Proficiency-based High School Diploma Systems in Maine: Getting to Graduation (Supporting Students in High Schools Implementing Standards-based Education and Proficiency-based Graduation Requirements)

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Executive Summary

In the 127th Maine State Legislative Session, An Act to Implement Certain Recommendations of the Maine Proficiency Education Council (S.P. 660 - L.D. 1627) was passed into law as Chapter 489. This amended the chaptered law passed in 2012, An Act to Prepare Maine People for the Future Economy (S.P.439 - L.D.1422), requiring public school districts to implement proficiency-based high school diploma requirements and standards-based education systems.

Beginning in 2012, the Maine Legislature's Joint Standing Committee on Education and Cultural Affairs has annually requested that the Maine Education Policy Research Institute's (MEPRI) work plan include empirical research studies designed to compile data, examine progress and explore impacts regarding implementation of this state policy within school districts across the state. This work has furthered the understanding of perceptions in the field and implications of proficiency-based diploma policies within the state, national and global context as well as the implementation in local schools and school administrative units.

In 2017-2018, Phase VI of this ongoing research includes two separate research studies examining the impacts of implementing proficiency-based diploma systems within the immediate and wider contexts of public schooling in Maine. One study will utilize survey methodology to identify perceived levels of progress towards implementation of Maine's proficiency-based diploma policy, specifically considering assessment methods, reporting student achievement, intervention systems and district-level high school diploma requirements. In addition, a second study focused on case studies of high schools to examine the practices, challenges and facilitators as well as the perceptions of high school educators and administrators about meeting the needs of students and their district's requirements for earning a proficiency-based diploma. Through these studies, Phase VI research examines implementation of Maine's proficiency-based high school diploma policy with regard to the challenges and facilitators of meeting the needs of students, especially struggling students, as they work to demonstrate proficiency at the high school level. This report describes the updates to current related literature, methodology and findings from the case study research involving Maine high schools.

Findings from this case study research indicate that, as part of the school and district work to implement a proficiency-based system, all case study schools were establishing definitions of proficient, aligning curricula and assessments to common content area standards,
and building interventions to remediate with students struggling to demonstrate proficiency. Although specific practices, approaches and perceptions of this work varied among educators and across schools, diligent effort to create a transparent system that benefitted students was evident in all case study schools. Educators and administrators shared that challenges included uncertainty about state-level rules, defining proficient, needing resources to support all students, misalignment with standardized tests, and communication through grading practices. Also, participants in this study indicated that transition to a proficiency-based education system could raise expectations for lower performing students, offer greater professional collaboration, and provide more clarity regarding academic standards.
Proficiency-based High School Diploma Systems in Maine: Getting to Graduation
(Challenges and Facilitators of Supporting Students in High Schools Implementing Standards-based Education and Proficiency-based Graduation Requirements)

Erika Stump, Bernadette Doykos & Maria Rios Brache
at
Maine Education Policy Research Institute

Context: Proficiency-based Education Policy & Research in Maine

Standards-based and Proficiency-based Education Policy in Maine

Culminating standards-based work from earlier decades, the Maine Learning Results were adopted by the Maine Legislature as statewide K-12 education standards in 1997 with the passing of Resolve, Regarding Legislative Review of Chapter 131: Rules for Learning Results, a Major Substantive Rule of the Department of Education (H.P. 1093 - L.D. 1536). These standards, developed by Maine educators and educational leaders, included eight academic content areas as well as "Guiding Principles." The Guiding Principles reflected expectations of high school graduates to demonstrate civic engagement in addition to certain habits of work and mind. In 2011, Maine adopted the Common Core State Standards in Mathematics and English Language Arts as the state standards in these content areas while retaining the Maine Learning Results standards in other areas. Although state law and the Maine Constitution prohibit a mandatory statewide curriculum, the Maine Department of Education provide ongoing support for local efforts to align curricula and assessments to these state standards.

In May 2012, the 125th Maine State Legislature passed the chaptered law, An Act to Prepare Maine People for the Future Economy (S.P.439 - L.D.1422). This policy amends Maine's Title 20-A, Chapter 207-A, adding Subsection 4722-A which requires high school diplomas to be awarded based on demonstration of proficiency in standards, replacing exclusively time-based, credit-based graduation requirements. Initially, all public Maine school
districts were expected to implement this graduation policy by 2018. In the 127th Legislative Session, An Act to Implement Certain Recommendations of the Maine Proficiency Education Council (S.P. 660 - L.D. 1627) was passed into law as Chapter 489. This legislation amended the original 2012 proficiency-based law in several ways. Some of these changes included adaptation of the mandated timeline for implementation, definition of expectations of students with disabilities, explication of language regarding multiple pathways and opportunity to achieve proficiency, and allowing exception to the high school graduation requirements for students completing certain career and technical education (CTE) programs of study or credentials.

It is important to note what is addressed and what is not addressed in Maine's statute with regard to implementation of a proficiency-based diploma and standards-based education. Evidence from empirical research across the state as well as anecdotal evidence throughout the region and data pulled from public testimony on related bills in the Maine Legislature suggested that the state laws were frequently referenced by practitioners, administrators, education leaders and other stakeholders as synonymous with certain educational approaches, strategies or theories that include proficiency-based or standards-based practices. Supporting resources from the Maine Department of Education and other organizations working with schools have encouraged assorted approaches to learning to support policy implementation, such as student-centered, anytime anywhere, experiential, personalized, customized, and others. Various instructional and assessment practices have also been promoted or adopted at the local level, such as 4-point grading scale (versus 100-point or A-F grading scales), student-paced progress, blended or online learning, increased use of technology for instruction and/or data management, and others. These methods have been recommended or adopted with the intention of providing guidance and support for implementation of a proficiency-based diploma system, and most of these approaches explicitly endorse proficiency-based or competency-based education. Some schools and districts adopted these approaches in local policy and/or were required to engage in corresponding practices as part of grant-funded agreements or professional support contracts. However, these approaches and practices are not required within the state statute and are not implemented in all Maine school districts. Key elements of Maine's Revised Statute Title 20-A: Education related to proficiency-based high school graduation requirements and standards-based education are summarized below, usually maintaining the statute language with some edits for clarity. Statutory language of "shall" or "must" indicate mandated requirements while "may" indicates an
allowance but not a mandate for public schools (usually specified as secondary schools in this section), school administrative units or the Commissioner of Education.

A (secondary) school shall/must:

- Ensure sufficient opportunity and capacity through multiple pathways for all students to study and achieve proficiency in career and education development, English language arts, health education and physical education, mathematics, science and technology, social studies, visual and performing arts and world languages as well as the guiding principles.
- Provide a comprehensive program of instruction of at least two years in length, which must meet the requirements of the chapter and the parameters for essential instruction and graduation requirements. The program must include instruction for all students in career and education development, English language arts, health education and physical education, mathematics, science and technology, social studies, visual and performing arts and world languages.
- American history, government, citizenship and Maine studies must be taught, and instruction must be aligned with the parameters for essential instruction and graduation requirements.
- Certify that the student (earning a diploma) has demonstrated proficiency in meeting state standards in all content areas of the system of learning results and each of the guiding principles.
  - Exceptions are included for student populations relating to CTE, special education, veterans, waivers, and others.
- Certify that the student (earning a diploma) has engaged in educational experiences relating to English language arts, mathematics and science and technology in each year of the student's secondary schooling.
- Students must be allowed to gain proficiency through multiple pathways and demonstrate proficiency by presenting multiple types of evidence.

A school administrative unit shall/must:

- In addition to maintaining a high school transcript for each student, a school administrative unit shall certify each student's content area proficiency, which must be included with the student's permanent academic transcript.
• Award a high school diploma based on student demonstration of proficiency.

**The Commissioner of Education shall/must:**

• Develop rules to accomplish the purposes of this section [which] must...
  
  o Allow local flexibility and innovation in developing consistent graduation standards.
  
  o Enable school administrative units to continue current progress aligned with the phase-in of the standards and proficiency requirements.
  
  o Describe standard criteria for ensuring equal educational opportunities for students.
  
  o Address the appropriate placement of students in career and technical education programs while ensuring that all students be exposed to all the content areas of the system of learning results through the 10th year of their studies.
  
  o Identify the manner in which the opportunities for learning in multiple pathways of career and technical education programs may be used to satisfy certain components of the system of learning results.

• Prescribe by rule basic courses of study that are in alignment with the system of learning results.

