

**From:**

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**To:**

Diana Doiron

**Notes:**

Here is the extension request of Option 4 from the Brewer School Department.



School Administrative Units (SAUs) award diplomas. The Maine Department of Education's role is to ensure that SAUs base the awarding of a diploma on student proficiency for students graduating after January 1, 2018. The following Proficiency-Based Diploma Extension application is intended to provide the Department and the school administrative unit with evidence of a good fit between the district's current progress and their extension request.

#### **Directions for submitting an extension application**

1. Complete the document and provide evidence to support the responses. Our intent is to keep the process streamlined and reasonable and have therefore set word limits of 1000 words for each section in the application and request that districts submit a total of no more than 25 pages of evidence.
2. Convert the extension application document and all pages of evidence to a PDF format and fax your complete application to Diana Doiron at the following fax number: 1-877-227-9838.

Note: Extension applications that are incomplete or lack sufficient evidence will receive feedback requesting additional information. Our plan is to process all submissions within a month of the submittal window. This plan is dependent on the number of submissions received per submittal deadline.

## Proficiency-Based Diploma Extension Option 4

At the time of the extension application the SAU will:

- Provide evidence of demonstrated preparedness to award diplomas based on proficiency of the standards in English language arts and mathematics in 2018. If there is a demonstrated preparedness to deliver diplomas based on proficiency in the standards of other content areas or the Guiding Principles, include this evidence as well.
- Provide a description of the overall plan to meet the goal of awarding of diplomas based on proficiency in the standards of the eight content areas and the standards of the Guiding Principles. The description should include benchmarks for the 2014-2015 school year and each year for which the extension is requested.
- Include a budget for the use of all existing targeted proficiency-based diploma transition funds during 2014-2015 and any 2013-2014 funds that were carried over to support the implementation of proficiency-based diplomas

LIMIT RESPONSES TO QUESTIONS TO 1000 WORDS PER QUESTION AND LIMIT TOTAL ATTACHED EVIDENCE TO 25 PAGES

### Submittal Window

1. Indicate the submitting date.

August 18, 2014, 5 pm     September 17, 2014, 5 pm     October 18, 2014, 5 pm

### Superintendents Region

2. Indicate the superintendent region in which your SAU is a member.

Aroostook	
Cumberland	
Hancock	
Kennebec Valley	
Midcoast	
Penquis	Jay McIntire
Washington	
Western Maine	
York	

3. School Administrative Unit: Brewer School Department
4. High School(s): Brewer High School
5. Name and title of person completing the extension request:
  - David Wall Principal of Brewer High
  - Kathleen Kazmierczak Director of Instruction- lead contact

**6. Superintendent's name, address, phone number and email:**

**Jay McIntire, Superintendent of Schools**

**Brewer School Department**

**261 Center Street**

**Brewer, Maine 04412**

**207-989- 3160**

**jmcintire@breweredu.org**

**Evidence of Preparedness**

- 7. Describe the proficiency-based system in place at the secondary level for students to demonstrate proficiency in English language arts and mathematics. (If there is a demonstrated level of preparedness in other content areas or the Guiding Principles, include these in your description and evidence as well.) Limit your description to 1000 words (approximately 2 pages single spaced or four pages double spaced) and attach evidence to support your description referencing the name of the document(s) and specific page(s).**

**Criteria:**

- **Clear description of the proficiency-based education work completed to date**
- **Clear connection between evidence and the work done**
- **Clear description of the impact the proficiency-based work is having on students, staff and community**
- **Clear alignment to extension option**

Brewer High School staff and administration have been working diligently since September of 2012 to develop curricula, and assessments and align instruction to the rigor of the state standards. The work through August 2014 has been focused and deliberate to ensure students at Brewer High School will graduate with a proficiency-based high school diploma. There has been significant work accomplished over this time but like all evolving initiatives there is still work to be completed before BHS is ready to assess students in all content areas. For this reason, BSD requests Extension Option Four which will allow time to fully develop programming and pathways with World Languages that has the rigor and opportunities for all students to meet the rigor of BHS graduation standards in the content area of World Languages that has the rigor and opportunities for all students to meet the BHS graduation standards.

**The following information addresses the four criteria for Extension Option Four:**

BSD is committed to providing a system that blends credits with proficiency-based learning and standards to earn a high school diploma. Students will be certified that they have met Maine's enhanced Learning Results by demonstrating their knowledge and skills against Brewer's Graduation Standards. This system requires students to successfully engage in rigorous, relevant, and progressive learning experiences. BHS has developed or redesigned assessments that document proficiency in all eight Maine content standards and the Guiding Principles. Beginning in September 2014 BHS has developed versions of coordinated and standards-aligned assessments of student skills across content areas for current ninth grade students. Students are expected to demonstrate proficiency in content area standards and Guiding Principles through their individual progression. Some students will accelerate, others will require additional time- this is being considered as multiple pathways are being developed. There is ongoing work with development and calibration of assessments within sections of courses and across content areas.

## 2012-15 Timeline

The Brewer School Committee has endorsed the work of implementing proficiency-based learning and approved Brewer High School's Plan "*Shaping a Brighter Future through Strategic Planning and Continuous Improvement (2013-18)*", the 5 year plan for Brewer High School, as well as, (1) *the Graduation Requirements Policy (IKF)* and (2) *Multiple Pathways Policy (IKFF) and Brewer's Graduation Standards*.

### Key Work in Implementation of Proficiency-based Learning and Graduation

- Graduation Standards for BHS were approved by School Committee 8-11-14 **(Evidence A)**
- Brewer High School's Five Year Improvement Plan (2013-2018) was approved by School Committee **(Evidence B)**
- Graduation requirements were revised to include a demonstration of proficiency against content standards and Guiding Principles through a Senior Capstone Project
- Personal Learning Plans are being developed for each students beginning with Class of 2018
- Alignment of English and Mathematics curriculum to CCSC/ Maine Learning Results was completed for 9<sup>th</sup> grade
- Professional Learning Groups by content areas met monthly to develop Graduation Standards in each content area through 2013-14 school year
- One-to-One computing at BHS began in 2012 with class of 2016
- The Brewer High School Pledge that reinforces Brewer's commitment to implementing Guiding Principles and ensuring students demonstrate proficiencies against them was developed and committed to by the staff and students at BHS in 2012-13. **(Evidence C)**
- In-service days(2013-14) at BHS were dedicated to defining Graduation Standards in all content areas
- Multiple Pathways Policy was approved by School Committee **(Evidence D)**
- Graduation Requirements Policy was approved by School Committee **(Evidence E)**
- Parent Advisory Group has met with the principal at BHS to support Improvement Plan **(Evidence F)**
- Student Advisory Group has met with the principal at BHS to support Improvement Plan **(Evidence F)**
- Multiple Pathways to graduation were expanded to include the Bridge Year Program with additional course offerings
- Apex Learning, an online learning lab, was approved for oversight by a certified teacher in the 2014 budget that began in 2014-15 school year
- Infinite Campus programming was extended to include Maine Learning Results Standards
- Minimum grading was implemented at BHS in 2012-13
- BHS led by School Improvement Team became a member of the New England Secondary School Consortium in 2013. The Team has participated with offerings and conferences since joining the Consortium. Resources are shared with all staff.
- Brewer School Department initiated, hosted, and facilitated a workshop between BHS 9<sup>th</sup> grade teachers and 8<sup>th</sup> grade teachers of Brewer Community School and sending school districts (Holden, Dedham and Orrington). The group was introduced to proficiency based learning and graduation requirements that begin with the class of 2018. **(Evidence G)**
- 9<sup>th</sup> grade team has aligned content courses with Maine standards and developed assessment for those graduation standards. **(Evidence H)**
- Multiple pathways offered include Classroom based Instruction, Online learning, Bridge Year Program, Job Shadowing, Internships with area businesses and non-profits, Articulation Agreements with Husson College, UMO, Washington County Community College; Concurrent Enrollment with UMO, and Early College Admission.

- Naviance was implemented to support development of Personal Learning Plans that build pathways to individual student post-secondary plans.
- A well-attended orientation session with parents and incoming 9<sup>th</sup> grade students (approximately 200 attendees) provided a forum for them to become acquainted with Proficiency-based Learning and Brewer's Graduation Requirements. Copies of Graduation Requirements Policy was distributed.
- A workshop with BHS staff on Capstone Projects tied to the Guiding Principles – mapped out learning experiences and created a list of additional activities that could support students with meeting the requirements of a Capstone Project.
- Guiding Principles - Training with BHS staff on Guiding Principles was held and generated brainstormed activities that could be implemented school-wide for students to demonstrate proficiency with the Guiding Principles.
- A group of BHS teachers ( 9 teachers representing across contents) attended sessions on "*Pathways to Proficiency*" sponsored by MDOE in Spring 2014

**Community impact:** While Brewer continues to be a community with increased numbers of residents who do not have children in the Brewer Schools, they have overwhelmingly supported budgets in the past few years and expressed pride with the new elementary school and renovations at Brewer High. They are committed to strengthening graduation standards and requirements for a Brewer High diploma, so students are well prepared for post-secondary college and career opportunities. They seem to trust their school department in implementing educational programming that will best meet the needs of the children in Brewer.

**Staff Impact:** BHS teachers in particular have been dedicated to the work of standards-based education over the past two years tying standards to courses and other learning experiences. The commitment of the staff members has taken the school department to its current position of having proficiency-based standards for all content areas and work in progress with tying the standards to courses and development of assessments that offer multiple opportunities for students to demonstrate proficiency in all content areas. BHS teachers believe that all students should have access to meaningful instruction and assessment through their individual pathways to graduation.

**Student Impact:** The entering ninth grade Class of 2018 is the first to engage with Proficiency-based Learning and Graduation Standards. Each student has a Personal Learning Plan commencing with the class of 2018. They will revise and adapt these plans through their high school years. The Naviance program is being implemented to guide the development and assessment of these individual plans. This is a work in progress and will be assessed by students, parents and staff as this cohort engages in their learning through this school year. Goals they select for their PLP's will guide the selection of educational learning experiences that will actively prepare them for their chosen post-secondary options.

#### **Extension Request**

An extension following the guidelines for Option 4 is requested due to limited resources and capacity in World Languages to ensure all students engage in learning and demonstrate proficiency in this content area. The Brewer School Department wants to review its current capacity and determine needed resources, both faculty and otherwise, as well as its multiple pathways for students to meet Brewer graduation standards in World Languages. In addition to the review of capacity for World Languages, BSD will continue to redesign its approach to the World Languages program at the middle and high school levels.

While this review has begun, a blended faculty with two Brewer High School teachers of World Languages are now providing instruction at Brewer Community School to middle school students, in addition to continued teaching at BHS. The staff is bridging the gap between the middle and high school programs during the review.

Members of the review committee include middle and high school teaching staff, building and district administration in consult with students and parents. The review committee will make recommendations to the school committee about expanding staff and learning experiences so all Brewer students can access the World Language Program to meet the Brewer High School Graduation Standards. A cohesive and comprehensive continuum of learning opportunities with enough capacity, both faculty and other, for Brewer students to meet the proficiency standards in the World Languages program starting with the class of 2020 is the desired outcome of this review.

### Overall Implementation Plan

8. Provide a description of the overall plan to meet the goal of awarding diplomas based on proficiency in the standards of English language arts and mathematics in 2018. (If there is a demonstrated level of preparedness in other content areas or the Guiding Principles, include these in your description and evidence as well.) The description should include benchmarks and metrics for the 2014-2015 school year and benchmarks for each year for which the extension is requested to reach the ultimate goal of awarding proficiency-based diplomas in eight content areas and the Guiding Principles after July 1, 2020. Limit your description to 1000 words (approximately 2 pages single spaced or four pages double spaced) and attach evidence to support your description referencing the name of the document(s) and specific page(s).

#### Criteria:

- Overall plan is aligned with the SAU shared vision focus areas
- Benchmarks for progress in 2014-2015 include activities/actions that will support the achievement of the benchmarks and metrics to measure them.
- Evidence included clearly supports the benchmarks

#### *The Vision of the Brewer School Department (adopted November 5 2012)*

- *It will offer a curriculum that is cohesive and seamless, providing smooth transitions between grades, with a variety of pathways suited to each child.*
- *The school department will be recognized for excellence in academics with an emphasis on supporting the arts in education*
- *Every student will be well-prepared to move to the next level of education on the path to lifelong learning*

**The plan for implementation of a proficiency- based diploma that includes all content areas except WL and includes the Guiding Principles with the current ninth grade class, which will graduate in 2018, clearly follows the vision of the district.**

The following timeline with benchmarks provides a pathway to implementation.

#### **Benchmark 1: Clear performance standards are calibrated in all content areas**

Students have opportunity to demonstrate proficiency with standards that are aligned to instruction and assessments and will contribute to individual profiles each year and over time. Teachers will review students' work for calibration in all content areas. Standards and assessments will be reviewed and revised, as needed. Collection of student work, developing models and anchors, and ensuring horizontal and vertical calibration in all content areas are critical, time-intensive processes that drive instructional intervention (i.e. multiple pathways required by LD 1422 and by MUSER / RTI), identify necessary revision of standards or assessments, and ultimately validate proficiency in standards in the blended system.

#### **Timeline:**

**September 2014 - June 2015: Conducted with incoming Class of 2018**

**August 1, 2015: Assessment revision, scoring calibration and anchor selection complete**

**Benchmark 2: System established to verify attainment of Guiding Principles/Capstone Project (Commencing with class of 2018)**

The system will be designed with a school-wide rubric to assess and provide feedback to the efficacy of this measurement tool. Assessments from across content areas and over the four academic years will double as assessment points for skills within the Guiding Principles - utilizing school-wide rubrics for Problem Solving, Research, Writing, and Oral Presentation. Finally, each student will be guided in the selection of an area of concentrated study during the final four semesters. Capstone projects will match students' academic interests and post-secondary goals. The Capstone will result in an exhibition of learning and reflection based on the Guiding Principles and designed to prepare students for continued education and career. The Capstone Project will provide a great opportunity to demonstrate proficiency against the Guiding Principles.

**Timeline:**

**September 2014 – May 2015: Developed a school-wide rubric for assessment of core skills of the Guiding Principles.**

**Benchmark 3: System developed to report student proficiency embedded in the current student data system**

Frequent, understandable communication to students and parents is essential to motivating and accelerating student achievement and documenting proficiency on standards and Guiding Principles. Assessments aligned to Graduation Standards will document student proficiencies with these standards. Managing the complicated technical aspects of Infinite Campus, where student performance data will be recorded, will be utilized to extract and report these data. Data that is essential to document student achievement, individual and otherwise, will be extracted in reports provided by Tableau. Developing the methodology, scale and language of reporting are critical aspects of the work. There is an interface between Infinite Campus, the current student data system, and Tableau, which will be utilized to extract and report student achievement and proficiency of the standards and Guiding Principles. This system will be available this school year for current ninth grade class, but needs continued development as this cohort progresses to graduation. This is a project that will be ongoing and refined through the next two years.

**Timeline:**

**August 2014: Maine Learning Results standards included in Infinite Campus and Brewer's Graduation Standards approved by School Committee**

**November- March 2015: Brewer's Graduation Standards embedded in Infinite Campus for alignment to content classroom assessments**

**February 2015: Individual proficiency reports for mid-year produced and reviewed for Class of 2018**

**June 2015: Full-year individual proficiency reports produced & reviewed for the Class of 2018**

**Benchmark 4: Personal Learning Plans developed with cohort Class of 2018**

The importance of student self-directed learning cannot be overstated or the ability of students to understand and report their own progress toward learning targets. Development of Personal Learning Plans that are tied to standards and through multiple pathways will be supported with the new Naviance system to be implemented with the Class of 2018. Naviance software will be utilized as a means for all students to create individual learning plans on their own computers. Training with the software is first and foremost essential to building capacity of student use. Review and revision of individual plans will be ongoing with assistance from teachers and guidance counselors, as well as, parent input. Personal Learning Plans will mark the individual learning experiences that support students' demonstration of proficiencies with the Maine Learning Results standards and Guiding Principles.

