
Roads To Opportunity



2010 Annual Report

Maine Course Pathways Project



*Submitted to: The Maine Department of Education
Prepared by: The Educational Policy Improvement Center*

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About EPIC



The Educational Policy Improvement Center, a 501(c)3 nonprofit organization, seeks to help policy makers and policy implementers alike do a better job of using educational policy as a tool to improve schooling and student learning.

EPIC works with federal agencies, state education departments, non-governmental organizations, private foundations, and school districts to support research on a range of issues in the areas of high school-to-college articulation, adequacy funding, large-scale assessment models, and other policy initiatives designed to improve student success.



Executive Summary

The Maine Course Pathways project, a collaboration between the Maine Department of Education (MDOE) and the Educational Policy Improvement Center (EPIC), was established in 2008. The MDOE was interested in providing Maine high schools with tools and technical assistance to increase standards-based teaching and learning. In the first year of the program, the project began developing a process of school-wide curriculum review. With the June 2009 passage of LD 1325 *An Act Regarding Curriculum Requirements and Standards for Awarding a High School Diploma*, now Public Law, Chapter 313, Maine codified a requirement that students be provided multiple pathways and opportunities to demonstrate achievement of the Maine *Learning Results: Parameters for Essential Instruction* (MLR). The Maine Course Pathways (MCP) project directly supports the state's goals to help schools validate curriculum and provide students the opportunity to learn all required standards.

The MCP system connects teachers and administrators, guides them in creating high-quality curriculum aligned with the MLR, and analyzes the results of course offerings. Syllabi are developed, reviewed, and then analyzed by the online Pathways system to identify gaps in MLR coverage across selected course pathways. This process allows schools to offer multiple pathways in each content area that accommodate different types and combinations of courses that, when taken as a whole, teach all of the applicable MLR. This creates the possibility of multiple ways that students with differing interests and goals can receive a comparable education that provides them the opportunity to learn all the content areas specified in the MLR.



The project was piloted between 2008–2010 during which time 18 schools across Maine participated by using online software to develop syllabi and provide feedback on tool functionality and project resources. This report provides a detailed description of the MCP system and an overview of pilot implementation to date. Data are presented on school participation and the results of the 2009–2010 syllabus reviews.

The report concludes with a discussion of the lessons learned during the pilots, as well as recommendations for improving the effective implementation of the MCP system and the quality of teachers' syllabi. The recommendations for MDOE include:

- Communicate MCP's purpose and role in a school for both administrators and teachers.
- Increase professional development to include training on developing high quality syllabi.

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- Encourage teacher collaboration on syllabus development and curricular materials.
 - Provide sample syllabi with concrete examples of activities, units, and syllabi that meet the scoring criteria in each content area.
 - Increase involvement from content experts to provide curriculum development support to teachers.
 - Expand reporting and integration with other state data systems to enable individual pathways.

The MCP system demonstrates promise beyond its original objective of validating opportunity to learn to become a powerful instructional management tool providing curriculum, instruction, and assessment resources and data never available previously. Schools are realizing the potential of the MCP system to be a powerful tool in transforming curriculum into a standards-based system, providing students the potential to plan individualized pathways towards graduation beyond the traditional course-based system. In addition, one of the strongest findings from the first two years of field-testing is that the MCP process increases school-level discussion and collaboration around course content, and curriculum development and alignment to state standards.

The use of technology is also an important piece of Maine's approach to implementing its vision. For the first time, educators have consistent and ready access to instructional information about what standards are being taught in what courses. The online system creates a database of course-standards alignment and analyzes the opportunities to learn offered by courses in combination. These course combinations create "pathways" toward graduation. Together with the collaborative development and sharing of course syllabi, this newly developed software allows administrators, teachers, and students to understand how combinations of courses build on the knowledge and skills of each course

to provide full pathways to graduation. The electronic platform also allows the opportunity for access to additional instructional materials and support. In short, the MCP system offers the state of Maine the opportunity to provide targeted resources aligned to state needs and priorities to educators statewide.

The MCP system has created new, alternative ways to provide professional development, teacher networking, and curriculum development support. As the project moves forward, Maine teachers will continue to benefit from the expansion of the instructional management system to provide a suite of resources for schools and teachers. The system offers possibilities to becoming a comprehensive standards-based system incorporating the MLR and Common Core State Standards, exemplar courses and units, performance assessments, and sample activities into curriculum development statewide.

Finally, the MCP system has positioned the state of Maine to be a national leader in creating a standards-driven accountability system in partnership with local schools. The MCP system can serve as a national model for how to integrate the Common Core State Standards and assessments into curriculum and instruction consistent with state policies and maintaining local control.

Introduction

The Maine Department of Education (MDOE) is at the forefront of national efforts to align high school curriculum to college and career readiness standards. Embarking on a mission it calls A Personal Journey for Next Generation Learners, Maine has employed several key strategies to ensure all of its students graduate from high school with the knowledge and skills necessary for success beyond high school. In addition to expanding student-centered and performance-based learning, the state has committed to providing students multiple opportunities to demonstrate state standards, the Maine *Learning Results: Parameters for Essential Instruction* (MLR), and multiple pathways to graduation. In 2009, the Maine Legislature passed LD 1325, which became part of Maine Public Law Chapter 207, mandating that schools provide students multiple pathways to graduation.

In response to LD 1325, the MDOE established the Maine Course Pathways (MCP) Project to provide high schools tools and technical assistance for monitoring school programs to ensure that all students have multiple opportunities to learn, practice, and demonstrate *all* of the MLR in each of the eight content areas. MCP, a collaboration between the MDOE and the Educational Policy Improvement Center (EPIC), is a school-wide curriculum review, centered on the course syllabus, that leads to course pathways analyses. The goal of the MCP system is to help schools validate curriculum and academic programs while maintaining local control over the content and sequencing of courses.

The MCP system is innovative in its approach



to educational accountability. MCP utilizes online software throughout its process to make curriculum development more collaborative and efficient. The project maximizes local control, enabling schools and teachers to determine course content, while external course reviews validate that schools offer opportunity to learn all state standards. This comprehensive and transparent system for course creation and review creates consistent, standards-aligned course syllabi that make explicit the knowledge and skills taught and assessed in every high school course. The process of documenting each course for MCP improves curricular alignment, both within courses and across courses, as teachers collaborate to develop

syllabi and align courses to standards. Uniquely, the system ensures that schools can validate students' opportunity to learn in a variety of environments, including courses at Career and Technical Education (CTE) centers, and in learning experiences outside the traditional classroom.

The MDOE can use the collected curricula and course data to examine instructional trends in schools across the state. MCP makes it possible to identify examples of high-quality instruction that support state priorities for standards-based instruction and 21st century skills. The state can begin to target those areas that require professional development and develop quality curricular resources for teachers in each content area. MCP positions school districts and the MDOE to design and deliver comprehensive course offerings that ensure students have opportunities to learn, practice, and utilize skills essential for success in postsecondary education, the workplace, and citizenship.

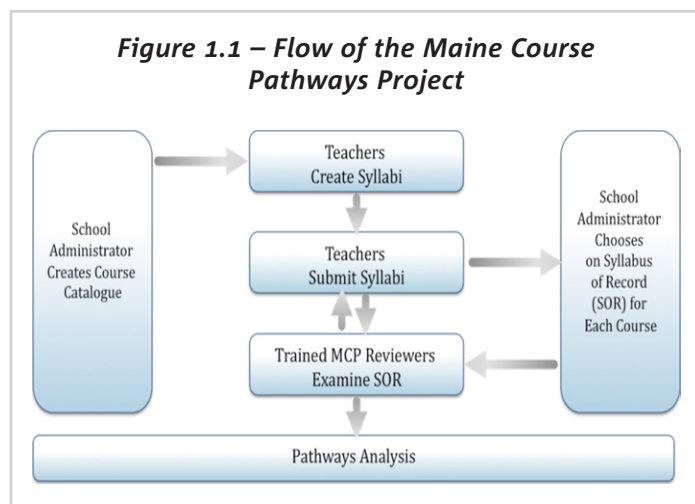
This report begins with a detailed description of the MCP system, followed by an overview of pilot implementation to date. Data are presented on school participation and the results of the 2009–2010 syllabus reviews. The report concludes with a discussion of the lessons learned during the pilots, as well as recommendations for improving the effective implementation of MCP and the quality of teachers' syllabi.

Project Overview

The MCP project began in 2008 when the MDOE partnered with EPIC to create a comprehensive system of course development, curricular validation, and pathways analysis to be offered to all Maine high schools. The MCP system was conceptualized based upon the expertise EPIC gained in conducting the AP[®] Course Audit for the College Board. The AP Course Audit is a system in which external reviewers use course syllabi to validate the presence of the AP curricular requirements in every AP course worldwide. Over time, the MCP system diverged from AP Course Audit processes as it was refined to meet the specific needs and goals of Maine. The resulting system allows MCP flexibility to support Maine's standards-based education efforts, serving as a tool for high schools to integrate the national Common Core Standards and common assessments into curriculum, and to implement the Re-inventing School Coalition (RISC) model in high school courses. **Figure 1.1** illustrates the current MCP process for individual schools participating in the project.

The school administrator begins the process by entering or uploading the school's course catalog into the MCP system. After the school has a course catalog in the system, teachers create and submit syllabi for these courses. Teachers of the same course are encouraged to collaborate to create a single syllabus for the course. If more than one teacher submits a syllabus for the same course, the school administrator must select one of these syllabi as the *syllabus of record* (SOR), or the one syllabus per course that will be reviewed.

After the syllabi have been submitted and the SORs selected, trained content area experts



review the syllabi for evidence of the MLR teachers included in the syllabi. If the reviewers do not find sufficient evidence of opportunity to learn one or more of the MLR scoring components, the syllabus is returned to the teacher for revision. Finally, all courses and their confirmed MLR are included in the Pathways system, which demonstrates the extent to which combinations of courses provide opportunity to learn the MLR in a given content area.

MCP evaluates opportunity to learn in seven of the eight MLR content areas: English Language Arts, Health Education and Physical Education, Mathematics, Science and Technology, Social Studies, Visual and Performing Arts, and World Languages. EPIC and the MDOE plan to pilot the review of Career and Education Development standards during the 2010–2011 academic year.

Innovative Elements

The MCP system contains several features to support Maine's standards-based education

efforts. This section describes four unique elements of the MCP, including: providing a system that ensures all students the opportunity to learn all required standards; increasing the alignment between high school and college; enabling high school faculty to create high quality syllabi; and advancing the use of technology to improve curriculum and instruction.

Opportunity To Learn

One of the key tenets of the standards movement and the MCP system is that all students can succeed if they are given appropriate opportunities to learn. The “opportunity to learn” approach focuses on the *scope* of the curriculum and instruction that is available to students, and verifies the opportunities schools provide students to meet the standards. Federal educational policy reinforced this principle under the No Child Left Behind Act of 2001 (NCLB). One purpose of NCLB is to “ensure that all children have the opportunity to obtain a high-quality education and reach proficiency on challenging state academic standards and assessments” (NCLB, 2002). Opportunity to learn is defined as offering students multiple opportunities and resources that promote learning through multiple forms of instruction, curriculum materials, and nontraditional educational experiences (Cooper and Liou, 2007, Herman and Klein, 1997). The objective of the MCP system is to determine the extent to which combinations of courses from each content area provide a student opportunity to learn all of the MLR.

College Readiness Strategies

In addition to curricular development and validation, MCP addresses multiple college readiness strategies. Studies conducted by researchers at EPIC found that many college freshmen recognize a gap between the expectations of their high school teachers and the expectations they encounter in college (Conley, Aspengren et al., 2006). Conley (2007)

has offered four major strategies to minimize the mismatch between high school curriculum and college course expectations:

1. Align high school curriculum and instruction with college expectations
2. Develop high-quality syllabi in all high school courses
3. Implement seminars for high school seniors
4. Add missing content to high school courses

With the MCP system, the MDOE is focusing on three of the four strategies to increase college readiness: aligning high school curriculum, developing high-quality syllabi, and analyzing course pathways for missing standards.

MCP is a ready-made delivery platform for the immediate integration of the College- and Career-Readiness Standards, released in June 2010 as part of the Common Core State Standards. EPIC is currently working in conjunction with the MDOE to develop Common Core scoring guides for MCP. High school faculty will be able to integrate the standards directly into their course documents beginning in January 2011. Maine is well positioned for rapid curriculum integration, and Maine can serve as a nationwide implementation model.

High Quality Syllabi

The syllabus is a useful tool for determining whether all Maine high school students are being offered the opportunity to learn all of the MLR. Properly constructed, a syllabus can explicitly define the expectations in a course and describe the knowledge and skills taught. By looking at the state standards identified in each syllabus, EPIC can validate that all standards are addressed in the curriculum, and determine whether or not the course content is aligned with the standards both horizontally (i.e., within the same grade level) and vertically (i.e., across grade levels). The MCP system encourages the development of high-quality syllabi similar to postsecondary syllabi in

content and format, further preparing students for the college experience. Syllabi allow high schools to explicitly communicate curriculum to parents and students, and provide a document that clearly outlines the actions and behaviors required to succeed in each course. In addition, educators can post the syllabi directly online. This increases the transparency of expectations for administrators, teachers, parents, community members, and students.

Typically, school districts have not required high school teachers to follow a prescribed format or use a template when creating a course syllabus. This lack of continuity can contribute to widely diverse course documentation. If they do create them, some teachers tend to view their syllabi and course materials as their own private property, and hesitate to share them with others (Conley, 2005). Working together on a common syllabus for each course gives teachers, school administrators and curriculum coordinators the opportunity to improve curricular alignment. A move to encourage Maine teachers to submit course syllabi, in a common format and with the goal of making all syllabi available online or otherwise publicly available, can therefore be the start of cohesive curriculum.

High schools can benefit from creating high quality course syllabi and validating these syllabi through a review process. A school-wide syllabus review process allows teachers to receive non-prescriptive external feedback from experts in their fields. This process ensures that all syllabi are up-to-date, fosters more opportunities for teachers to collaborate, and can serve as a mechanism to determine whether the curriculum aligns with college expectations (Conley, 2007).