• [The department shall] establish parameters for essential instruction in English language arts; mathematics; science and technology; social studies; career and education development; visual and performing arts; health, physical education and wellness; and world languages.

**The Commissioner of Education may:**

• In order to facilitate the transformation of the public education system to one in which standards are used to guide curriculum and instruction and in which student advancement and graduation are based on student demonstration of proficiency in meeting educational standards, the commissioner may waive or alter any provision of this Title [20-A] (exceptions noted).

• Prescribe by rule basic courses of study that include minimum time requirements and performance standards.
Research Examining Implementation of Maine's Proficiency-based Diploma Policy

Maine's education history reveals a strong tradition of standards-based education with ongoing, complex implementation occurring in schools and classrooms across the state. These efforts have been reinforced by substantial investment and support from various local business organizations and education reform agencies. This work was underscored by the proficiency-based high school diploma systems mandated in state legislation. To further understand these proficiency-based diploma policies within the state, national and global context as well as the implementation work in local schools and school administrative units, the Maine Legislature's Joint Standing Committee on Education and Cultural Affairs has requested that the Maine Education Policy Research Institute's (MEPRI) work plan for the past six years include studies designed to compile data, examine progress and explore impacts regarding implementation of this state policy. MEPRI is a nonpartisan research institute funded jointly by the Maine State Legislature and the University of Maine System, with a mandate to collect and analyze education information and perform targeted education research for the Legislature.

A summary of each phase of this ongoing study's findings is presented below. In addition, many of the reports from these earlier phases of research offer more in-depth summaries of national and state contexts and deeper reviews of related literature. Detailed evidence from this year's targeted case study research regarding challenges and facilitators to getting students to graduation in a proficiency-based high school as part of Phase VI work is discussed in the "Findings" sections of this report.

Phase I: Preliminary Implementation of Proficiency-based Diploma Systems in Maine (A School Level Analysis)

In 2012, MEPRI conducted an initial study that examined the preliminary development, costs and impacts of standards-based school programs being implemented in Maine. Nine public institutions, including those representing various configurations of grades PK-12, served as case studies in which this approach was being practiced in some or all classrooms.

This study revealed that Maine educators and educational leaders were working diligently to embrace and apply the underlying philosophies of standards-based education as well as build systems applicable to their local context. Institutions beyond the initial phase of shifting belief structures and school culture were grappling with the logistics of implementing some of the
changes they saw as necessary within curriculum, scheduling, staffing and reporting achievement.

Further discussion of the findings from Phase I of this study of Maine public institutions may be found in the report, Preliminary Implementation of Maine's Proficiency-Based Diploma Program, or available at <mepri.main.edu>.

**Phase II: Implementation of Proficiency-Based Diploma Systems in Maine**

*(A District Level Analysis)*

After sharing the findings and recommendations of Phase I with the Maine Legislature's Joint Standing Committee on Education and Cultural Affairs and in the publication of the report mentioned above, a second year of the study was commissioned in 2013 to focus on school districts that were in the process of systemically implementing S.P.439-L.D.1422. Phase II examined the systemic benefits and challenges of putting this state law into practice. Findings revealed that district leaders were working attentively to implement these policies with fidelity. District leaders also indicated that a key goal of their implementation was developing practices and policies that were beneficial to all students in their district even when practitioners were faced with challenges of creating common definitions, developing practical learning management systems and finding resources to support their work.

Further discussion of district implementation of the law examined in Phase II of this study may be found in the report, Implementation of a Proficiency-Based Diploma System in Maine: Phase II - District Level Analysis, available at <mepri.main.edu>.

**Phase III: Implementing Proficiency-Based Diploma Systems in Maine**

*(An Analysis of District-Level High School Graduation Policies)*

In 2014, the MDOE required public school districts to submit a Confirmation of Readiness or an Extension Application outlining the policies and practices in place and planned for implementation of a proficiency-based diploma system. Subsequently, the MDOE provided a response letter with feedback and recommended action to each district as well as conducted several in-person district visits. Maine's law S.P.439-L.D.1422 required students to demonstrate proficiency in eight content areas (English Language Arts, Mathematics, Science and Technology, Social Studies, Health Education and Physical Education, Visual and Performing
Arts, Career and Education Development as well as World Languages) in order to earn a high school diploma. This third phase of the MEPRI study focused on *high school graduation requirements* in the content areas of English Language Arts (ELA), Mathematics and Science. Many of the district policies and proposals were intended to eventually apply to all eight mandated content areas. However, ELA, Mathematics and Science were the areas with the most substantial level of implementation and established policy development within local districts at this point.

In Phase III of the study, a comprehensive examination of the application documents, practices, policies and standards of several case study districts provided insights into the development of local high school graduation policies aligned with Maine's proficiency-based diploma legislation. In addition, high school administrators and district leaders in case study districts were interviewed and discussed the continued impact of this state policy on their local district and institutions. Participants indicated that building a proficiency-based diploma system had encouraged more professional collaboration in institutions, improved transparency in communication about student achievement, and had inspired school improvement efforts in some districts. The data revealed that districts were working diligently to align PK-12 curricula and policies to their local standards as well as developing common language and expectations within the district. However, comparing the academic content standards and definitions of proficiency from various school districts across the state highlighted many practices and policies that were not common statewide. Implementing this state policy appeared to require substantial professional work. School and district administrators suggested that they wanted greater clarity and consistency from the state level with regard to the required components of the law. But, local stakeholders also adamantly supported the retention of local control over defining proficiency benchmarks and developing standards that were perceived as accessible and relevant to their student population.

Further discussion of high school graduation policies examined in Phase III of this study may be found in the report, *Proficiency-based Diploma Systems in Maine: Implementing District-level High School Graduation Policies (Phase III Technical Policy Report)*, available at <mepri.maine.edu>.
Phase IV: Implementing Proficiency-Based Diploma Systems in Maine
(A Longitudinal and Updated District Level Analysis)

Phase IV of this study collected data from qualitative interviews and document analysis in six case study school districts in 2015. Three of these districts had been involved in at least one year of Phase I-III of this study, allowing for exploration of ongoing implementation practices and comparing perceived challenges and benefits from initial implementation to later stages. School districts were still at various stages of implementation and utilizing proficiency benchmarks and language to describe content standards that were varied across the state yet increasingly common within a district. Findings from Phase IV suggested that school districts made great strides and were continuing work to improve interventions to support students who did not meet the standards. Where these proficiency-based diploma systems had been enacted, increased communication and strategies for remediation were reported as advancing student performance and contributing to an enhanced culture of learning. This work encompassed increased collaboration among teachers, families and leaders surrounding students' progress, and many educators spoke of the benefits of "breaking down the walls" of the teaching profession. School and district administrators described public relations and systems-wide strategies that facilitated communication within their organizations and the community at large as well as the challenges of implementing this state mandate.

Further discussion of impacts of implementation examined in Phase IV of this study may be found in the report, Proficiency-based High School Diploma Systems in Maine: Local Implementation of State Standards-based Policy, available at <mepri.main.edu>.

Phase V: Implementing Proficiency-Based Diploma Systems in Maine
(Implications for College and Career Access, Special Education, Career and Technical Education, and High School Graduation Standards)

In 2016-2017, Phase V of this study shifted from the general perceptions and practices of institutions and districts implementing proficiency-based high school diploma systems to the examination of the policy implications within key programs, contexts and populations. Document review and interviews were conducted with college admissions' personnel to gather data regarding alignment of proficiency-based diploma systems and college eligibility and entry requirements. In addition, leaders and representative personnel from and Maine businesses and
the U.S. military were interviewed to identify postsecondary career entry requirements and attributes of high quality workers. Another area of inquiry in this phase of the study included analysis of data from interviews with leaders and educators in Special Education to examine the perceived challenges, benefits and impacts of this diploma policy on students with identified disabilities and special education programming provided by Maine's public PK-12 school districts. In addition, qualitative case studies of a sample of Maine Career and Technical Education centers and regional vocational programs were conducted. Finally, a single school district case study was incorporated into this phase of the research to closely examine Maine public educators' and school administrators' interpretations and perceptions of establishing standards and defining proficiency levels in content areas and developing district-level policies for proficiency-based high school graduation policies.