**Timeline: September 2014-2015- Conduct with Class of 2018**

**June 2015 – Survey students and parents for efficacy of new system**

**July 2015-August 2015 - Revise and adapt Naviance use based on survey results**

**September 2015- Implement system to include Class of 2019**

### **Benchmark 5: Program for World Languages established (commence with Class of 2020)**

The World Languages Program from middle through high school will be reviewed for content, assessment and alignment to Maine Learning Results Standards. Brewer's Graduation Standards have been identified but capacity for all students to have opportunity to engage with learning and assessment of these standards is not currently realized. The broad design with intent to build capacity, faculty and other resources, in the content area of World Languages at Brewer High School has been shared with the MDOE consultant in that area. Initial response was very positive and now the Brewer School Department is proceeding with redesign of its middle school and high school programs. In the interim, the District is sharing faculty between high school and middle school while building capacity. A committee of teachers, administrators (building and district) with consultation from parents and students will develop recommendations for building capacity, faculty and other resources, so that all children commencing with the Class of 2020, will meet the graduation standards and earn a Brewer diploma. This will ensure that all students have opportunity to engage in learning that is identified on their individual learning plans beginning with the class of 2020. These recommendations will be shared with the school committee for approval.

**Timeline: October 2014-March 2015**

**Committee convenes to review current status of programs and Brewer High School's graduation standards for World Languages.**

**March 2015: Committee recommendations for building capacity is presented to the School Committee to include budget items for consideration for 2015-16 school year and beyond**

### **System of Supports for Student Learning**

9. Describe the system of supports you have in place for secondary school students when proficiency is not demonstrated. Limit your description to 1000 words (approximately 2 pages single spaced or 4 pages double spaced) and attach evidence to support the Description referencing the name of the document(s) and specific page(s).

**Criteria:**

- Clear description of the practices/protocols for improving student performance and ensuring feedback is timely, specific to each student and delivered when and where it has the most benefit
- Clear description of practices for regular monitoring of student progress
- Clear description of equity of opportunity for support in any content area and Guiding Principle

### **System of Support**

Currently, Brewer High School teachers provide feedback to students on a daily basis through the use of formative and summative assessments and during classroom interaction. Teachers are required to frequently update their online gradebooks in Infinite Campus, thereby providing students and parents with regular feedback on classroom performance. All students and parents have Infinite Campus (IC) accounts, which offer them up-to-date information on grades, announcements, and school information. Many teachers communicate with parents regularly via IC emails and messages. Additionally, School Counselors, the Social Worker, and Administrators regularly communicate with parents and students when academic and behavioral expectations are not met. Finally, feedback is given to both parents and students at least twice throughout the school year in a formal setting during Parent-Teacher Conferences. (Evidence I)

Student progress is monitored by teachers at the classroom level using Infinite Campus. Students who do not meet academic expectations are offered remediation in the classroom, or, in some cases, referred to School Counselors or other support staff. In many cases, teachers and counselors work cooperatively with parents to develop individualized systems of

supports for students. Student progress is also monitored using a “top down” approach; both administrators and support staff use Infinite Campus data to inform interventions. Often, counselors and administrators meet with students individually, call home, and meet with parents to assist students who struggle both academically and behaviorally.

Currently, a large number of our existing supports are tailored to ensure that students earn enough credits to graduate and are successful in the academic classroom environment. These supports include:

**Personal Learning Plans:** Commencing with Class of 2018 students will develop individual pathways to graduation through PLP’s. Development of these plans will be supported through classroom based learning, small groups and individual sessions with students and their guidance counselors, teachers, with parental input.

**Guidance Department:** Guidance counselors meet regularly with students to provide multiple opportunities to review individual plans and provide resources for students to create individual pathways to learning for post-secondary education and careers.

**Freshman Seminar:** All freshman students participate in this half-credit learning experience which provides opportunity for instruction with study skills, Habits of Mind, communication skills and exploring learning opportunities that are of personal interest.

**Freshmen Teams:** Incoming students are placed on one of two teams for their core classes to facilitate learning and ease the transition to high school. Teachers on each team have common planning time and work cooperatively to communicate with parents and support student success in the classroom.

**Co-Teaching:** Special Education teachers have partnered with regular education teachers in Mathematics and English Language Arts in order to provide added support to special education students in the regular education classrooms.

**Academic Support** On a daily basis, forty minutes is dedicated to support all ninth grade students. During that block special education teachers and educational technicians and regular education teachers work with all ninth grade students to provide academic support in classroom settings.

**Alternative Education Program:** Alpha, is a pull-out program that is housed off-campus for students who are not successful in a traditional classroom setting. Students are offered a hands-on, project-oriented curriculum and earn credits toward a BHS diploma.

**Jobs for Maine Graduates (JMG) Program:** Brewer High School has an on-site JMG Specialist and JMG classroom teacher who work with at-risk students to help these students develop job skills, career interests, and civic responsibility. The JMG Specialist takes a leadership role with developing internships in the community providing multiple pathways for all students to meet graduation standards and the Guiding Principles.

**Career Preparation:** All sophomores participate in the Career Preparation class offered by the Jobs for Maine Graduates teacher. This is an opportunity for college and career exploration which will support students’ Personal Learning Plans for post-secondary goals. Additionally, the course provides an opportunity for all students to demonstrate proficiency with Career Development graduation standards during their sophomore year.

**Apex Lab for alternative pathway to courses and Credit Recovery:** Brewer High School has established a lab supervised by a teacher for students to access another pathway to their learning. This has been successfully implemented for two years and is offered as a summer program for those students needing additional opportunity for credit recover.

**United Technology Center (UTC):** Brewer High School students have access to UTC and may pursue programs of study during their junior and senior years. This alternative pathway to earning credit provides hands-on learning opportunities and allows for students to take the Accuplacer exam which can support students with direction for post-secondary choices with college and career pathways.

**Bridge Year Program:** The 2014-15 school year is the initial year of the program offered through UTC with an articulation agreement with the University of Maine. Students enroll at UTC and take their four core classes at BHS taught by BHS teachers, who have been accepted as UMO adjunct faculty, to provide students with opportunity to earn up to thirty college credits.

**504/IEP Teams:** These teams meet regularly to discuss and implement both behavioral and academic supports for regular and special education students.

**Teacher Blogs/Websites:** Most teachers have a blog or website that allows students and parents to access classroom information and homework assignments. Students who are absent are encouraged to check teachers' blogs/websites for their assignments.

**Office Hours/After & Before School Help:** Some teachers have posted after school "office hours," which allows students to come in for extra help and to make up missing assignments. Teachers who do not specifically post hours are almost always available for extra help before school, after school, or during study halls.

Brewer High School also offers some social-emotional and behavioral supports for students. These supports include:

**Counseling/Support Staff:** Brewer High School currently has three School Counselors, a Social Worker, a School Psychologist, a School Nurse, and JMG School-Based Counselor who work cooperatively to support students' mental-health needs.

**School-based Health Program:** Through a grant with Penobscot Community Health and Counseling (PCHC) the Brewer School Department has on site a nurse practitioner, dental hygienist, social worker and dentist who work in concert with the Brewer School Department Counseling and Support Staff. These health services are provided at both schools in the district and opened to staff, if needed.

**School Resource Officer (SRO):** Provides support to staff and students daily and ensures that the health, welfare, and safety of the school is maintained.

As we transition to a proficiency based education, where learning standards are constant and time becomes the variable, we are rethinking many of these supports. One significant target for improvement is to fully develop our RTI system of support. Our teachers need 1:1 or 1:2 time with students who need more time on their work. Additionally, our system of evidence-based behavioral and academic interventions needs to be revised so that it reflects the needs of the current student body and the capabilities of our current staff.

### Proficiency-Based Diploma Transition Funds

10. Identify the approximate percentage of the 2013-2014 proficiency-based transition funds and how these were applied to proficiency-based education expenditures in the following areas:

- Policy:
- Practice:
- Community Engagement:
- One-year Carry Over:

FY 14 Total allocation \$15,399.64	80% of funding expended	\$7,825.00 for purchase of Naviance Program to support individual student's Personal Learning Plans pathways to post-secondary goals	\$4,500.00 Tableau system to provide reports of individual student progress with achievement of learning standards
\$3,074.64	20% carryover funds	Monies carried forward to FY 15	

11. Provide a description of the intended impact for your transition funds. Attach a budget for the 2014-2015 transition funds and any 2013-2014 transition funds that were carried over after June 30, 2014. For each expense, identify the amount and date by which it will be expended. Limit your description to 1000 words (approximately 2 pages single spaced or 4 pages double spaced). Attach a budget document and limit the budget document to 2 pages.

Criteria:

- Clear description of intended impact for your use of transition funds
- Budget aligns to intended impact

FY 15 Total allocation \$15,799.66	FY 14 Carry forward \$3,074.64	Total available funds for FY 15 \$18,874.30
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Expenditure of FY 15 total available funds

\$18,874.30	Great School Partnerships consultation and direct services to support Brewer High School's readiness to develop and implement Proficiency-based Learning and assessment in all content areas of the Graduation Standards
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**Option 4 Authorization Page**

Annually the SAU will provide evidence of progress and will submit an extension renewal request to the Maine DOE by July 1. This request will include:

- evidence of progress toward the identified annual benchmarks;
- goals and benchmarks for continued progress over the next school year toward the awarding of diplomas based on proficiency of the standards of the eight content areas and the standards of the Guiding Principles; and
- A budget for use of additional proficiency-based diploma transition funds.

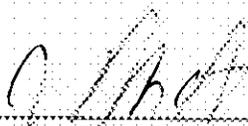
We certify that the information contained in the extension application accurately reflects the current status of our implementation of proficiency-based diplomas.

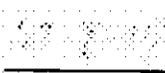
We certify that the criteria for awarding a diploma beginning after January 1, 2018 will be the following criteria from Maine Revised Statutes 20-A §4722-A:

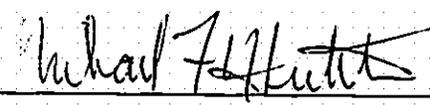
- A. Demonstrate that the student engaged in educational experiences relating to English language arts, mathematics and science and technology in each year of the student's secondary schooling;
- B. Demonstrate proficiency in meeting state standards in English language arts and mathematics of the system of learning results established under section 6209;
- D. Meet any other requirements specified by the governing body of the school administrative unit attended by the student.

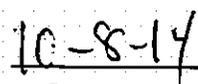
We certify that the criteria for awarding diplomas beginning after July 1, 2020 will include the addition of the following criteria from Maine Revised Statutes 20-A §4722-A:

- B. Demonstrate proficiency in meeting state standards in all remaining six content areas of the system of learning results established under section 6209; and
- C. Demonstrate proficiency in each of the Guiding Principles set forth in department rules governing implementation of the system of learning results established pursuant to section 6209.

  
 \_\_\_\_\_  
 Superintendent of Schools

  
 \_\_\_\_\_  
 Date

  
 \_\_\_\_\_  
 Chair of School Board

  
 \_\_\_\_\_  
 Date



# Brewer High School Graduation Standards

adopted by School committee 8-11-14

## **Maine Statute on Proficiency for Graduation**

Beginning with the graduating class of 2018, a diploma indicating graduation from a secondary school must be based on student demonstration of proficiency as described in this section.

### **I. Requirements for award of diploma.**

In order to receive a diploma indicating graduation from secondary school, a student must:

- A. Demonstrate that the student engaged in educational experiences relating to English language arts, mathematics and science and technology in each year of the student's secondary schooling; [2011, c. 669, §7 (NEW).]
- B. Demonstrate proficiency in meeting state standards in all content areas of the system of learning results established under section 6209; [2011, c. 669, §7 (NEW).]
- C. Demonstrate proficiency in each of the guiding principles set forth in department rules governing implementation of the system of learning results established pursuant to section 6209; and [2011, c. 669, §7 (NEW).]
- D. Meet any other requirements specified by the governing body of the school administrative unit attended by the student. [2011, c. 669, §7 (NEW).][ 2011, c. 669, §7 (NEW) .]

In education the term "standards, a skill or knowledge deemed essential", is often used in a variety of contexts. The use of the term standards in the proficiency-based education statute refers to the standards of Maine's learning standards document, the Maine Learning Results. The statute identifies the Maine learning standards (the MLR content standards) as the targets for student proficiency. The word standard appears in multiple contexts on the Maine Getting to Proficiency website. In some contexts the term standard is intended to reference the standards of the Maine Learning Results. In other instances, the term "standards" appears in the context of "Power Standards" and "graduation standards". Power Standards and graduation standards are provided as examples of ways that schools can merge or consolidate, or expand the essential knowledge and skills identified in our state standards documents for the purposes of reporting. The examples provide schools with alternative reporting schema for organizing the comprehensive collection of the core ideas in each content area of the state learning standards. Schools may select one of these organizations for reporting proficiency or create a different organization that comprehensively represents the core ideas of the state standards. The examples provided on Getting to Proficiency offer a system with a manageable and similar number of reporting units for each of the eight content areas.

# What is Proficiency-Based Education?

Proficiency-based education refers to any system of academic instruction, assessment, grading and reporting that is based on students demonstrating mastery of the knowledge and skills they are expected to learn before they progress to the next lesson, get promoted to the next grade level or receive a diploma. In Maine, academic expectations and "proficiency" definitions for public-school courses, learning experiences, content areas and grade levels are outlined in the Maine Learning Results which includes the Guiding Principles, expectations for cross-disciplinary skills and lifelong learning, and eight sets of content-area standards, including the Common Core State Standards in English language arts and mathematics.

The general goal of proficiency-based education is to ensure that students acquire the knowledge and skills that are deemed to be essential to success in school, higher education, careers and adult life. If students struggle to meet minimum expected standards, they receive additional instruction, practice time and academic support to help them achieve proficiency, but they do not progress in their education until expected standards are met.

The following Graduation Standards define what a student needs to know and be able to do in each of the content areas of Maine Learning Results. These standards distill the most important long-term learning goals that will support with the skills and knowledge they will need to succeed in every area of adult life.

## Mathematics

### Graduation Standard 1: Number and Quantity

**Students will be able to reason and model quantitatively, using units and number systems to solve problems.**

#### Performance Indicators

**N.RN.1** Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents.

**N.RN.2** Rewrite expressions involving radicals and rational exponents using the properties of exponents.

**N.Q.1** Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.

**N.Q.3** Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.

**N.CN.2** Use the relation  $i^2 = -1$  and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers.

### Graduation Standard 2: Algebra

**Students will be able to interpret, represent, create and solve algebraic expressions and equations.**

#### Performance Indicators

**A.SSE.1** Interpret expressions that represent a quantity in terms of its context.

a. Interpret parts of an expression, such as terms, factors, and coefficients

**A.APR.1** Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.

**A.CED.1** Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear and quadratic functions, and simple rational and exponential functions.

**A.CED.2** Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.

**A.REI.3** Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.

**A.REI.4b** Solve quadratic equations by inspection (e.g., for  $x^2 = 49$ ), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as  $a \pm bi$  for real numbers  $a$  and  $b$ .

**A.REI.6** Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.

### Graduation Standard 3: Functions

**Students will be able to interpret, analyze, construct, and solve linear, exponential, quadratic, and trigonometric functions.**

#### Performance Indicators

**F.IF.1** Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If  $f$  is a function and  $x$  is an element of its domain, then  $f(x)$  denotes the output of  $f$  corresponding to the input  $x$ . The graph of  $f$  is the graph of the equation  $y=f(x)$

**F.IF.2** Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.

**F.IF.4** For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.

**F.IF.5** Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. For example, if the function  $h(n)$  gives the number of person-hours it takes to assemble  $n$  engines in a factory, then the positive integers would be an appropriate domain for the function.

**F.IF.7a** Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. Graph linear and quadratic functions and show intercepts, maxima, and minima.

**F.BF.3** Identify the effect on the graph of replacing  $f(x)$  by  $f(x)+k$ ,  $kf(x)$ ,  $f(kx)$ , and  $f(x+k)$  for specific values of  $k$  (both positive and negative); find the value of  $k$  given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. Include recognizing even and odd functions from their graphs and algebraic expressions for them.

**F.LE.5** Interpret the parameters in a linear or exponential function in terms of a context.

### Graduation Standard 4: Geometry

**Students will be able to prove, understand, and model geometric concepts, theorems, and constructions to solve problems.**

#### Performance Indicators

**G.CO.1** Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.

**G.CO.8** Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions.

**G.SRT.8** Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems.

**G.C.2** Identify and describe relationships among inscribed angles, radii, and chords. Include the relationship between central, inscribed, and circumscribed angles; inscribed angles on a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle.