The Role Of Technology

The MCP system uses technology to connect teachers and administrators, guide them in creating high-quality curriculum aligned with the MLR, and analyze the results of course offerings. Technology can facilitate a process



that formerly required tedious, time-consuming tracking by teachers and administrators. The effects of small changes in a program of study or a course offering can be analyzed almost instantly with software, removing uncertainty and barriers to curriculum change.

The use of technology is therefore central to the MCP system. Every step of the process relies on web-based technology to create, manage, and carry documentation from one stage to the next. To achieve this, MCP utilizes three online systems:

- SyllabusMaker
- Syllabus Review System
- Course Pathways System

EPIC's SyllabusMaker software is the primary tool administrators and teachers use to catalog, create, and share course syllabi. With SyllabusMaker, the online catalog of teachers' syllabi can be easily shared and accessed from year to year. It streamlines syllabus development, provides new teachers access to previous years' documents, and allows for collaborative course development. Administrators have reading privileges to all course syllabi, drawing the administrator into the course creation process and facilitating dialogue between teacher and administrator.

The Syllabus Review System verifies whether or not a course provides opportunity for students to learn the standards the teacher identified. The review system utilizes software and methodology developed by EPIC to evaluate syllabi and provides a unique approach for validating course content. A panel of trained content area experts uses criteria developed in collaboration with MDOE content area specialists to confirm that each syllabus contains sufficient evidence of opportunity to learn the MLR. These criteria are described and outlined in a *Scoring Guide* that is readily available to all participants. If reviewers determine a syllabus lacks sufficient evidence of the MLR, teachers have multiple opportunities to adjust or refine the syllabus as needed.

After syllabi are reviewed, the Course Pathways system identifies gaps in MLR coverage across selected course pathways. The online system creates a database of course-standards alignment and analyzes the opportunities to learn offered by courses in combination. These course combinations create multiple pathways toward graduation. Together with the collaborative development and sharing of course syllabi, this newly developed software allows administrators, teachers, and students to understand how combinations of courses build on the knowledge and skills of each course to provide full pathways to graduation.

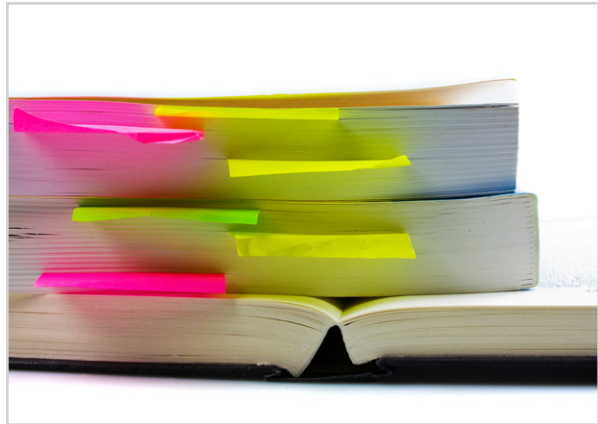
Methodology

Criterion-Based Review Method

MCP uses a criterion-based professional judgment method to confirm the evidence of the MLR scoring components in course syllabi. The Syllabi of Record (SORs) are evaluated by at least two trained expert reviewers in each content area. Using a Scoring Guide to determine whether or not there is sufficient evidence, reviewers make a confirmed/not confirmed decision on each scoring component in each unit.

The criterion-based approach allows course syllabi to be reviewed in order to reach a dichotomous judgment for each scoring component based on individual criteria. Two types of reviewers, seniors reviewers and reviewers, are experienced content experts consisting of postsecondary and retired high school faculty. This method allows reviewers to utilize their expert judgment, which derives from their deep knowledge of the subject area being reviewed, but avoids pitfalls inherent in holistic judgment approaches to document review, in which a reviewer reaches a decision on the document as a whole.

The criterion-based process utilizes rules that constrain reviewer judgment by filtering all decisions through the screen of a series of criteria that are developed by experienced senior reviewers and MDOE content area specialists. To inform reviewer judgment further, decision rules and additional contextual information accompany scoring components. The final result is an overall confirmation of which standards the course provides an opportunity to learn.



Extensive training hones reviewer judgment and improves inter-rater reliability. All syllabus reviewers complete an EPIC-designed training program prior to reviewing SOR for MCP. Training consists of independent practice reviews followed by facilitated team discussion of review results and implementation of the Scoring Guide. Senior reviewers assist in training, and provide additional guidance to other reviewers as needed throughout the SOR review process.

One of the goals of the MCP system, in addition to confirming opportunity to learn the MLR, is to help teachers gain experience in developing and modifying course syllabi to better reflect the standards that are taught. Therefore, a review of course syllabi confirms degree of alignment with the criteria for these standards and identifies specific areas where additional information may be needed.

The use of a criterion-based professional judgment model allows teachers to demonstrate curricular activity by submitting one document, a syllabus, rather than

completing questionnaires or inventories requiring an account of how each MLR is or is not addressed. The use of the criterion-based professional judgment method allows for the review of complex documents that can be submitted as used in the classroom without the need for the teacher to provide additional evidence.

System Design

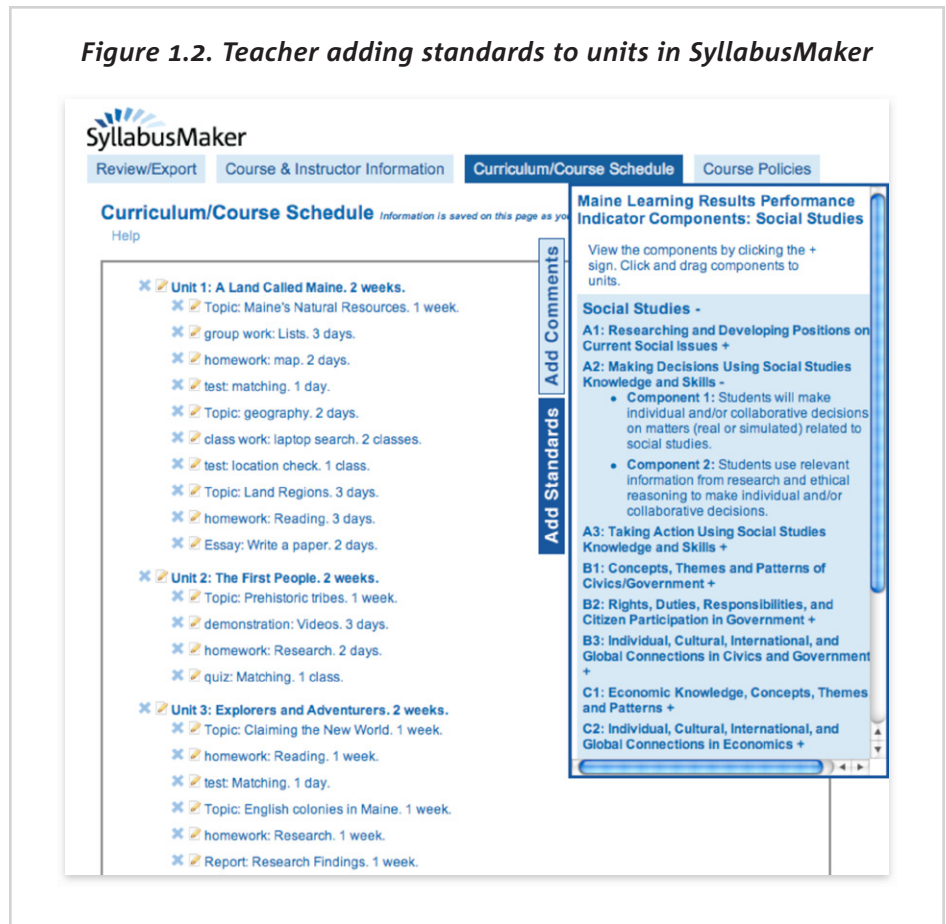
The following describes elements used in the design and implementation of the MCP syllabus review system.

Syllabus Of Record

Although multiple teachers at a high school or CTE center may teach the same course, opportunities to learn the standards should be consistent across all teachers' courses. Therefore, the school administrator identifies one syllabus per course as the *Syllabus of Record (SOR)*. The SOR is the official syllabus for the course in the MCP system, and is the syllabus document evaluated in the review process. Following review, the SOR becomes the record of confirmed MLR standards for the course.

The format and structure of the SOR are similar to those of standard course syllabi. Common elements of the SOR include course objectives, course policies, and unit-by-unit curriculum. While individual teachers may use their own instructional strategies, the SOR includes the common standards, activities, assignments, and assessments for a course. In this way, the SOR represents the *minimum* standards and activities that a student can expect to encounter in that course. When creating the SOR, teachers align standards with each unit

Figure 1.2. Teacher adding standards to units in SyllabusMaker



of the syllabus based on what is taught in that unit.

Figure 1.2 shows how standards are selected for curricular units. In SyllabusMaker, the teacher drags the applicable standards to each curricular unit. The standards for each unit display in the syllabus document and in the syllabus review system for evaluation.

Teachers are allowed to submit one syllabus for every course they teach. However, teachers of the same course are strongly encouraged to

collaborate to develop the SOR for that course. Once syllabi are created, teachers submit them to the school administrator who identifies one SOR for each course to be reviewed. **Figure 1.3** shows the school administrator selecting a SOR. In selecting the SOR, the administrator has a record of the syllabus and the standards each teacher has listed for the course.

After the SOR has finished the external review and has been finalized, teachers may customize the SOR for use in their own classes by adding the activities specific to their individual teaching strategies.

Scoring Guides

The MCP Scoring Guides, developed collaboratively by syllabus reviewers and MDOE content area specialists, contain the criteria and guidelines reviewers use to determine whether a unit contains sufficient evidence of the MLR scoring components indicated by the teacher.

Maine organizes each content area's MLR by standards that outline the broad knowledge and skills students should acquire. The standards are broken into *performance indicators (PIs)* that define the big ideas in each standard. In order to align and review the MLR at the curricular unit level, MCP breaks PIs down into *scoring components*. The scoring components are more concise measures of individual learning targets that can be taught and evidenced in a single curricular unit. As teachers create syllabi, they align scoring components to each curricular unit.

Figure 1.4 shows the Scoring Guide for an English Language Arts component. Although

Figure 1.3. School administrator selecting a syllabus of record

Submitted Syllabi: World History 1

Below are the syllabi your teachers have submitted for World History 1. Your task is to verify one syllabus as the syllabus of record for the course. The syllabus of record will be reviewed by trained content experts for the Maine Learning Results the teacher has identified. A syllabus you've returned to a teacher for edits will not appear here until the teacher resubmits it.

- If your teachers worked together to create and submit one syllabus, please select it and click "Submit decision."
- If more than one teacher has created and submitted a syllabus, please view the syllabi and the MLRs to make your decision. Remember that all teachers of a course must attest to teaching the MLRs the reviewers confirm in the syllabus of record.

Teacher	View Syllabus	View MLR Report	Select as Syllabus of Record
Jones, Jack	World History 1	View MLRs	<input type="radio"/>
Smith, Jane	World History 1	View MLRs	<input type="radio"/>

Scoring Guides are developed and modified for each content area specifically, all Scoring Guides follow a uniform structure and contain the following information:

- **Performance Indicators:** Referenced directly from the 2007 MLR.
- **Scoring Components:** A break down of the performance indicators to a finer level that can be taught and evidenced in a single curricular unit.
- **Key Terms:** Particular words and phrases in the scoring components defined to ensure consistent understanding among teachers and reviewers.
- **Decision Rules:** Criteria used to make consistent judgments. All decision rules must be met in a unit for the component to be confirmed in that unit.
- **Important Considerations:** Additional information to provide context for the decision rules and guide reviewers' decision-making. This may include additional subject-specific context that may not appear in the or component.

Like reviewers, teachers and administrators have access to the Scoring Guides for all seven content areas in the online system. Teachers are encouraged to use these documents while developing their syllabi to ensure their units contain enough detail to confirm opportunity to learn.

Reviewers

Syllabus reviewers, contracted by EPIC, are content area experts from outside the state of Maine. These reviewers bring to the MCP system considerable teaching experience, either as current postsecondary faculty or as retired high school faculty. Additionally, all reviewers have experience with criterion-based judgment systems outside of MCP, many of whom having served in a similar capacity as syllabus reviewers for the AP Course Audit.

There are two types of syllabus reviewers: reviewers and senior reviewers. The main distinguishing factor between the two groups is experience; senior reviewers have more experience with the syllabus review process and assisted with the development of the Scoring Guide. There are two reviewers and one senior reviewer in each content area.

All syllabus reviewers complete an EPIC-designed training program prior to reviewing SORs for MCP. Training consists of independent practice reviews followed by facilitated team discussion of review results and implementation of the Scoring Guide. Senior reviewers assist in training, and provide additional guidance to other reviewers as needed throughout the SOR review process.

Figure 1.4. Scoring Guide for an English Language Arts component

C. RESEARCH	
C1. Research	
MLR Performance Indicator: Students develop research questions and modify them as necessary to elicit, present, and critique evidence from a variety of primary and secondary sources following the conventions of documentation.	
Component: Students engage in the process of inquiry by gathering, critiquing, and synthesizing evidence.	
Key Term & Definition(s):	process of inquiry: A broad category involving the idea of accessing, gathering, and processing information.
Decision Rule(s):	The syllabus must show evidence that students have opportunities to engage in the process of inquiry.
Important Consideration(s):	The process of inquiry may be as informal as a classroom discussion, or as formal as library research. This standard focuses on the process of research and not on the presentation of those findings.
	The emphasis of this Performance Indicator is about the process of inquiry, not creating research projects.
	The process of inquiry may involve traditional research methods, personal interview, viewing a video, watching presidential debates, or other media sources.
	The process of inquiry can be entirely verbal; it does not have to involve formal assignments.
	For this component, critiquing evidence means evaluating evidence and making decisions about usefulness.

Content Area Reviews

A *Content Area Review* is a review of a SOR in one content area. Although most teachers align SORs with components from only a primary MLR content area, they have the option to select components from more than one content area. Syllabi that include scoring components from *multiple content areas* undergo review in each content area from which components are selected. For example, if a chemistry syllabus contains the MLR scoring components from Science and Technology, and Mathematics, the syllabus will undergo two content area reviews: one in Science and Technology, and one in Mathematics.

