** (you can use the current date)
 - **version** (we recommend you use "1")

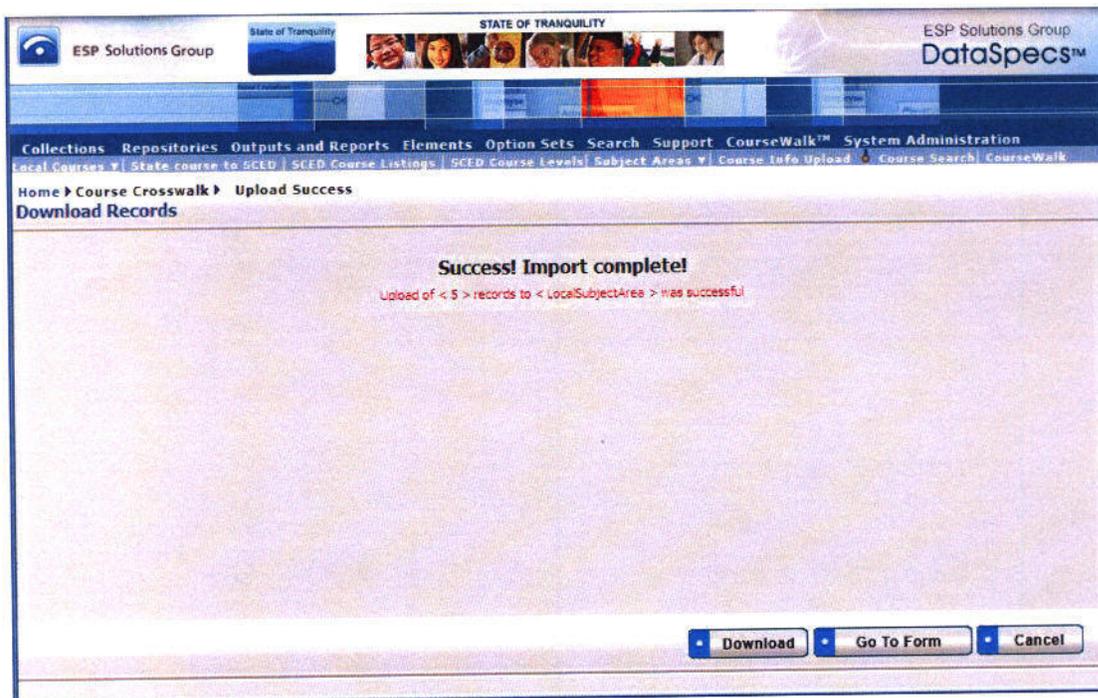
- Local Course to State
 - local_course_id
 - local_course_name
 - local_course_description
 - local_subject_area
 - state_course

- ib_indicator
 - ap_indicator
 - not_ib_not_ap
 - **elementary_mapping_allowed**
 - **secondary_mapping_allowed**
 - other_mapping
 - comment
 - **effective_date** (you can use the current date)
 - expiration_date
 - version (we recommend you use "1")
- Local Subject Area
 - **local_subject_area_code** (6 characters - can be numbers or letters, e.g., 123 or Engl)
 - **local_subject_area_title** (name of the course – 70 characters)
 - SCED_subject_area_id
 - **effective_date** (you can use the current date)
 - expiration date
 - **version** (we recommend you use "1")

The **local course id** is not important for content purposes and can be a sequential course number if you have not assigned codes to your courses.

2.3.2 Validate and Import

Press the **Validate and Import** button if the file is ready to enter into CourseWalk. If there are errors, you will receive error messages describing what is wrong with the file. If the file validates properly, you will get the prompt, "No validation errors." Then press the **Upload/Commit** button. If the upload is not successful, you will get the message "Upload process not successful." When you succeed, you will get the following screen.



Your file will now be ready to use. First you will map your subject areas, and then you will map your courses.