Phase VI: Proficiency-based High School Diploma Systems in Maine: Getting to Graduation (Supporting Students in High Schools Implementing Standards-based Education and Proficiency-based Graduation Requirements)

In 2017-2018, Phase VI of this ongoing research includes two separate research studies examining the impacts of implementing proficiency-based diploma systems within the immediate and wider contexts of public schooling in Maine. One study will utilize survey methodology to identify perceived levels of progress towards implementation of Maine's proficiency-based diploma policy, specifically considering assessment methods, reporting student achievement, intervention systems and district-level high school diploma requirements. In addition, a second study focused on case studies of high schools to examine the practices, challenges and facilitators as well as the perceptions of high school educators and administrators.
about meeting the needs of students and their district's requirements for earning a proficiency-based diploma.

Therefore, Phase VI of this study examining implementation of Maine's proficiency-based high school diploma policy explores the challenges and facilitators to meeting the needs of students, especially struggling students, as they work to demonstrate proficiency at the high school level. This report describes the updates to current related literature, methodology and findings from the case study research involving high schools.

**Review of Literature**

As mentioned above, many of the reports from these earlier phases of this targeted research examining proficiency-based systems in Maine offer in-depth summaries of national and state contexts and reviews of literature. Although the related research literature and education environment has not changed substantially since the prior report was released last year in 2017, a few significant updates are noted below. Select literature providing insights to key themes specific this year's research is also discussed in the following subsections.

**Standards-based and Proficiency-based Education Policies in the United States**

Variation in implementation of standards-based education practices and policies is not a situation unique to Maine. Nationally, forty-two states and the District of Columbia currently have state policies adopting the Common Core State Standards (CCSS). However, identification of the exact number of states utilizing CCSS but not fully adopting them may vary depending on the level of revision or augmentation.

Although many schools and states are implementing the use of common standards, very few states have passed policies requiring school districts to revise *graduation* policies substantially. Some states have taken incremental measures to integrate standards-based approaches. Multiple states have adopted policy allowing flexibility in graduation standards so as to encourage proficiency-based or competency-based approaches, while other states are funding pilots or exploration of building such systems. Two states (NH & RI) have policies that require high schools to conduct proficiency-based assessment practices at the school or course level. New York has high school graduation requirements that are aligned with demonstrating
proficiency on the state assessments. Louisiana has multiple traditional pathways to earning a diploma that include demonstration of competency through unit (credit) completion as well as achievement on state assessments.

Only two states (Maine and Vermont) have laws requiring all public school administrative units to implement proficiency-based high school graduation requirements in the near future. Implementation of high school graduation requirements as well as certification of students' proficiency in content area and guiding principle state standards in Maine (primarily described in statute within Title 20-A, Chapter 207-A, Subchapter 3) is mandated to be partially in place for the high school graduating class of 2021, phasing in complete implementation by 2025. (Bills put forth the current 128th Second Legislative Session in Maine are proposing changes to timeline and scope of expectations, but remain pending at the time of writing this report.) Vermont's State Board of Education recently adopted a similar statewide policy, Education Quality Standards, requiring all public high schools’ "graduation requirements be rooted in demonstrations of student proficiency" in locally-determined standards including five content areas as well as "global citizenship" and "transferable skills" instead of seat-time (VDOE, 2018) for the graduating classes of 2020 and beyond. Vermont's legislature also passed a proficiency-based high school graduation statute indicating that schools must also ensure all students in grades 7-12 have a Personalized Learning Plan (16 V.S.A. §941) describing the individual student's pathway to attain a proficiency-based high school diploma. However, there are still time-based requirements for physical education classes and physical activity options.

Although many states are allowing or encouraging proficiency-based diploma policies and practices, there is a lack of empirical research examining statewide implementation of a high school graduation policy or evaluation studies examining the rigor of local standards across all districts in a state. This can partly be explained by the fact that only Maine and Vermont have proficiency-based high school graduation requirements as well as the various approaches, definitions and levels of implementation of related practice within and across the states.

High School Graduation as a Rite of Passage

Despite a relatively small pool of national empirical research relating to proficiency-based diploma systems, MEPRI is conducting ongoing, qualitative research examining perceptions of Maine students, families and educators as well as practices in schools and districts.
across the state. These studies have provided empirical data for the past six years. A recurring emergent theme within this multi-year data identified the importance of high school graduation as a significant event recognizing the growth of a community's children.

National and international research confirm that a common rite of passage is one signifying a life transition, such as childhood to adulthood (Markstrom et al., 1998). These moments frequently acknowledge a need for separation and change of status with the presence of key community elders (Delaney, 1995). Contemporary American society is largely devoid of formalized ceremony surrounding the passage to adulthood. One exception is high school graduation. Some ceremonial aspects of this occasion are highly formalized and remain consistent through generations. Although informal aspects of high school graduation celebrations vary among communities, cultures and families in the United States, these accompanying events are usually present and often encompass equally important traditions among peers and families.

The value of a high school diploma beyond certification of academic proficiency or post-secondary readiness is a critical component of understanding the role of graduation in many places, especially the United States. This cultural value of graduation is often much more age-based or socially-derived than related to academic achievement or scholarly work.

Adolescence has been described as a stage of breaking away from one’s childhood to prepare for adulthood, a period during which there are ever-present conflicting themes that the adolescent confronts (e.g. responsibility/irresponsibility, child-like ambitions/adult-like ambitions) in their social world (Glozah & Lawani, 2014).

Rites of passage are thereby considered important social moments to support and direct the adolescent during this transition (Van Gennep, 1960). As one of the few formal rites of passage still remaining in ceremony in modern American culture, the high school graduation and its related informal celebrations embody these aspects of transition for many students (Delaney, 1995).

With this lens, it is noteworthy to recognize the pressure and difficulty that has been reported by educators, administrators and parents in research regarding efforts to raise the bar for graduation. For many American students, a high school diploma does represent scholastic achievement and greater post-secondary opportunity. However, students in the United States also reported a disconnect between the academic expectations and participation in the graduation ceremony (Fall & Roberts, 2012). The challenges posed by this situation were also seen in
research examining Maine's proficiency-based high school diploma law: "This is a small town. If you live here, you don't want to be the one who didn't let a kid graduate. You don't want to make those enemies" (Stump, Doykos & Fallona, 2016, p.15). In this way, it may be significant to consider the social and cultural implications of graduation as an adolescent's rite of passage in addition to the proficiencies or academic skills implied or explicitly required in awarding a diploma.

Education Reform

Maine's history of education reform—including the educator-led development of "Maine's Common Core of Learning" plan in 1990 and the 1997 adoption of state standards Maine
Learning Results--continues with its proficiency-based high school diploma chaptered law, An Act to Prepare Maine People for the Future Economy (S.P.439 - L.D.1422), passed in 2012. In the past six years, numerous bills have been proposed to amend, withdraw or expand the legislation. Significant changes to the state statute were adopted in the 127th Legislative Session, An Act to Implement Certain Recommendations of the Maine Proficiency Education Council (S.P. 660 - L.D. 1627) as Chapter 489. These policies and the debates surrounding them reflect decades of the state's engagement in efforts to embrace standards-based education and related approaches to implementation. For a deeper look at the context of Maine's history of standards-based education reform, refer to MEPRI reports examining Maine's implementation of proficiency-based graduation systems from earlier phases of this research identified above.

Evidence from national literature suggests that local educators perceive multiple barriers to translating external standards with fidelity and academic rigor (Hill, 2001; Kober & Rentner, 2012). Also, variation in local environments and definitions (Scheopner Torres, Brett, & Cox, 2015) highlight the the complexity of scaling-up adoption of state and federal policies or reform models (Henry, Rose & Campbell, 2012) and contribute to the "mutual adaptation" (Berman, 1978; Berman & McLaughlin, 1976) of both the original policy and local interpretation. Within mutual adaptation, teachers and school administrators tend to change state/federal policies to meet the needs of their immediate contexts and facilitate students' progress towards meeting standards (Wong, 2011). Examination of the impacts felt by stakeholders in PK-12 public schools during implementation of a statewide policy with national foundations can provide
critical insight regarding policy adoption, effects of education reform as well as implications for classroom and systems practices.

While education reform often finds wide support in its theory and general goal to improve America's schools, practitioners cite challenges in implementation when "practical strategies are notably absent" and "efforts are likely to exacerbate other problems; for example, whether improvements in standards that come at the expense of equity or other interests are likely to generate later rounds of critiques, different commission reports, and still other proposals for reform" (Grubb & Oakes, 2007, p.6). In fact, it can be this frequent variation and turnover in reform approaches that is perceived as one of the greatest challenges in the education profession:

...constantly embrace politically attractive changes, producing prodigious amounts of reform at a pace inimical to effective implementation. As a result, these reforms do not significantly alter the nature of schooling, but they do manage to frustrate, confuse and finally alienate faculty (Hess, 1999, p.4).