Review Process

The review process begins with two reviewers who independently evaluate each SOR in their content area. Reviewers begin each evaluation by reading the full SOR to establish context for the course. Next, the Reviewer works unit by unit

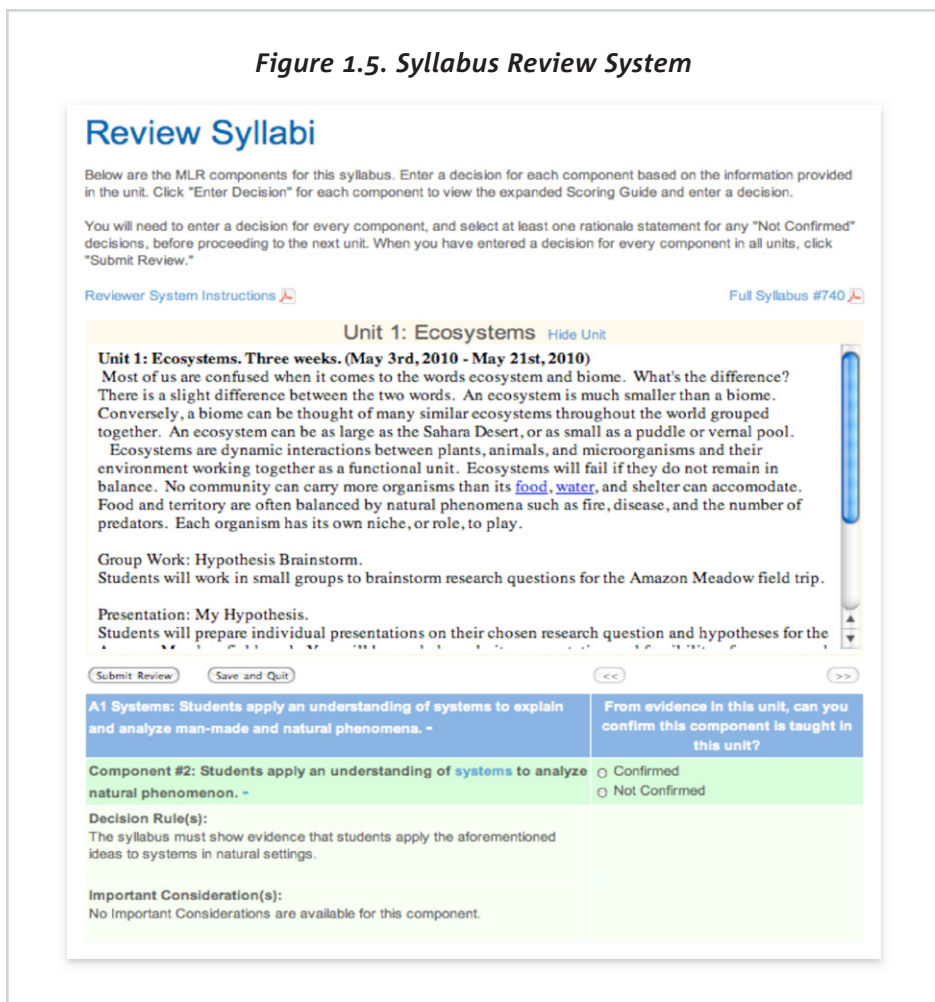
through the syllabus, using the criteria defined in the Scoring Guide to provide a decision for each component, determining whether or not the unit provides sufficient evidence of the component. **Figure 1.5** shows a Reviewer evaluating a Science syllabus. Note that the Reviewer sees the Scoring Guide onscreen while evaluating each component.

Every unit is evaluated independently; evidence from one unit cannot be used to confirm the same component in another unit. Therefore, it is possible for a component to be confirmed in one unit and not in another within the same course. Likewise, each review is conducted independently; one Reviewer's evaluation is never seen or considered by the second Reviewer.

The independent reviews conducted by the two reviewers can result in some difference of professional judgment, particularly for units that contain little evidence. When the reviewers do not agree whether or not a component is sufficiently evidenced in a unit, the SOR is sent to the Senior Reviewer for a final decision.

The Senior Reviewer follows a procedure similar to the one used by reviewers; reading the full syllabus, then using the Scoring Guide to evaluate each unit and make final decisions on components. However, the Senior Reviewer is provided the answers from both reviewers and only makes decisions for components on which the reviewers did not agree. Viewing the decisions made by reviewers not only provides the Senior Reviewer with additional

Figure 1.5. Syllabus Review System



context from each Reviewer's particular content expertise, but also enables the Senior Reviewer to informally monitor the reviewers' performance and assist EPIC in determining when follow-up training or additional guidance is needed.

Assumptions For Syllabus Reviews

The MCP review process is based upon a basic set of assumptions. Reviewers use the following assumptions and principles to guide the SOR review process:

1. Components are the smallest grain size of the MLR. Therefore, components **cannot** be partially met in a unit.

2. Performance indicators are comprised multiple components and **can** be partially met in a unit. Any number of a PI's components can be aligned to a single unit.
3. Reviewers are content experts. One reviewer may have greater expertise in a particular field within the content area (e.g., the field of biology within Science and Technology) than another reviewer. Therefore, senior reviewers may defer to an individual Reviewer's expertise for final content-specific determinations.

The role of the MCP reviewer is to confirm the existence of components within a unit; it does not involve curriculum evaluation or professional development in curriculum design. Therefore, syllabus reviewers do not provide suggestions for additional components that may be covered in the course.

Rationale Statements

When syllabus reviewers do not find sufficient evidence that a MLR standard is taught and select a "not confirmed" decision for the component, they are required to select at least one rationale statement to support this decision. A complete list of rationale statements is provided in Appendix B. These statements provide a means for the reviewer to communicate directly with the teacher. This specific guidance facilitates teachers' revisions by identifying the information that needs to be added to the unit for the component to be confirmed. Rationale statements are mutually exclusive, so that multiple statements can apply to one particular decision.

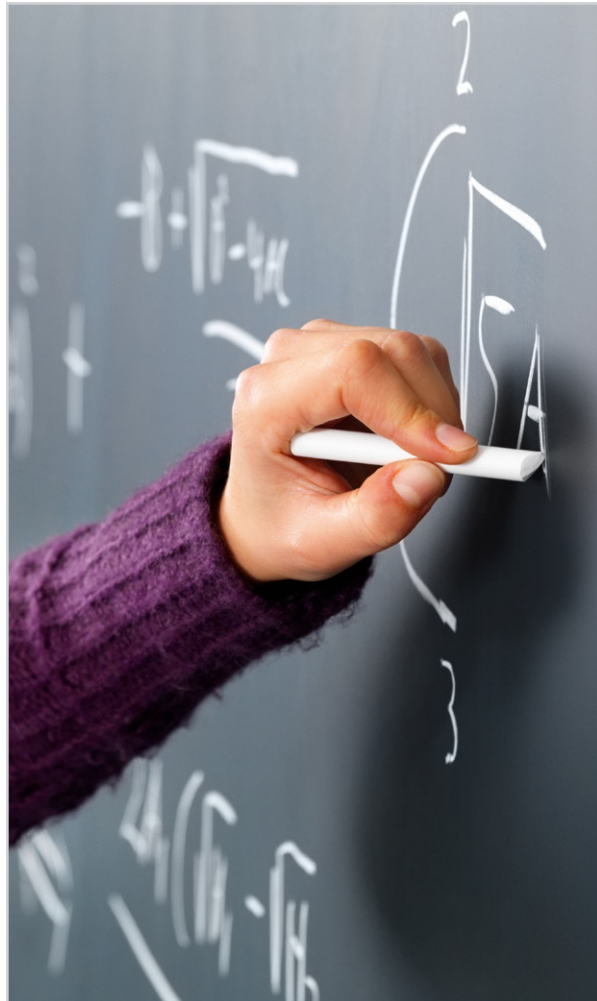


Figure 1.6. Evidence of Alignment Report

Maine Course Pathways	
Second Submission Feedback: 9th Grade English	
This is a unit-by-unit report of which scoring components were confirmed in your syllabus, and which were not. The results of this review have been entered in your school's Course Pathways reports.	
Unit 1: Poetry	
Confirmed in this unit	
Performance Indicator	Scoring Component
English Language Arts A1: Interconnected Elements: Comprehension, Vocabulary, Alphabetic, Fluency	Students read and evaluate text, demonstrating strategies of fluency and comprehension.
English Language Arts A2: Literary Texts	Students use excerpts from the text to defend their assertions.
English Language Arts A4: Persuasive Texts	Students evaluate persuasive texts by analyzing the intended audience, purpose and effectiveness of writing.
English Language Arts D1: Grammar and Usage	Students use resources (handbooks, style guides, websites), either print and/or electronic, to confirm independently the accuracy of their use of Standard American English.
Not confirmed in this unit	
Performance Indicator	Scoring Component
English Language Arts A2: Literary Texts	Students read texts and present analyses of fiction, nonfiction, drama, and poetry. Rationale: The unit lacks a description of how student activities are to be assessed.

When reviewers agree that a component is not confirmed within a unit but select different rationale statements, the teacher sees both reviewers' statements. Differing rationale statements from reviewers do not cause the component to advance to the Senior Reviewer level for a final decision.

Review Outcomes

Once an SOR has been reviewed in all applicable content areas, the results of the review are sent electronically to the teacher and administrator in the form of an *Evidence of Alignment Report* (Figure 1.6). The final decisions are also sent to the Pathways tool.

The Evidence of Alignment Report identifies which components were confirmed and not confirmed in each unit, and provides the reviewers' rationale for all non-confirmed components. The *Resubmission Resource* document provided to teachers is a guide that explains the Evidence of Alignment Report, and directs teachers through their SOR revisions.

Pathways System

In the Pathways tool, administrators analyze combinations of courses in each content area to: a) verify that multiple combinations of courses offer the opportunity to learn all of the MLR in a content area; b) identify unconventional course pathways that allow students opportunity to learn all of the MLR; and c) identify any coverage gaps in the MLR.

Figure 1.7. School administrator entering a course pathway

Create Pathways

This system uses syllabi reviewed in Maine Course Pathways to tell you whether combinations of courses you identify provide the opportunity to learn all of Maine's *Learning Results*.

To begin, please select a content area:

Science and Technology Instructions

Science And Technology

The date listed for each course refers to the quarter the syllabus was last reviewed.

Astronomy Sp '10	Automotive Technology (CTE) Sp '10	Biology Sp '10	Building Construction (CTE) Sp '10	Chemistry Sp '10
Chemistry In The Community Sp '10	Drafting Sp '10	Lab Physics Sp '10		

Year 1	Year 2	Year 3	Year 4	Year 5

Save Pathway Evaluate Cancel

Figure 1.7 shows the school administrator selecting courses for a pathway. The boxes in gray are courses in the school's catalog in the Science and Technology content area. The administrator drags and drops the courses into the grid below.

A pathway may consist of multiple courses per year, or only one or two courses. After the administrator has assembled a pathway and clicked the "Evaluate" button, the system analyzes the pathway, as demonstrated in Figure 1.8, and tells whether the pathway does or does not provide opportunity to learn all the standards in the content area, based on the evidence teachers included in the syllabi.

The pathway analysis report shows which performance indicators were confirmed in the pathway, based on the evidence teachers included in the syllabi. Users can drill down to information at the scoring component level.

Figure 1.8. Pathway analysis report

Pathway Summary					
Legend: ● Performance Indicator fully confirmed ○ Performance Indicator partially confirmed					
Science And Technology Performance Indicators	Biology Sp '10	Automotive Technology (CTE) Sp '10	Chemistry Sp '10	Lab Physics Sp '10	Pathway Confirmed
A1: Systems	○	○			●
A2: Models					○
A3: Constancy and Change					○
A4: Scale					○
B1: Skills and Traits of Scientific Inquiry	●				●
B2: Skills and Traits of Technological Design					●
C1: Understandings of Inquiry					○
C2: Understandings About Science and Technology	●				●
C3: Science, Technology, and Society		●			●
C4: History and Nature of Science				○	○
D1: Universe and Solar System				○	○
D2: Earth	●				●
D3: Matter and Energy			○	○	●
D4: Force and Motion				○	○
E1: Biodiversity	●				●
E2: Ecosystems	○				○
E3: Cells	○				○
E4: Heredity and Reproduction	●				●
E5: Evolution	●				●

A4: Scale
Automotive Technology (CTE)

Component Summary

1. ✓ Students apply understanding of scale to explain phenomena in technological systems.
2. ✗ Students apply understanding of scale to explain phenomena in biological systems.
3. ✗ Students apply understanding of scale to explain phenomena in physical systems.

1 out of 3 A4: Scale scoring components have been confirmed for Automotive Technology (CTE).

✓ OK

Project Implementation

The MCP project was piloted between 2008–2010. The initial version of the system was first available in Spring 2008 to volunteering schools. Pilot schools received access to MCP’s online software to develop syllabi and provide feedback on functionality and resources. This section describes the two pilot years and the development of resources that will inform the eventual statewide implementation of the MCP system.

Selection Of Schools

In each pilot year, the MDOE chose high schools for targeted recruitment based on likely administrator interest and the school’s level of readiness to participate in achieving the goals of the MCP project. For the 2009–2010 school year, the MDOE sent informational letters inviting all high schools to attend regional workshops about the MCP project. Schools that participated in the workshops were invited to participate in the project.

The MDOE also made the MCP system available to Career and Technology Education (CTE) centers. Many high schools students elect to take courses at their schools’ partnering CTE center to supplement their high school education. Therefore, it is important to determine which of the MLR are offered in these courses and how CTE center courses can fit into high school course pathways to provide additional options for opportunities to learn particular standards and thereby expand a student’s educational experience.

Pilot Year I: 2008–2009

During the first year of the MCP project, EPIC and the MDOE collaboratively developed the



technology, procedures, and support necessary for implementing a system to create and review high school course syllabi. In Spring 2008, three Maine high schools worked in a beta version of EPIC’s SyllabusMaker software to create courses aligned with the MLR. Teachers provided feedback on the software that was then incorporated into later versions. Content area specialists from the MDOE worked with EPIC staff to create the first version of the MCP Scoring Guides.

