Overview of the Secondary Credit Assessment System[1]

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Introduction In 2006, Public Acts 123 and 124 of 2006 were enacted. These public laws implemented a set of high school graduation requirements for Michigan's high school students. Starting in the 2006-07 school year, entering eighth graders will need to demonstrate their proficiency in certain academic content areas prior to graduation from high school. These include specific credit areas in English, mathematics, science, and social studies. Students can obtain credits by taking certain courses or through other means.

Public Acts 123 and 124 require the Michigan Department of Education to develop course/credit content expectations in the required course/credit areas, to develop guidelines in other course/credit areas, and to develop end-of-course examinations in at least the required course/credit areas. The credits required for graduation include the following:

English	**Science**
English 9	Biology
English 10	Chemistry or Physics
English 11	One Additional Credit
English 12	*Earth Science*
Mathematics	**Social Studies**
Algebra I	American History (Including Geography)
Geometry	World History (Including Geography)
Algebra II	Government/Civics
Data and Statistics	Economics
Pre-Calculus	

Note: Credits listed in italics indicate credits that students might take in order to fulfill graduation requirements. They also indicate credits for which examinations may be needed.

The table above shows the areas in which the Michigan Department of Education will need to develop, within three years, "end-of-course (EOC) tests" in English, mathematics, science, and social studies. Although credits in visual and performing arts, health education, and physical education are required, the law does not require examinations in these areas. These assessments are to be made available to local districts, although the laws do not require local school districts to use them. In addition, the laws are not specific as to what is meant by end-of-course tests.

Other States End-of-course (EOC) tests are used in a number of states at the secondary level to assess whether students have learned the key knowledge and skills from high-school-level courses that they take. In some states, these are courses that all students are required to take; in other states, the courses are not required. Approximately half of the states administer EOC assessments in some

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manner. In most states, participation of schools and students is required for all students who enroll in a class for which an examination is available.

End-of-course examinations usually measure the states' or districts' definition of the content standards for the courses. The exams, which can run from one to two hours, usually include both multiple-choice and constructed-response (written response) items. In some states, the constructed response section can count for up to half of the points. Because of this, results often are returned to students and schools in late summer or early fall. A couple of states administer some or all of their EOC assessments online, so results are available quickly. Only a handful of states administer their EOC assessments in such a manner that the results are returned in time to be used in the grading of students.

In the case of state-administered programs, the end-of-course tests may be used for NCLB accountability purposes. A few states use the results to determine whether or not the student has passed the course (or receives credit for taking the course), regardless of whether the score is factored into the grade that the student receives. A few states require students to pass a certain number of course exams (e.g., four) in order to receive a high school diploma.

Typically, states administer end-of-course exams in the spring of the school year. In the states that require passing the tests in order to receive course credit or to graduate from high school, the exams may also be offered in the fall and winter so that students who did not initially pass may retake the exams in order to do so.

An Alternative Approach – In Michigan, assessments need to be developed for each of the required and major optional credits that students can take to fulfill graduation requirements. These won't necessarily correspond to specific courses, since students could acquire the content either through traditional courses, integrated courses, applied career-technical programs, or even independent study.

Since Michigan's requirements focus on credits not courses, a more complete assessment system is in order – a balanced assessment system. This system, the *Secondary Credit Assessment System (SCAS)* would be comprised of three parts:

- **Summative assessments (end-of-course examinations)** available to school districts.

- **Interim benchmark assessments** that can be administered to students when they complete units of instruction. These assessments will verify that student learning is on track for students to complete the credit area successfully.

- **Formative assessment strategies** for teachers to use to guide student learning and to verify instruction on a daily basis in their classrooms.

In order to develop this balanced assessment system, several types of assessments would need to be prepared:

- Summative Assessments: Relatively short, two-hour, end-of-course assessments would be prepared for schools that wish to administer the traditional type of examination at the end of two semesters of instruction. These exams would be in the range of about 75 – 85 items total, with the

bulk of the questions multiple-choice in nature. The state would provide four forms of the exams annually, at set intervals throughout the school year (e.g., October, January, and May). School districts would order the required number of examinations from the state's test administration contractor that would provide the testing materials and would score and report the results back to schools and students.

- Interim Benchmark Assessments: *Testlets* or mini-assessments for sub-units of study in each credit area would be made available to students and educators. Testlets are defined as a predetermined set of items (multiple choice and constructed response) measuring a fixed subset of the content expectations in a credit area with known statistical characteristics that are offered as a package, thus permitting reliable and valid assessments for each sub-unit in the credit area. The number and level of specificity of the sub-units to be measured would need to be determined for each credit area.

  The testlets would be offered in different formats as suitable for the content area (e.g., traditional, integrated, career-tech, or other). By offering a series of testlets for each credit area, local school districts could offer the assessments in a flexible manner. Some of the ways in which districts might choose to assess include:

  - Assessing students in the traditional manner at the end of two semesters of study;
  - Dividing the assessments into first and second semester assessments;
  - Assessing student proficiency at the end of each marking period;
  - Administering a testlet when students have completed their study of one strand, standard or benchmark covered during the school year;
  - Offering the assessments to students who want to "comp out" of a course and receive credit for the credit area by passing the set of testlets before taking the course.
  - Using the testlets to retest students who did poorly on the testlet the first time that they took it.