2.4 Subject Areas

Subject areas play an important role in SCED as well as in state and local course coding systems. The same course can be taught in multiple subject areas, such as economics courses that may be taught in Social Studies as well as in Business. Subject areas also help you to find a course match when there is no plausible match made by the tool.

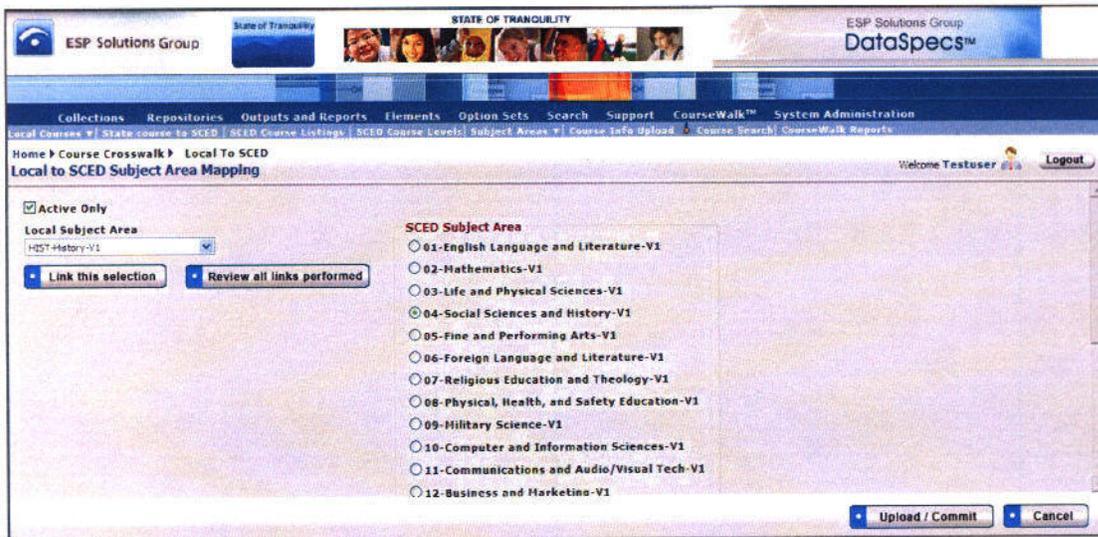
An important first step in making CourseWalk work easily for you is to map your list of subject areas to the SCED or state subject areas. We have observed that some local subject areas may not conform easily to the SCED codes (also possibly not to state codes). For instance, agriculture and auto mechanics may both be coded as “career/technical education” in a local or state coding structure. SCED however, has a separate set of subject codes for “Agriculture, Food, and Natural Resources” and “Transportation, Distribution and Logistics.” Thus we recommend that you enter your subject areas with as much granularity as possible to ensure appropriate mapping. Multiple subject areas can be mapped to state or SCED subject areas, but not the other way around. See the list of SCED subject area codes presented earlier in this document.

The SCED coding structure has both numeric codes and titles, but the titles will be the most useful for making matches. Similarly, your local or state subject areas will most likely be titles; however, you may also have codes you use. Your subject area titles may be up to 70 characters in length. Your codes may only be 6 characters in length and may be numeric, alpha, or alpha-numeric.

The process of mapping your subject areas to SCED or state subject areas begins after you have successfully uploaded your Excel file containing the list of subject areas. The easiest way to do the mapping is to go to the Subject Area menu and select the appropriate mapping, either:

- **Local to SCED Subject Area Mapping**
- **Local to State Subject Area Mapping**

CourseWalk will take you to a screen that looks like this.