**G.GPE.5** Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point).

**G.GMD.3** Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.

### Graduation Standard 5: Statistics and Probability

**Students will be able to interpret, infer and apply statistics and probability to analyze data and reach and justify conclusions.**

#### Performance Indicators

**S.ID.1** Represent data with plots on the real number line (dot plots, histograms, and boxplots).

**S.ID.2** Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets.

**S.ID.6a** Represent data on two quantitative variables on a scatter plot, and describe how the variables are related. Fit a function to the data; use functions fitted to data to solve problems in the context of the data. Use given functions or choose a function suggested by the context. Emphasize linear, quadratic, and exponential models.

**S.ID.6c** Represent data on two quantitative variables on a scatter plot, and describe how the variables are related. Fit a linear function for a scatter plot that suggests a linear association

**S.ID.7** Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.

## English Language Arts

### Graduation Standard 1: Reading Comprehension

**Read and comprehend appropriately complex literary and Informational texts independently and proficiently. (CCRA 10)**

#### Performance Indicators

- A. Determine, analyze, and trace the development/interaction of themes/central ideas in complex text. (RI.2, RL.2)
- B. Summarize text. (RI.2, RL.2)
- C. Analyze and explain how individuals, ideas or events develop/interact throughout a text. (RI.3, RL.3)
- D. Determine denotative, connotative, figurative and/or technical meanings of words in context; analyze the effect of word choice on meaning/tone. (RI.4, RL.4, RL.5, RL.6)

### Graduation Standard 2: Reading Interpretation

**Interpret, analyze, and evaluate appropriately complex literary and Informational texts. (CCRA 7,10)**

#### Performance Indicators

- A. Cite valid textual evidence in support of text analysis; determine explicit, implicit, and ambiguous textual meanings. (RL.5 + RI.5)
- B. Analyze author's deliberate fashioning of text to communicate meaning and effect aesthetic and rhetorical impact. (RL, RI.5)
- C. Determine author's point of view, purpose, or rhetorical strategies in a text, analyzing how rhetorical choices create the intended effect within the reader. (RI.6)
- D. Delineate and evaluate the argument and specific claims in a text, assessing reasoning for validity and evidence for relevance and sufficiency; identify fallacious statements and reasoning. (RI.8)
- E. Evaluate and integrate information from diverse sources, into a coherent understanding of an idea or event, noting discrepancies and agreement among sources. (RI.9, RL.9)

### Graduation Standard 3: Writing Arguments

**Write clear and coherent arguments for a range of tasks, purposes, and audiences. (CCWA 1,4,7,10)**

#### Performance Indicators

- A. Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation. (WA, W.9)
- B. Develop claim(s) that are precise and informed. Establish the significance of the claim(s) and distinguish the claim(s) from alternate or opposing claims. (W.1.8)

- C. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. (W.1.C)
- D. Establish and maintain an appropriate style and tone for the audience. (W.1.D, W.2.E)
- E. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. (L.1; L.2)

#### Graduation Standard 4: Writing Narrative Texts

**Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences. (CCWA2,3,4,10)**

#### Performance Indicators

- A. Engage the reader by presenting a situation, establishing a point of view, and introducing a narrator and/or characters; create a logical progression of experiences or events. (W.3.A)
- B. Use narrative techniques, such as dialogue, description, and reflection to develop experiences, events, and/or characters. (W.3.B)
- C. Use precise language and sensory details to convey a vivid picture of the events, setting, and/or characters. (W.3.D)
- D. Provide a conclusion that reflects on what is experienced over the course of the narrative. (W.3.E)
- E. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling. (L.1; L.2)

#### Graduation Standard 5: Speaking and Listening

**Initiate and participate effectively in a range of discussions, responding thoughtfully to diverse perspectives, express ideas clearly and persuasively.**

#### Performance Indicators

- A. Engage effectively in a group to promote a civil exchange of ideas that probes reasoning and evidence. (SL.1.A)
- B. Respond thoughtfully to diverse perspectives, resolve contradictions when possible, and determine what additional information or research is required to deepen the investigation or complete the task. (SL.1.D)
- C. Integrate multiple sources of information to make informed decisions and solve problems. (SL.2)
- D. Evaluate a speaker's point of view, reasoning, and use of evidence. (SL.3)
- E. Develop a clear line of reasoning that addresses alternative or opposing perspectives. (SL.4)
- F. Use appropriate organization, development, style, and substance appropriate to a range of purposes and audiences for both formal and informal tasks. (SL.4)

**Grade 10 Standard 4: Writing Informative Text**

**Produce clear and coherent informative writing for a range of tasks, purposes, and audiences. (CCWA 2,3,4,10)**

**Performance Indicators**

Write informative/explanatory texts to examine and convey complex ideas, concepts, and information that:

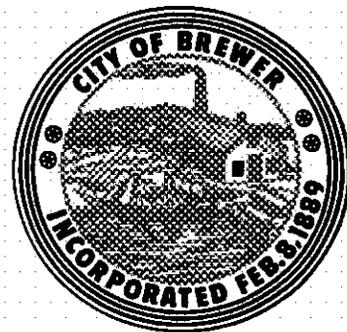
- A. Introduce a topic; organize complex ideas, concepts and information to create a unified whole. (W.2.A)
- B. Develop the topic thoroughly by selecting the most significant and relevant facts appropriate to the audience's knowledge of the topic. (W.2.B)
- C. Provide a conclusion that follows from, supports, or reflects on information that is presented. (W.2.C)



**Brewer  
High School**

# BREWER HIGH SCHOOL

Shaping a Brighter Future Through Strategic  
Planning and Continuous Improvement  
2013-2018



# BREWER HIGH SCHOOL

# Moving Forward Through Challenge and Change

## Strategic Actions, 2013-2018

Clearly, the times are challenging for today's schools. The recession has persisted and an anemic economy has strained financial support for public education across Maine, New England, and the nation. At the same time, the world is changing rapidly, becoming more complex, and requiring a higher level of literacy for all graduates who pursue success in their work and in their lives.

Today's kindergarteners, future Brewer High School students, are set to graduate as members of the Class of 2025. If they pursue post-secondary study, as most will, they will leave college for the workforce in 2030 or so, taking on numerous careers well into the 2070s. While we don't know what world they will inherit, it will assuredly be a complex and sophisticated one. They will use and create knowledge that does not yet exist, and as citizens they will be challenged to solve difficult problems, some barely visible today.

The challenges and opportunities for these students will be extraordinary, and will necessitate a strong foundation of knowledge and skills. For students, this literacy needs to be designed for their times—punctuated by critical thinking, problem-solving, and innovation. The emerging literacy will be rigorous as this nation, state, and Brewer prepares its students to be capable, confident, and contributing citizens in this fast-paced 21<sup>st</sup> century world.

To prepare its students to be adaptable to their times and to the demands that come with it, change is necessary and Brewer High School is in the process of change. With the support of the public, the physical plant – the structure, the spaces, the bricks and mortar—will receive a major redesign and renovation. Spaces will be more contemporary, serving students, faculty, and staff more effectively and efficiently.

In companion with the physical upgrade of the school building will be the need to move forward with strategic change in teaching and learning so that all Brewer High School graduates leave prepared for success in the sophisticated 21<sup>st</sup> century, able to complete post-secondary study, pursue meaningful work, adapt to change, while contributing as responsible and involved citizens.

What follows is a series of strategic actions intended to help shape the learning opportunities and performance of Brewer High students as they experience challenges and opportunities over the next several years.



# MEASURES OF PROGRESS

## Tracking Student Achievement, Attainment, and Performance

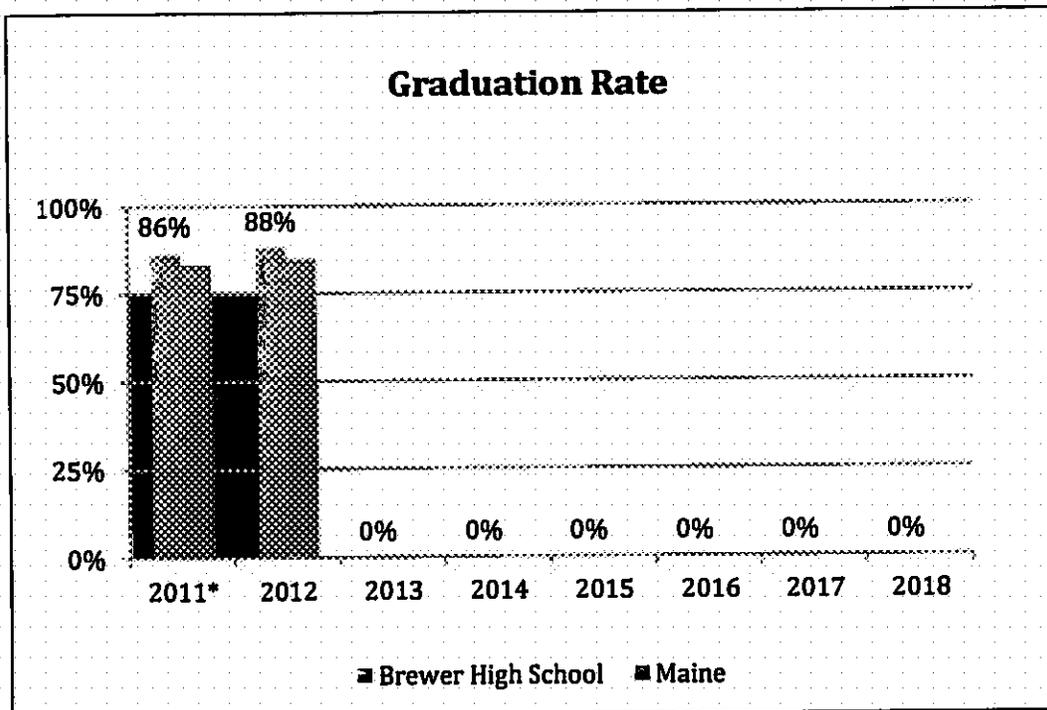
### Key Measures and Performance Targets

**OVERARCHING GOAL:** All students will graduate from our schools with a world class education prepared to succeed in college, in work, and as involved, responsible citizens.

#### Attainment Measures

*At the end of the 2017-2018 school year:*

1. **95% OF STUDENTS WILL GRADUATE FROM BREWER HIGH SCHOOL**



2. 80% OF STUDENTS WILL BE ENROLLED IN A TWO OR FOUR-YEAR COLLEGE DEGREE PROGRAM OR A POST SECONDARY INDUSTRY CERTIFICATE PROGRAM WITHIN ONE YEAR OF HIGH SCHOOL GRADUATION.

	High School Students Enrolled in a Two or Four Year College or Industry Certificate Program
Class of 2012	62%

3. 70% OF STUDENTS WILL COMPLETE A TWO OR FOUR YEAR COLLEGE DEGREE OR A POST SECONDARY INDUSTRY CERTIFICATE\*.

	High School Students Completing Two or Four Year College Degree or Industry Certificate
Baseline: 2011-12	TBD

**SPECIAL NOTE:** College completion using nationally accepted rules of calculation provide six (6) years to complete a four (4) year bachelor's degree and three (3) years for an associate degree.

## Key Measures and Performance Targets

## Achievement Measures

*At the end of the 2017-2018 school year:*

4. 70% (3 YEAR AVERAGE) OF BREWER HIGH SCHOOL STUDENTS WILL MEET OR EXCEED THE STATE STANDARDS IN THE MATHEMATICS, READING, WRITING, AND SCIENCE SECTIONS OF THE SCHOLASTIC APTITUDE TEST (SAT)/MAINE HIGH SCHOOL ASSESSMENT (MHSA).

Brewer SAT Scores	2012 Score	2010-2012 Avg.	Maine 2010-2012 Avg.
Math	40%	44%	47%
Reading	48%	51%	48%
Writing	53%	46%	47%
Science	44%	46%	43%

### SPECIAL NOTE:

As the nation and the State of Maine move to implement the Common Core State-Led Standards and a new assessment system, the New England Common Assessment Program - (NECAP) and the current SAT may be replaced. When and if this occurs, the new measures, perhaps in 2014/15, will entail a new baseline.

5. BREWER HIGH SCHOOL WILL HAVE A STUDENT PARTICIPATION RATE OF 60% IN ATHLETICS AND 70% IN CLUBS/CO-CURRICULAR ACTIVITIES.

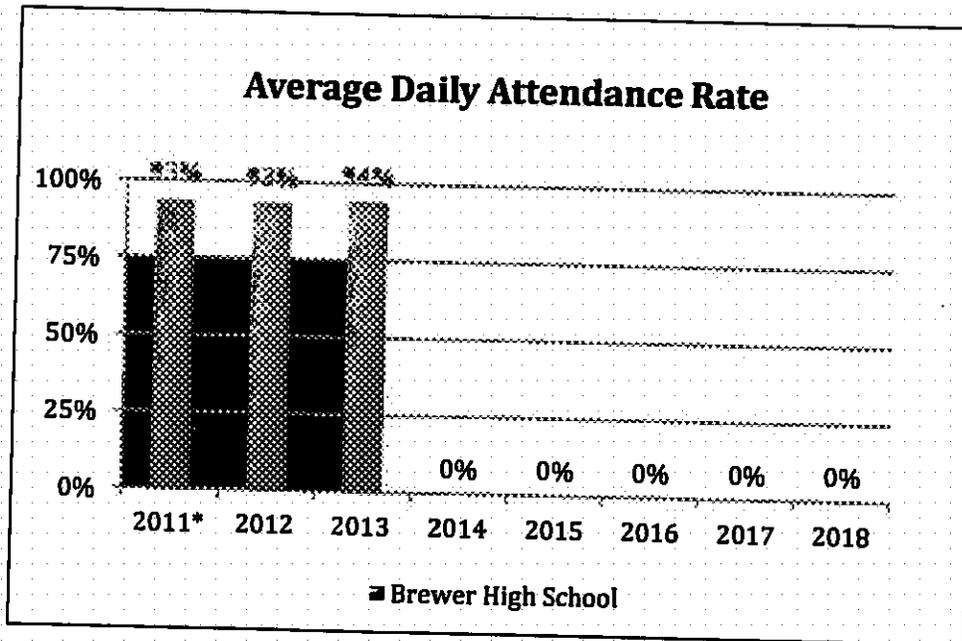
Brewer High School	2012	2013	2014	2015	2016	2017	2018
% of Students in Athletics	50%						

Brewer High School	2012	2013	2014	2015	2016	2017	2018
% of Students in Clubs/Co-Curricular Activities	59%						

6. BREWER HIGH SCHOOL WILL HAVE A 75% PASSING RATE ON AP EXAMS OR AN AP INDEX OF 70. (AP INDEX IS THE NUMBER OF STUDENTS TAKING THE EXAM MULTIPLIED BY THE OVERALL PASSING RATE)

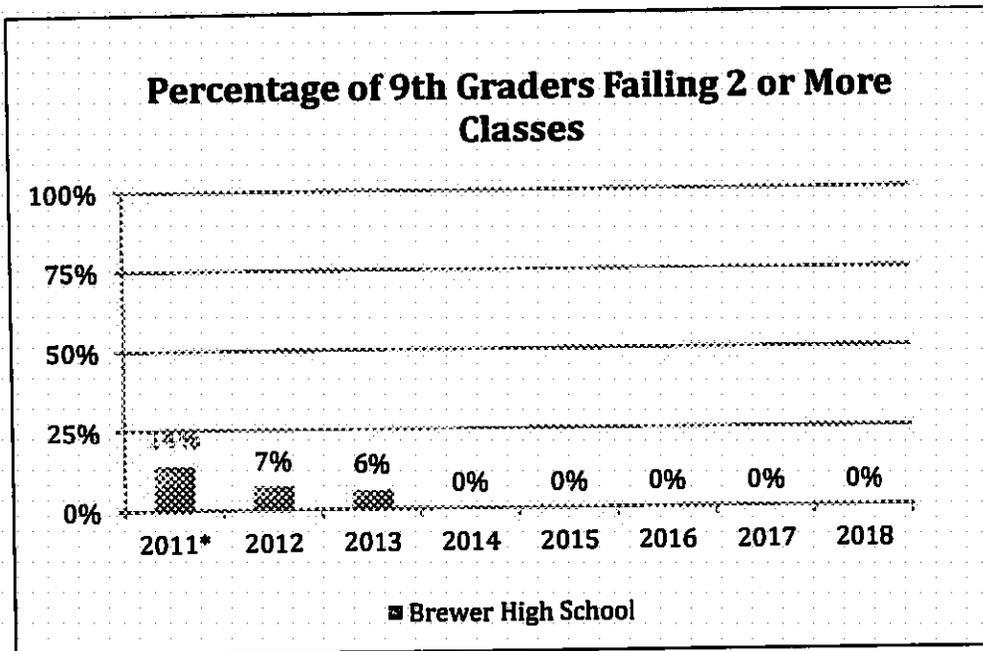
Brewer High School	AP Exam Passing Rate	AP Index
2011	49%	39
2012	56%	63
2013	62%	69
2014		
2015		
2016		
2017		
2018		

7. THE AVERAGE DAILY ATTENDANCE RATE WILL BE 95%.



8. THE PERCENTAGE OF 9<sup>TH</sup> GRADERS FAILING 2 OR MORE CLASSES WILL BE 3% OR LESS.

Brewer High School	2011	2012	2013	2014	2015	2016	2017	2018
Failing 2 or More Classes	14.0%	7.3%	6.1%					



# LEAD OBJECTIVES AND ACTION STRATEGIES

## LEAD OBJECTIVE #1

**High Expectations:** Foster universally high expectations and aspirations for all students, while addressing inequities in learning opportunities across the curriculum and programs.