The first MCP pilot was conducted with seven schools during the 2008–2009 academic year. EPIC and the MDOE conducted training workshops in Bangor and Freeport in Winter 2009. Following the workshops, teachers

submitted over 70 syllabi, using SyllabusMaker version 1.0. Syllabus reviewers evaluated these syllabi using the criteria in the newly developed Scoring Guides. In this initial pilot reviewers evaluated syllabi holistically for evidence of the MLR Performance Indicators, as opposed to the unit-by-unit review of scoring components conducted in the current 2009–2010 pilot. After the first round of syllabus reviews in which a small number of standards were confirmed, EPIC and the MDOE made a joint decision to delay further reviews and revise the project accordingly. Attention was thereby refocused to revise the Scoring Guides and amend project methodology. As such, the 2008–2009 academic year did not generate review outcome data, but provided feedback and field-testing information that informed significant system refinements and enhancements.

Pilot Year II: 2009–2010

In September 2009, the MDOE and EPIC expanded the MCP pilot to include additional schools. Together EPIC and the MDOE hosted a series of regional workshops to introduce schools to the MCP project and encourage participation. Workshop participants received training on the MCP software and a brief introduction to high-quality syllabus design. In addition, they received several syllabus development resources, including the Scoring Guides reviewers use to evaluate syllabi.

Following the workshops, twelve schools agreed to participate during the 2009–2010 academic year, including five from the previous pilot. In October 2009, all twelve pilot schools received access to MCP software, including

Table 1.1. 2009–2010 Timeline

First Submissions	
SyllabusMaker open to teachers	October 9, 2009
Syllabus reviews begin	January 28, 2010
Administrator deadline to select syllabi of record	February 19, 2010
Teachers begin receiving review feedback	February 22, 2010
Syllabus reviews complete	April 12, 2010
Second Submissions	
Teachers begin submitting new and revised syllabi for Round Two	February 13, 2010
Teachers begin receiving review feedback	April 27, 2010
Pathways System opens	May 1, 2010

SyllabusMaker, and were able to begin developing their syllabi immediately, although most began using the software in January 2010. Teachers who participated in the first year's pilot had access to their original syllabi to revise. All participants received technical support from EPIC staff, accessible via telephone and the MCP Communication Center, an online form-based email system.

A formal timeline detailing syllabus submission and review deadlines for the 2009–2010 year was announced in January 2010. The timeline was created to prompt teachers and schools to begin creating and submitting syllabi in time to conduct the reviews. Deadlines were adjusted during the school year to accommodate unforeseen circumstances at some participating schools. **Table 1.1** displays the timeline for the 2009–2010 pilot year.

Submission Data And Review Results

The following section provides an analysis of the results from the 2009–2010 syllabus submission and review cycle. Results were gathered from SOR reviews conducted from January 2010 through May 15, 2010. Some syllabi were revised to provide additional evidence of the MLR in response to reviewer feedback and submitted a second time; review results include initial SOR submissions as well as resubmissions.

A total of twelve schools, including high schools and CTE centers, participated in the MCP project in the 2009–2010 academic year. The level of participation varied by school and school type (high school or CTE center). Ten schools participated in the initial round of SOR submission and review that began in January and continued through February 19th. High schools and CTE centers were represented in equal number. Two additional high schools submitted syllabi for the first time during the second round of submissions.

The following tables summarize school participation for both rounds of SOR submissions through May 17th, 2010. **Table 1.2** provides an overview of teacher participation

Table 1.2. 2009–2010 MCP School Participation

School Name	Teacher Accounts ¹	Syllabi Created	Syllabi of Record
High Schools			
Belfast Area High School	45	41	40
Edward Little High School	2	1	1
Gray-New Gloucester High School	54	80	77
Hodgdon High School	14	29	28
Lawrence High School	34	26	26
Medomak Valley High School	47	38	38
Oak Hill High School	44	74	74
CTE Centers			
Kenneth Foster Regional Applied Technology Center	1	2	2
Lewiston Regional Technical Center	2	2	2
Mid-Coast School of Technology	4	4	4
Sanford Regional Vocational Center	1	1	1
Tri-County Technical Center	1	2	2

and syllabus submissions at each school, as measured by the number of teachers who created accounts in the MCP online system, the number of syllabi created at each school, and the number of SORs selected. Overall, 165 teachers created a total of 300 syllabi, of which 98 percent were selected as SORs. The fact that nearly all syllabi submitted became SORs suggests that teachers of the same course collaborated to create one syllabus or that schools had only one teacher per course. As

Table 1.3. SOR Submission Summary by School

School Name	SORs	Content areas submitted (of seven)	SORs with multiple content areas	Content area reviews
High Schools				
Belfast Area High School	40	5	1	41
Edward Little High School	1	1	0	1
Gray-New Gloucester High School	77	7	7	106
Hodgdon High School	28	6	1	52
Lawrence High School	26	5	0	36
Medomak Valley High School	38	7	2	40
Oak Hill High School	74	7	12	157
CTE Centers				
Kenneth Foster Regional Applied Technology Center	2	4	2	7
Lewiston Regional Technical Center	2	3	1	3
Mid-Coast School of Technology	4	3	1	5
Sanford Regional Vocational Center	1	1	0	1
Tri-County Technical Center	2	4	2	8

expected, CTE centers submitted comparatively few syllabi because they offer fewer courses, which are meant to supplement the high school curriculum.

Content Area Reviews

The scoring components selected for each SOR determined the content area in which the SOR was reviewed. SORs with components from multiple content areas were reviewed in each content area from which components were included. Therefore, a single SOR may result in two or more *content area reviews*.

Tables 1.3 and 1.4 provide an overview of content area representation among SORs submitted by participating schools. Overall, 295 SORs were submitted, resulting in a total of 459 content area reviews across all seven

content areas in the first and second round of submissions combined.

Of the 295 SORs submitted, 284 came from high schools and resulted in reviews in all seven content areas. CTE centers submitted 11 SORs and covered four of the seven content areas. All CTE centers submitted SORs in Science and Technology, and all but one CTE center submitted SORs in Mathematics.

Among all schools, the highest number of content area reviews occurred in Mathematics, followed closely by English Language Arts and Science and Technology. The fewest number of reviews were conducted in Health Education and Physical Education, and World Languages. These results likely reflect the way in which schools implemented MCP, with most electing to focus concentration on core content

Table 1.4 – Content Area Reviews by School

School Name	ELA ²	HEPE	Math	Science & Tech	Social Studies	VPA	World Lang	Total
High Schools								
Belfast Area High School	5	8	14	9	-	5	-	41
Edward Little High School	-	-	-	1	-	-	-	1
Gray-New Gloucester High School	18	11	21	14	10	20	12	106
Hodgdon High School	13	3	12	13	10	-	1	52
Lawrence High School	4	-	10	8	5	9	-	36
Medomak Valley High School	9	4	7	5	5	6	4	40
Oak Hill High School	22	17	16	20	28	30	24	157
CTE Centers								
Kenneth Foster Regional Applied Technology Center	2	1	2	2	-	-	-	7
Lewiston Regional Technical Center	-	1	1	1	-	-	-	3
Mid-Coast School of Technology	2	-	4	1	-	-	-	7
Sanford Regional Vocational Center	-	-	-	1	-	-	-	1
Tri-County Technical Center	2	2	2	2	-	-	-	8
Total	77	47	89	77	58	70	41	459

areas such as English Language Arts and Mathematics.

Table 1.4 displays the breakdown of reviews conducted in each content area at each school.

Although most teachers aligned syllabi with components from only one content area, some teachers did align syllabi with components from multiple content areas. About 10 percent of all SORs included components from more than one content area. Most SORs submitted by CTE centers included components from multiple content areas (55 percent), whereas only 9 percent of high school SORs did.

First And Second Round Submissions

The first round of SOR submission and review ran from January–February 19, 2010. The second round of submission and review ran from February 20–June 30, 2010. Results provided here include reviews completed through May 17, 2010 (87 percent of the 459 content area reviews submitted). Two tables include the combined results from both rounds of review.

Table 1.5 summarizes SOR submissions in each round by school with a distinction made between SORs submitted for the first time in the

Table 1.5. Rounds 1 and 2 Submission Summary by School

School Name	Total SORs Submitted	Round One SORs Submitted	Round Two Revised SORs Submitted	Round Two New SORs Submitted
High Schools				
Belfast Area High School	40	0	0	40
Edward Little High School	1	0	0	1
Gray-New Gloucester High School	77	77	23	0
Hodgdon High School	28	28	22	0
Lawrence High School	26	25	10	1
Medomak Valley High School	38	35	0	3
Oak Hill High School	74	70	59	4
CTE Centers				
Kenneth Foster Regional Applied Technology Center	2	2	0	0
Lewiston Regional Technical Center	2	2	0	0
Mid-Coast School of Technology	4	4	2	0
Sanford Regional Vocational Center	1	1	0	0
Tri-County Technical Center	2	2	1	0

second round and those that were resubmitted based on first round feedback. About 48 percent of all SORs submitted in the first round were revised and resubmitted in the second round.

There are several reasons why not all SOR were resubmitted for a second review. First, teachers did not resubmit if all components were confirmed during the first review. If some components were not confirmed, some teachers elected to remove the unconfirmed components, thereby resulting in a SOR with all components confirmed. Other teachers simply may not have resubmitted in time for this report, or are electing to complete their revision work this summer. For instance, one school collectively decided to spend time revising their syllabi and will resubmit in the fall. This effort demonstrates commitment to collaboration and improved course planning.

First And Second Round Reviews

Table 1.6 summarizes the reviews completed to date and provides an overview of the SOR reviews by content area. By summarizing the results in this way, English Language Arts stands out as the content area reviewed most frequently in syllabi that contained components from multiple content areas. This may suggest that English Language Arts standards are utilized frequently as cross-disciplinary skills outside of the traditional English Language Arts course offerings. Eventually, with statewide implementation, Maine will be able to analyze similar trends across the content areas.

Table 1.6. Content Area Review Summary (First and Second Reviews Combined)

Content Area	Content Area Reviews	Content Area Reviews Completed as of 5/17/10	Completed Reviews of High School SORs	Completed Reviews of CTE Center SORs	Reviews as Multiple Content Area
English Language Arts (ELA)	77	72	67	5	23
Health Education & Physical Education (HEPE)	47	41	37	4	9
Mathematics	89	62	54	8	11
Science & Technology (ST)	77	66	59	7	17
Social Studies	58	56	56	0	15
Visual & Performing Arts (VPA)	70	68	68	0	15
World Languages (WL)	41	32	32	0	1
TOTAL	459	397	373	24	91

SOR Composition By Content Area

The composition of the SORs, including review-related parts such as units, performance indicators, and scoring components, varied somewhat among content areas, but was similar overall. SORs averaged between six and nine units and tended to contain components from fewer than 10 performance indicators. On average, mathematics courses were typically divided into more units than courses in other content areas. Similarly, more components were selected in Health Education and Physical Education SORs on average than in other content areas, although there was greater variation in number of components among SORs in this content area as well. **Table 1.7** provides the breakdown of composition averages for SORs by content area, including the multiple content area subset.

Multiple content area SORs included considerably fewer components than single content area syllabi. Such multiple content area courses include titles like *Academic Decathlon*, *Career Development and Exploration*,

and *Automotive Technology*, which are not traditionally part of the seven current MCP content areas. Therefore, it is possible these courses include curricula outside the seven content areas and simply cover few MLR in general. These courses may instead prove to include more of the Career and Education Development content area standards when those become available.

Course Pathways

Syllabus reviews to date have served as not only a method to verify standards included in courses, but also to validate the revised Scoring Guide. As such, it is important to examine the review outcomes for individual components. See Appendix C for a summary of the review results for each component by content area. Nearly every component in each content area was included among the SORs reviewed. The exception to this was one Social Studies component regarding the political and civic aspects of Maine Native American tribal governments, and 21 components in the Dance section of Visual and Performing Arts (VPA) that were not included in any SORs.

Table 1.7. SOR Review Summary by Content Area

Content Area	Number of SORs Reviewed	Average Number Curricular Units per SOR	Average Number Performance Indicators per SOR	Average Number Components per SOR	Reviews as Multiple Content Area
English Language Arts (ELA)	56	8	9	12	23
Health Education & Physical Education (HEPE)	34	7	9	13	9
Mathematics	61	9	6	14	11
Science & Technology (ST)	48	8	6	11	17
Social Studies	37	8	4	8	15
Visual & Performing Arts (VPA)	52	6	7	11	15
World Languages (WL)	29	8	5	9	1
Multiple Content Area	29	9	4	5	91

Of the components included in the syllabi, most were confirmed in at least one SOR. All ELA components were confirmed at least once. However, 30 components among the remaining content areas were reviewed and never confirmed, 16 of which were Science and Technology components. The remaining content areas each revealed five or fewer components that were not confirmed. Further examination of these unconfirmed components suggest that some components require criteria that are not possible to meet within a single unit or course or the criteria are unclear.

Although most components were confirmed at least once among the SORs reviewed, therefore demonstrating they are “confirmable,” a single confirmation does not mean a component is easily confirmed. Looking at the review results for individual schools provides component information at a practical level. For example, SORs for each high school received confirmation of all ELA components, thereby demonstrating that each school’s courses, in combination, provided at least one complete confirmed pathway of courses in ELA. ELA components

therefore appear to be performing well at the school level.

In contrast, complete pathways were not confirmed in any other content area at any school. Schools received confirmation rates as low as 6 percent or less for components in World Languages, and Science and Technology. Low confirmation rates were evident in Mathematics and Social Studies as well. This may be an indication that, although a component may be confirmable, it may not be practical for most courses to demonstrate the required criteria. For example, feedback from science teachers suggests that the decision rules for some Science and Technology components will be nearly impossible to meet given present curricula. Similarly, lower-level World Language courses may have a very difficult time meeting the criteria of several components due to the advanced nature of the requirements.