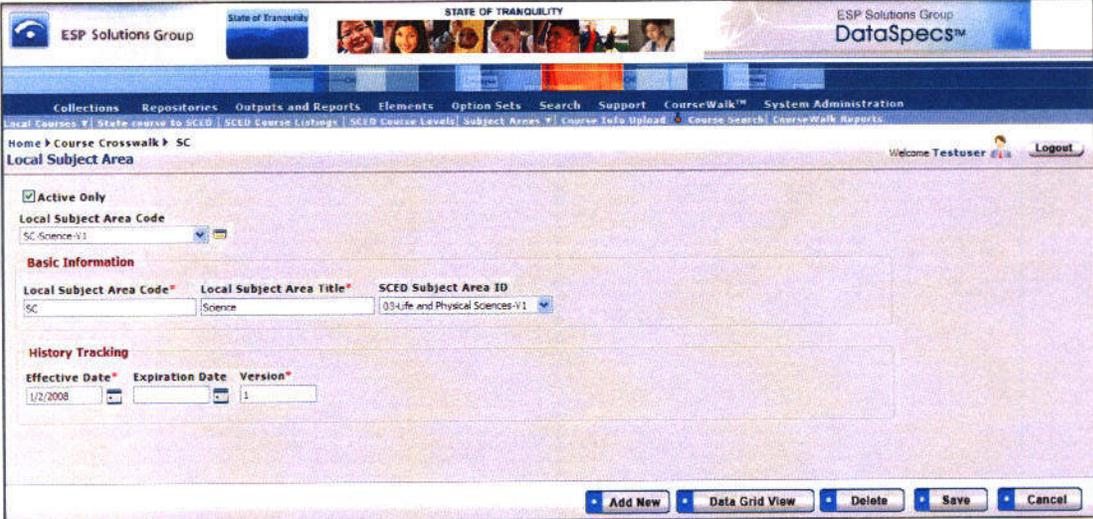


To map your codes to an existing list, (Local to SCED Subject Area Mapping or Local to State Subject Area Mapping),

- Use the pull down menu under **Local Subject Area** to identify the next subject area to be mapped.
- Click on the radial button next to the appropriate subject area from the list on the right.
- Click on the **Link this selection** button.

- Review the links by clicking on the **Review all links performed**.
- Click on the **Upload/Commit** button to save all of your links.

To review the Local Subject Area mappings to SCED Subject Areas (or State Subject Areas), go to **Local Subject Areas** from the Subject Area Menu on the menu bar.



The Local Subject Area screen can be used to add, edit, or delete subject areas. Instructions for each action follow.

2.4.1 Edit a Subject Area

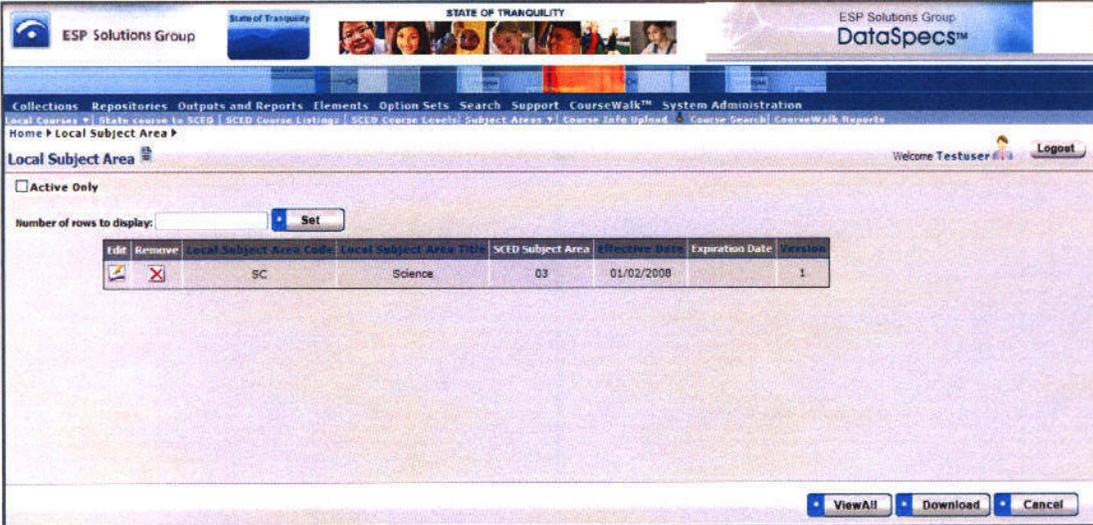
- Click on the bit of information that needs to be changed.
- Type the desired changes.
- Click on **Save** to save the record.