  The state would provide four versions of each testlet annually. Testlets would be delivered online, so that students could take any testlet when they or their teacher felt they were ready. The goal is to provide a uniform assessment for all students at the conclusion of units of instruction so that students who did not do well could receive immediate remedial assistance and therefore not fall behind their peers.

  In order to implement this system, the state would need to provide not only the assessments but also a delivery system (online assessment system) and a record-keeping system.

- Formative Assessments: Helping all students achieve the new High School Content Expectations will be a challenge for educators and student alike. In order to do this, schools will need to change how students are taught and how they learn. Student assessment will play to key role in transforming how students learn in their high school courses. Classroom teachers assess students' learning on an on-going basis; the goal of this activity is to help them become more proficient in doing so.

The state proposes to gather teams of local educators to develop several resources for educators across the state: 1) instructional strategies keyed to the High School Content Expectations, 2) classroom-based assessment strategies that teachers can use to foster student learning. 3) professional development opportunities for educators to help them improve their skills in instruction and assessment, and 4) strategies for engaging students in taking responsibility for and demonstrating their own learning.

The goal of these assessment strategies is to build assessment ideas that are embedded in innovative instructional strategies.

The *Secondary Credit Assessment System* will be comprised of several types of assessments and thus be a balanced assessment system. The overall goal of the *Secondary Credit Assessment System* is to assure that students have mastered important content in the credit areas required by the new graduation requirements.

How Will the Assessments in the *Secondary Credit Assessment System* be Developed? The *Secondary Credit Assessments* would developed by staff of the Office of Educational Assessment and Accountability (OEAA), working in conjunction with other MDE offices (such as the Office of School Improvement), external advisory groups and contractors. Different strategies will be used to create the different components of the *SCAS*:

Summative, End-of-Course Examinations There are several steps in the development of the measures to be used:

- Select the credit areas for which summative assessments are to be created.
- Determine the range of content for which the summative assessments would be created.
- Conduct a Webb alignment study to determine the Depth of Knowledge for each standard and expectation. This will help to assure alignment of the tests to the expectations during and after item development.
- Select the vendor to be used for this program.
- Develop a test blueprint for the summative assessment in each credit area. This blueprint would describe which skills will be assessed, with what number and type of items, and how the results would be reported.
- Create the needed assessments using the typical item development steps including item writing, editing, content and bias reviews, pilot testing, content and bias reviews, field testing, and reviews and revisions of the items. This process would include an external contractor and the use of the MEAP Item Writing Teams for development of the assessments.
- Prepare multiple versions of each end-of-course examination by selecting items from the item bank to populate four forms of each examination annually.
- Provide a means for local school districts to order a sufficient quantity of each end-of-course exam needed.
- Print and package the exams.
- Distribute the exams to schools at fixed times during the school year (fall, mid-year, and spring).
- Assess students during pre-determined testing periods
- Collect and score the examinations
- Analyze and report the exams back to school districts (providing student, classroom, school and district results. The state *might* collect data from a

random sample of students in order to provide state-comparative data for users of the state end-of-course exams).
- Provide technical analyses of each of the exams in order to assure that the assessments are of the highest quality.

Interim Benchmark Assessments There are several steps in the development of the measures to be used:

- Select the credit areas for which testlets are to be created.
- Determine the level of specificity (e.g., strand, standard, or benchmark) for which the testlets would be created.
- Determine the number of testlets in each credit area.
- Select the vendor(s) for this program.
- Develop specifications for the testlet development. This would include the formats (traditional, integrated, applied, and so forth), item type(s), number of items needed for the final testlet, and the number of items to be created.
- Create the needed assessments using the typical item development steps including item writing, editing, content and bias reviews, pilot testing, content and bias reviews, field testing, and reviews and revisions of the items.
- Select or develop the software needed to store, retrieve, score, and report the testlet information at the state and local levels.
- Load the items into the electronic testlet bank;
- Make the new testlets available to local school districts.
- Provide the capability to administer the testlets on paper or electronically.
- Score and report would be handled for either the paper- or electronically-based assessments.
- Repeat these processes to keep the testlet bank "refreshed" – that is, new forms would need to be created on an on-going basis so that students could retest without repeating any testlet form.

Once the testlet bank is created, local school systems would determine how it would be used. Since schools might want to administer fixed tests at the end of units of instruction, marking periods, terms, semesters or the school year, the district would control how the testlet bank would be used and when it could be accessed. This would be possible if a portion of the bank was kept secure and accessed only by authorized individuals. The other portion of the bank would be open at all times, so that students could assess themselves on the strands needed to qualify for credit in the credit area in which they take the testlets.