The fact that no course pathways were confirmed in most content areas may be due to three primary factors: 1) syllabi lack sufficient curricular detail to confirm components; 2) Scoring Guide criteria are difficult to

Table 1.8. Course Pathways Summary by School

School Name	Number Content Areas Submitted	Number of Content Areas with Complete Pathways Submitted ³	Number of Content Areas with Complete Pathways Confirmed
High Schools – subtotal			
Belfast Area High School	5	2	1
Edward Little High School	1	0	0
Gray-New Gloucester High School	7	3	1
Hodgdon High School	6	3	1
Lawrence High School	5	2	1
Medomak Valley High School	7	4	1
Oak Hill High School	7	3	1
CTE Centers – subtotal			
Kenneth Foster Regional Applied Technology Center	4	0	0
Lewiston Regional Technical Center	3	0	0
Mid-Coast School of Technology	3	0	0
Sanford Regional Vocational Center	1	0	0
Tri-County Technical Center	4	0	0

demonstrate in a single curricular unit or course; 3) schools failed to submit all components in the content area; or 4) there are gaps in the school curriculum. Additional analysis is needed in future administrations to further examine this issue.

Table 1.8 provides a summary of the number of complete pathways submitted and confirmed for each school, compared with the number of content areas submitted. It would be expected for schools' SORs to include all components within a content area in order for a complete pathway to be submitted for review. In many cases where pathways were incomplete, schools were only missing one or two components from a pathway. However, inclusion of all components is a crucial step to the MCP process; even if all components included in a

school's SORs were to be confirmed, without a complete set of components submitted in the first place a complete pathway cannot be demonstrated.

Rationale Statements

For each scoring component not confirmed in a unit, reviewers were required to select one or more *Rationale Statements* to explain why the component did not meet the criteria. The intended purpose of these statements was to assist teachers in the revision process by providing detail on the evidence required in the curricular unit for that component to be confirmed. A complete list of rationale statements is provided in Appendix B.

During the first round of reviews, the most commonly selected rationale statement was

“The unit demonstrates no evidence of this component.” In other words, the level of detail was insufficient to demonstrate that the component was included in the unit. During the second round of reviews, the most commonly selected rationale statements varied by content area, and no longer indicated a complete lack of evidence. Instead, reviewers were able to provide more specific rationale, such as “The unit lacks required activities or assignments,” or “The unit lacks a sufficient description of how the assigned activity addresses the component.” This suggests that teachers are making progress, but evident that continued professional development for teachers is still needed. Sufficient levels of detail must be provided in syllabi to satisfy the criteria in the Scoring Guides in order for all components to be confirmed.

Findings And Recommendations

E PIC and the MDOE have learned several lessons from the MCP pilot projects. After two years, there is a deeper understanding of what works and what does not work for teachers, school administrators, and syllabus reviewers. This section describes key lessons learned from the pilot process, as well as corresponding recommendations for the project's future.

The methods and characteristics of MCP implementation have varied from pilot site to pilot site. A vital component to the success of MCP is school administrators' clear, coherent vision of why and how the project will be implemented at their schools. Once administrators have developed this vision, they must communicate it to teachers so that faculty can share the same understanding. In addition, a major theme that emerged was the need for increased professional development to support not only the understanding of the project, but also how to use MCP effectively to improve instruction. Finally, enhancements to and development of additional resources and support emerged as another important area for future work.

Understanding And Purpose

In discussions with Maine teachers and administrators, the MCP project is often referred to as the "syllabus review project." To these teachers, the project centered on creating syllabi and aligning them to the standards, but few teachers were able to connect the project to a larger objective. Many teachers expressed that they entered the project with little or no context of the project's vision, or an understanding of why their school was participating in MCP; the



project was simply assigned to them. This lack of understanding of the larger goals is partly due to the focus of the project during the early pilot years when the Pathways system was under development. The full scope of the project was not demonstrated to administrators or teachers until the 2009–2010 school year.

This incomplete understanding of the project has predictably led to some frustration from participants. To date, training sessions, resources, and review feedback have indeed centered on using SyllabusMaker and Scoring Guides. However, the scope of MCP is considerably broader and far-reaching than syllabus development. In addition to the syllabus, the project provides a system for developing a comprehensive high school curriculum aligned to state standards and that provides opportunity to all students to learn all standards.

Therefore, in order to achieve statewide buy-in, it is important that the project clearly communicate its comprehensive goals and desired outcomes. Schools, administrators, and teachers will benefit from obtaining a firm understanding of MCP's purpose, why

their syllabi are reviewed, and how this project fits into the MDOE's larger vision for standards-based education. The corresponding recommendations for improving understanding of the vision and purpose of MCP include:

- *Clarify MCP's purpose and role in a school.* It is evident that schools need a clear understanding of the role of MCP and its purpose. We recommend that the MDOE and EPIC collaborate with participating MCP schools to develop a coherent and accessible description of the purpose, function, and implementation strategies for MCP at the school level. Once drafted, this document can be distributed to MCP administrators to discuss and customize at a school administrator workshop. Each school administrator can then share the customized plan with the MCP teacher mentors and other faculty.
- *Conduct workshop for school administrators.* Workshops will bring school administrators together to learn more about MCP, changes to the project, and successful strategies for implementation. In addition to working on customized MCP plans for their schools, administrators can hear from veteran MCP participants, the MDOE and EPIC staff about topics relevant to the project. Administrators should meet annually to create a leadership support network. An extension of this work would be to develop a cohort of administrator and teacher mentors to help ensure each interested school has a solid support base to implement MCP's.
- *Increase the participation of CTE centers and other non-traditional programs.* One purpose of MCP is to enable schools to identify multiple pathways for learning the MLR; therefore, it is crucial that schools identify a variety of pathway opportunities through partnerships with their CTE centers. Including alternative programs and non-traditional pathways will help school staff see the project's relation to standards-based

education, real-world application and various reforms, further demonstrating how the MCP system differs from previous initiatives.

Professional Development

The most consistent lesson from the pilot work so far, and a lesson learned in multiple contexts, is the project's need for targeted, quality professional development for teachers. In addition to understanding the purpose of the project, teachers need support in syllabus development. For some teachers, participation in MCP represented the first time they were asked to write a syllabus; for *most* teachers this was the first time they were required to write a syllabus with a high level of curricular detail. As a result of teachers' inexperience with writing detailed syllabi and the high level of documentation MCP requires, this project has served as a tool for teachers' learning and professional development.

Professional development in syllabus creation has been one of the project's goals from the start. However, a strong lesson is that such professional development should not be limited to online resources and reviewer feedback alone as currently configured. It became clear that one or two rounds of independent syllabus submission under the current system are not necessarily sufficient to provide the level of professional development needed to create a high-quality syllabus aligned to the MLR. As one teacher commented, "I underestimated the task, thinking it was more clerical. We needed much more time, training, and content-specific models to complete the work."

During the second year of the pilot, Scoring Guides were made available to teachers to aid them in developing syllabi for the project. Scoring Guides provide the criteria reviewers use to evaluate syllabi, including the decision rules that describe the level and type of evidence necessary to confirm each scoring component. However, making the Scoring Guides and other

teacher resources available on the MCP website was not a sufficient level of assistance in and of itself. Even with the availability of in-person trainings and communications sent to teachers announcing and directing them to the available resources, the results from the feedback survey indicated that many teachers were unaware of the resources available to them, including Scoring Guides, video tutorials, webinars, and the Resubmission Resource.

Beyond the creation of syllabus, teachers receiving syllabus review feedback that included multiple non-confirmed components needed assistance in understanding the feedback. In addition to the Scoring Guides, teachers were provided the Resubmission Resource, a document intended to help teachers address review feedback. This document provided explanations of each rationale statement, along with samples of evidence that address reviewer feedback and satisfy requirements.

Though the Scoring Guides and the Resubmission Resource with the scoring criteria are readily available to teachers, many teachers were unclear why components were not confirmed. Understandably, teachers expressed frustration at receiving “not confirmed” decisions on standards they know they teach. Therefore, additional training on the Scoring Guides may be necessary to ensure teachers understand the purpose and importance of the criteria and evidence necessary for demonstrating each standard in a unit.

Along with learning what constitutes a sufficient level of curricular detail for a syllabus, teachers would benefit from learning how to effectively align components to each unit. Some teachers were appropriately selective in aligning components to units; others, however, took more of an “everything but the kitchen sink” approach, including far more components than could be feasibly covered in one unit, or even in one course. A syllabus is more likely to be confirmed when the teacher selects only those components

the course covers in depth, and focuses on providing sufficient detailed evidence of these components.

Although it can happen, as one ELA course demonstrated, no single course is expected to cover all the standards in a content area. Rather, teachers in a department or content area should collaborate to determine which components will be covered in which courses to ensure *multiple* pathways and opportunities for students to learn the standards. Therefore, MCP should train teachers to use a quality over quantity approach in selecting components. A syllabus that clearly demonstrates opportunity to learn a few standards has a much higher confirmation rate than a syllabus that claims to cover many standards but fails to clearly demonstrate any.

Initial training was available prior to the 2009–2010 pilot. EPIC staff conducted regional workshops in September 2009; however, over 80 percent of teachers who responded to our feedback survey did not attend a regional workshop. Those teachers who attended were able to help their colleagues understand the project, use the software, and create a syllabus. In the survey, some teachers expressed that their primary and preferred source of help was other teachers, and many teachers indicated that teacher collaboration was the most positive aspect of the project.

Providing more in-depth training to fewer teachers, who are already committed to the project, will be more efficient than our previous model of training large groups of teachers who may or may not participate in MCP. This model will ensure that each school has someone onsite to provide guidance to teachers, to make the project feel more tangible and less removed from teachers’ day-to-day work. Teacher collaboration became a greater than expected outcome of this project and will be important to nurture as the project continues. Therefore, it is important to ensure that teachers remain

knowledgeable about and committed to the project. The following recommendations to improve professional development include:

- *Increased focus on high-quality syllabi.* Previous MCP trainings have focused heavily on the goals of the project and the use of software. There has been less emphasis on how to create a syllabus that will succeed in the external reviews. As described earlier, additional training on developing high quality syllabi with sufficient detail will result in more confirmed components and increased satisfaction and efficiency.
- *Train-the-trainer/school mentor.* Having on-site assistance available will help teachers feel supported while also increasing teacher collaboration. We recommend all participating schools designate a teacher mentor who receives training at least once a year. In addition, we recommend providing continued support and training opportunities for these mentors as new training topics arise.
- *Increased collaboration among teachers.* MCP will be most successful at schools that foster collaboration among teachers, either at the course or department level. In developing a SOR, all teachers of a course should agree to a common set of standards and activities. All teachers in a department should agree to the order and sequencing of standards, in order to provide students with multiple pathways to learn all of the MLR in the content area. We recommend encouraging departments to collaborate before syllabus development begins and on an on-going basis thereafter.
- *Additional online video tutorials.* The MCP project currently uses online video for software tutorials. We recommend updating and expanding the videos to address not only how to use the software, but also offer information about The MCP system in the larger policy context, and explain how to create syllabi that perform well in the review

process. Making such tutorials available online will help teachers who cannot attend an in-person workshop. EPIC is also planning to create an introductory video tutorial for SyllabusMaker, which teachers can view the first time they use the program.

Sample Syllabi

In addition to inconsistent professional development, teachers did not have access to sample syllabi. As a result, teachers often were not clear on the expectations for a MCP syllabus. Rating underdeveloped syllabi due to lack of training this year has also resulted in inefficient use of reviewer time. Much of the reviewer feedback to date has been limited to “no evidence of the components,” as teachers may list the topics they cover or the names of some of their curricular activities, but provide insufficient or no description of how these address the MLR they teach. Without richly developed syllabi to rate, reviewers cannot provide the level of feedback they would like nor that allows them to share their expertise, such as feedback that addresses how the course does or does not address the MLR, and includes *specific* suggestions for the teacher to improve the syllabus.

Many teachers requested sample syllabi as reference documents throughout the syllabus development and revision processes. The Scoring Guides alone did not seem to provide sufficient guidance for teachers to have a clear understanding of what an MCP syllabus should be, or the level of detail to include. In response, EPIC made available a creative writing syllabus that had completed a review and received confirmation for all components, to serve as an example of the level of detail required. This proved beneficial for teachers with ELA courses, but several teachers in other disciplines stated that this syllabus did not help them understand what syllabi should look like in their content areas. Sample syllabi are needed for each content area individually.

Teachers will benefit greatly from an example in each content area, and sub-discipline, accompanied by a clear description of what sample syllabi are and their limitations. For example, sample syllabi are merely *examples* of the level and type of detail required to confirm components within a unit; teachers will still need to refer to the Scoring Guide when studying samples to obtain the most benefit. However, sample syllabi are not necessarily curricular *exemplars*, which would take longer to develop and should be endorsed by the MDOE as best practice curricula. Accordingly, we offer the following recommendation to improve the resources available to support teachers:

- **Sample syllabi.** Teachers need concrete examples of activities, units, and syllabi that meet the criteria in the Scoring Guides in each content area. In the initial years, these do not need to be curricular exemplars. We recommend posting two to three sample syllabi in each content area. If entire syllabi are not feasible, the project should post sample activities or units. In addition, curricular examples should be embedded in SyllabusMaker. Ideally, over time, exemplars would be developed and integrated into the MCP online platform, that demonstrate what best practice instruction should look like, incorporating other state-level initiatives, such as performance assessment and standards-based educational models.

Scoring Guide Revisions

EPIC collected important feedback to revise the initial versions of the scoring guides during the 2009–2010 school year. Overall, there is a need to improve the clarity, consistency, and relevance of some content within the MCP Scoring Guides. We recommend revising the Scoring Guides with the following changes:

- **Consistency with unit-by-unit review.** Several Scoring Guides require evidence of components being taught throughout a course, such as demonstrating progressive

activity or increasing level of difficulty. Such criteria are not consistent with or possible to meet in unit-by-unit syllabus reviews. Content area teams should review scoring components to verify that teachers can clearly evidence them in a single curricular unit.

- **Broader applicability of decision rules.** The decision rules should be consistent with the PIs and components in being applicable to multiple courses, and not applicable to only specific courses. This specificity causes components not to be confirmed in certain courses where they otherwise should be present. In addition, some components are too detailed, making it unclear which criteria are most important. Decision rules should not be exhaustive; they are intended to be clarifying in nature and describe minimal levels of criteria without making the component more difficult to be demonstrated.
- **Revisit components for consistency across content areas.** Scoring components are intended to be a simple breakdown of the performance indicators for scoring purposes and targeted review feedback. Components in some content areas add content beyond the or draw specificity from the descriptors. In order to maintain consistency among content areas, scoring components should be revisited and adjusted to ensure they examine the same level of detail across standards and content areas.