2.4.2 Enter a New Subject Area

- Click on the **Add New** button
- Select from one of the options – either Add New, New from Copy or New Version. New Version is the same as revising an existing entry.
- Enter **Add Item** in the pop-up screen
- Type in the Local Subject Area Code, Local Subject Area Title.
- The Effective Date defaults to the current date and the Version is listed as “1.” These can be changed.
- Map the subject area to SCED by choosing from the SCED Subject Area ID pull-down list
- Click on **Save** to save the record.
- Click on **Data Grid** to see the information and determine if you need to edit or remove the item.

2.4.3 Delete a Subject Area

- Select the Local Subject Area Code from the drop down list.
- Click on **Delete** to remove the record.



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DataSpecs™

Local Courses | State Course to SCED | SCED Course Listings | SCED Course Levels | Subject Areas | Course Info Upload | Course Search | CourseWalk Reports

Home > Local Subject Area >

Welcome Testuser  [Logout](#)

Active Only

Number of rows to display: [Set](#)

Local Subject Area Code	Local Subject Area Title	SCED Subject Area	Effective Date	Expiration Date	Version
SC	Science	03	01/02/2008		1

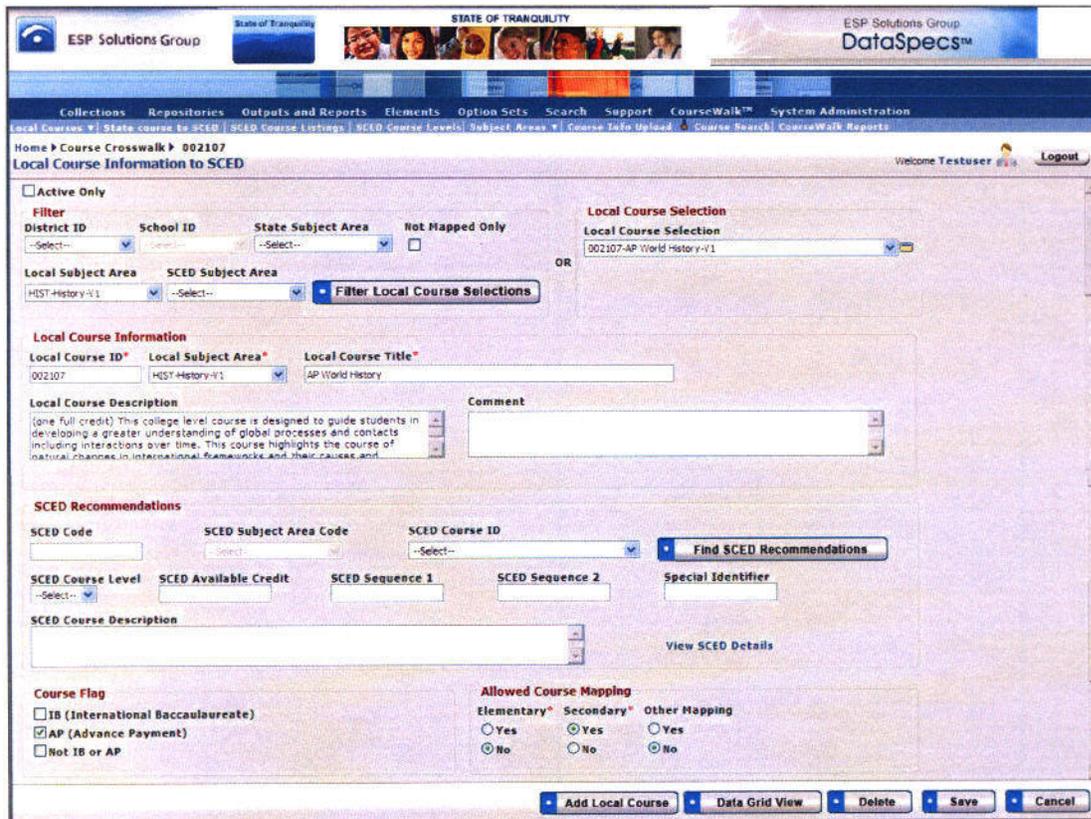
[View All](#) [Download](#) [Cancel](#)