In fact, this popularity of being a champion of change among funders and education stakeholders often can present a challenge for policymakers working with practitioners to support and improve public schooling.

One common goal of school reform is to offer America's diverse student population equal educational opportunities and realize equitable outcomes. One of the largest barriers to educational improvement cited in research literature is a lack of resources. Such obstacles were repeatedly noted by numerous participants in MEPRI's research with Maine educators and leaders working to implement the state's proficiency-based diploma policy. This challenge is often even cited within the goals of the reform itself, as exemplified in one of the National Center on Education and the Economy's benchmarks for success: "Giving the nation's disadvantaged students the resources they need to succeed against internationally benchmarked standards" (2007). Although resources are identified as prerequisites to success, it is regularly expected that schools and their students will execute subsequent recommendations even when such foundational conditions have not yet been met. Educators and school leaders repeatedly indicated in research that such situations of misalignment between theory and practice were deemed "distracting," "impractical" (Guthrie, 1986; Hallinger, 2010) and "idealistic" (Paige, 2006).
Still, the case for more rigorous standards and improved outcomes in K-12 schools is strongly supported by many stakeholders, including educators. The challenge for policymakers is one of multi-dimensional (Lindle, 1999) action: How much? When? What kind? Certainly, not every crack in the foundation of public education can be patched with one policy, so incremental policy making (Lindblom, 1959) is a common approach. Realities of politics, markets, and structure persist even in sustained efforts to implement education reforms based on practical elements of improvement (Elmore, 2000; Ladson-Billings, 1998). The complicated nature of attempts to reform complex systems, such as public education, increases the intricacy of these policy undertakings and makes the determination of their "success" even more challenging. However, continued attention to the barriers and facilitators perceived by educators and other key stakeholders invested in their children's schooling is a critical element of understanding the impacts of education reform and supporting work to improve all students' opportunities and outcomes.

**Methodology**

The sixth phase of MEPRI's research on this topic includes two separate studies examining the impacts of implementing proficiency-based diploma systems within the immediate and wider contexts of public schooling in Maine. One study, utilizing survey methodology, describes perceived levels of implementation while this report focuses on case studies of high schools. The purpose of this case study research is to examine the practices, challenges and facilitators of implementing a standards-based curriculum and proficiency-based diploma system, specifically with regard to supporting all students in their progression towards meeting the school district's requirements for graduation. Utilizing interviews, classroom observations and document analysis, this research explored the perceptions of high school educators, administrators and district stakeholders as they related to meeting the needs of students and their district's requirements for earning a proficiency-based diploma. This study was guided by the following research questions:

- What are the perceived facilitators and challenges of meeting the needs of students entering high schools, including students not on track with demonstrating proficiency in grade level standards?
• What are perceived as the necessary resources for developing a manageable, working standards-based curriculum, successful instructional strategies and an intervention system for struggling students at the high school level?
• What are the evident or reported resources and interventions currently available or in place to support struggling students at the high school level?
• How are high schools and school administrative units (districts) implementing Maine's proficiency-based diploma system: How is proficiency being defined? What changes (if any) have been adopted to implement proficiency-based graduation requirements?

Sample

For this study, multiple case study high schools were recruited for participation with emails and phone calls to district superintendents and school principals. The sample for recruitment purposefully excluded high schools that had previously participated in any of the earlier phases (2013-2017) of this research examining proficiency-based diploma systems in Maine so as to avoid redundant themes in findings and to expand the pool of participants. Participation required a one-day visit to the high school by two MEPRI researchers and involved qualitative interviews of educators, administrators, education staff and local stakeholders (parents, school board members, local college representatives, civic leaders, etc.). In addition, classroom observations were conducted to collect data on instructional practices.

It is significant to note that several high schools initially recruited declined to participate. A few superintendents indicated that work to implement this proficiency-based diploma policy was still in beginning stages, so they believed many of the interview questions would not be able to be answered at this point. It was also stated that some high schools were in critical, sensitive stages of implementation in which local policies had not yet been fully embraced or developed, so administrators did not want to further complicate the process with external questioning and observation. The recruitment process also coincided with the Maine Department of Education’s withdrawal of proposed rules. Two district leaders suggested that action at the state level had brought doubt to their staff about implementation and noted a limited level of local change or enactment of the policy at the high school level.
Three case studies thus served as the sample for this research. These three case study high schools were selected because they represented a range of levels of student achievement, geographic locale, enrollment size and student demographics. While each of the three case studies also represented varying levels of implementation (both through self-identification and researcher-identification), all of these high schools had, at the least, deliberately begun the process of preparing their current ninth grade students (graduating class of 2021) for a standards-based curriculum and proficiency-based reporting by which high school graduation would be determined.

Data Collection & Analysis

Following an examination of existing research and literature, an interview protocol (see Appendix A) was developed to address the following topics:

- Components and characteristics perceived as necessary for developing a manageable, working standards-based curriculum at the high school level. Identifying facilitators and barriers to implementing such a system in the local high school context.
- Components and characteristics perceived as necessary for developing an efficient, effective proficiency-based diploma system that benefits all students. Identifying facilitators and barriers to implementing such a system in the local high school context.
- Identifying practices, protocols and structures existing in their high school and district to develop a system of interventions to support students struggling to demonstrate proficiency on pace with attending high school for four years.
- Perceptions of how proficiency-based graduation policies may or may not affect their district's and the state's graduation rates.
- Perceptions of factors contributing to their district, school and teacher determination of whether or not a student has demonstrated proficiency.

In total, the data analyzed for this study represents 38 in-person interviews of small groups and individuals and 46 classroom observations. Interview subjects included professionals from three high schools in three different school districts: high school administrators, high school teachers (content area, special education, academic support), district administrators, high school guidance counselors, school nurses, and social workers. Other interview participants included parents of high school students, school board members, local college representatives, and civic
leaders. Classroom observations were conducted by visiting MEPRI researchers and involved a walk-through of approximately five minutes in length. An internally-developed protocol was utilized to input data regarding classroom set-up, instructional practices, student activity, student-educator ratios, and use of technology.

After all case study site visits had been conducted, researcher notes and provided documents were organized and analyzed to describe the practices, protocols and structures involved in implementation of each school's proficiency-based diploma system. Interview data regarding participants' perceptions was analyzed and examined across researchers for reliability in relation to emergent themes and themes in existing research. The MEPRI research team established key areas of focus as well as significant findings within all research data that were unique or divergent. The findings from these three case studies high schools examine the practices and perceptions regarding challenges and facilitators of implementing a standards-based curriculum and proficiency-based diploma systems. This study specifically focused on supports for students progressing towards high school graduation. Findings are discussed in this report in the section below.

**Findings**

All three case study high schools in this research indicated that their schools and districts were still in the process of implementing Maine's proficiency-based high school diploma policy. One school had adopted related approaches to grading, instruction and student progress for several years but identified numerous changes to their original practices. Another school identified in-depth adoption of proficiency-based practices and graduation policies just a few years ago and was currently examining development options. The third school had experienced multiple administrative changes at both the school and district level in the past several years, so it was reported that various reforms had been started and stopped while still in the early stages of implementation. All three districts had a proficiency-based high school graduation requirement in policy meeting the letter of the state law for at least the graduating class of 2021 and beyond.

This research examined participants' perceptions in interviews, school practices during observations as well as curricula and policies through document analysis. As part of the school and district work to implement a proficiency-based system, document analysis revealed that case
study schools were establishing methods for defining proficient, aligning curricula and assessments to common content area standards, as well as building interventions to remediate with students struggling to demonstrate proficiency. Observations indicated that lead classroom teachers worked individually for the most part, utilizing various types of instructional strategies that engaged students most often in independent work but also included small and large group configurations. Educators, administrators and other local stakeholders shared their insights regarding implementation of proficiency-based education in small group and individual interviews. Participants indicated that challenges of implementation included uncertainty about state-level rules, defining proficient, resources to support all students, misalignment with standardized tests, and communication through grading practices. Educators also expressed beliefs that proficiency-based education could raise expectations for lower performing students, offer greater professional collaboration, and provide more clarity regarding academic standards. Further discussion of these findings is explored in the subsections below.