Content Area Specialists

As the project expands, there will be need for increased involvement of content specialists to respond to teachers. Many of the questions EPIC received from teachers required knowledge of the intent behind a content area's MLR or were otherwise heavily content area-specific.

As an example of content-specific assistance, some teachers requested preliminary feedback on a syllabus before submitting it for review,

often to simply verify whether or not they were on the right track. EPIC staff can provide this type of feedback with regard to general level of detail, in reference to Scoring Guide requirements, but content area knowledge is often required to determine whether the syllabus adequately addresses all the decision rules. In these cases, individuals such as the MDOE content area specialists, with their intimate knowledge of both the MLR and the MCP Scoring Guides, can be helpful to teachers. Offering feedback on one or two units is usually sufficient to guide teachers on their way. Providing this sort of “pre-review” is beneficial to teachers and can be an opportunity for MDOE content specialists to stay involved with the MCP system while assisting in teacher professional development. Content area support might also come from specially trained consultants, such as senior reviewers, who also possess in-depth knowledge of the Scoring Guides. We recommend that a network of content-specific experts be created, specifically including:

- *Involvement from content experts.* Help and feedback from content area experts will support teachers throughout the process. We recommend implementing a system through which teachers can receive content support from MDOE content area specialists, and/or EPIC consultants (such as senior reviewers).

Course Pathways Data And Analysis

The 2009–2010 pilot provided an opportunity for the MCP project to take its first look at course pathways data. For the first time, educators have access to instructional information about what standards are being taught in what courses. The uses of this data are manifold. Primarily, the data is used to determine what pathways students can follow that will enable them to have the opportunity to learn all required standards (MLR currently, and Common Core Standards will be incorporated in the 2010–2011 school year). This

allows the exploration of traditional and non-traditional pathways for graduation. As Maine moves towards a student-centered standards-based education, the pathways analysis feature could be used by students to plan high school programs of study that are both tailored to their particular interests and offer the opportunity to learn all standards within the traditional classroom, at the CTE Centers, and in alternative, external learning opportunities.

At the state level, for the first time, the MDOE will be able to examine curricular alignment to standards across the state. As more high schools participate, what will emerge is a curricular map of current practice and the opportunities students have to learn what standards in what courses. This unique data can inform planning discussions about targeted assistance and resources necessary to further state educational goals. For example, for the small pilot, one theme that has emerged is the difficulty for all schools, particularly small or rural schools, to offer courses that provide opportunity to learn *all* of the MLR in each of the content areas due to lack of access to sufficient resources. One specific example is within Visual and Performing Arts (VPA). This content area contains 73 components for diverse subject areas including Music, Theater Arts, Dance, and Visual Arts. Schools submitting VPA courses may not be able to offer a full array of arts-related courses and therefore will not be able to submit all VPA standards. Therefore, the MCP system offers opportunities for in-depth discussions for how the state can support schools in providing opportunities to learn all standards. To continue to expand the innovative MCP database, we recommend the following:

- *Expanded reporting and integration with other state data systems.* A key statewide priority is to expand the reporting capabilities of the MCP system. One important area is the creation of student accounts to enable to students to individually plan course pathways that offer the opportunity to

learn all required standards. In addition, the data available in the MCP system should be available to be used in other databases. For example, as the MCP grows statewide, the data can be linked with the Statewide Longitudinal Data System. This would enable explorations such as the relationship of typical course-taking patterns and student outcomes, particularly at the postsecondary level.

Conclusion

The last two years have provided important learning opportunities for the MCP system. As the project expands to include more schools and teachers, it continues to show promise beyond its original objective of validating opportunity to learn to becoming a comprehensive instructional management tool providing curriculum, instruction, and assessment data and resources never available previously. MCP has created professional development opportunities for teachers and administrators. Schools have discovered that the MCP process increases discussion and collaboration around curriculum development and alignment to state standards.

The MCP project has also become part of Maine's standards-based education system incorporating teaching, grading, and assessment. The MLR are at the core of a learner-centered system that requires all students graduate based on demonstrated achievement of the state standards. Currently, the MCP system ensures that students have opportunity to learn and demonstrate achievement of the MLR, and during the 2010–2011, the system will also include the Common Core State Standards. Plans to embed performance assessments, aligned to the standards, ensures that the system connects teaching and assessment so that learning expectations and outcomes are explicitly stated for teachers, parents, and students.

The use of technology is another piece of Maine's approach to implementing its vision. The system has created new, alternative ways to provide professional development, teacher networking, and curriculum development support. As the project moves forward, Maine

teachers will continue to benefit from the expansion of the instructional management system to provide a suite of resources for schools and teachers. The system offers possibilities to embed performance assessments, exemplar courses and units, and sample activities into course materials. The system can grow to support the state vision to develop a network of teachers collaborating and sharing course documents.

Leveraging these lessons learned, the enthusiasm of current participants, and increasing school interest can result in significant growth of the project. Although most recommendations in this report can be implemented over time, it will be most efficient and beneficial to the MCP system to begin making relevant or necessary changes in the next school year. Strategic interventions will yield better course data useful to both schools and the MDOE in improving the alignment of academic offerings and the opportunity for all students to learn what knowledge and skills they need to be prepared for college and career success.

Endnotes

1. "Teacher Accounts" identifies the number of teachers associated with the school who have an account in the MCP online system. Not all teachers with accounts created syllabi, and some teachers created more than one syllabus.
2. For formatting purposes, some content area titles have been abbreviated as follows: English Language Arts (ELA), Health Education and Physical Education (HEPE), Mathematics (Math), Science and Technology (Science & Tech), Visual and Performing Arts (VPA), World Languages (World Lang).
3. A "complete content area pathway" is created when submitted courses, in combination, include all components for a given content area.

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Appendix A

Participants by Pilot Year

2007–2008

Capital Area Technical Center

Hall–Dale High School

Oak Hill High School

2008–2009

Belfast Area High School

Gardiner High School

Hermon High School

Lawrence High School

Lewiston Regional Technical Center

Morse High School

Oak Hill High School

Poland High School

Tri-County Technical Center

2009–2010

Belfast Area High School

Edward Little High School

Gray-New Gloucester High School

Hodgdon High School

Foster Regional Applied Technology Center

Lawrence High School

Lewiston Regional Technical Center

Medomak Valley High School

Mid-Coast School of Technology

Oak Hill High School

Sanford Regional Vocational Center

Tri-County Technical Center

Appendix B

Rationale Statements

Basic Statements (All Content Areas):

1. The unit demonstrates no evidence of this component.
2. The unit lacks required activities or assignments.
3. The unit lacks evidence of instruction in the concepts or topics outlined in the component.
4. The unit lacks a sufficient description of how the assigned activity addresses the component.
5. The unit lacks evidence of student opportunity to demonstrate the knowledge and skills required in the component.
6. The unit includes resources or materials that are unfamiliar or not clearly explained.

Additional Content Area-Specific Statements:

World Languages

7. The unit lacks authentic resources or materials.
8. The unit lacks evidence of the use of authentic materials.

Science and Technology

9. The unit lacks a sufficient description of the lab's subject matter, assignment, or activities.

Visual and Performing Arts

10. The unit lacks evidence of performance or presentation opportunities.

English Language Arts

11. There is no indication of how activities are to be assessed.

Appendix C

Component Review Summary for ELA

Component	Component Instances Reviewed	Component Instances Confirmed	Percentage Of Component Instances Confirmed
Reading			
A1: Interconnected Elements: Comprehension, Vocabulary, Alphabetics, Fluency			
Students read and evaluate text, demonstrating strategies of fluency and comprehension.	196	172	88%
Students read and evaluate texts, demonstrating strategies of vocabulary and alphabetics.	174	122	70%
A2: Literary Texts			
Students use excerpts from the text to defend their assertions.	165	145	88%
Students read texts and present analyses of fiction, nonfiction, drama, and poetry.	173	149	86%
A3: Informational Texts			
Students evaluate the effectiveness of a text's features and structures.	82	74	90%
Students evaluate the effectiveness of ideas presented in informational texts.	115	91	79%
A4: Persuasive Texts			
Students evaluate persuasive texts by analyzing the effectiveness of rhetorical devices.	52	40	77%
Students evaluate persuasive texts by analyzing the intended audience, purpose and effectiveness of writing.	63	50	79%
Writing			
B1: Interconnected Elements			
Students engage in a writing process that improves content and structure.	207	172	83%
B2: Narrative			
Students embed narrative writing in a written work.	104	90	87%
B3: Argument/Analysis			
Students write thesis-driven academic essays that are well-developed and clearly organized.	108	99	92%

Component	Component Instances Reviewed	Component Instances Confirmed	Percentage Of Component Instances Confirmed
B4: Persuasive			
Students write persuasive essays exhibiting logical reasoning to affect a specific audience for a specific purpose.	60	36	60%
Students write persuasive essays that employ rhetorical techniques most effective for topic, audience, and purpose.	52	35	67%
B5: Practical Application			
Students write personal communication and pieces related to educational development, career issues, or civic participation.	103	85	83%
Research			
C1: Research			
Students engage in the process of inquiry by gathering, critiquing, and synthesizing evidence.	159	142	89%
Language			
D1: Grammar and Usage			
Students use resources (handbooks, style guides, websites), either print and/or electronic, to confirm independently the accuracy of their use of Standard American English.	199	113	57%
D2: Mechanics			
Students use complex and mature vocabulary, appropriate for purpose, situation, and audience.	244	118	48%
Students use complex and mature sentence structures and writing structures, appropriate for purpose, situation, and audience.	194	80	41%
Listening and Speaking			
E1: Listening			
Students examine and critique information presented to them in verbal communication.	109	68	62%
E2: Speaking			
Students determine speaking strategies for formal and informal discussions, debates, or presentations appropriate to the audience and purpose.	135	86	64%
Media			
F1: Analysis of Media			
Students select and analyze appropriate media, relevant to audience and purpose, that extend and support oral, written, and visual communication.	103	56	54%

Component Review Summary for HEPE

Component	Component Instances Reviewed	Component Instances Confirmed	Percentage of Component Instances Confirmed
Health Concepts			
A1: Healthy Behaviors and Personal Health			
Students predict how behaviors can impact health status.	46	30	65%
A2: Dimensions of Health			
Students analyze the interrelationship of physical, mental/intellectual, emotional, and social health.	19	4	21%
A3: Diseases/Other Health Problems			
Students explain causes of common diseases, disorders, and other health problems.	21	11	52%
Students propose ways to reduce, prevent, or treat common diseases, disorders, and other health problems.	21	11	52%
A4: Environment and Personal Health			
Students determine the interrelationship between the environment and other factors and personal health.	22	11	50%
A5: Growth and Development			
Students describe the characteristics of human growth and development throughout the various stages of life.	22	5	23%
A6: Health Concepts			
Students analyze complex health concepts related to alcohol use prevention.	7	3	43%
Students analyze complex health concepts related to family life.	12	6	50%
Students analyze complex health concepts related to safety and injury prevention.	20	12	60%
Students analyze complex health concepts related to nutrition.	16	13	81%
Students analyze complex health concepts related to personal health.	22	16	73%
Students analyze complex health concepts related to tobacco use prevention.	7	3	43%
Students analyze complex health concepts related to other drug use prevention.	7	4	57%
Health Information, Products, and Services			
B1: Validity of Resources			
Students evaluate the accessibility of health information, products, and services.	8	1	13%
Students evaluate the validity of health information, products, and services.	10	0	0%

Component	Component Instances Reviewed	Component Instances Confirmed	Percentage of Component Instances Confirmed
B2: Locating Health Resources			
Students access valid and reliable health services.	11	3	27%
Students access valid and reliable health information.	16	6	38%
Students access valid and reliable health products.	9	1	11%
Health Promotion and Risk Reduction			
C1: Healthy Practices and Behaviors			
Students demonstrate healthy practices and/or behaviors to maintain or improve the health of self and others in the area of prevention of STDs and HIV.	9	4	44%
Students demonstrate healthy practices and/or behaviors to maintain or improve the health of self and others in the area of prevention of unintended pregnancy.	9	3	33%
Students demonstrate healthy practices and/or behaviors to maintain or improve the health of self and others in the area of physical activity.	14	8	57%
Students demonstrate healthy practices and/or behaviors to maintain or improve the health of self and others in the area of healthy eating.	13	7	54%
Students demonstrate healthy practices and/or behaviors to maintain or improve the health of self and others in the area of drug use prevention.	12	1	8%
C2: Avoiding/Reducing Health Risks			
Students demonstrate a variety of behaviors to avoid or reduce health risks to others.	17	6	35%
Students demonstrate a variety of behaviors to avoid or reduce health risks to self.	20	9	45%
C3: Self-Management			
Students implement a plan for stress management.	6	1	17%
Students evaluate a plan for stress management.	6	1	17%
Students design a plan for stress management.	9	2	22%
Influences on Health			
D1: Influences on Health Practices/Behaviors			
Students analyze and evaluate influences on health and health behaviors.	38	23	61%
D2: Technology and Health			
Students evaluate the impact of technology, including medical technology, on personal health.	8	1	13%
Students evaluate the impact of technology, including medical technology, on family health.	7	0	0%
Students evaluate the impact of technology, including medical technology, on community health.	7	0	0%

Component	Component Instances Reviewed	Component Instances Confirmed	Percentage of Component Instances Confirmed
D3: Compound Effect of Risk Behavior			
Students analyze how three or more health risk behaviors can influence the likelihood of engaging in unhealthy behaviors.	16	6	38%
Communication and Advocacy Skills			
E1: Interpersonal Communication Skills			
Students utilize skills for communicating effectively with family, peers, and others to enhance health.	23	8	35%
E2: Advocacy Skills			
Students demonstrate ways to influence and support others in making positive health choices.	25	11	44%
Decision-Making and Goal-Setting Skills			
F1: Decision-Making			
Students apply a decision-making process to enhance health.	34	10	29%
F2: Goal-Setting			
Students analyze a plan to attain a personal health goal.	10	2	20%
Students develop a plan to attain a personal health goal.	24	10	42%
F3: Long-Term Health Plan			
Students formulate a long-term personal health plan, incorporating decision-making and goal-setting strategies.	11	5	45%
Movement/Motor Skills and Knowledge			
G1: Stability and Force			
Students change their motion by applying the principles of stability and force to modify their performance in games/physical activities.	94	92	98%
Students change the motion of objects by applying the principles of stability and force to modify their performance in games/physical activities.	65	62	95%
G2: Movement Skills			
Students demonstrate a variety of specialized movement skills specific to a game/physical activity while participating in a game/physical activity.	100	92	92%
G3: Skill-Related Fitness Components			
Students explain the relationship of skill-related fitness components to specialized movement skills.	35	9	26%
G4: Skill Improvement			
Students design appropriate practice sessions, utilizing fundamental movement skills to improve performance.	72	24	33%