If you have subject areas that do not match the list to which you are matching, then you may choose not to make a link. Much work went into the identification of the SCED codes so that all subject areas are covered. If you are matching to the SCED codes but it is not obvious which subject area is a match, you may want to refer to the documentation for SCED at <http://www.nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2007341>.

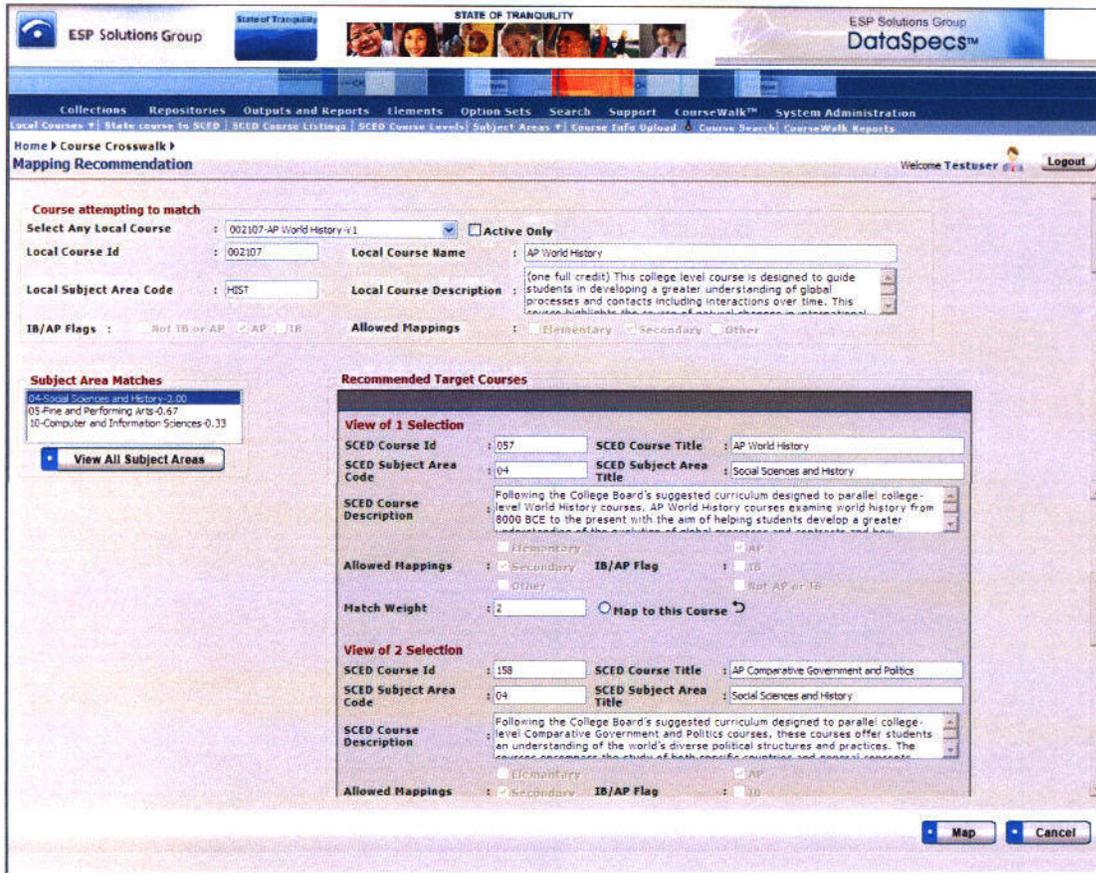
2.5 Local Course to State or SCED

When you have “Validated and Imported” your list of local subject areas and courses, CourseWalk can be used to identify potential matches to SCED courses or the State list of courses. The screen you choose will determine which type of match is made.