## SAMPLE ACTION STRATEGIES

- Implement a formal “State of the School” report by the Principal to the community, highlighting trends and progress in student achievement and attainment (Spring, 2014).
- Accelerate progress as the district transitions towards standards-based teaching, learning, and accountability, revising and implementing local graduation requirements for the Class of 2017 or Class of 2018, depending on state funding (Partially Implemented, June, 2013).
- \* Develop a comprehensive plan, to be implemented in conjunction with middle level educators, for implementing a standards-based, proficiency-based approach to graduation, commencing with the Class of 2017 (Spring, 2014).
- ◊ Plan for and implement the Common Core State-Led Standards in English Language Arts and Mathematics, revising the curriculum as necessary (Fall, 2013).
- \* Develop, through local policy, as well as a series of agreements with colleges and universities, an expanded early college / dual enrollment program open to all students, with offerings on-campus, at college sites, and via on-line and hybrid courses (Fall, 2014).
- ◊ Redesign the curriculum by implementing rigorous and relevant learning opportunities that are based on career and college readiness indicators and include demonstrations of learning through multiple pathways such as authentic project work, exhibitions, internships, online courses, independent studies, and early college/dual enrollment (Fall,

2015).

- ♦ **Examine the design of the senior year and explore establishing a required senior seminar focusing on transitions, college and career planning, as well as a modified school calendar that provides for portions of two weeks of classes to focus on workplace and college visits, as well as workshops centered on “life after high school” and transition issues (Fall, 2015).**
  
- ♦ **Develop internship programs with local businesses and organizations to expose high school students to various and rewarding career opportunities in science, technology, engineering, mathematics, visual and performing arts, humanities, and physical education/outdoor education while paying close attention to the unique enterprises of the region (Fall, 2015).**

## LEAD OBJECTIVE #2

**21st Century Learning Expectations:** Foster skills and knowledge for success in modern adult life, including critical thinking, collaboration, problem-solving, and innovation.

### SAMPLE ACTION STRATEGIES

- Undertake a school-wide self-assessment of 21st century teaching and learning to gauge staff understanding, level of integration, and areas where support is needed (Fall, 2014).
- Prioritize instruction and assessment of “21st century skills,” which can broadly be defined as the interdisciplinary knowledge, skills, and personal traits that are critical to success in modern adult life: critical thinking, problem-solving, presentation skills, persuasiveness, fostering innovation, adaptation to change, collaboration (Fall, 2014).
- Develop and align assessment practices to 21st Century skills and knowledge through formal and informal assessment – self-assessment, reflection, and use of performance assessments, portfolios, and exit exhibitions/capstone projects (Fall, 2015).
- Explore the development, piloting, and implementation of a student exhibition/capstone project with the ultimate policy that each student undertake and complete the research project as a demonstration of integrated learning in an area of personal interest and as a requirement for graduation (Commencing with the Class of 2018).
- Investigate the benefits of establishing several special programs of interest, distinctive to Brewer High School, to increase student engagement and career preparation, collaborating with institutions of higher education (Fall, 2015).

## LEAD OBJECTIVE #3

**School Culture:** Develop and maintain a positive, student-centered school culture that reflects rigorous academics, strong habits of mind, a committed pursuit of excellence, and an environment of mutual respect, responsibility, and ethics.

### SAMPLE ACTION STRATEGIES

- Explore the notion of designing and implementing the “Brewer Honor Pledge,” reinforcing mutual respect within classroom experiences and extracurricular activities, led by strong faculty and staff instruction, modeling, practices, and adherence by all students (Completed, Fall, 2013).
- Increase real world relevance in instructional practice and lesson design by expanding project-based opportunities to learn outside of the school: community-based learning projects, service learning and community service, volunteerism, virtual learning, study abroad, interdisciplinary learning (Fall, 2014).
- Explore strengthening student-centered learning and interest through the development and implementation of personal learning plans (Fall, 2014).
- Explore the inclusion of student voice by 1) providing students with opportunities to offer feedback about the effectiveness of their learning experiences; and 2) establishing a student advisory group to the principal (Implemented Fall, 2013).
- Develop, in partnership with community organizations and businesses, a robust mentoring program for high school students (Fall 2016)
- Explore the establishment of a Center of Alumni Relations at Brewer High School, staffing the initial effort with volunteers (Fall, 2016).

## **Brewer High School Pledge**

**I promise**

to walk these halls with confidence,  
while showing respect to those around me.

**I am**

responsible for what my peers and I put forth  
because we know the quality of work produced  
is a testament to our integrity.

**I hold**

caring for others to be a top priority,  
along with staying honest, because  
we expect one another to do the same.

**I know**

that one day I will leave these halls,  
and represent this community  
by showing others everything

I was taught to be at

**BREWER HIGH SCHOOL.**

## Policy IKFF

### **MULTIPLE PATHWAYS for LEARNING**

Multiple pathways provide various courses, programs, and learning opportunities that allow students to demonstrate proficiency, earn academic credit, and satisfy graduation requirements. Brewer High School encourages its students to explore these varied options for learning.

These learning pathways provide students an expansion of educational opportunities beyond classroom-based course offerings located at the high school. Often occurring in locales outside of the traditional classroom settings or school buildings, leaning pathways offer students opportunities to pursue and apply knowledge and skills in areas of particular student interest. When combined with the learning experiences offered through classroom-based coursework, students are able to personalize their education. this personalized approach leads to increased engagement and motivation to explore post secondary college and career options.

Brewer High School offers numerous pre approved pathways outside of the normal classroom-based courses including early college or dual enrollment courses; career and technical education programming; online or virtual learning; alternative or at-risk programming; internships and additional field work or exchange experiences; independent study and long-term projects, and adult education. These options are readily available to all students through the regular course selection process.

In addition to these programs, students are encouraged to collaborate with their counselor to identify other courses or student-designed learning experiences that engage their personal interests, align with one or more learning standards required for graduation, and enable students to achieve and demonstrate these learning standards. In order to pursue either of these options, a student must detail in their Personal Learning Plan how the learning experience aligns with specific graduation standards, including cross content graduation standards. These learning options must be of equal or higher rigor and quality as those offered through regular courses.

These learning experiences may or may not align entirely to a classroom-based course and may enable students to achieve some, but not all, graduation standards within a parallel classroom-based course. Some learning experiences may enable students to achieve graduation standards from two or more classroom-based courses. the student's Personal learning Plan will detail how the student will also achieve the other graduation standards that would have been achieved through successful completion of a classroom-based course.

Student learning through any multiple pathway experience will be approved, reviewed, assessed and documented through the school. The school, in collaboration with any involved outside instructor or supervisor, will verify proficiency against the standards.

Students who successfully complete a learning pathway will have the experience and the grade/performance level reported on progress and report cards, as well as the Brewer High School official transcript.

Legal Reference: Maine Revised Statutes, Title 20-A, Chapter 207-A, Instruction, Subchapter 1, General Requirement, Section 47

Cross Reference:  
IKF -- Graduation Requirements  
IKC -- Transcripts

First Reading: April 7, 2014  
Second Reading: May 5, 2014  
Adoption: May 5, 2014

## Policy IKF

**GRADUATION REQUIREMENTS**

Mindful of its responsibility to provide not only a varied and challenging high school program, encourage a full and serious pursuit; of the knowledge and skills necessary to succeed in careers and college, and with a desire to enhance the significance of the diploma the Brewer School Committee establishes the following requirements for graduation from Brewer High School consistent with State law and regulations and aligned with the community's educational values and expectations.

**Communicating Graduation Requirements**

Prior to entering high school, students and their parents need to know the standards for attaining a high school diploma in order to plan an appropriate, sequential, educational program to meet that goal.

The Superintendent, through the high school principal or other designee, shall be responsible for making accurate information concerning diploma requirements available to incoming students and their parents in the spring prior to the start of the ninth grade school year. An overview of graduation requirements will be disseminated to all incoming ninth grade students at the time of course selection. This policy will also be referenced in each edition of the high school student handbook, the Program of Studies booklet, and on the school district website.

**Academic Requirements for Graduation from Brewer High School****I. Students enrolled in the Class of 2014 or the Class of 2015 must earn 20 credits allocated as follows:**

English: Four (4) credits (Grades 9, 10, 11, 12)

Fine Arts: One (1) credit

Health: One half (1/2) credit

Mathematics: Three (3) credits – one must be Algebra I

Physical Education: One (1) credit

Social Studies: Two (2) credits – one must be U.S. History

Science: Two (2) credits – one must be Biology

Electives: Minimum of six and one-half (6.5) credits

**TOTAL REQUIRED CREDITS: 20**

In addition, students must demonstrate computer proficiency in the use of computers loading, operating, and applying fundamental skills. This may include word processing, keyboarding, developing a database, accessing data, and using software. This requirement may be satisfied in grades seven (7) or eight (8).

**II. Students enrolled in the Class of 2016 must earn twenty and a half (20.5) credits allocated as follows:**

English: Four (4) credits (Grades 9, 10, 11, 12)

Fine Arts: One (1) credit

**Policy IKF**

**Health: One half (1/2) credit**

**Integrated Technology: One half (1/2) credit (Beginning with Class of 2016)**

**Mathematics: Three (3) credits – one must be Algebra I**

**Physical Education: One (1) credit**

**Social Studies: Two (2) credits – one must be U.S. History**

**Science: Two credits (2) – one must be Biology**

**Electives: Minimum of six and one-half (6.5) credits**

**TOTAL REQUIRED CREDITS: 20.5**

**III. Students enrolled in the Class of 2017 and beyond must earn twenty four (24) credits allocated as follows:**

**English: Four (4) credits (Grade 9, 10, 11, 12)**

**Fine Arts: One (1) credit**

**Health: One half (½) credit**

**Mathematics: Four (4) credits**

**Physical Education: One (1) credit**

**Social Studies: Three (3) credits (including one (1) year of U.S. History)**

**Science: Three credits (3) (one must have a laboratory component)**

**Integrated Technology: ½ credit (Students who enroll at BHS after grade nine may meet this requirement by taking an approved alternative technology course)**

**External Credits: Students may earn up to two (2) These credits may not be used to satisfy cores subjects (English, mathematics, science or social studies) for graduation unless approved by the principal.**

**Electives: The remaining seven credits may be selected by the student on the basis of his or her interests, abilities and plans following graduation (electives).**

**TOTAL REQUIRED CREDITS: 24**

**IV. Commencing with the Class of 2018, in addition to earning 24 credits listed above, every Brewer High School student will satisfy the following:**

**A. Demonstrate proficiency on each standard in the following content areas of the Maine**

**Policy IKF****Learning Results.**

English Language Arts  
Mathematics  
Science and Technology  
Social Studies  
Health Education and Physical Education  
Visual and Performing Arts  
World Languages  
Career and Education Development (embedded in the other content areas)

- B. Be engaged in educational learning experiences in the content areas of English Language Arts, Mathematics, Science and Technology in each year of their secondary school program.**
- C. Meet the cross content performance standards set forth by the Maine Learning Results' "Guiding Principles."**

All students will graduate from Brewer High School as a:

Clear and effective communicator  
Self-directed and life-long learner  
Creative and practical problem solver  
Responsible and involved citizen  
Integrative and informed thinker.

- D. Complete a capstone research project, through which students will demonstrate their knowledge and skills in conducting in-depth research, as well as proficiency in the presentation of their research through the application of technology.**
- E. Every student will complete and submit an application to a post-secondary educational institution, training program, the military, or other experience to provide an opportunity for continued growth.**
- V. Personalized Learning and Diploma Requirements**
- A. Most students will satisfy graduation requirements during a four-year experience; however, students may fulfill the requirements for a diploma in a time period that is accelerated or lengthened, based on their individual needs. All students will have Personal Learning Plans with input from counselors, teachers and parent(s).**
- B. Multiple Pathways - all students will have access to multiple pathways to graduation. The student's Personal Learning Plan will detail how the student will demonstrate competency when their pathway is in lieu of core academic experiences. Multiple pathway experiences will be approved, assessed, and documented through the school.**

Pathway options include the following:

Early College/Dual Enrollment Courses  
Career and Technical Education programming  
Online/Virtual Learning  
Alternative/At-risk programming  
Internships & additional Field work and/or Exchange Experiences

## Policy IKF

Independent Study or Long-term Projects  
Traditional Classes

## VI. Credits

## A. Academic Credits

Credits shall be awarded as follows:

- Semester courses - ½ credit will be awarded if the final semester average is 70 or higher.
- Full year courses - one credit shall be awarded if the final yearly average is 70 or higher. The final yearly average will be the first and second semester averages added together then divided by two.
- If a year course is double blocked two credits shall be awarded.

## B. External Credits

Students may earn up to two (2) external credits unless otherwise approved by the principal. External Credits are defined as any credits earned outside the Course of Studies for Brewer High School. These credits may not be used to satisfy cores subjects (English, mathematics, science or social studies) for graduation unless approved by the principal.

## C. In Addition to Meeting Credit Requirements and content Standards:

- Students in grades nine and ten must enroll in seven (7) classes for each year of study, unless otherwise approved by the principal.
- Students in grades eleven and twelve must enroll in six (6) classes for each year of study, unless otherwise approved by the principal.  
\*To be included in class ranking, a student must be continuously enrolled at Brewer High School as a full-time student their junior and senior years.

## VII. Additional considerations Applicable to the Awarding of Diplomas

A. Students Receiving special Education Services - Students who successfully meet the graduation requirement, as specified in the goals and objectives of their Individualized Education Plans (IEP), will be awarded diplomas.

B. *Early Awarding of Diploma* - The Brewer School Department recognizes that on occasion, exceptional circumstances will enable a student to complete graduation requirements in fewer than four years. Any current sophomore who is considering graduating early must meet with his/her guidance counselor and have a plan approved by June 1<sup>st</sup> of the sophomore year in order to be considered for early graduation. Permission to graduate early must be granted by the Principal and the Superintendent.

C. *Certificate of Attendance* - The School Department may provide a student who leaves school without meeting the requirements for a diploma a Certificate of Attendance, provided that the student has attended for four (4) years. This certificate acknowledges

## Policy IKF

participation in the educational program for a specific period of time and includes a record of the student's course credits and a record of the student's achievement.

- D. *Delayed Awarding of Diploma* - At the Superintendent's discretion, a student who leaves Brewer High School to attend an accredited, degree-granting institution of higher education may, upon satisfactory completion of the freshman year, be awarded a high school diploma, although he/she may not have met all of the diploma requirements.
- E. *Extended Study* - Students are eligible for extended years of study to complete the requirements of a diploma if they have not reached the age of twenty (20) at the start of the school year. (For the purpose of this regulation, the start of the school year is defined in Maine as July 1.) Students eligible for extended years of study may be referred to adult education or other resources suitable to young learners. Extended study for students with disabilities shall be specified in the student's Individualized Education Program.
- F. *Transitional Advantage Diploma* - This program is designed to assist students who face significant challenges due to a diagnosed disability who are not able to meet the established requirements of a standard diploma. Extensive focus is placed on activities of daily living and work experiences. Courses offered through the Transitional Advantage Program include, but are not limited to, functional academic courses, life skills, and work experience opportunities. The awarding of a Transitional Diploma versus a certificate of attendance is determined on an individual basis according to the student's Individual Education Program (IEP).
- G. *Honors Diploma* - Students awarded an Honors Diploma must meet the same requirements as the standard diploma plus the following:
1. One (1) additional credit in mathematics
  2. One (1) additional credit in science
  3. One (1) additional credit in social studies
  4. Three (3) credits in the same modern language
  5. Six (6) seminars and two (2) field trips

In addition, students must complete an application and interview process, complete ten (10) Honors/AP courses, earn a 90 cumulative grade point average over seven (7) semesters, and complete a Senior Exhibition Project or enroll in Senior Seminar in order to be awarded an Honors Diploma.