Formative Classroom Assessments These assessments would be developed in the following manner:

- The State will notify school districts of the opportunity to participate in the development of these assessment strategies.
- The Michigan Department of Education will select and train a group of classroom assessment specialists to work with the volunteer school teams to develop the materials needed:
    - Instructional strategies and activities to address the HSCEs for all students
    - Assessments for teacher use that can be embedded in these instructional activities
    - Professional development activities that can be used by educators to learn how to use the instructional activities and assessment strategies.

- Volunteer school teams will work under the direction of the state's trainers, as well as others to create the needed materials.
- Using the specifications developed for the interim benchmark assessments and the High School Content Expectations, the volunteer teams will create instructional and assessment resources for each sub-unit of the HSCEs.
- The state's contractor will select from the developed materials those that are of the highest merit, package these into modules, and edit these in preparation for the pilot testing.
- Volunteer teams and others will try out the instructional and assessment modules to determine their suitability and utility.
- The contractor and other advisors will review the results of the statewide pilot test and revise the modules as needed.
- The modules will be finalized by the contractor.
- The state will make the modules available to all districts statewide.
- All school districts, even those not electing to use other components in *SCAS*, will be encouraged to use these formative modules.

How Would the Use of This Assessment Strategy Assist High School Students? The *Secondary Credit Assessments* could provide rich information about student achievement of the academic content standards covered for each credit area. Thus, they can provide valuable information to students, parents, educators, and the public about student achievement. For the student, this information is useful to assure that students have learned the content they will need to succeed in subsequent courses in the content area, as well as enhance their probability of success in post-secondary activities such as higher education or employment.

For parents, the information on student achievement at the individual student level will help assure the parents that students are making progress as needed to succeed in high school, as well as to be prepared for college. Using group data, parents can see that the school's instructional program is succeeding in adequately preparing most students for post-secondary opportunities.

For educators, the data provided by the *Secondary Credit Assessments* can provide data about which students are struggling most in learning the course content. The data can also provide educators with useful information that they can use to assure that the courses that are taught offer appropriately rigorous content that students need to be successful. Low scores may also indicate the need to review how the instruction was provided. Both reviews can help assure that students receive the instruction that they need.

Providing summary data to the public can help provide information about how well the students in their local high school do in comparison to students elsewhere in the state. This public scrutiny can bring a measure of accountability to help high schools that focus on student achievement of important knowledge and skills. Since only the students who feel prepared to pass the credit are assessed, these assessments can be both rigorous and fair for all students assessed.

If the *Secondary Credit Assessment* approach is used, students could receive feedback on their learning as it is occurring, rather than wait until the end of the school year to take a summative assessment. This could help students focus their learning on material they had not yet mastered which may speed their learning of this material.

How Would This Assessment Strategy Complement the Michigan Merit Examination? The Michigan Merit Examination (MME) is a survey assessment of high school-level standards and benchmarks. Because it is a survey instrument, the coverage of content taught in any specific course may be quite limited. In addition, survey assessments such as MME include all students, both those who have taken rigorous college-preparatory courses and those who have taken less rigorous ones. Thus, survey assessments cannot fairly probe into more rigorous content taught in more advanced high school courses. End-of-couirse assessments can provide more information in-depth about the knowledge and skills students have been taught.

Summary The goal of the *Secondary Credit Assessment System* is to create a balanced assessment system, comprised of summative, interim benchmark, and formative assessments that will help each secondary student learn all of the High School Content Expectations for each of the required course credit areas. The level of rigor of the expectations, combined with the requirement that student demonstrate their proficiency in each credit area, demand that a new system of instruction and assessment be used to better prepare high school students for post-secondary opportunities. Hopefully, the *Secondary Credit Assessment System* will provide the structure needed for student success.

How Can YOUR School Get Involved?

There are several ways that Michigan high schools can get involved in the development of the *Secondary Credit Assessment System*. These include:

- Form a team of educators in one or more high schools, in your local or intermediate school district, to learn about formative classroom and interim benchmark assessments.
- Develop model instructional units for one or more High School Course/Credit areas
- Develop assessments (formative classroom and interim benchmark) that are embedded in the model instructional units
- Field test the instructional units with formative classroom and interim benchmark assessments embedded in them.
- Provide individuals to help review and revise others' instructional units with formative classroom and interim benchmark assessments embedded in them.
- Field test state-developed summative assessments.
- Review the state-developed summative assessments when they are field tested.

If your high school would like to participate in the development of the *Secondary Credit Assessment System*, please complete the attached form and return it to an MDE staff member to the address or fax number shown on the form. Thank you in advance for your interest in helping to develop *SCAS*.

Secondary Credit Assessment System
Enrollment Form

The following team would like to participate in the development of the *Secondary Credit Assessment System*. Please list each member of the team, the content area specialty of each team member and what High School Course/Credit area(s) the team wishes to focus on.

School District _____

School District Number _____

Content Area(s) ELA Mathematics Science Social Studies

Course/Credit Area(s) _____

_____

Contact Person _____

Mail Address _____

_____

Telephone _____ Fax _____

E-Mail _____

Team Members (Use Other Side if Necessary)

Name	Content Area(s)	Grades

Return to:

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