To review the recommendations and select the appropriate mapping, go to the **Local Course to State** or **Local Course to SCED** screens from the second level Local Courses menu at the left of the screen. In the Filter area, select a **Local Subject Area**, and then click on the **Filter Local Course Selections**. From the Local Course Selection (in the upper right hand section of the screen), select a course. In the **Local Course Information** section, the Local Course ID, Local Subject Area, Local Course Title, and Local course Description will be available (for all of your courses).



To map to SCED (or State Courses), click the **Find SCED Recommendations** button or the **Find State Recommendations** button. Based on the subject area, course title, and course description, CourseWalk will find the closest matches and provide them in a list in order of preference. You will then review the proposed matches and determine which one is best.



Course attempting to match

Select Any Local Course : 002107-AP World History v1 Active Only

Local Course Id : 002107 Local Course Name : AP World History

Local Subject Area Code : HIST Local Course Description : (one full credit) This college level course is designed to guide students in developing a greater understanding of global processes and contacts including interactions over time. This course highlights the evolution of global processes and contacts.

IB/AP Flags : Not IB or AP AP IB Allowed Mappings : Elementary Secondary Other

Subject Area Matches

- 04-Social Sciences and History-2.00
- 05-Fine and Performing Arts-0.47
- 10-Computer and Information Sciences-0.33

[View All Subject Areas](#)

Recommended Target Courses

View of 1 Selection

SCED Course Id : 057 SCED Course Title : AP World History

SCED Subject Area Code : 04 SCED Subject Area Title : Social Sciences and History

SCED Course Description : Following the College Board's suggested curriculum designed to parallel college-level World History courses, AP World History courses examine world history from 8000 BCE to the present with the aim of helping students develop a greater understanding of the evolution of global processes and contacts and how

Allowed Mappings : Elementary AP IB
 Other Not AP or IB

IB/AP Flag : IB Not AP or IB

Match Weight : 2 Map to this Course ↻

View of 2 Selection

SCED Course Id : 158 SCED Course Title : AP Comparative Government and Politics

SCED Subject Area Code : 04 SCED Subject Area Title : Social Sciences and History

SCED Course Description : Following the College Board's suggested curriculum designed to parallel college-level Comparative Government and Politics courses, these courses offer students an understanding of the world's diverse political structures and practices. The course emphasizes the study of both specific countries and general concepts.

Allowed Mappings : Elementary AP IB

IB/AP Flag : IB Not AP or IB

CourseWalk will give you one or more recommended target courses. These courses are arranged in subject areas, with the subject area matching first. Each potential match has the SCED (or State) information entered in to assist you in selecting the best match. At the bottom of the page you will see how many pages of potential matches there are. When you have identified the desired match, click on the radial button called **Map to this Course** which appears at the end of the course information. If you select another one later, it will replace the first match. After you are sure about the match, click the **Map** button at the end of all potential matches. After you have completed this step, you will return to the screen and may select another Local Course to map.

If the recommendations are not appropriate, you may choose from the enter list of subjects within a subject area. To see additional courses, click on the **Other Choice** menu. You will see the list of all courses in the subject area. When you choose one from the list on the left hand side of the screen, the Subject Area Title, Course Title and Course Description will be populated in the View of Other Choice on the right hand side of the screen. The Other Choice view can be changed to look at other potential matches. When you have found the desired match, click on **Map This Selection** at the bottom of the screen.

If the State courses have already been mapped to SCED, you will also be able to get the SCED code for your local courses.