- H. *Transfer Students* - Students transferring to Brewer High School from another school within the state, a school from another state, or some other educational program must complete an application. (Note: This policy does not apply to students who reside in the city of Brewer or in sending districts that currently have articulation agreements with the Brewer School Department.) The principal will determine the value of the student's prior educational experience toward meeting the credit requirements. This determination is

## Policy IKF

done in a manner that is consistent with this policy.

- I. *Home Schooled Students* - Home-schooled students who wish to receive a Brewer High School diploma will provide the school with sufficient information so that the principal is able to determine the value of the student's prior educational experiences toward meeting credit requirements. Any credits issued for home-schooled classes will be on a pass/fail basis. All decisions are final. A home-schooled student must meet the residency requirement in order to attend Brewer High School and must have attended Brewer High School for a minimum of two (2) years or completed a minimum of fourteen (14) courses at Brewer High School in order to receive a diploma. This must occur immediately prior to the awarding of the diploma.
- J. *Participation in Graduation Ceremony* - In order to participate in the graduation ceremony, the following requirements must have been fulfilled before graduation day:
- Students must complete all requirements for a high school diploma or a certificate of attendance.
  - All outstanding disciplinary matters must be resolved.
  - Students must have paid all fees and fines owed to the school.
- K. *Honors and Awards at Graduation* - In order to be eligible for honors or awards based wholly or in part on academic achievement (e.g. valedictorian, salutatorian, class speaker), a student must have been enrolled full time at Brewer High School for two (2) years immediately preceding graduation. Students who do not meet this enrollment requirement will not be "ranked" for the purpose of determining eligibility for graduation honors, awards, or scholarship.

First reading: April 14, 2014  
Second reading: May 5, 2014  
Adopted: May 5, 2014

*Evidence T*

# **Student Advisory Group Meeting Schedule 2013-2014**

**September 29**

**October 29**

**November 19**

**December 17**

**January 28**

**March 25**

**April 29**

*Guidance R*

**Parent Advisory Group Meeting Schedule  
2013-2014**

**October 29**

**November 19**

**January 28**

**February 26**

**April 2**

**April 30**

**Meeting of Middle School and High School Staff Members**  
**Thursday, January 9, 2014**  
**Brewer Community School**  
**9:00-1:00**  
**Agenda**

**Essential Question**

"How are we preparing incoming 8th graders to support their achievement of the new Graduation requirements?"

**9:00-11:30**

I. Welcome and Introductions (Kathleen)

II. Overview of new Graduation requirements as viewed at the state and national levels (Duke)

III. 5 year plan for Brewer High School (David and Kathleen)

- Collaboration between MS and HS
- Transition point
- Proficiency standards for all content areas as well as Guiding Principles
- PLP's for incoming 9th graders (Fall 2014)
- E-Portfolios
- Capstone projects
- Multiple Pathways

IV. Current work in progress in content areas ( Reg, Tim, Arthur, Michelle, Andrea)

**11:30-12:15 Lunch (will be provided)**

**12:15-1:00**

- Questions and Answers
- How do we align with your direction?
- Where do we go from here?



## English I Hero Unit

### “Journey in Search of a Hero”

#### Essential Questions:

1. What is a hero?
2. What qualities are necessary for someone to be considered a hero?

#### Common Core Standards To Assess Formally:

##### **Standard 6: Writing Informative Texts**

**Indicator A:** Introduce a topic; organize complex ideas, concepts and information to create a unified whole. (W.2a)

**Indicator B:** Develop the topic thoroughly by selecting the most significant and relevant facts appropriate to the audience's knowledge of the topic. (W.2b)

**Indicator C:** Provide a conclusion that follows from, supports, or reflects on information that is presented, or what is experienced, observed, or resolved over the course of a narrative. (W.2f, W.3e)

#### **Day 1:**

1. Project Overview & Outline share this with the class.
2. Give students the index cards and manila envelopes.
3. Teach students how to use the index cards for gathering notes. Teach how to make source cards and note cards. (slideshow “How to make source and notecards” & handout)
4. Practice with the Wesley Autrey story. Play video first - <http://newyork.cbslocal.com/2012/02/21/5-years-later-new-york-city-subway-hero-wesley-autrey-is-still-the-man/>
5. Read article as a class; highlight qualities of a hero
6. Make a source card for this article using easybib; make 3 note cards for direct quotations using proper format.  
(Collect cards before students leave!)

**Homework:** Read pages 13-15 from the book *Why Courage Matters* and summarize the author's main points about courage.

**Day 2:**

1. Begin with discussion from the book *Why Courage Matters* about the opening on pages 13-15 that discusses courage.
2. Give students the handout about Paraphrasing. Read it and then give students time to work with a partner to analyze whether the examples given are plagiarized or acceptable based on the passage. Share their findings with the class.
3. Make a Source Card for this book.
4. Read remainder of the chapter about Angela Dawson and highlight, looking for information about hero qualities.
5. Make at least 2 note cards, paraphrasing information from the chapter about Angela Dawson.  
(Collect note cards before students leave!)

**Day 3:**

1. Introduce film *Lean on Me*.
2. Make source card for film.
3. Have students make 3 partial quote cards during the movie.
4. Demonstrate an example on the board.
5. Watch film.  
(Collect note cards before students leave!)

**Day 4:**

1. Finish *Lean on Me*.
2. Wrap up any remaining note cards for this source.
3. Discuss parenthetical citations/Works Cited page.
4. Talk to students about grouping their notecards for the first section. Give them time to group them.
5. Students will then begin writing the first section of their research paper, "Hero Qualities." In this section they should have at least two paragraphs, each paragraph clearly identifying a quality of heroes.

**Day 5:**

1. Explore websites and read about different heroes. (Share the Hero Web Search document with web links)
2. Make a "Hero Findings" sheet on Google Documents that contains information about three potential hero choices.

3. Share findings with a partner and then with the whole class.

**Day 6:**

1. Visit the Library to have presentation about finding research.
2. Students should spend time researching and coming away with at least two good sources from the library.
3. Add their name & hero choice to a class poster. Students should choose unique heroes - no duplicates within a class.

**Homework:** Write Part II of the essay, "Prior Knowledge of My Hero."

**Day 7:**

1. Time in class to create Source Cards for each source.
2. Time to read sources and begin making Note Cards. Discuss the different Headings for the cards (Early Life and Heroic Deed).
3. Students should have at least 2 library sources for English I or 3 library sources for Honors English I. They may find additional sources online if they choose.
4. They should make at least 6 note cards per source.

**Day 8:**

1. Give students time to finish reading sources and making note cards.
2. Collect note cards for a grade.

**Day 9:**

1. Today have students find their "Early Life" note cards and see what main points they want to make about the hero's early life.
2. They should create a brief outline of the main points, turning each into a topic sentence for their essay.
3. If there's time they can start writing this part in class.

**Homework:** Finish writing "Early Life" in your research paper.

**Day 10:**

1. Similar pattern as yesterday with the other part of Section III, "Heroic Deed."

2. Create a brief outline of their main points, turning each into a topic sentence for their essay.

3. If there's time, begin writing this section.

**Homework:** Write the "Heroic Deed" section.

**Day 11:**

1. Students should look back to Section I and find the two qualities of heroes.
2. They need to write Section IV "Evaluation of My Hero". This should be two paragraphs long, each paragraph evaluating the hero based on one of the hero qualities.

**Homework:** Update your Works Cited list. Make sure all of your sources you cite are listed on it in alphabetical order.

**Day 12:**

1. Peer Editing activity at the start of class.
2. Make the presentation slide to share with the class on Day 13. The slide should have the hero's name, a photo of the hero, and three pieces of information about the hero.

**Homework:** Revise the research essay and make sure the slide is complete.

**Day 13:**

1. Print out research paper.
2. Present hero to class using the slide presentation.

## Algebra 1, Unit 1

**Unit Title:** Relationships Between Quantities and Reasoning with Equations

**Designed by:** Johanna Lake, Reg Ruhl

**Content Area:** Mathematics

**Grade Level:** 9

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### Summary of Unit

By the end of eighth grade students have learned to solve linear equations in one variable and have applied graphical and algebraic methods to analyze and solve systems of linear equations in two variables. This unit builds on these earlier experiences by asking students to analyze and explain the process of solving an equation. Students develop fluency writing, interpreting, and translating between various forms of linear equations and inequalities, and using them to solve problems. They master the solution of linear equations and apply related solution techniques. All of this work is grounded on understanding quantities and on relationships between them.

### Stage 1 – Desired Results

What students will know, do, and understand

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Common Core Standards	Big Ideas
<p><b>N.Q.1</b> Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.</p> <p><b>N.Q.2</b> Define appropriate quantities for the purpose of descriptive modeling.</p> <p><b>N.Q.3</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.</p>	<p><b>Reason quantitatively and use units to solve problems.</b></p>
<p><b>A.SSE.1</b> Interpret expressions that represent a quantity in terms of its context.★</p> <p>a. Interpret parts of an expression, such as terms, factors, and coefficients.</p> <p>b. Interpret complicated expressions by viewing one or more of their parts as a single entity. For example, interpret <math>P(1+r)^n</math> as the product of <math>P</math> and a factor not depending on <math>P</math>.</p>	<p><b>Interpret the structure of expressions.</b></p>
<p><b>A.CED.1</b> Create equations and inequalities in one variable and use them to solve problems.</p>	<p><b>Create equations that describe numbers or relationships.</b></p>

<p><b>A.CED.2</b> Create equations in two or more variables to represent relationships between quantities;</p> <p><b>A.CED.3</b> Represent constraints by equations or inequalities, and interpret solutions as viable or non-viable options in a modelling context. For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.</p> <p><b>A.CED.4</b> Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. For example, rearrange Ohm's law <math>V = IR</math> to highlight resistance <math>R</math>.</p>	
<p><b>A.REI.1</b> Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.</p>	<p><b>Understand solving equations as a process of reasoning and explain the reasoning.</b></p>
<p><b>A.REI.3</b> Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.</p>	<p><b>Solve equations and inequalities in one variable.</b></p>

### Unit Enduring Understandings

Students will understand that...

- equations can be used to represent a real-world situation
- the solution to an equation can be used to answer a real-world question

### Unit Essential Questions(s)

- How can we write an equation that represents a real-world situation?
- How can we solve a linear equation and make sense of the solution?

### Knowledge and Skills

Students will know..

Students will be able to...

### Stage 3 – Learning Plan

(Design learning activities to align with Stage 1 and Stage 2 expectations)

### Key learning events needed to achieve unit goals

- Solving One-Step Equations (Lesson 2-1)
- Solving Two-Step Equations (Lesson 2-2)
- Solving Multi-Step Equations (Lesson 2-3)

- **Equations with Variables on Both Sides (Lesson 2-4)**
- **Equations and Problem Solving (Lesson 2-5)**
- **Formulas (Lesson 2-6)**
- **Inequalities and Their Graphs (Lesson 3-1)**
- **Solving Inequalities Using Addition and Subtraction (Lesson 3-2)**
- **Solving Inequalities Using Multiplication and Division (Lesson 3-3)**
- **Solving Multi-Step Inequalities (Lesson 3-4)**
- **Review of prior skills incorporated throughout unit (Chap 1)**

*evidence I*

Policy ICA

**BREWER SCHOOL DEPARTMENT  
2014-2015 SCHOOL CALENDAR**

2014

**AUGUST 2 (4)**

M	T	W	T	F
				1
4	5	6	7	8
11	12	13	14	15
18	19	20	21	22
25	W	O	B	29

**SEPTEMBER 21 (21)**

M	T	W	T	F
H	A	3	4	5
8	9	10	11	12
15	16	17	18	E
22	23	24	25	26
29	30			

**OCTOBER 22 (22)**

M	T	W	T	F
		1	2	3
6	7	8	9	10
H	14	15	16	17
20	21	22	23	E
27	28	29	30	Q

**NOVEMBER 14 (16)**

M	T	W	T	F
3	4	5	6	7
10	H	12	13	14
17	18	19	20	T
C	C	26	H	28

**DECEMBER 17 (17)**

M	T	W	T	F
1	2	3	4	5
8	9	10	11	12
15	16	17	18	19
22	23	24	H	26
29	30	31		

2015

**JANUARY 18 (19)**

M	T	W	T	F
			H	2
5	6	7	8	9
12	13	14	E	W
H	20	21	22	Q
26	27	28	29	30

**FEBRUARY 15 (15)**

M	T	W	T	F
2	3	4	5	6
9	10	D	12	13
H	17	18	19	20
23	24	25	26	27

**MARCH 21 (22)**

M	T	W	T	F
2	3	4	5	T
9	10	11	E	E
16	17	18	19	20
23	24	25	26	27
30	31			

**APRIL 17 (17)**

M	T	W	T	F
		1	2	Q
6	7	8	9	10
13	14	15	16	17
H	21	22	23	24
27	28	29	30	

**MAY 20 (20)**

M	T	W	T	F
				1
4	5	6	7	8
11	12	13	14	15
18	19	20	21	22
H	26	27	28	29

2015

**JUNE 11 (12)**

M	T	W	T	F
1	2	3	4	5
8	9	T/Q	11	12
L	W	17	18	19
22	23	24	25	26
29	30			

**JULY**

M	T	W	T	F
		1	2	3
6	7	8	9	10
13	14	15	16	17
20	21	22	23	24
27	28	29	30	31

**KEY**

- \_\_ = Students not in attendance that day
- A= School begins 9-12
- B= School begins PreK-8
- C= Parent Conferences
- D= Early dismissal at 11:00 AM for 9-12 ONLY 8th grade step-up day
- E= Early dismissal at 11:00 AM for grades 5-12; 12:00 PM grades Pre-K-4
- H= Holiday
- L= Last student day
- O= Orientation for 9th grade and new high school students; dismissal at 11:00 AM
- T= End of Trimester ranking period Pre K-8
- Q= End of Quarter ranking period 9-12
- W= Teachers' Workshop - no students

**HOLIDAYS**

- July 4 Independence Day
- Sept. 1 Labor Day
- Sept. 25 to 26 Rosh Hashanah
- Oct. 4 Yom Kippur
- Oct. 13 Columbus Day
- Nov. 11 Veteran's Day (observed)
- Nov. 27 Thanksgiving
- Dec. 16 to 24 Chanukah
- Dec. 25 Christmas
- Jan. 1 New Year's Day
- Jan. 19 Martin Luther King Day
- Feb. 16 Presidents' Day
- Apr. 20 Patriots' Day
- May 25 Memorial Day

**SPECIAL EVENTS**

- Aug.26 - Open Houses: Pre-K through Gr. 2 - 5:30 to 7:00 PM  
Grades 3 and 4 - 6:30 to 8:00 PM
- Aug.27 - Open House for grades 5 through 8 - 5:30 to 7:00 PM
- Sept 2 - Classes begin at the United Technologies Center
- Oct. 1 - High School Parent's Night
- Nov. 24 - Parent/Teacher conferences from 2:00 to 8:00 PM
- Nov. 25 - Parent/Teacher conferences from 2:00 to 8:00 PM
- Jan. 20 -23 - High School Mid-term Examinations
- June 7 - High School Graduation

**Ranking Periods Pre K - Grade 8**

- First trimester begins on August 28th and ends on November 21nd (59 days)
- Second trimester begins on December 1st and ends on March 6th (55 days)
- Third trimester begins on March 9th and ends on June 10th (61 days)

**Ranking Periods Grade 9 - 12**

- First quarter begins on August 28th and ends on October 31st (45 days)
- Second quarter begins on November 3rd and ends on January 23rd (44 days)
- Third quarter begins on January 26th and ends on April 3rd (44 days)
- Fourth quarter begins on April 6th and ends on June 10th (42 days)

*This calendar allows for three (3) storm days due to inclement weather or other emergencies. Parents, students and employees should anticipate adjusting the school year in June (shortening or extending) depending upon the number of storm days used.*

First Reading: March 3, 2104  
 Second Reading: April 7, 2014  
 Adopted: April 7, 2014  
 Revised: August 25, 2014

## BREWER SCHOOL DEPARTMENT 2013-2014 SCHOOL CALENDAR

**2013**

**AUGUST 2 (4)**

M	T	W	T	F
			<u>1</u>	<u>2</u>
<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>
<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>
<u>26</u>	W	O	B	30