**Instructional Practice & Student Activity**

Although observations indicated that specific instructional practices, pedagogical approaches and perceptions of this work varied among educators and across schools, diligent effort to create a transparent system that benefitted students was evident in all case study schools. Among the 46 observations, all classes included less than 26 students and the most common (47%) range included 21-25 students. The vast majority of classes (88%) were led by one teacher; when additional educational staff was present, it was in the role of a one-on-one educational technician supporting an individual student.

Lead classroom teachers often held various instructional roles during the observation time (approximately five minutes). Teachers were most commonly observed working with individual students (40%), while lecture (17%) and facilitating discussion (17%) were the next most common instructional roles.
Frequently, students were engaged in independent work (53%) or whole class instructional grouping (23%). However, approximately a quarter (24%) of observations reflected students working in pairs, small groups or larger groups. The type of work in which students were engaged was most often a task or assignment that was identical for every student in the class (70%). About one quarter (24%) of observations indicated that the students were working on assignments or tasks that had been personalized, and a few observations (6%) reflected that the students had been offered differentiated tasks based on interest, prior achievement or special education plans. It should be noted that researchers did not engage in direct analysis or questioning regarding assigned work and only documented observed practices. Therefore, it is probable that some tasks had been modified or offered with accommodations required by students eligible for special education services that were not necessarily observable in the classroom walkthrough.
Defining Proficient

A theme that has been continually prevalent in this study and for all six years of the MEPRI research is the challenge and uncertainty surrounding the process to explicitly define proficiency. Practitioners strongly advocated for retaining "local control" over key aspects of implementing education policy while also reflecting concern about varied approaches and multiple interpretations of external mandates. The state law requiring a transition to proficiency-based high school diplomas focuses on graduation requirements set in district policy but does not prescribe criteria for local districts and schools as they set content area benchmarks and minimum student achievement levels. The state policy indicates that a high school diploma must only be awarded to students who "demonstrate proficiency in meeting state standards," including content area standards and Guiding Principles within the Maine Learning Results, with some exceptions for specific populations (CTE students, veterans, etc.). However, the standard a student must demonstrate to meet graduation requirements is specified only in guiding documents to be at a "high school level." Therefore, it is expected that the local school
administrative unit will establish the exact determination of proficiency required in each content area for students to earn a high school diploma.

In some districts, selection of minimum content area standards required for graduation had been designated to the content area teachers. An Art teacher said, "As each department, we were given the opportunity to make our own standards. Our administrators didn't dictate...We spent years debating whether to use the MLRs [Maine Learning Results] or the National Cores." The number of content area standards within many accepted documents, such as the Common Core State Standards (CCSS), were deemed "overwhelming" by educators. For example, in CCSS mathematics, there are 385 standards K-12, including 156 standards for high school level. This means that if one school week was dedicated to each high school level standard, it would take approximately 4.5 academic years to cover all the high school mathematics standards. In fact, even the CCSS document organizes the standards into groups called "clusters" and "domains." Many guiding resources encourage adoption of a selection of "power standards" or "high leverage" standards instead of requiring students to demonstrate proficiency in every individual standard verbatim. A teacher described, "Power standards are identified by department for each course. The taxonomy level of the skill is included through wordsmithing the standards." Similarly, most national standards include benchmarks for skills and content knowledge at certain grade levels. However, various stakeholders perceived the highest standards as more than necessary for a high school graduation baseline. Again for example, the CCSS mathematics high school level standards include Trigonometry as well as Statistics and Probability. Yet, some district-level graduation policies omitted these standards from their minimum target benchmarks required to earn a high school diploma. In other situations, these higher-level standards were included in the graduation requirements, but mastery was not expected. A teacher explained, "None of us could meet those standards, so we identified 2.5 as proficient [for graduation] instead of a 3."

Defining proficiency at the course level also varied in each case study but was usually still dependent upon traditional age-based progressions through grade level (i.e. 9th grade English) or skill level (i.e. Algebra II) within semester or year-long classes. A teacher noted, "As the MLRs are written, they don't really align with course progressions." Many participants indicated that aligning standards to assessments and curriculum was a "heavy lift" involving "many years of work" and "a lot of professional time." A teacher noted,
There are so many indicators for each standard. I don't think we've decided how many of these indicators students need to hit in order to be deemed proficient. There are too many to say all of them. That is something that needs to be worked out and causes frustration. Despite these challenges, all three case studies had implemented some proficiency-based district policies and standards-based reporting for ninth grade students, and two case studies had proficiency-based practices in place for upper grades as well.

Variation also existed across schools in this research when identifying the score or grade representing proficient. In one school, proficient was described as at least "a 2.0 to a 2.5 depending upon the teacher." In another school, students had to meet three criteria to demonstrate proficiency for graduation requirements: (1) earn a score of 3.0 or above in course assessments, (2) earn a trended (over time) average in the course of 2.8* or above, and (3) earn a trended average of 2.2* or above across all high school courses. In this case, some teachers described the determination of proficiency as "out of my hands" and "the algorithm is in [the software program], not done by the teacher." In another school, students had to earn an average of 3.0 or above on all standards to pass a course as well as earning a 75* or above on select assessments and the course to meet graduation requirements. (*The exact number in these descriptions has been changed to maintain confidentiality.)

Most participants in this and previous phases of this research supported the concept of local control (versus state or federal control) over significant decisions affecting their students. However, many stakeholders appeared uneasy about the variation of Maine's high school graduation requirements, both within their local school district and among districts across the state. A civic leader noted, "Definitions of proficiency certainly seem to vary district to district." This variation especially concerned professionals working in roles focused on post-secondary preparation. A guidance counselor said,

In the world of scholarships and college applications, we have to remember that this is not a [local] audience or state audience. This is a national audience. And to be honest, there isn't a nationally-normed proficiency system yet, so we have to provide something for those national applications to compare to other applicants.

One focus group interview included a representative from a nearby college that also used competency-based grading systems. The university representative said,
It seems that proficiency means something different at this high school than at [our college] ...It appears to be essentially grade inflation if a student either fails or gets a 3...There doesn't seem to be any establishment of inter-rater reliability. We do competency-based education in our online learning platform, but there is nationally established inter-rater reliability. Without discipline, defining proficiency can become a scary prospect with serious implications.

Yet, high school teachers and administrators also emphasized the importance of connecting the work to the local context. One teacher said, "We have local control. We make proficiency what works for our students and our community." In this way, participants were dealing with a dichotomy of retaining local control over key aspects of public education, such as high school graduation requirements, while looking for improved, consistent guidance and models to implement best practice.

Graduation Rates and Raising the Bar

The majority of participants in this study suggested that implementing proficiency-based high school graduation requirements would not significantly change their district's graduation rates. There were multiple reasons offered for this perception, including (a) increased monitoring and supports within intervention systems to keep students on track, (b) new practices that reduced consequences for inadequate work habits, (c) defining proficiency in alignment with current practice, and (d) the social pressure to graduate students even when they were not meeting expectations. However, some educators did believe that proficiency-based education "could potentially raise the bar" while adding that "it's not doing that yet." A teacher said, "It's very possible that our graduation rate will go down because we've upped our rigor. This system has more integrity."

Intervention Systems

Participants in this study and previous years' research examining Maine's implementation of proficiency-based diploma systems shared the belief that supports for struggling students were increasing. They believed these improved interventions could provide needed remediation to students struggling with higher standards implemented in a proficiency-based system, thereby reducing any change to the district's graduation rate. Educators credited development of more robust intervention systems with increased awareness about students’ progress and well-
being. One educator noted, "There will not be a lower graduation rate because there will be early indicators of where kids are not proficient." There was reported and observed evidence in our research of established structures and practices to remediate academic failures, track student behavioral issues and offer social-emotional supports. Most commonly, targeted remediation was provided to help students complete assignments to a level demonstrating proficiency on specific content area standards. A teacher described, "It doesn't raise the bar, but it makes us proactive about [helping] failing students earlier." Within these three case study high schools, the following remediation practices or interventions were evident:

- Dedicated courses for identified students not meeting standards (both for students eligible for special education services and students not eligible for special education services).
- Student advisory programs offering social-emotional support as well as academic guidance and strategies (i.e. Building Assets, Reducing Risks (BARR), Student Assistance Teams (SAT), Re-inventing Schools Coalition (RISC) Approach, and others).
- General study halls replaced with content area labs (most commonly mathematics and English language arts) providing targeted support with content area teacher or educational technician for assigned or drop-in students.
- Whole-school academic assistance time including opportunities or requirements for students to meet with content area teachers for remediation or participate in enrichment opportunities if all standards had been met.
- After school academic assistance programs, transportation dependent.
- Supplemental assignments and independent online tasks to remediate targeted skills and knowledge.
- Differentiated classroom support by lead teacher and/or educational technician.
- Proficiency-based course progression: students enrolled in leveled classes based on demonstration of standards mastery, most commonly mathematics.
- Repeat course enrollment in classes where students failed to demonstrate proficiency in a vast majority of standards.
- Academic programming during summer or academic year vacations targeting completion of work to demonstrate required standards.
• Opportunity to re-take assessments or revise work until it demonstrated student's proficiency in standards.