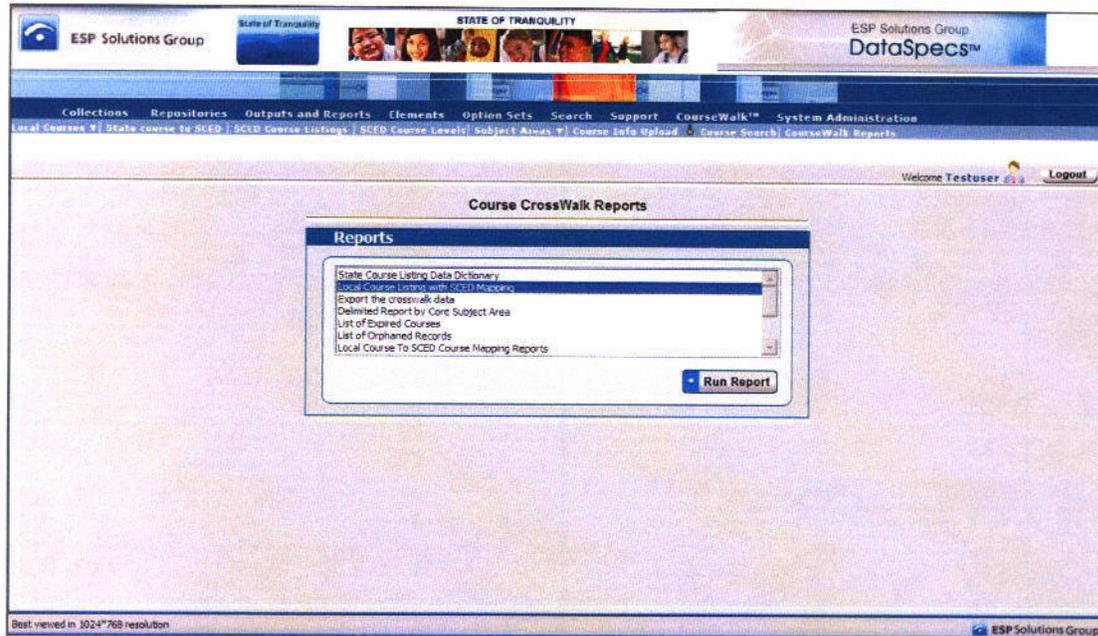
When you have additional local courses to add to your list and map to the SCED course codes, you will use this screen. You will also use it to makes revisions to existing entries. Click on the **Local Course to SCED** option on the menu bar. The directions are the same as for the State Course to SCED.

If you are revising a course, click on the pull-down menu for **Local Course Selection** and choose a course. It will load the information you have already entered into the Local Course Information Section. You may revise your course description, title or other information in this screen. When you are ready to find the SCED match, press **Find SCED Recommendations**.

If the recommendations are not appropriate, you may choose from the enter list of subjects within a subject area. To see additional courses, click on the **Other Choice** menu. You will see the list of all courses in the subject area. When you choose one from the list on the left hand side of the screen, the Subject Area Title, Course Title and Course Description will be populated in the View of Other Choice on the right hand side of the screen. The Other Choice view can be changed to look at other potential matches. When you have found the desired match, click on **Map This Selection** at the bottom of the screen.

2.6 Reports

The Reports screen provides you with the capacity to print or save reports based on the information in CourseWalk. The Reports screen can be accessed prior to entering CourseWalk as well as after you are using the tool. To run a report, select the name of the report you want to run, then click the **Run Report** button.



The report you receive will look something like this.

Local Course Listing With SCED Mapping													
Local Course Id	Local Course Name	Local Course Description	District	School	SCED Code	IB	AP	Elementary Mapping Allowed	Secondary Mapping Allowed	Comment	Effective Date	Expiration Date	Version
002107	AP World History	(one full credit) This college level course is designed to guide students in developing a greater understanding of global processes and contacts including interactions over time. This course highlights the course of natural changes in international frameworks and their causes and consequences, as well as comparisons among major societies. Students successfully completing the AP exam.			0405700.000000	False	True	False	True		12/21/2008		1

This information is downloadable in an Excel format.