**2014**

**JANUARY 20 (21)**

M	T	W	T	F
		<u>H</u>	<u>2</u>	<u>3</u>
<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>	W
<u>H</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>
<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	Q

**2014**

**JUNE 11 (12)**

M	T	W	T	F
<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
L/T	<u>W</u>	<u>18</u>	<u>Q</u>	<u>20</u>
<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>
<u>30</u>				

**SEPTEMBER 20 (20)**

M	T	W	T	F
<u>H</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	E
<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>
<u>30</u>				

**FEBRUARY 15 (15)**

M	T	W	T	F
<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>
<u>10</u>	<u>11</u>	D	<u>13</u>	<u>14</u>
<u>H</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>
<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>

**JULY**

M	T	W	T	F
	<u>1</u>	<u>2</u>	<u>3</u>	<u>H</u>
<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>
<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>18</u>
<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>
<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>	

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 H= Holiday  
 L= Last student day  
 O= Orientation for 9th grade and new high school students; dismissal at 11:00 AM  
 T= Report Cards Distributed Pre K - Grade 8  
 Q= Report Cards Distributed Grades 9 - 12  
 W= Teachers' Workshop - no students

**OCTOBER 22 (22)**

M	T	W	T	F
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>
<u>H</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>18</u>
<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	E
<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>	

**MARCH 20 (21)**

M	T	W	T	F
<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>
<u>10</u>	<u>11</u>	<u>12</u>	E	<u>W/T</u>
<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>
<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>
<u>31</u>				

**NOVEMBER 15 (17)**

M	T	W	T	F
				<u>1</u>
<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	Q
<u>H</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>
<u>C</u>	<u>C</u>	<u>27</u>	<u>H</u>	<u>29</u>

**APRIL 17 (17)**

M	T	W	T	F
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	Q
<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>18</u>
<u>H</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>
<u>28</u>	<u>29</u>	<u>30</u>		

**DECEMBER 15 (15)**

M	T	W	T	F
<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	T
<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>
<u>23</u>	<u>24</u>	<u>H</u>	<u>26</u>	<u>27</u>
<u>30</u>	<u>31</u>			

**MAY 21 (21)**

M	T	W	T	F
			<u>1</u>	<u>2</u>
<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>
<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>
<u>H</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

**HOLIDAYS**

July 4 Independence Day  
 Sept. 2 Labor Day  
 Sept. 4 to 6 Rosh Hashanah  
 Sept. 13-14 Yom Kipper  
 Oct. 14 Columbus Day  
 Nov. 11 Veteran's Day (observed)  
 Nov. 27 to Dec. 5 Hanukkah  
 Nov. 28 Thanksgiving  
 Dec. 25 Christmas  
 Jan. 1 New Year's Day  
 Jan. 20 Martin Luther King Day  
 Feb. 17 Presidents' Day  
 Apr. 21 Patriots' Day  
 May 26 Memorial Day

**SPECIAL EVENTS**

Aug. 27<sup>th</sup> - Open Houses: Pre-K through Gr. 2 - 5:30 to 7:00 PM  
 Grades 3 and 4 - 6:30 to 8:00 PM  
 Aug. 28<sup>th</sup> - Open House for grades 5 through 8 - 5:30 to 7:00 PM  
 August 30<sup>th</sup> - Classes begin at the United Technologies Center  
 Nov. 25<sup>th</sup> - Parent/Teacher conferences from 2:00 to 8:00 PM  
 Nov. 26<sup>th</sup> - Parent/Teacher conferences from 2:00 to 8:00 PM  
 Jan. 21<sup>st</sup> -24<sup>th</sup> - High School Mid-term Examinations  
 June 8<sup>th</sup> - High School Graduation

**Ranking Periods Pre K - Grade 8**

First trimester begins on August 29<sup>th</sup> and ends on November 22<sup>nd</sup> (59 days)  
 Second trimester begins on December 2<sup>nd</sup> and ends on March 7<sup>th</sup> (55 days)  
 Third trimester begins on March 10<sup>th</sup> and ends on June 11<sup>th</sup> (61 days)

**Ranking Periods Grade 9 - 12**

First quarter begins on August 29<sup>th</sup> and ends on November 1<sup>st</sup> (45 days)  
 Second quarter begins on November 4<sup>th</sup> and ends on January 24<sup>th</sup> (44 days)  
 Third quarter begins on January 27<sup>th</sup> and ends on April 4<sup>th</sup> (44 days)  
 Fourth quarter begins on April 7<sup>th</sup> and ends on June 11<sup>th</sup> (42 days)

*This calendar allows for three (3) storm days due to inclement weather or other emergencies. Parents, students and employees should anticipate adjusting the school year in June (shortening or extending) depending upon the number of storm days used.*

First Reading: February 4, 2013  
 Second Reading: March 4, 2013



# Brewer High School Graduation Standards

adopted by School committee 8-11-14

## **Maine Statute on Proficiency for Graduation**

Beginning with the graduating class of 2018, a diploma indicating graduation from a secondary school must be based on student demonstration of proficiency as described in this section.

### I. Requirements for award of diploma.

In order to receive a diploma indicating graduation from secondary school, a student must:

- A. Demonstrate that the student engaged in educational experiences relating to English language arts, mathematics and science and technology in each year of the student's secondary schooling; [2011, c. 669, §7 (NEW).]
- B. Demonstrate proficiency in meeting state standards in all content areas of the system of learning results established under section 6209; [2011, c. 669, §7 (NEW).]
- C. Demonstrate proficiency in each of the guiding principles set forth in department rules governing implementation of the system of learning results established pursuant to section 6209; and [2011, c. 669, §7 (NEW).]
- D. Meet any other requirements specified by the governing body of the school administrative unit attended by the student. [2011, c. 669, §7 (NEW).][ 2011, c. 669, §7 (NEW) .]

In education the term “standards, a skill or knowledge deemed essential”, is often used in a variety of contexts. The use of the term standards in the proficiency-based education statute refers to the standards of Maine’s learning standards document, the Maine Learning Results. The statute identifies the Maine learning standards (the MLR content standards) as the targets for student proficiency. The word standard appears in multiple contexts on the Maine Getting to Proficiency website. In some contexts the term standard is intended to reference the standards of the Maine Learning Results. In other instances, the term “standards” appears in the context of “Power Standards” and “graduation standards”. Power Standards and graduation standards are provided as examples of ways that schools can merge or consolidate, or expand the essential knowledge and skills identified in our state standards documents for the purposes of reporting. The examples provide schools with alternative reporting schema for organizing the comprehensive collection of the core ideas in each content area of the state learning standards. Schools may select one of these organizations for reporting proficiency or create a different organization that comprehensively represents the core ideas of the state standards. The examples provided on Getting to Proficiency offer a system with a manageable and similar number of reporting units for each of the eight content areas.

## **What is Proficiency-Based Education?**

Proficiency-based education refers to any system of academic instruction, assessment, grading and reporting that is based on students demonstrating mastery of the knowledge and skills they are expected to learn before they progress to the next lesson, get promoted to the next grade level or receive a diploma. In Maine, academic expectations and “proficiency” definitions for public-school courses, learning experiences, content areas and grade levels are outlined in the [Maine Learning Results](#) which includes the [Guiding Principles](#), expectations for cross-disciplinary skills and lifelong learning, and eight sets of content-area standards, including the Common Core State Standards in English language arts and mathematics.

The general goal of proficiency-based education is to ensure that students acquire the knowledge and skills that are deemed to be essential to success in school, higher education, careers and adult life. If students struggle to meet minimum expected standards, they receive additional instruction, practice time and academic support to help them achieve proficiency, but they do not progress in their education until expected standards are met.

The following Graduation Standards define what a student needs to know and be able to do in each of the content areas of Maine Learning Results. These standards distill the most important long-term learning goals that will support with the skills and knowledge they will need to succeed in every area of adult life.

## Mathematics

**BH.M.NQ - Graduation Standard 1: Number and Quantity**

**Students will be able to reason and model quantitatively, using units and number systems to solve problems.**

## Performance Indicators

**N.RN.1** Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents.

**N.RN.2** Rewrite expressions involving radicals and rational exponents using the properties of exponents.

**N.Q.1** Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.

**N.Q.3** Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.

**N.CN.2** Use the relation  $i^2 = -1$  and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers.

## BH.H.A - Graduation Standard 2: Algebra

**Students will be able to interpret, represent, create and solve algebraic expressions and equations.**

### Performance Indicators

**A.SSE.1** Interpret expressions that represent a quantity in terms of its context.

a. Interpret parts of an expression, such as terms, factors, and coefficients

**A.APR.1** Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.

**A.CED.1** Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear and quadratic functions, and simple rational and exponential functions.

**A.CED.2** Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.

**A.REI.3** Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.

**A.REI.4b** Solve quadratic equations by inspection (e.g., for  $x^2 = 49$ ), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as  $a \pm bi$  for real numbers  $a$  and  $b$ .

**A.REI.6** Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.

## BH.M.F - Graduation Standard 3: Functions

**Students will be able to interpret, analyze, construct, and solve linear, exponential, quadratic, and trigonometric functions.**

### Performance Indicators

**F.IF.1** Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If  $f$  is a

function and  $x$  is an element of its domain, then  $f(x)$  denotes the output of  $f$  corresponding to the input  $x$ . The graph of  $f$  is the graph of the equation  $y=f(x)$

**F.IF.2** Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.

**F.IF.4** For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. **Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.**

**F.IF.5** Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. **For example, if the function  $h(n)$  gives the number of person-hours it takes to assemble  $n$  engines in a factory, then the positive integers would be an appropriate domain for the function.**

**F.IF.7a** Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. Graph linear and quadratic functions and show intercepts, maxima, and minima.

**F.BF.3** Identify the effect on the graph of replacing  $f(x)$  by  $f(x)+k$ ,  $kf(x)$ ,  $f(kx)$ , and  $f(x+k)$  for specific values of  $k$  (both positive and negative); find the value of  $k$  given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. **Include recognizing even and odd functions from their graphs and algebraic expressions for them.**

**F.LE.5** Interpret the parameters in a linear or exponential function in terms of a context.

#### BH.M.G - Graduation Standard 4: Geometry

**Students will be able to prove, understand, and model geometric concepts, theorems, and constructions to solve problems.**

##### Performance Indicators

**G.CO.1** Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.

**G.CO.8** Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions.

**G.SRT.8** Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems.

**G.C.2** Identify and describe relationships among inscribed angles, radii, and chords. **Include the relationship between central, inscribed, and circumscribed angles; inscribed angles on a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle.**

**G.GPE.5** Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point).

**G.GMD.3** Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.

#### BH.M.S - Graduation Standard 5: Statistics and Probability

**Students will be able to interpret, infer and apply statistics and probability to analyze data and reach and justify conclusions.**

##### Performance Indicators

**S.ID.1** Represent data with plots on the real number line (dot plots, histograms, and boxplots).

**S.ID.2** Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets.

**S.ID.6a** Represent data on two quantitative variables on a scatter plot, and describe how the variables are related. Fit a function to the data; use functions fitted to data to solve problems in the context of the data. [Use given functions or choose a function suggested by the context.](#) [Emphasize linear, quadratic, and exponential models.](#)

**S.ID.6c** Represent data on two quantitative variables on a scatter plot, and describe how the variables are related. Fit a linear function for a scatter plot that suggests a linear association

**S.ID.7** Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.

## English Language Arts

### BH.RC - Graduation Standard 1: Reading Comprehension

**Read and comprehend appropriately complex literary and informational texts independently and proficiently. (CCRA 10)**

#### Performance Indicators

- A. Determine, analyze, and trace the development/interaction of themes/central ideas in complex text. (RI.2, RL.2)
- B. Summarize text. (RI.2, RL.2)
- C. Analyze and explain how individuals, ideas or events develop/interact throughout a text. (RI.3, RL.3)
- D. Determine denotative, connotative, figurative and/or technical meanings of words in context; analyze the effect of word choice on meaning/tone. (RI.4, RL.4, RL.5, RL.6)

### BH.RI - Graduation Standard 2: Reading Interpretation

**Interpret, analyze, and evaluate appropriately complex literary and informational texts. (CCRA 7,10)**

## Performance Indicators

- A. Cite valid textual evidence in support of text analysis; determine explicit, implicit, and ambiguous textual meanings. (RL.5 + RI.5)
- B. Analyze author's deliberate fashioning of text to communicate meaning and effect aesthetic and rhetorical impact. (RL, RI.5)
- C. Determine author's point of view, purpose, or rhetorical strategies in a text, analyzing how rhetorical choices create the intended effect within the reader. (RI.6)
- D. Delineate and evaluate the argument and specific claims in a text, assessing reasoning for validity and evidence for relevance and sufficiency; identify fallacious statements and reasoning. (RI.8)
- E. Evaluate and integrate information from diverse sources, into a coherent understanding of an idea or event, noting discrepancies and agreement among sources. (RI.9, RL.9)

## BH.WA - Graduation Standard 3: Writing Arguments

**Write clear and coherent arguments for a range of tasks, purposes, and audiences. (CCWA 1,4,7,10)**

### Performance Indicators

- A. Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation. (W.8; W.9)
- B. Develop claim(s) that are precise and informed. Establish the significance of the claim(s) and distinguish the claim(s) from alternate or opposing claims. (W.1.B)
- C. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. (W.1.C)
- D. Establish and maintain an appropriate style and tone for the audience. (W.1.D, W.2.E)
- E. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. (L.1; L.2)

## BH.WNT - Graduation Standard 4: Writing Narrative Texts

**Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences. (CCWA2,3,4,10)**

### Performance Indicators

- A. Engage the reader by presenting a situation, establishing a point of view, and introducing a narrator and/or characters; create a logical progression of experiences or events. (W.3.A)
- B. Use narrative techniques, such as dialogue, description, and reflection to develop experiences, events, and/or characters. (W.3.B)
- C. Use precise language and sensory details to convey a vivid picture of the events, setting, and/or characters. (W.3.D)
- D. Provide a conclusion that reflects on what is experienced over the course of the narrative. (W.3.E)
- E. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling. (L.1; L.2)

## BH.SL - Graduation Standard 5: Speaking and Listening

**Initiate and participate effectively in a range of discussions, responding thoughtfully to diverse perspectives, express ideas clearly and persuasively.**

Performance Indicators

- A. Engage effectively in a group to promote a civil exchange of ideas that probes reasoning and evidence. (SL.1.A)
- B. Respond thoughtfully to diverse perspectives, resolve contradictions when possible, and determine what additional information or research is required to deepen the investigation or complete the task. (SL.1.D)
- C. Integrate multiple sources of information to make informed decisions and solve problems. (SL.2)
- D. Evaluate a speaker's point of view, reasoning, and use of evidence. (SL.3)
- E. Develop a clear line of reasoning that addresses alternative or opposing perspectives. (SL.4)
- F. Use appropriate organization, development, style, and substance appropriate to a range of purposes and audiences for both formal and informal tasks. (SL.4)

**BH.WIT - Graduation Standard 6: Writing Informative Texts**

**Produce clear and coherent informative writing for a range of tasks, purposes, and audiences. (CCWA 2,3,4,10)**

Performance Indicators

Write informative/explanatory texts to examine and convey complex ideas, concepts, and information that:

- A. Introduce a topic; organize complex ideas, concepts and information to create a unified whole. (W.2.A)
- B. Develop the topic thoroughly by selecting the most significant and relevant facts appropriate to the audience's knowledge of the topic. (W.2.B)
- C. Provide a conclusion that follows from, supports, or reflects on information that is presented. (W.2.F)

## Science

**BH.S.PS - Graduation Standard 1: Physical Science:Structure/Properties of Matter, Forces and Interactions**

**Understand and analyze matter, reactions and physical systems as demonstrated through the integration of scientific and engineering practices and cross-cutting concepts (PS1 + PS2)**

### Performance Indicators

- A. Use the periodic table as a model to predict the relative properties of elements based on the patterns of electrons in the outermost energy level of atoms. (HS-PS1-1)
- B. Construct and revise an explanation for the outcome of a simple chemical reaction based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties. (HS-PS1-2)
- C. Plan and conduct an investigation to gather evidence to compare the structure of substances at the bulk scale to infer the strength of electrical forces between particles. (HS-PS1-3)
- D. Develop a model to illustrate that the release or absorption of energy from a chemical reaction system depends upon the changes in total bond energy. (HS-PS1-4)
- E. Apply scientific principles and evidence to provide an explanation about the effects of changing the temperature or concentration of the reacting particles on the rate at which a reaction occurs.(HS-PS1-5)