Component	Component Instances Reviewed	Component Instances Confirmed	Percentage of Component Instances Confirmed
Physical Fitness Activities and Knowledge			
H1: Fitness Assessment			
Students participate in a health-related fitness assessment to reassess their fitness over time.	23	13	57%
Students participate in a health-related fitness assessment to establish personal fitness goals.	25	18	72%
H2: Health-Related Fitness Plan			
Students critique a personal fitness plan, from established goals, that applies the five health-related fitness components and the principles of training (specificity, overload, and progression).	19	6	32%
Students design a personal fitness plan, from established goals, that applies the five health-related fitness components and the principles of training (specificity, overload, and progression).	30	10	33%
H3: Fitness Activity			
Students select and participate in physical activities that address their personal fitness plans and apply the five health-related fitness components.	32	16	50%
H4: Physical Activity Benefits			
Students explain the interrelationship of physiological responses and physical, mental/intellectual, emotional, and social benefits related to regular participation in physical activity.	31	8	26%
Personal and Social Skills and Knowledge			
I1: Cooperative Skills			
Students demonstrate collaborative skills while participating in physical activities.	122	69	57%
I2: Responsible Behavior			
Students demonstrate responsible and ethical personal behavior while participating in physical activities.	124	77	62%
I3: Safety Rules and Rules of Play			
Students predict how etiquette/rules improve games/activities.	103	36	35%

Component Review Summary for Mathematics

Component	Component Instances Reviewed	Component Instances Confirmed	Percentage of Component Instances Confirmed
Number			
A1: Real Number			
Students compute with rational numbers in exponential form.	66	6	9%
Students use radical forms of numbers in mathematical applications.	61	11	18%
Students use exponential forms of rational numbers in mathematical applications.	63	22	35%
Students create rational approximations of numbers expressed in radical form.	57	16	28%
Students use fractional, decimal and percent forms of rational numbers including signed numbers in mathematical applications.	99	33	33%
Data			
B1: Measurement and Approximation			
Students use precision appropriately in applications of measurement.	65	35	54%
Students understand the relationship between precision and accuracy.	64	34	53%
B2: Data Analysis			
Students recognize the distinction between correlation and cause and effect.	31	4	13%
Given a set of data, students create the associated scatter plot.	40	21	53%
By estimating the sign and strength of the correlation and lines of best fit, students interpret scatter plots to solve problems within mathematics or across disciplines or contexts.	28	7	25%
By estimating the sign and strength of the correlation, students analyze tabular data to solve problems.	17	4	24%
B3: Data Analysis			
Students find descriptive statistics for a set of data.	31	23	74%
Students use descriptive statistics for a set of data to solve problems.	19	1	5%
Students describe distributions.	18	2	11%
B4: Data Analysis			
Students understand and account for the difference between sample statistics and statistics describing the distribution of the entire population.	14	0	0%
Students understand that the purpose of random sampling is to reduce bias compared to other samplings when creating a representative sample for a set of data.	20	6	30%

Component	Component Instances Reviewed	Component Instances Confirmed	Percentage of Component Instances Confirmed
B5: Probability			
Students find the probability of compound events.	32	23	72%
Students understand the relationship of probability to relative frequency.	34	13	38%
Geometry			
C1: Geometric Figures			
Students justify statements about properties of congruent polygons.	42	12	29%
Students justify statements about properties of similar polygons.	44	7	16%
Students solve problems involving polygons.	70	19	27%
C2: Geometric Figures			
Students solve problems involving circles.	49	8	16%
Students justify statements about properties of circles.	23	4	17%
C3: Geometric Figures			
Students apply the basic ideas of the trigonometry of right triangles.	58	32	55%
C4: Geometric Measurement			
Students understand surface area and volume relationships among solids as dimensions change.	35	9	26%
Students find the volume of three-dimensional objects.	52	14	27%
Students find the surface area of three-dimensional objects.	50	12	24%
Algebra			
D1: Symbols and Expressions			
Students understand and use polynomials.	69	11	16%
Students understand and use expressions with rational exponents.	54	16	30%
D2: Equations and Inequalities			
Students solve quadratic equations.	55	17	31%
Students solve absolute value equations and inequalities and interpret the results.	50	8	16%
Students solve systems of linear equations.	51	22	43%
Students solve equations numerically in tabular form.	43	5	12%
Students solve equations graphically.	97	33	34%
Students solve simple rational equations.	70	26	37%
Students solve systems of linear inequalities.	33	15	45%
D3: Equations and Inequalities			
Students understand and apply ideas of logarithms.	31	9	29%

Component	Component Instances Reviewed	Component Instances Confirmed	Percentage of Component Instances Confirmed
D4: Functions and Relations			
Students can apply basic function families to problem situations.	51	2	4%
Students use the concepts of domain, range, zeros, intercepts, and maximum and minimum values for basic functions.	74	12	16%
Students can use concepts of rate of change to compare function families and distinguish among them.	51	12	24%
Students recognize and sketch the graphs of the basic functions.	83	10	12%
D5: Functions and Relations			
Students express relationships recursively.	20	8	40%
Students use iterative methods to solve problems.	28	4	14%

Component Review Summary for Science

Component	Component Instances Reviewed	Component Instances Confirmed	Percentage of Component Instances Confirmed
Unifying Themes			
A1: Systems			
Students apply an understanding of systems to explain man-made phenomenon.	31	2	6%
Students apply an understanding of systems to analyze man-made phenomenon.	21	2	10%
Students apply an understanding of systems to explain natural phenomenon.	43	3	7%
Students apply an understanding of systems to analyze natural phenomenon.	24	5	21%
A2: Models			
Students evaluate the effectiveness of a model by comparing its predictions to actual observations from the technological world.	27	3	11%
Students evaluate the effectiveness of a model by comparing its predictions to actual observations from the living environment.	43	8	19%
Students evaluate the effectiveness of a model by comparing its predictions to actual observations from the physical setting.	66	12	18%
A3: Constancy and Change			
Students analyze the effect of counterbalances on constancy and change in designed systems.	6	0	0%
Students identify and explain examples of constancy and change in designed systems.	16	0	0%
Students analyze the effect of counterbalances on constancy and change in biological systems.	11	4	36%
Students identify and explain examples of constancy and change from biological systems.	19	5	26%
Students analyze the effect of counterbalances on constancy and change in physical systems.	27	5	19%
Students identify and explain examples of constancy and change from physical systems.	43	13	30%
A4: Scale			
Students apply understanding of scale to explain phenomena in technological systems.	13	0	0%
Students apply understanding of scale to explain phenomena in biological systems.	10	2	20%
Students apply understanding of scale to explain phenomena in physical systems.	42	4	10%

Component	Component Instances Reviewed	Component Instances Confirmed	Percentage of Component Instances Confirmed
The Skills and Traits of Scientific Inquiry and Technological Design			
B1: Skills and Traits of Scientific Inquiry			
Students use the scientific method in which they methodically plan, conduct, analyze data from, and communicate results of in-depth scientific investigations, including experiments guided by a testable hypothesis.	106	16	15%
The Skills and Traits of Scientific Inquiry and Technological Design			
B2: Skills and Traits of Technological Design			
Students use a systematic process, tools and techniques, and a variety of materials to design and produce a product that meets new needs or improves existing designs.	59	3	5%
The Scientific and Technological Enterprise			
C1: Understandings of Inquiry			
Students describe key aspects of scientific investigations: that they are guided by scientific principles and knowledge, that they are performed to test ideas, and that they are communicated and defended publicly.	50	2	4%
C2: Understandings About Science and Technology			
Students explain how the relationship between scientific inquiry and technological design influences the advancement of ideas, products, and systems.	46	2	4%
C3: Science, Technology, and Society			
Students describe the role of science and technology in creating and solving contemporary issues and challenges.	59	10	17%
C4: History and Nature of Science			
Students describe the human dimensions and traditions of science and the nature of scientific knowledge that have impacted science and society.	38	2	5%
Students describe the historical episodes in science that have impacted science and society.	42	12	29%
The Physical Setting			
D1: Universe and Solar System			
Students explain the size and scale of the universe and solar system.	7	0	0%
Students explain how our past and present knowledge of the solar system developed.	4	0	0%
Students explain the physical formation and changing nature of our universe and solar system.	10	1	10%

Component	Component Instances Reviewed	Component Instances Confirmed	Percentage of Component Instances Confirmed
D2: Earth			
Students describe and analyze the physical and energy influences that shape and alter Earth Systems.	26	1	4%
Students describe and analyze the biological and human influences that shape and alter Earth Systems.	20	2	10%
D3: Matter and Energy			
Students describe reactions and reaction rates.	67	0	0%
Students describe matter as made up of invisibly small particles.	60	0	0%
Students describe the basic ingredients and properties of matter.	78	1	1%
Students describe the conservation of energy.	63	4	6%
D4: Force and Motion			
Students understand force, motion and gravity.	50	0	0%
Students understand electromagnetic fields and forces.	28	0	0%
Students understand light.	19	3	16%
Students understand relative motion.	30	5	17%
The Living Environment			
E1: Biodiversity			
Students describe and analyze the evidence for relatedness among and within diverse populations of organisms.	20	0	0%
Students describe and analyze the importance of biodiversity.	21	1	5%
E2: Ecosystems			
Students describe and analyze the cycles that affect short-term and long-term ecosystem stability and change.	25	1	4%
Students describe and analyze the interactions and factors that affect short-term and long-term ecosystem stability and change.	27	2	7%
E3: Cells			
Students describe structure and function of cells at the intracellular and molecular level, including differentiation to form systems.	22	0	0%
Students describe structure and function of cells at the intracellular and molecular level including interactions between cells and their environment.	21	0	0%
Students describe structure and function of cells at the intracellular and molecular level including the impact of cellular processes and changes on individuals.	32	0	0%

Component	Component Instances Reviewed	Component Instances Confirmed	Percentage of Component Instances Confirmed
The Living Environment			
E4: Heredity and Reproduction			
Students examine the role of DNA in transferring traits in differentiating cells.	13	0	0%
Students examine the role of DNA in transferring traits through the evolution of populations and speciation.	10	0	0%
Students examine the role of DNA in transferring traits from generation to generation.	17	1	6%
E5: Evolution			
Students describe the interactions between and among species and environments that lead to natural selection and evolution.	20	0	0%
Students describe the interactions between and among populations and environments that lead to natural selection and evolution.	17	1	6%

Component Review Summary for Social Studies

Component	Component Instances Reviewed	Component Instances Confirmed	Percentage of Component Instances Confirmed
Applications of Social Studies Processes, Knowledge, and Skills			
A1: Researching and Developing Positions on Current Social Issues			
Students present and defend an informed position about a current social studies issue.	48	17	35%
Students develop positions about current social studies issues.	75	23	31%
Students research current social studies issues by: (a) Exploring a given research question or developing an original research question; (b) Consulting and evaluating information from multiple and varied sources; (c) Synthesizing information from multiple and varied sources.	89	40	45%
A2: Making Decisions Using Social Studies Knowledge and Skills			
Students will make individual and/or collaborative decisions on matters (real or simulated) related to social studies.	70	26	37%
Students use relevant information from research and ethical reasoning to make individual and/or collaborative decisions.	58	16	28%
A3: Taking Action Using Social Studies Knowledge and Skills			
Students will select, plan and implement a civic action project based on the assets and/or needs.	8	3	38%
Students will identify a community, school, state, national, or international asset or need.	16	5	31%
Students evaluate the project's effectiveness in relation to civic contribution.	4	1	25%
Civics and Government			
B1: Concepts, Themes and Patterns of Civics/Government			
Students understand ideals, purposes, and principles of constitutional government in the United States.	29	9	31%
Students will identify and explain structures and processes of constitutional government in the United States.	23	7	30%
Students compare constitutional government and the American political system in the United States with different forms of government and political systems.	13	2	15%
B2: Rights, Duties, Responsibilities, and Citizen Participation in Government			
Students understand and can explain the major civic responsibilities of citizens in a constitutional democracy.	36	4	11%
Students will understand the role of citizens in a constitutional democracy, especially as evidenced in historic documents, laws, and landmark court cases.	19	5	26%

Component	Component Instances Reviewed	Component Instances Confirmed	Percentage of Component Instances Confirmed
Students will understand and can explain major constitutional and legal rights of citizens in a constitutional democracy.	39	5	13%
Students compare and contrast the role of citizens in a constitutional democracy to the role of citizens in different forms of government.	12	1	8%
Students compare and contrast the role of citizens in the United States with citizen roles in the local community, or state of Maine.	30	4	13%
B3: Individual, Cultural, International, and Global Connections in Civics and Government			
Students understand political and civic aspects of unity and diversity in Maine, the United States, or the world using at least one distinct interest group or cultural group.	29	5	17%
Students understand political and civic aspects of unity and diversity for Maine Native American (Wabanaki) tribal governments/political systems and their relationship with local, state, national, or international governments.	0	0	-
Economics			
C1: Economic Knowledge, Concepts, Themes, and Patterns			
Students understand the major concepts and processes of economics in a market economy.	48	24	50%
Students understand how economics serves to inform personal, national and global decisions and can apply economics to present and future decision-making.	41	12	29%
Students understand the principles and processes of making personal financial decisions.	43	6	14%
Students understand and compare at least two different economic systems to that of the United States, especially as related to goals such as freedom, efficiency, equity, security, growth, and sustainability.	18	4	22%
C2: Individual, Cultural, International, and Global Connections in Economics			
Students understand economic aspects of unity and diversity for Maine Native American (Wabanaki) economic systems and their relationship with local, state, national, or international economic systems.	2	0	0%
Students understand the economic aspects of unity and diversity in other economic systems.	13	5	38%
Students understand economic factors influencing unity and diversity in Maine, the United States or the world.	41	8	20%
Government			
D1: Geographic Knowledge, Concepts, Themes, and Patterns			
Students understand the geography of the world and the effect of geographic decisions on the present and future.	30	9	30%