Some teachers did not believe the proficiency-based diploma policy was the impetus for this expanded student support, however: "Before it was kids who didn't have the credits to graduate; now it is kids who don't demonstrate proficiency. That pool of kids hasn’t changed much." An intervention teacher reiterated this sentiment: "The system isn't really new. We do the same interventions, the same things with the same group of kids who are not graduating in the traditional system. There are not really new kids in our support systems as a result of proficiency-based education." It should be noted that Maine's proficiency-based diploma policy was passed into state law in the same year (2012) that Title 20-A, Sect. 4710 mandated the following enactment:

By the school year that begins in the fall of 2012 all school administrative units shall develop and implement a system of interventions for kindergarten to grade 12 that provide each student who is not progressing toward meeting the content standards of the parameters for essential instruction and graduation requirements with different learning experiences or assistance to achieve the standard. The interventions must be specific, timely and based upon ongoing formative assessments that continuously monitor student progress [2009, c. 313, §10 (NEW).]

Further explication of interventions systems was also included in the Maine Unified Special Education Regulations (Chapter 101) in "General Education Intervention" (Section III) and "Eligibility Criteria and Procedures for Determination" (Section VII). Therefore, in cases where a school’s intervention system has seen greater development, it cannot be attributed exclusively to one policy.

Habits of Work

Some educators believed that certain approaches to implementing proficiency-based education lowered expectations, specifically with regard to habits of work. An administrator described, "We may have a higher graduation rate, because if they're not doing well, we give them the assistance they need to get a diploma. But it can become hand-holding; some students become lazy. They don't have these systems monitoring them in college or a job." Teachers in multiple schools echoed concerns with trying to enact reform measures that allowed students to work at their own pace, removed negative consequences for handing in assignments beyond a
due date or provided continued opportunity for students to revise and "re-do" work until it met standards at the level of proficient or above. One teacher said, "Proficiency-based education is a grade inflator. There is a never-ending deadline." Another teacher noted, "I don't think their GPA is accurate because they have re-takes, and we are missing any habits of work." High schools had implemented some of these reform approaches to proficiency-based education, even though they are not required by law, but many schools were now changing some of their practices. A teacher explained:

We had no deadline practice, but there was a lot of paperwork. Keeping track of students' progress was hard. Now we have tightened up: there are deadlines for finishing work and submitting grades. We found without deadlines, students were getting too far behind to graduate in a reasonable number of years.

Responding to feedback from educators, students, families and the community, two of the three case study schools had recently returned to "teacher-paced" instruction, explicit due dates for work completion and graded habits of work. A civic leader said, "A reality in proficiency-based education is a level of pacing. It is necessary to define exactly the expectations. There are deadlines in life." A teacher described the process:

Our challenge as a school is that we started to do something and then we stopped doing it and now we're doing it again...There's inconsistency in the belief system in the school. Belief, buy in and truly understanding. There are still questions. That old thing of flying the plane while you're repairing it...I think it's unfortunate for students in the middle of that. They're guinea pigs and they're asking questions we don't have the answers to.

Although all case study schools had adopted a proficiency-based graduation requirement for at least the class of 2021 and beyond, not all schools had clearly defined how habits of work would figure into those graduation requirements. Various strategies had been piloted or implemented by some teachers or whole schools in these case studies, but lacking common support for one approach had meant that many stakeholders believed such reforms were not likely to be adopted as part of a more rigorous graduation requirement.

Standards-based Graduation Requirements

One practice in which some participants believed proficiency-based diploma systems could increase expectations was aligning standards to high school graduation requirements. An Art teacher said, "They won't meet all the standards just by creating. They have to analyze,
present, etc. And I think that means they have to show more." Another teacher indicated, "Proficiency-based education improves student learning because kids will actually have to learn stuff, not just spit out for one test." In fact, some teachers were concerned about such higher standards: "I think that our standards are set too high. I think they are set to go to a high, high level liberal arts college experience. I think that's an unrealistic expectation for a majority of students." However, other teachers described their school's process of aligning content area standards to maintain current status instead of raising the bar or encouraging innovation: "We look at what we've done in the past and how the standards fit, where the gaps are. We changed things a little bit, but mostly just tied standards to what we've always done." A History teacher said, "We generally fell on the belief that this is our curriculum, and we're going to fit the [standards] in with our curriculum." Similar concerns were shared when discussing alternative pathways for students to demonstrate proficiency or pursue interests not directly connected to content standards. A guidance counselor said, "It's hard to know what supports are needed to give students credit for a semester abroad, CTE, internships. The goal was to offer more alternatives to traditional courses, but proficiency-based grading makes it harder."

Cultural Expectations

A common perception in this research regarding graduation rates was that the pressures from local communities and external accountability could prevent schools and teachers from making any changes that resulted in lower graduation rates. A teacher noted, "When they pulled the [proficiency-based] grades for honor roll, no freshman had made high honor roll, so now we're going to change it back...They are not going to say 35% of you do not make it and cannot graduate." A superintendent said, "I still have to pay attention to the graduation rate. The goal is for remediation rates and graduation rates to go up." A school administrator shared, I don't think schools will allow proficiency-based [policies] to change their graduation rate. There would be too much backlash from parents, community, administration and even the state. We'll create a system that doesn't change that. Both teachers and administrators admitted that the reality of awarding credit, identifying proficiency or determining if a student met graduation requirements could include flexibility and exceptions. A teacher said, "It's still a negotiation with parents and administration when a kid is not meeting standards. Which standards do you hold hard on and which do you decide don't need to be met for that student?" Another teacher echoed, "There is a learning curve with parents and
administration support for holding fast to standards when students don't meet. If that support exists, it will be more rigorous. But some decisions may still be made to let it slide." One case study school had worked deliberately with their community to implement proficiency-based practices and policies. The superintendent noted that support from families and civic leaders was crucial to having local policies approved: "Our definition of proficient has to have a path to graduation that our community is going to embrace. I'm not going to die on that hill…You need to keep the community on your side to do the things you want in the district." Therefore, it was generally the belief of participants in this study that high school graduation rates would not vary significantly due to increased supports for students who were failing in combination with pressures to maintain current practices.

Standardized Testing versus Proficiency-based Education

This study specifically explored participants' perceptions regarding the relationship between student performance on standardized tests (such as the mandated annual state assessments) and demonstration of proficiency in local standards-based education curricula. All three case studies acknowledged that Maine students demonstrated a significant gap between eighth grade state assessment performance and graduation rates. A gap between recent eleventh grade state assessment performance and local proficiency rates was also noted by two of the case studies. In all cases, students were much more likely to demonstrate proficiency on local, classroom assessments even when scoring below proficient in standardized, on-demand assessments.

School and district administrators from the case studies in this research confirmed the common understanding that student performance on standardized assessments was a significant piece of data. School performance on annual state assessments was considered in federal accountability measures, state-level report cards and often discussed in local board meetings and media outlets. Due to the role standardized tests assumed, most participants in this study agreed that "the test results are a community issue, like it or not."

Prior research highlighted the gap between proficiency rates on Maine's standardized annual assessment and high school graduation rates. Less than half (45%) of Maine's high school graduates scored at the level of proficient or above in both mathematics and reading state assessments in 2010 and 2011 (Silvernail, Sloan, Paul & Linet, 2014). Administrators in this
current case study research suggested that such a trend could be generally exemplified in their recent population of high school graduates as well. One principal said, "We are struggling to understand and deal with our low test scores."