**BH.S.EWE - Graduation Standard 2: Physical Science:Energy, Waves, and Electromagnetic Radiation**

**Understand and analyze energy and the characteristics and dynamics of waves as demonstrated through the integration of scientific and engineering practices and cross-**

## cutting concepts (PS3 + PS4)

### Performance Indicators

- A. Create a computational model to calculate the change in the energy of one component in a system when the change in energy of the other component(s) and energy flows in and out of the system are known. (HS-PS3-1)
- B. Develop and use models to illustrate that energy at the macroscopic scale can be accounted for as either motions of particles or energy stored in fields. (HS-PS3-2)
- C. Plan and conduct an investigation to provide evidence that the transfer of thermal energy when two components of different temperature are combined within a closed system results in a more uniform energy distribution among the components in the system (second law of thermodynamics). (HS-PS3-4)
- D. Develop and use a model of two objects interacting through electric or magnetic fields to illustrate the forces between objects and the changes in energy of the objects due to the interaction. (HS-PS3-5)
- E. Use mathematical representations to support a claim regarding relationships among the frequency, wavelength, and speed of waves traveling in various media. (HS-PS4-1)
- F. Evaluate questions about the advantages of using a digital transmission and storage of information. (HS-PS4-2)
- G. Evaluate the claims, evidence, and reasoning behind the idea that electromagnetic radiation can be described either by a wave model or a particle model, and that for some situations one model is more useful than the other. (HS-PS4-3)

## BH.S.LS.SFI - Graduation Standard 3: Life Science: Structure, Function, and Information Processing

### Understand and analyze molecular, structural, and chemical biology as demonstrated through the integration of scientific and engineering practices and cross-cutting concepts (LS1)

### Performance Indicators

- A. Construct an explanation based on evidence for how the structure of DNA determines the structure of proteins, which carry out the essential functions of life through systems of specialized cells. (HS-LS1-1)
- B. Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms. (HS-LS1-2)
- C. Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis. (HS-LS1-3)
- D. Use a model to illustrate the role of cellular division (mitosis) and differentiation in producing and maintaining complex organisms. (HS-LS1-4)
- E. Use a model to illustrate how photosynthesis transforms light energy into stored chemical energy. (HS-LS1-5)
- F. Construct and revise an explanation based on evidence for how carbon, hydrogen, and oxygen from sugar molecules may combine with other elements to form amino acids and/or other large carbon-based molecules. (HS-LS1-6)
- G. Use a model to illustrate that cellular respiration is a chemical process whereby the bonds of food molecules and oxygen molecules are broken and the bonds in new compounds are formed resulting in a net transfer of energy. (HS-LS1-7)

**BH.S.LS.ME - Graduation Standard 4: Life Science: Matter and Energy in Organisms and Ecosystems**

**Understand and analyze the characteristics, functions, and behavioral interactions within an ecosystem as demonstrated through the integration of scientific and engineering practices and cross-cutting concepts (LS2)**

**Performance Indicators**

- A. Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales. (HS-LS2-1)
- B. Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different scales. (HS-LS2-2)
- C. Construct and revise an explanation based on evidence for the cycling of matter and flow of energy in aerobic and anaerobic conditions. (HS-LS2-3)
- D. Use mathematical representations to support claims for the cycling of matter and flow of energy among organisms in an ecosystem. (HS-LS2-4)
- E. Develop a model to illustrate the role of photosynthesis and cellular respiration in the cycling of carbon among the biosphere, atmosphere, hydrosphere, and geosphere. (HS-LS2-5)
- F. Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem. (HS-LS2-6)
- G. Evaluate the evidence for the role of group behavior on individual and species' chances to survive and reproduce. (HS-LS2-8)

**BH.S.LS.ONSA - Graduation Standard 5: Life Science: Growth, Development, and Reproduction of Organisms, Natural Selection, and Adaptations**

**Understand and analyze genetics, adaptation, and biodiversity as demonstrated through the integration of scientific and engineering practices and cross-cutting concepts (LS 3 + LS 4)**

**Performance Indicators**

- A. Ask questions to clarify relationships about the role of DNA and chromosomes in coding the instructions for characteristic traits passed from parents to offspring. (HS-LS3-1)
- B. Make and defend a claim based on evidence that inheritable genetic variations may result from: (1) new genetic combinations through meiosis, (2) viable errors occurring during replication, and/or (3) mutations caused by environmental factors. (HS-LS3-2)
- C. Apply concepts of statistics and probability to explain the variation and distribution of expressed traits in a population. (HS-LS3-3)
- D. Communicate scientific information that common ancestry and biological evolution are supported by multiple lines of empirical evidence. (HS-LS4-1)
- E. Construct an explanation based on evidence that the process of evolution primarily results from four factors: (1) the potential for a species to increase in number, (2) the heritable genetic variation of individuals in a species due to mutation and sexual reproduction, (3) competition for limited resources, and (4) the proliferation of those organisms that are better able to survive and reproduce in the environment. (HS-LS4-2)
- F. Apply concepts of statistics and probability to support explanations that organisms with an advantageous heritable trait tend to increase in proportion to organisms lacking this trait. (HS-

LS4-3)

- G. Construct an explanation based on evidence for how natural selection leads to adaptation of populations. (HS-LS4-4)
- H. Evaluate the evidence supporting claims that changes in environmental conditions may result in: (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species. (HS-LS4-5)

**BH.S.ESS.ESU - Graduation Standard 6: Earth and Space Sciences: Earth, Space, and the Universe**

**Understand and analyze the origins, interactions, and relationships between and among the earth, our solar system, and the universe as demonstrated through the integration of scientific and engineering practices and cross-cutting concepts (ESS1)**

**Performance Indicators**

- A. Develop a model based on evidence to illustrate the life span of the sun and the role of nuclear fusion in the sun's core to release energy that eventually reaches Earth in the form of radiation. (HS-ESS1-1)
- B. Construct an explanation of the Big Bang theory based on astronomical evidence of light spectra, motion of distant galaxies, and composition of matter in the universe. (HS-ESS1-2)
- C. Communicate scientific ideas about the way stars, over their life cycle, produce elements. (HS-ESS1-3)
- D. Use mathematical or computational representations to predict the motion of orbiting objects in the solar system. (HS-ESS1-4)
- E. Evaluate evidence of the past and current movements of continental and oceanic crust and the theory of plate tectonics to explain the ages of crustal rocks. (HS-ESS1-5)
- F. Apply scientific reasoning and evidence from ancient Earth materials, meteorites, and other planetary surfaces to construct an account of Earth's formation and early history. (HS-ESS1-6)

**BH.S.ESS.ESHA - Graduation Standard 7: Earth and Space Sciences: Earth, Space, and the Universe**

**Understand and analyze earth's systems and the relationship between human activity and the earth as demonstrated through the integration of scientific and engineering practices and cross-cutting concepts (ESS2 + ESS3)**

**Performance Indicators**

- A. Develop a model to illustrate how Earth's internal and surface processes operate at different spatial and temporal scales to form continental and ocean-floor features. (HS-ESS2-1)
- B. Analyze geoscience data to make the claim that one change to Earth's surface can create feedbacks that cause changes to other Earth systems (HS-ESS2-2)
- C. Develop a model based on evidence of Earth's interior to describe the cycling of matter by thermal convection. (HS-ESS2-3)
- D. Use a model to describe how variations in the flow of energy into and out of Earth's systems result in changes in climate. (HS-ESS2-4)

- E. Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes. (HS-ESS2-5)
- F. Develop a quantitative model to describe the cycling of carbon among the hydrosphere, atmosphere, geosphere, and biosphere. (HS-ESS2-6)
- G. Construct an argument based on evidence about the simultaneous coevolution of Earth's systems and life on Earth. (HS-ESS2-7)
- H. Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity. (HS-ESS3-1)
- I. Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity. (HS-ESS3-3)
- J. Analyze geoscience data and the results from global climate models to make an evidence based forecast of the current rate of global or regional climate change and associated future impacts to Earth systems. (HS-ESS3-5)

## Social Studies

### BH.SS - Graduation Standard 1: Application of Social Studies Processes, Knowledge and Skills

**Collaboratively and independently, research, present and defend discipline-based processes and knowledge from civics/government, economics, geography and history in authentic contexts. (MLR, A1; CCSS)**

#### Performance Indicators

- A. Develop compelling inquiry questions and conduct research on current social studies issues by applying appropriate methods and ethical reasoning skills, and using relevant tools, technologies and sources from social studies fields to conduct the inquiry. (MLR A1 a-b, f-g, i-j, A2, A3; CCSS WH 7-9)
- B. Gather, synthesize and evaluate information from multiple sources representing a wide range of views; make judgments about conflicting findings from different sources, incorporating those from sources that are valid and refuting others. (MLR A1 b-e, i-j; CCSS RH 1-3, RH 6-9)
- C. Develop informative/ explanatory texts about social studies topics, including the narration of historical events, and present a coherent set of findings orally and in writing. (MLR A1 e-j; CCSS WH 2, WH 4-6, WH 10)
- D. Construct and present arguments both orally and in writing in which claims, counterclaims, reasons and evidence demonstrate their relevance to each other and the overall argument and the piece is organized anticipating the audience's knowledge level, concerns, values and possible biases. (MLR A1 e-j; CCSS WH 1, WH 4-6, WH 10, CCSS SL 4-6)

### BH.SS.CE - Graduation Standard 2: Civil Engagement

**Apply the attributes of a responsible and involved citizen to affect a real world issue based on a local need (MLR, A2 + A3)**

#### Performance Indicators

- A. Develop compelling inquiry questions and conduct research on current social studies issues by applying appropriate methods and ethical reasoning skills, and using relevant tools, technologies and sources from social studies fields to conduct the inquiry. (MLR A1 a-b, f-g, i-j,

A2, A3; CCSS WH 7-9)

- B. Gather, synthesize and evaluate information from multiple sources representing a wide range of views; make judgments about conflicting findings from different sources, incorporating those from sources that are valid and refuting others. (MLR A1 b-e, i-j; CCSS RH 1-3, RH 6-9)
- C. Develop informative/ explanatory texts about social studies topics, including the narration of historical events, and present a coherent set of findings orally and in writing. (MLR A1 e-j; CCSS WH 2, WH 4-6, WH 10)
- D. Construct and present arguments both orally and in writing in which claims, counterclaims, reasons and evidence demonstrate their relevance to each other and the overall argument and the piece is organized anticipating the audience's knowledge level, concerns, values and possible biases. (MLR A1 e-j; CCSS WH 1, WH 4-6, WH 10, CCSS SL 4-6)

### **BH.SS.CG - Graduation Standard 3: Civics and Government**

**Apply understanding of the ideals and purposes of founding documents, the principles and structures of the constitutional government in the United States, and the American political system to analyze interrelationships among civics, government and politics in the past and the present, in Maine, the United States and the world. (MLR,B)**

#### **Performance Indicators**

- A. Evaluate current issues by applying the democratic ideals in the founding documents and constitutional principles of the United States government, and explain how and why democratic institutions and interpretations of democratic ideals have changed over time. (MLR B1 a-c)
- B. Compare and evaluate various forms of government and political systems in the United States and the world, and describe their impact on societal issues, trends and events. (MLR B1 d-e; B3 a)
- C. Analyze the constitutional principles, and the roles of the citizen and the government, in major laws or cases, and compare the rights, duties, and responsibilities of United States citizens with those of citizens from other nations. (MLR B2 b-d)
- D. Using examples of historical or current issues, analyze the political structures, power and perspectives of diverse cultures, including Maine Native Americans, various historical and recent immigrant groups in Maine and the United States, and various cultures in the world. (MLR B3 a-b)

### **BH.SS.E - Graduation Standard 4: Economics**

**Understand and apply the concepts and processes from economics to understand issues of personal finance and issues of production, distribution and consumption in the community, Maine, the United States and the world. (MLR C)**

#### **Performance Indicators**

- A. Explain and analyze the role of financial institutions, the stock market, and government including fiscal, monetary and trade policies in personal, business and national economies. (MLR C1 a-b, d-e)
- B. Evaluate the different strategies of money management, and the positive and negative impacts that credit can have on personal finances, using economic reasoning. (MLR C1 c)

- C. Compare different economic systems in a variety of regions and groups including Maine, Maine Native Americans, the United States and various regions of the world; explain the relationship between the region's economic system and its government, and the resulting costs and benefits. (MLR C2 a-c)

## **BH.SS.G - Graduation Standard 5: Geography**

**Analyze the physical, human and environmental geography of Maine, the United States and various regions of the world to evaluate the interdependent relationships and challenges facing human systems in the past, present and future. (MLR D)**

### **Performance Indicators**

- A. Analyze the spatial organization of people, places and environments on the Earth's surface using mental maps, geographic data and representations, geospatial technologies and spatial thinking. (MLR D1 b-c)
- B. Apply geographical concepts, skills, and tools to interpret the past, address the present and plan for the future. (MLR D1 a, d)
- C. Evaluate the impact of change and how culture and experience influence people's perceptions of the physical and human characteristics of places and regions. (MLR D1 d)
- D. Analyze the interaction between human actions and environmental systems, and evaluate the meaning, use, distribution and importance of resources in various regions of the world. (MLR D1 c, D2 a)
- E. Evaluate how the forces of cooperation and conflict among people, as well as the movement and interactions of various groups of people, including Native Americans in Maine, influence the division and control of the Earth's surface historically and in the present. (MLR D2 b)

## **BH.SS.H - Graduation Standard 6: History**

**Apply and demonstrate knowledge of major eras, enduring themes, turning points and historic influences to analyze the forces of continuity and change in the community, the state, the United States and the world. (MLR E)**

### **Performance Indicators**

- A. Apply an understanding of the forces of continuity and change to analyze the evolution of historical eras, the persistence of enduring themes, and the significance of turning points and current issues in Maine, Maine Native American cultures, the nation and the world. (MLR E1 b, E2 b)
- B. Select and organize evidence from primary and secondary sources to support an historical interpretation or argument. (MLR E1 A)
- C. Trace and evaluate the development of democratic ideals, the persistence of enduring themes (e.g. power and authority; migration) and their impact on societal issues, trends and events. (MLR E1 C)
- D. Identify and critique diverse perspectives on societal issues, trends and events and articulate priorities different groups or people hold in their perspectives. (MLR E1 d, E2 a; CCSS RH 6)
- E. Apply an understanding of causality, connections and significance to develop credible explanations of historical events based on reasoned interpretation of evidence. (MLR E1 D)

## Computer Technology

### BH.CT.DC - Graduation Standard 1: Digital Citizenship

**Students will demonstrate a clear understanding of technology systems and operations and practice safe, legal, and ethical behaviors.**

#### Performance Indicators

- A. Demonstrate safe, legal and ethical behavior in the use of information and technology. Students will get permission and/or cite the work of others.
- B. Understand technology systems and use hardware and networks to support learning.
- C. Use productivity tools and common applications effectively and constructively.
- D. Transfer current knowledge to new and emerging technologies.

### BH.CT.I - Graduation Standard 2: Integration

**Students will use technology in all subject areas to collaborate, investigate and solve problems.**

#### Performance Indicators

- A. Demonstrate creative thinking, develop innovative ideas and processes using technology.
- B. Research and evaluate information to solve problems using digital tools.

### BH.CT.C - Graduation Standard 3: Communication

**Students will use technology to effectively communicate with others electronically and to work collaboratively online.**

#### Performance Indicators

- A. Use digital media to communicate and work collaboratively to support individual learning.
- B. Communicate information and ideas effectively to multiple audiences using a variety of media formats.
- C. Contribute to team projects to produce original works and/or solve problems.
- D. Label email and store it in appropriate folders.
- E. Maintain email by deleting or archiving when no longer needed.

### BH.CT.DM - Graduation Standard 4: Data Management

**Students will use technology to effectively store data for current and future use.**

## Performance Indicators

- A. Proper organization of data according to subject matter through folders.
- B. Accurately naming data for retrieval and storage.
- C. Maintain data by deleting documents no longer needed.