Component	Component Instances Reviewed	Component Instances Confirmed	Percentage of Component Instances Confirmed
Students understand essential elements and tools of geography in studying physical, environmental, and cultural activity on earth.	29	12	41%
Students understand the geography of the United States and the effect of geographic decisions on the present and future.	28	5	18%
D2: Individual, Cultural, International, and Global Connections in Geography			
Students understand geographic aspects of unity and diversity between Maine Native American territories and other areas in Maine, the United States or the world.	5	0	0%
Students understand geographic aspects of unity and diversity in Maine, the United States or the world.	33	9	27%
History			
E1: Historical Knowledge, Concepts, Themes, and Patterns			
Students understand major eras, enduring themes, and influences in United States history.	81	27	33%
Students understand historical relationships between democratic and non-democratic societies.	32	3	9%
Students understand major eras, enduring themes, and influences in world history.	68	27	40%
Students understand the origins of democratic philosophy and democratic ideals in the history of the United States or world.	39	8	21%
Students understand essential elements and tools of history in order to appreciate the past, understand the present, and support informed decision-making about the future.	91	16	18%
E2: Individual, Cultural, International, and Global Connections in History			
Students understand cultural aspects of unity and diversity for Maine Native Americans (Wabanaki) throughout history.	2	0	0%

Component Review Summary for VPA

Component	Component Instances Reviewed	Component Instances Confirmed	Percentage of Component Instances Confirmed
Disciplinary Literacy - Dance			
DANCE A1: Terminology			
Students will apply accumulated knowledge of dynamics to describe dances with greater complexity and variation.	1	0	0%
Students will apply accumulated knowledge of dance terminology to perform dances with greater complexity and variation.	1	0	0%
Students will apply accumulated knowledge of dance composition to describe dances with greater complexity and variation.	3	1	33%
DANCE A2: Space			
Students will apply space concepts in an original repeatable, choreographed piece.	20	16	80%
DANCE A3: Time			
Students will identify rhythms of various genres.	11	3	27%
Students will move to rhythms of various genres.	23	11	48%
DANCE A4: Energy			
Students will incorporate energy qualities into a choreographed piece as a solo, small group, or ensemble.	6	4	67%
DANCE A5: Locomotor and Non-Locomotor Movement			
Students will integrate and show evidence of body-part isolation.	4	3	75%
Students will integrate and show evidence of skeletal alignment.	0	0	-
Students will integrate and show evidence of strength.	0	0	-
Students will integrate and show evidence of flexibility.	0	0	-
Students will integrate and show evidence of agility.	0	0	-
Students will integrate and show evidence of coordination.	0	0	-
DANCE A6: Compositional Forms			
Students will replicate dance composition forms and themes including narrative.	0	0	-
Students will replicate dance composition forms and themes including canon.	0	0	-
Students will replicate dance composition forms and themes including call and response.	0	0	-
Students will replicate dance composition forms and themes including ab.	0	0	-
Students will replicate dance composition forms and themes including aba.	0	0	-

Component	Component Instances Reviewed	Component Instances Confirmed	Percentage of Component Instances Confirmed
Students will replicate dance composition forms and themes including retrograde.	0	0	-
Students will replicate dance composition forms and themes including palindrome.	0	0	-
Students will replicate dance composition forms and themes including theme and variation.	0	0	-
Students will replicate dance composition forms and themes including rondo.	0	0	-
Disciplinary Literacy - Music			
MUSIC A1: Music Difficulty			
Students will perform music that requires a well-developed ability to perform music with a variety of rhythms in various meters alone or with others.	57	33	58%
Students will perform music that requires a well-developed ability to perform music in various keys alone or with others.	51	29	57%
Students will perform music that requires well-developed technical skills with attention to proper posture and technique, alone or with others.	57	43	75%
Students will perform music that requires well-developed attention to interpretation alone or with others.	50	35	70%
Students will perform music that requires well-developed attention to phrasing, alone or with others.	51	36	71%
MUSIC A2: Notation and Terminology			
Students will apply accumulated knowledge of symbols to perform music with greater complexity.	70	41	59%
Students will apply accumulated knowledge of musical notation to perform music with greater complexity.	72	46	64%
Students will apply accumulated knowledge of music terminology to perform music with greater variation.	61	32	52%
Students will apply accumulated knowledge of music terminology to perform music with greater complexity.	61	35	57%
Students will apply accumulated knowledge of musical notation to perform music with greater variation.	70	40	57%
MUSIC A3: Listening and Describing			
Students will analyze music using their understanding of pitch, rhythm, tempo, dynamics, form, timbre, texture, harmony, style and compound meter.	61	25	41%
Students will evaluate music using their understanding of pitch, rhythm, tempo, dynamics, form, timbre, texture, harmony, style and compound meter.	58	19	33%
Disciplinary Literacy - Theatre			
THEATRE A1: Terminology			
Students will identify and define the parts of the stage.	2	0	0%
Students will identify and describe the crisis, resolution, and theme of the play.	1	0	0%

Component	Component Instances Reviewed	Component Instances Confirmed	Percentage of Component Instances Confirmed
THEATRE A2: Production			
Students will fulfill at least one technical role from pre-show through strike.	3	2	67%
Disciplinary Literacy - Visual Arts			
VISUAL ARTS A1: Artist's Purpose			
Students will explain how art and artists reflect and influence culture and periods of time.	51	8	16%
Students will research how art and artists reflect and influence culture and periods of time.	21	8	38%
VISUAL ARTS A2: Elements of Art and Principles of Design			
Students will evaluate all the features of composition.	81	30	37%
VISUAL ARTS A3: Media, Tools, Processes and Techniques			
Students will compare the effects of media and their associated tools, techniques, and processes, using elements, principles and expressive qualities in art forms.	55	6	11%
Students will compare the effects of media and their associated tools, techniques, and processes, using elements, principles and expressive qualities in genres.	36	3	8%
Creation, Performance, and Expression - Dance			
DANCE B1: Communication			
Students will create an original piece of choreography using the elements of dance.	0	0	-
DANCE B2: Sequencing			
Students will create solo dance works accurately producing an original or pre-existing complex movement sequence with rhythmic acuity.	0	0	-
Students will create ensemble dance works accurately producing an original or pre-existing complex movement sequence with rhythmic acuity.	0	0	-
DANCE B3: Solving Challenges			
Students will solve increasingly complex movement challenges involving several dance concepts with one or more partners.	0	0	-
DANCE B4: Technical Aspects			
Students will include and explain costume changes in a piece of choreography.	0	0	-
Students will include and explain light changes in a piece of choreography.	0	0	-
Students will include and explain sound changes in a piece of choreography.	0	0	-

Component	Component Instances Reviewed	Component Instances Confirmed	Percentage of Component Instances Confirmed
Creation, Performance, and Expression - Music			
MUSIC B1: Style/Genre			
Students will perform music of various styles that requires well-developed technical skills, attention to phrasing and interpretation and various meters and rhythms in a variety of keys, accurately applying the accumulated knowledge and skills of: proper posture and technique; musical notation; symbols; and terminology.	51	26	51%
MUSIC B2: Composition			
Students will analyze and evaluate musical ideas expressed in their own compositions or the compositions of others.	57	12	21%
Creation, Performance, and Expression - Theatre			
THEATRE B1: Movement			
Students will refine gesture and stage business in the portrayal of a role.	4	1	25%
THEATRE B2: Character			
Students will show evidence of the development of a character's attitude and point of view using physicality to communicate ideas, moods, intentions, or feelings.	5	3	60%
Students will show evidence of the development of a character's attitude and point of view using voice tone/level to communicate ideas, moods, intentions, or feelings.	4	2	50%
Students will show evidence of the development of a character's attitude and point of view using voice timing to communicate ideas, moods, intentions, or feelings.	3	2	67%
THEATRE B3: Improvisation			
Students will improvise through theatre games or during the rehearsal process for productions to address unforeseen circumstances and develop characters and relationships.	8	4	50%
Creation, Performance, and Expression - Visual Arts			
VISUAL ARTS B1: Media Skills			
Students will choose multiple suitable media, tools, techniques, and processes to create a variety of original art works.	58	10	17%
VISUAL ARTS B2: Composition Skills			
Students will use Elements of Art and Principles of Design to create original art works that show evidence development of personal style in a variety of media and visual art forms.	75	2	3%
VISUAL ARTS B3: Making Meaning			
Students will create a body of original art work.	65	25	38%

Component	Component Instances Reviewed	Component Instances Confirmed	Percentage of Component Instances Confirmed
VISUAL ARTS B4: Exhibition			
Students will select, prepare, and help with exhibiting their works in the classroom, school, or other community location.	40	9	23%
Students will articulate an artistic justification for their selection.	8	1	13%
Creative Problem Solving			
C1: Application of Creative Process			
Students will apply creative problem solving and creative-thinking skills to improve or vary their own work or the work of others.	139	41	29%
Aesthetics and Criticism			
D1: Aesthetics and Criticism			
Students will evaluate art forms.	98	32	33%
Students will analyze art forms.	117	31	26%
Visual and Performing Arts Connections			
E1: The Arts and History and World Cultures			
Students will analyze the characteristics and purposes of products of the visual/performing arts to understand history or world cultures.	83	13	16%
E2: The Arts and Other Disciplines			
Students will analyze skills that are similar across disciplines.	27	1	4%
Students will analyze concepts that are similar across disciplines.	19	2	11%
E3: Goal-Setting			
Students will make short-term goals based on rigorous criteria and related to time management, interpersonal interactions, or skill development that will lead to success in the arts.	113	27	24%
Students will make long-term goals based on rigorous criteria and related to time management, interpersonal interactions, or skill development that will lead to success in the arts.	75	22	29%
E4: Impact of the Arts on Lifestyle and Career			
Students will explain how the arts can function as a means of renewal and recreation.	41	1	2%
Students will explain how their knowledge of the arts relates to school-to-school and school-to-work transitions and other career and life decisions.	12	0	0%
E5: Interpersonal Skills			
Students will reflect on the impact of interpersonal skills on personal success in the arts.	35	3	9%
Students will show evidence of positive interpersonal skills.	93	9	10%

Component Review Summary for World Languages

Component	Component Instances Reviewed	Component Instances Confirmed	Percentage of Component Instances Confirmed
Communication			
A1: Interpersonal			
Students elicit the thoughts and opinions of others by using strings of sentences or short paragraphs.	80	4	5%
Students of modern languages use pronunciation and intonation patterns or use appropriate non-manual markers (ASL), which would be comprehensible to a native speaker accustomed to interacting with language learners.	90	16	18%
Students express their own thoughts and opinions about familiar topics by using strings of sentences or short paragraphs.	150	7	5%
A2: Interpretive			
Students comprehend recorded material in familiar contexts that are longer or more complex than those in the 6-8 grade span.	80	11	14%
Students comprehend conversations in familiar contexts that are longer or more complex than those in the 6-8 grade span.	66	1	2%
Students comprehend narratives in familiar contexts that are longer or more complex than those in the 6-8 grade span.	79	8	10%
A3: Presentational			
Students express their own thoughts to describe in oral/signed presentations using strings of sentences or short paragraphs and with sufficient accuracy in form and pronunciation to be understood by native speakers accustomed to interacting with language learners.	83	7	8%
Students express their own thoughts to describe in written presentations using strings of sentences or short paragraphs and with sufficient accuracy in form to be understood by native speakers accustomed to interacting with language learners.	78	12	15%
Students express their own thoughts to narrate in oral/signed presentations using strings of sentences or short paragraphs and with sufficient accuracy in form and pronunciation to be understood by native speakers accustomed to interacting with language learners.	53	5	9%
Students express their own thoughts to narrate in written presentations using strings of sentences or short paragraphs and with sufficient accuracy in form to be understood by native speakers accustomed to interacting with language learners.	49	10	20%
A4: Language Comparisons			
Students use their understanding of the nature of language to enhance their communication in the target language.	232	34	15%

Component	Component Instances Reviewed	Component Instances Confirmed	Percentage of Component Instances Confirmed
Cultures			
B1: Practices and Perspectives			
Students identify how perspectives of a culture(s) are related to cultural practices of a culture(s) in which the target language is spoken.	92	20	22%
Students explain how perspectives of a culture(s) are related to cultural practices of a culture(s) in which the target language is spoken.	23	0	0%
B2: Products and Perspectives			
Students explain how political structures reflect the perspectives of a culture(s) in which the target language is spoken.	25	2	8%
Students explain how visual and/or performing arts reflect the perspectives of a culture(s) in which the target language is spoken.	10	1	10%
Students explain how literature reflects the perspectives of a culture(s) in which the target language is spoken.	5	1	20%
Students explain how historical artifacts reflect the perspectives of a culture(s) in which the target language is spoken.	13	1	8%
B3: Comparisons with Own Culture			
Students explain how products of a culture(s) in which the target language is spoken contribute to the culture in which the student lives.	38	2	5%
Students explain how perspectives of a culture(s) in which the target language is spoken contribute to the culture in which the student lives.	18	1	6%
Students explain how practices of a culture(s) in which the target language is spoken contribute to the culture in which the student lives.	27	0	0%
Connections			
C1: Knowledge of Other Learning Results Content Areas			
Students use the target language to enhance their knowledge of other Learning Results content areas.	112	35	31%
C2: Distinctive Viewpoints			
Students locate authentic resources about the target language and associated culture(s) that are available only through the sources in the target language.	24	4	17%
Students describe ideas about the target language and associated culture(s) that are available only through the sources in the target language.	20	4	20%

Component	Component Instances Reviewed	Component Instances Confirmed	Percentage of Component Instances Confirmed
Communities			
D1: Communities			
Students use their knowledge of the target language to communicate with target language speakers.	6	1	17%
Students demonstrate an understanding of the target language.	104	6	6%
Students use their knowledge of the target language to demonstrate an understanding of the importance of culture and language in the 21st century.	13	1	8%