Although not all case study high schools had lower than state average test scores, the misalignment between the philosophies and practices embraced in some proficiency-based education approaches and skills required to perform well on standardized tests was commonly raised by participants in this research. Two essential beliefs were reflected: 1) local stakeholders valued classroom work and assessments more than external standardized tests, especially the annual state assessment; 2) proficiency-based education reform approaches encouraged practices that did not develop the skills of on-demand, one-time test taking. As a teacher said, "What standardized testing is measuring doesn't always align with what educational priorities we have in our district."

Maine's state policy requiring proficiency-based graduation requirements also explicitly mandates that schools must provide "multiple pathways...for students to reach proficiency" (Sec. 1. 20-A MRSA §4511, sub-§3, ¶J) and students "must be allowed to demonstrate proficiency by presenting multiple types of evidence" (Sec. 2. 20-A MRSA §4722-A). This evidence certainly may include on-demand test results but may not be exclusively based on such performance. A teacher said, "We want kids to do the best they can but don't want them to have just one shot. It's a progression...they can supplement or re-do or average with other things." Another teacher noted, "When we had student-paced learning, kids definitely wouldn't choose to take a timed test. Even now that we've gotten more to teacher-paced instead of student-paced, few teachers give kids a timed test with no retakes." Multiple educators in these case study high schools indicated that they were working to develop systems and classroom practices that provided more than one opportunity for students if initial attempts did not meet the required level of skill or knowledge to be identified as proficient.

It was reported by participants that embracing the practice of multiple opportunities reduced the emphasis on teaching explicit skills to succeed in timed, on-demand tasks. "Preparing for the A.P. exam is really the only time our students are directly taught strategies for taking timed tests," said a school principal. Most case study schools did utilize other on-demand tests, such as NWEA or specific exams related to determining eligibility for special education services. However, participants described these as "very different tests" often given in a "more
comfortable classroom setting" that "didn't have high stakes for scoring above a national norm." Locally-developed classroom tests were usually not high stakes. A teacher noted, "In our proficiency system, midterms and finals are worth so little because of the re-do policy. So kids don't take these tests, like the SAT, seriously." Teachers admitted that this meant students "don't really see any one-time test as high stakes." Another teacher described,

**Proficiency-based education doesn't marry well with high stakes testing.** Kids in this system don't get much high stakes competition like tests or deadlines. It's a skill, you have to practice and learn strategies. We don't really teach them any of that.

Many teachers and administrators in this study agreed that their district's emphasis was "on our local standards, not external tests" and believed that contributed to the evident gap between student's performance on state assessments and graduation rates.

While educators and leaders acknowledged the significance of external assessments, many participants readily indicated that they did not value these tests as much as classroom work. A teacher said, "Standardized tests are not aligned with our approach to higher order thinking." Other educators noted that state assessment data was not always available for use in a manner they found helpful: "It's hard to respond to changing tests, data returned too late for current year instructional practice changes." With local standards work, teachers said they had timely and relevant information: "I feel like I'm critically examining things if they fail a standard...You take some time to analyze the things they're not getting and fix that...I think that has made me a better teacher." Yet, other teachers also recognized that on-demand testing was a skill still commonly in place in college classrooms, job training programs and online learning platforms. A guidance counselor said, "There is a value in good standardized testing protocols, but culturally here it hasn't been a priority. It has been undermined. And scores tank when it's optional."

Maine's proficiency policies require school districts to develop systems in which "student advancement and graduation are based on student demonstration of proficiency in meeting educational standards." However, observations and evidence from educator interviews indicated that student advancement through lessons, units, and grade levels based on demonstration of proficiency was not being practiced in all schools, even those with thoroughly developed implementation practices. Student advancement was often based on age, time, course progressions and maintenance of peer groupings. "We don't really hold kids back anymore,"
said one teacher. Student proficiency levels were documented and utilized to inform course selection or assessments, but in many cases students and instruction continued to "advance." Participants believed this was important to note when analyzing grade-level test scores. "There are absolutely kids moving from tenth to eleventh grade who have not mastered the tenth grade standards. In fact, we get students in tenth grade that are reading at a sixth grade level. We don't tell a junior who is reading at a sixth grade level to take the sixth grade test. We make him take the eleventh grade test because he's enrolled in eleventh grade."

There were mixed beliefs about the value of external standardized assessments or the skills of on-demand testing in this study. However, most participants recognized the significance of external federal or state accountability measures and the common practice of on-demand testing in post-secondary learning situations. Many educators highlighted the misalignment between proficiency-based education approaches that encouraged multiple opportunities, on-going support structures, trending grading systems, flexible deadlines and student-paced progress with accountability measures using one-time, on-demand standardized tests students had to take without direct, immediate support. A teacher noted, "There one foot in the new system and one foot in the traditional system. It's a struggle for everybody."

Conclusions

Focusing exclusively on the aspects of local practice and policy that are mandated in state statute, teachers and administrators participating in this research expressed some common perceptions regarding Maine's proficiency-based diploma law. When discussing local enactment of the state policy, participants often had difficulty separating local actions that were not required by law from those that were direct consequences of the law. As mentioned in the introductory context section of this report, this state proficiency-based policy actually has a rather limited scope in terms of mandating instructional practice. The related legislation applied amendments to the state's statutes regarding education. The amended sections of statute focus primarily on PK-12 standards-based system development and proficiency-based high school graduation requirements. Other than requiring that students be allowed to demonstrate proficiency through "multiple pathways" using multiple types of evidence, there is minimal statutory direction for implementation methods, instructional strategies, classroom practice or school culture. However,
these elements of education certainly contribute to the specifics of how a school and educator would interpret and enact this policy. Therefore, perceptions of local reform efforts or implementation approaches were inevitably intertwined with participants’ responses to the state policy.

There was common concern from numerous stakeholders in these case studies regarding the level of variation in definitions and benchmarks delineating proficiency levels required for awarding a high school diploma. Most educators shared a willingness and capacity to develop common standards and definitions of proficient within their district even when this process encompassed substantial work and professional time. Further guidance and workable models were often requested though. However, many stakeholders predicted that if state, federal or external organizations mandated a one-size-fits-all expectation for these critical decisions, such as defining proficiency for graduation requirements, the result would not fit the needs of their students or community. Existing or earlier-introduced models of proficiency-based education systems often included components that were criticized or considered not fully relevant to the local context by participants in this research.

In fact, several educators and administrators identified the misalignment between external (state, federal or support organizations) and internal (local school, district or community) priorities as the fundamental factor in wanting to maintain local control over definitions and requirements for awarding a high school diploma. For many communities, high school graduation was a significant rite of passage for its young people. Often coinciding with becoming 18-years-old, earning a diploma was a key step into adulthood for many youth: military service, employment, marriage, independent living, etc. At times, internal definitions of graduation had very little to do with academic proficiency, skills or knowledge and much more to do with demonstration of work ethic, passage of time and age. To develop a system in which a child could potentially put in effort for thirteen or fourteen years without being awarded a diploma was seen as unreasonable by some educators.

Even when educators and school leaders believed in the idea of awarding a diploma only to students who had demonstrated proficiency at a more rigorous level in academic content and habits of work, many participants indicated that they could not convince their communities or families to support such a system. Therefore, they believed implementation of a proficiency-based diploma system would be developed locally so as to not change graduation rates, either by
aligning standards and requirements with current practice and/or providing structures, supports
and flexibility for students who were struggling. Most often, the greatest challenge to
implementing a proficiency-based graduation system in these contexts was agreement on the
baseline standards or benchmarks for a diploma that would be equitably applied to all students:
What should be the minimum required knowledge and skills of every high school graduate?

These case studies revealed widespread understanding that post-secondary education was
increasingly important for earning a living wage and pursuing chosen interests and lifestyles.
There was also widespread assertion supporting the foundational importance of public K-12
education and the role of schools in improving the lives of students, including the diversity of
needs and contributions of the community's children. This role was perceived as critical to the
well-being of students, but it was also seen as a significant challenge. As often reflected in
national and international policy implementation research, the beliefs and theories underlying the
policy had prevalent support from the many stakeholders. However, the devil is in the details. In
many schools and communities, finding success in implementation of a proficiency-based
diploma policy highlighted existing barriers for lower performing students and rarely offered
additional resources or strategies for alleviating these complex, deeply-rooted issues.