## Wellness

### BH.W.HPS - Graduation Standard 1: Health Information, Products, and Services

**Students comprehend concepts related to health promotion and disease prevention to enhance health. (MLR A)**

#### Performance Indicators

- A. Predict how behaviors impact health status by analyzing individual responsibility for one's health, barriers to healthy behaviors, personal susceptibility and potential severity of injury and illness when practicing unhealthy behaviors. (MLR A1)
- B. Analyze the interrelationships of physical, mental/intellectual, emotional and social health.(MLR A2)
- C. Explain causes of common diseases, disorders, and other health problems and propose ways to reduce, prevent or treat them. (MLR A3)
- D. Analyze and describe how the environment, genetics, family history, and access to health care, are interrelated and can impact personal health. (MLR A4)
- E. Describe the characteristics of human growth and development through the various stages of life. (MLR A5)
- F. Analyze complex health concepts related to family life; nutrition; personal health; safety and injury prevention; and tobacco, alcohol and other drug use prevention. (MLR A6)

### BH.W.HPRP.W - Graduation Standard 2: Health Promotion and Risk Reduction

**Demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks. (MLR C)**

#### Performance Indicators

- A. Demonstrate healthy practices/behaviors to maintain or improve the health of self and others in each of the following areas: healthy eating; physical activity; tobacco, alcohol and other drug use prevention; and prevention of STDs, HIV and unintended pregnancy. (MLR C1)
- B. Demonstrate a variety of behaviors to avoid or reduce health risks to self and others including first aid for personal, family and community health. (MLR C2)
- C. Design, implement and evaluate a plan for stress management. (MLR C3)

### BH.W.IH - Graduation Standard 3: Influences on Health

**Analyze the ability of family, peers, culture, media, technology and other factors to enhance health. (MLR D)**

#### Performance Indicators

- A. Analyze and evaluate how multiple factors such as norms, culture and values influence health and health behaviors and investigate how public health policies and government regulations can influence health promotion and disease prevention. (MLR D1)
- B. Evaluate the impact of technology, including medical technology, on personal, family, and community health. (MLR D2)
- C. Analyze how some health risk behaviors, can influence the likelihood of engaging in unhealthy behaviors such as drug and alcohol use. (MLR D3)

#### **BH.CT.ADG - Graduation Standard 4: Advocacy, Decision-Making and Goal-setting Skills**

**Demonstrate the ability to use interpersonal communication and advocacy skills; make decisions; and set goals to enhance personal, family and community health. (MLR E, F)**

##### Performance Indicators

- A. Utilize effective communication skills with family, peers and others to enhance health in the following ways: asking for and offering assistance to enhance the health of self and others; refusal, negotiation and collaboration skills to avoid and reduce health risks; and strategies for prevention, management and resolution of interpersonal conflicts without harm to self or others. (MLR E1)
- B. Demonstrate the following ways to influence and support others to make positive health choices: formulate health messages utilizing accurate peer and societal norms; adapt health messages and communication techniques to different audiences; and work cooperatively as an advocate for personal, family and community health. (MLR E2)
- C. Apply the following decision-making process to enhance health: compare the value of thoughtful decision-making to quick decision-making in a health-related situation; justify when that decision should be individual or collaborative; generate alternative approaches and predict the potential short and long-term impact for themselves and other with each alternative; defend the healthy choice; and evaluate the effectiveness of the healthy decision.
- D. Develop and analyze a plan to attain a personal health goal in the following ways; assess personal health practices and overall health status; select a personal health goal that addresses strengths, needs and risks; implement strategies and analyze progress towards achieving the goal. (MLR F2)
- E. Formulate a long-term personal health plan, incorporating decision-making and goal-setting strategies. (MLR F3)

#### **BH.CT.MK.A - Graduation Standard 5: Movement/Motor Skills and Knowledge**

**Demonstrate the fundamental and specialized motor skills and apply principles of movement for improved performance. (MLR G)**

##### Performance Indicators

- A. Apply the following principles of stability and force to modify their performance in games/ physical activities: how spin and rebound affect the motion of an object; how opposition, point of contact and point of release change the path of an object; how adjusting movements to accommodate external forces decrease the risk of injury. (MLR G1)
- B. Demonstrate a variety of specialized movement skills specific to game/physical activity while participating in that game/physical activity. (MLR G2)

- C. Explain the relationship of fitness skill components to specialized movement skills. (MLR G3)
- D. Design appropriate practice sessions, utilizing fundamental movement skills to improve performance. (MLR G4)

#### **BH.W.PFK - Graduation Standard 6: Physical Fitness Activities and Knowledge**

##### **Demonstrate and apply fitness concepts. (MLR H)**

###### Performance Indicators

- A. Participate in a health-related fitness assessment to establish personal fitness goals and reassess their fitness over time. (MLR H1)
- B. Design and critique a personal fitness plan, from established goals, that applies the five fitness components and the principles of training (specificity, overload, and progression). (MLR H2)
- C. Select and participate in physical activities that address their personal fitness plans and apply the five health-related fitness components. (MLR H3)
- D. Explain the interrelationship of physiological responses and physical, mental/intellectual, emotional and social benefits related to regular participation in physical activity. (MLR H4)

#### **BH.W.PSSK - Graduation Standard 7: Personal and Social Skills and Knowledge**

##### **Demonstrate and explain responsible personal behavior and responsible social behavior in physical activity settings. (MLR I)**

###### Performance Indicators

- A. Demonstrate the following collaborative skills while participating in physical activities: giving and accepting constructive feedback; respectful inclusion of peers in activities. (MLR I1)
- B. Demonstrate responsible and ethical personal behavior while participating in physical activities. (MLR I2)
- C. Predict how etiquette/safety rules improve games/activities, contribute to productive participation, and how environmental modifications can impact safety. (MLR I3)

## BH.CE.SIR - Graduation Standard 1: Self-knowledge and Interpersonal Relationships

**Assess and demonstrate a thorough understanding of the knowledge, attitudes, behaviors and skills needed to be successful in school, careers, civic life, and relationships with others. (NCDG PS1, PS2)**

### Performance Indicators

- Students are able to assess personal skills, abilities, aptitudes and dispositions and analyze how they positively and negatively aid them in reaching academic, career and life goals. (MLR A1)
- Students identify and evaluate strategies to improve behaviors, beliefs, and attitudes necessary for success in school, careers and civic life. (MLR A2)
- Students demonstrate how positive and negative attitudes affect one's ability to work with others and evaluate successful strategies to improve interpersonal skills. (MLR A3)

## BH.CE.ECL - Graduation Standard 2: Education, Career and Life Roles

**Demonstrate an understanding of the relationship between the changing nature of work in a 21st century global economy and educational requirements; how learning new skills and educational achievement lead to increased career options and lifelong learning. (NCDG ED 1, ED 2 ,CM 3, CM 5)**

### Performance Indicators

- Students understand the integration and application of academic knowledge and skills and lifelong learning to career success in a 21st century global economy. (MLR B1)
- Students evaluate strategies to improve skills that lead to lifelong learning and personal success in school, work, careers and community. (MLR B2)
- Students use a variety of informational resources including self-assessment, academic achievement and career interests to develop a personalized plan for education, training, and career choices. (MLR B3)

## BH.CE.DPPOC - Graduation Standard 3: Making Decisions, Utilizing a Planning Process, Creating Opportunities and Making Meaningful Contributions.

**Demonstrate effective decision-making and planning skills in their pursuit of success in education, work and citizenship roles. (NCDG CM 1, CM 2, CM 3, CM 4)**

### Performance Indicators

- Students use the planning process to evaluate the effectiveness of secondary and postsecondary goals. (MLR C1, C2)
- Students identify multiple resources that influence their career and education decision-making. (MLR C3)
- Students analyze and evaluate strategies for addressing diverse and changing societal and global economic needs that influence personal decision-making for workplace success. (MLR C4)

# Visual and Performing Arts

## Visual Arts

#### BH.VA.DL - Graduation Standard 1: Discipline Literacy

**Students show literacy in the discipline by understanding and demonstrating concepts, skills, terminology, and processes.**

##### Performance Indicators

- Elements of Art & Principles of Design: Students evaluate elements of art (color, form, line, shape, space, texture and/or value) and some principles of design (balance, contrast, emphasis, movement, pattern, rhythm, and/or unity). (MLR: A2)

#### BH.VA.CPE - Graduation Standard 2: Creation, Performance, and Expression

**Students create, perform, and express through the discipline**

##### Performance Indicators

- Media Skills: Students choose multiple suitable media, tools, techniques, and processes, to create a variety of original art works. (MLR: B1)
- Exhibition: Students select, prepare, and help with presenting their works in the classroom, school, or other community location, and articulate an artistic justification for their selection. (MLR: B4)

#### BH.VA.CPS - Graduation Standard 3: Creative Problem-Solving

**Students approach artistic problem solving using multiple solutions and the creative process.**

##### Performance Indicators

- Application of Creative Process: Students apply and analyze creative problem-solving and creative-thinking skills to improve or vary their own work and/or the work of others. (MLR: C1)

#### BH.VA.AC - Graduation Standard 4: Aesthetics and Criticism

**Students describe, analyze, interpret, and evaluate art (dance, music, theatre, and visual arts).**

##### Performance Indicators

Students analyze and evaluate art forms:

- Describe, analyze, interpret, and evaluate art forms by applying grade span appropriate arts concepts, vocabulary, skills, and processes. (MLR: D1 a.)
- Demonstrate an understanding of the difference between a personal opinion and an informed judgment. (MLR:D1c.)

#### BH.VA.VAC - Graduation Standard 5: Visual and Performing Arts Connections

**Students understand the relationship among the arts, history and world culture; and they make connections among the arts and to other disciplines, to goal-setting, and to interpersonal interaction.**

## Performance Indicators

- The Arts & History & World Cultures: Students analyze the characteristics and purposes of products of the visual/performing arts to understand history and/or world cultures. (MLR: E1)
- Interpersonal Skills: Students demonstrate positive interpersonal skills and reflect on the impact of interpersonal skills on personal success in the arts. (MLR: E5)

## Media Arts

### BH.MA.DL - Graduation Standard 1: Discipline Literacy

**Students show literacy in the discipline by understanding and demonstrating concepts, skills, terminology, and processes.**

#### Performance Indicators

- Elements of Art & Principles of Media Design: Students evaluate elements of art (color, line, shape, space, and/or value) and some principles of media design (contrast, repetition, alignment, and/or proximity). (based on MLR: A2)

### BH.MA.CPE - Graduation Standard 2: Creation, Performance, and Expression

**Students create, perform, and express through the discipline**

#### Performance Indicators

- Media Skills: Students choose multiple suitable media, tools, techniques, and processes, to create a variety of media art works. (MLR: B1)
- Exhibition: Students select, prepare, and help with presenting their works in the classroom, school, or other community location, and articulate an artistic justification for their selection. (MLR: B4)

### BH.MA.CPS - Graduation Standard 3: Creative Problem-Solving

**Students approach artistic problem solving using multiple solutions and the creative process.**

#### Performance Indicators

- Application of Creative Process: Students apply and analyze creative problem-solving and creative-thinking skills based on goals, audience, resources and presentation. (MLR: C1 and NCAS MA: Cr1-I)

### BH.MA.AC - Graduation Standard 4: Aesthetics and Criticism

**Students describe analyze, interpret, and evaluate art (dance, music, theatre, and visual arts).**

#### Performance Indicators

Students analyze and evaluate art forms:

- Describe, analyze, interpret, and evaluate media art forms by applying grade span appropriate arts concepts, vocabulary, skills, and processes. (MLR: D1 a.)
- Demonstrate an understanding of the difference between a personal opinion and an informed judgment. (MLR:D1c.)

### BH.MA.VAC - Graduation Standard 5: Visual and Performing Arts Connections

**Students understand the relationship among the arts, history and world culture; and they make connections among the arts and to other disciplines, to goal-setting, and to interpersonal interaction.**

#### Performance Indicators

- Interpret intent and meaning in artistic work: Students identify, describe, and analyze a media artwork based on personal, societal, historical, and/or cultural contexts. (NCAS, MA: Re8-1)
- Interpersonal Skills: Students demonstrate positive interpersonal skills and reflect on the impact of interpersonal skills on personal success in the arts. (MLR: E5)

## Music

### BH.M.DL - Graduation Standard 1: Discipline Literacy

**Students show literacy in the discipline by understanding and demonstrating concepts, skills, terminology, and processes.**

#### Performance Indicators

- Listening and Describing: Students listen to and compare elements of music, including pitch, rhythm, tempo, dynamics, form, timbre, texture, harmony, style, and/or compound meter. (MLR: A3)

### BH.M.CPE - Graduation Standard 2: Creation, Performance, and Expression

**Students create, perform, and express through the discipline**

#### Performance Indicators

- Composition: Students analyze and evaluate musical ideas expressed in their own composition or the composition of others. (MLR: B2)

### BH.M.CPS - Graduation Standard 3: Creative Problem-Solving

**Students approach artistic problem solving using multiple solutions and the creative process.**

#### Performance Indicators

- Application of Creative Process: Students apply and analyze creative problem-solving and creative-thinking skills to improve or vary their own work and/or the work of others. (MLR: C1)

#### BH.M.AC - Graduation Standard 4: Aesthetics & Criticism

**Students describe analyze, interpret, and evaluate art (dance, music, theatre, and visual arts).**

##### Performance Indicators

Students analyze and evaluate art forms:

- Demonstrate an understanding of the difference between a personal opinion and an informed judgment. (MLR: D1 c.)
- Research and explain how art and artists reflect and shape their time and culture. (MLR:D1 d.)

#### BH.M.VPC - Graduation Standard 5: Visual and Performing Arts Connections

**Students understand the relationship among the arts, history and world culture; and they make connections among the arts and to other disciplines, to goal-setting, and to interpersonal interaction.**

##### Performance Indicators

- The Arts & History & World Cultures: Students analyze the characteristics and purposes of products of the visual/performing arts to understand history and/or world cultures. (MLR: E1)
- Interpersonal Skills: Students demonstrate positive interpersonal skills and reflect on the impact of interpersonal skills on personal success in the arts. (MLR: E5)

### World Language

#### BH.WL.IM - Graduation Standard: Interpersonal Mode

**Students can engage in basic conversations, exchange information about various topics in both formal and informal settings.**

##### Performance Indicators

Students Consistently:

- Can express self in conversations on very familiar topics using a variety of words, phrases, simple sentences and questions that may have been highly practices. Initiates and sustains the conversation.
- Can negotiate meaning by self correcting and restating the question or prompt.
- Can communicate about self, others and everyday life.
- Can initiate, maintain and end a conversation to satisfy basic needs and/or handle a simple transaction.
- Can be understood by those accustomed to dealing with language learners.

#### BH.WL.IM.SP - Graduation Standard: Interpretive Mode

**Students can negotiate meaning from spoken language.**

##### Performance Indicators

Students Consistently:

- Can understand the main ideas and supporting details of conversations and presentations.
- Can comprehend paragraph-like discourse.
- Can guess meaning from context and make basic inferences about a source.

#### BH.WL.IMWL - Graduation Standard: Interpretive Mode

**Students can negotiate meaning from written language.**

Performance Indicators

Students Consistently:

- Can understand the main ideas and supporting details of a variety of written text
- Can recognize main ideas and key words in paragraph-like discourse.
- Can guess meaning from context and make basic inferences about a text.

**BH.WL.PM - Graduation Standard: Presentational Mode**

**Students can express in writing, information and ideas to an audience of readers, on a variety of topics.**

Performance Indicators

Students Consistently:

- Can express his/her own thoughts to describe and narrate in written presentations.
- Can write on a wide variety of familiar topics using sequencing and transition words to connect sentences.
- Can be understood by readers accustomed to language learners.

**BH.WL.PMOI - Graduation Standard: Presentational Mode**

**Students can express orally information and ideas to an audience of listeners, on a variety of topics.**

Performance Indicators

Students Consistently:

- Can express his/her own thoughts to describe and narrate in spoken presentations.
- Can present orally on a wide variety of familiar topics using sequencing and transition words to connect sentences.
- Can be understood by audiences accustomed to language learners.

**BH.WL.PMRPP - Graduation Standard: Presentational Mode**

**Students can demonstrate and understanding relationship between the practices and the perspectives of the culture studied.**

Performance Indicators

Students Consistently:

- Can identify differences in cultural practices among peoples that speak the same language.
- Can identify and compare differences in their native cultural practices and those of speakers of the target culture.

**BH.WL.PMPRPC - Graduation Standard: Presentational Mode**

**Students demonstrate and understand the relationship between the products and perspectives of the culture studied.**

Performance Indicators

Students Consistently:

- Can explain how political structure, history, literature, and/or visual/performing arts reflect the perspectives of a culture(s) in which the target language is spoken.