Despite such challenges, educators appeared to work diligently in consideration of the
state policy while retaining best practices that had demonstrated success. Instructional practices
observed in this study exemplified this situation. Our classroom observations usually reflected
teachers in a traditional role of being a solitary adult in the room and engaged in a mix of
instructional methods, including strategies that had stood the test of time (lecture, individual
work with students) as well as application of best practice established in recent decades
(discussion facilitation models, writing workshops, learning centers) and reform-minded
approaches (personalized learning, differentiated tasks, standards-based assessment). In this way,
participants sometimes varied in their perceptions of certain aspects of the law or confidence in
specific aspects of an approach, but the vast majority of participants in this study remained
steadfast in their belief that schools played an essential role in the lives and well-being of the
children in their communities.
Considerations for Policy and Practice

An Act to Implement Certain Recommendations of the Maine Proficiency Education Council (S.P. 660 - L.D. 1627) was passed into law as Chapter 489 in 2016. This legislation revised and added to amendments to Maine's Revised Statute Title 20-A: Education passed in 2012 within An Act to Prepare Maine People for the Future Economy (S.P.439 - L.D.1422), requiring Maine's public school districts to implement proficiency-based diplomas and standards-based education systems. Evidence from the current year's research reflected implications of this state policy within the context of three case study high schools in Maine. Findings revealed a need for greater clarity and alignment in communication about the policies and practices that constitute a proficiency-based diploma system, especially with regard to student advancement and graduation requirements. Additionally, it was evident that in order to align expectations of academic performance with the social significance of the high school diploma, many schools (especially schools serving significant populations of students living in poverty or eligible for special education services or English language learners or in geographic isolation) would need much greater levels of support and resource allocation to change current graduation requirements in a meaningful manner. The following considerations for policy and practice reflect this and previous year's research with regard to Maine's current proficiency-based education state statutory requirements.

A. The State, researchers in the field, policymakers and education leaders should provide support and guidance to increase consistency and clarity among all stakeholders with regard to distinctions and relationships between practices and policies required by state law and practices or approaches recommended as possible implementation models.

B. The State should provide schools and school districts expanded guidance in developing common definitions and greater consistency in standards and proficiency levels. This guidance should be based on consensus of policymakers and practitioners.

C. Maine Revised Statute, Title 20-A requires public SAUs and 60% publicly funded schools to develop K-12 education systems in which "student advancement and graduation are based on student demonstration of proficiency in meeting educational standards." It is recommended that schools and districts be provided with resources,
technical assistance and professional support to align existing student advancement practices (currently based on age, time, grade progressions or peer groupings in most cases) with the statutory requirements in a manner that improves student educational outcomes. Otherwise, considerations of amendment to statutory language should allow for increased alignment between local advancement practices and graduation requirements determined by SAUs.

D. The State should take a greater leadership role in helping school districts develop and implement learning management systems to support standards-based reporting and proficiency-based systems. This leadership role should include technical and financial assistance where needed in implementing technology-based local learning management systems that will align with state-level reporting requirements.

E. Policymakers should give consideration to establishing an expanded procedure and structure for monitoring school districts' and the department's development of the proficiency-based diploma systems as outlined in law.

F. The State and policymakers in collaboration with experts in the field should facilitate opportunities for differentiated, job-embedded professional development that targets the varied needs of schools along the continuum of the level of implementation of a standards-based, proficiency-based system.

G. Further research should be conducted to examine the prevalence of misalignment between annual state assessments and school's educational pedagogy as well as the implications of such a misalignment on a state accountability system that relies on standardized tests as the primary measure of school performance.

It is important to support public schools, school districts and their communities with guidance and resources to develop key components their education system, achieve greater alignment between practice and policy in the local context, and improve communication among stakeholders to facilitate successful policy implementation. In turn, these steps and dedication actions should increase performance and efficiency as well as improve learning opportunities for Maine's children.
References


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Appendix A: Interview Protocol

This empirical study using qualitative research methodology was approved by the University of Southern Maine's Institutional Review Board (IRB) for the Protection of Human Subjects in Research. The following protocol was reviewed as part of that approval process:

ADMINISTRATIVE or EDUCATOR INTERVIEW GUIDE / FOCUS GROUP PROTOCOL

School/district Administrators, District Administrators, Union Leaders, Technology Administrators, Community Leaders, School/district Board Members, Teacher Leaders, Classroom Teachers, etc.

School/district Name: __________________________  Date: __________  Time: __________

Researchers: Read this introduction verbatim:

Thank you for your willingness to talk with me today. I am ______________, a researcher working with MEPRI, an education policy research center at USM. We’re here because the Education Committee of the state legislature commissioned a study to better understand implementation of proficiency-based education policies in Maine. And I’d like to talk to you about your role and experience with developing proficiency-based diploma systems at your school/district. We’re doing interviews with administrators, teachers and staff at all of our case study high schools to better understand what characterizes the challenges, needs and opportunities of a Proficiency-based Diploma System in Maine, specifically examining the systems and supports needed to get all students to proficiency at the high school level. The information from these interviews will be pulled together with other interviews, observations, and documents to get a sense of what is happening in your high school and other high schools in the state.

Your participation is voluntary. You may choose to leave the focus group or refrain from answering questions at any time. This interview will be confidential. I will not identify you by name in the report or any public discussion of the findings. We request that you do your part to maintain confidentiality for all the participants by not sharing the information shared within this interview outside of the interview setting. However, please note that we cannot guarantee that all participants will maintain confidentiality after this interview. I have provided a printed copy of the full consent information. Please read that document. Let me know if you have any questions.

[wait for participants to read document]

The interview should last about 40 minutes. Would you mind if I record the interview? It will help me stay focused on our conversation, and it will ensure I have an accurate record of what we discussed.

Additional contextual details if participants inquire: This study was commissioned by the legislative Committee on Education and Cultural Affairs. The task of the study is to compile a sixth-year of
data on the goals, needs and successes of implementing a Proficiency-based Diploma System in Maine, as directed in LD 1627. LD1627 requires that high school/district students earn a proficiency-based (as opposed to time- or credit-based) diploma by 2021. Findings of this study will be reported to the Education Committee early in 2018 and a public report of the study will be available the following spring. The purpose of the study is to document (NOT evaluate) some of the work being done to implement Proficiency-based Diploma Systems in Maine.

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**Note:** Questions asked of people in different roles may vary.

Background/Opening, ask each participant individually: To start, could you tell me about your role in the school/district/district?

Role / Content Area, Grade Level Focus: _____________________ Years at School: ____

**PROFICIENCY-BASED STUDENT PROGRESS**

1. How is it determined that a student is proficient on a particular standard? Is this common throughout the school across courses and teachers?

2. What are a student's pathways/opportunities/consequences if he/she does not demonstrate proficiency?

   Possible Probe Questions:
   - What is the student's next step if he/she does not demonstrate proficiency on a formative assessment? What is the educator's next step if a student does not demonstrate proficiency on a formative assessment?
   - What is the student's next step if he/she does not demonstrate proficiency on a summative assessment? What is the educator's next step if a student does not demonstrate proficiency on a summative assessment?
   - What is the student's next step if she/he demonstrates proficiency on all standards for a content area or learning level? What is the educator's or administrator's next step if a student demonstrates proficiency on all standards for a content area or learning level?

3. Do teachers implement deadlines at your school/district for submission of completed work? If so, what is the consequence for not meeting deadlines? If not, what is the next step if a student fails to submit assigned work?

   1. Has your school/classroom developed standards for guiding principles/work habits/21st century skills? If so, how is it determined when a student is proficient in these? Is this common throughout the school/district?
4. How are students placed in courses? (E.g. grade level, age, prior performance, prerequisite course completion, entrance exam, etc.)

SYSTEMS OF INTERVENTION

5. How are students in your school identified for academic support beyond the regular classroom?

6. Identify the academic support resources available to all students (not special education services for only eligible students), e.g. content labs, writing center, before/after school learning, peer tutoring.

2. Does the resource include instruction or assistance from a certified teacher? an educational technician? a student? a volunteer?

3. Is the resource content-specific?

4. Is the resource available within or outside the school day? If outside, is transportation provided?

7. What approximate percentage of students in your school utilize these resources?

8. What approximate percentage of students in your school are not on track to demonstrate proficiency in all required standards in their regular course of instruction (not extended day, time or additional years to graduate)?

9. If entering 9th graders are not on track, what interventions are required?

10. What are the common pathways of students who have not demonstrated proficiency in all required content areas and guiding principles by their fourth year of high school?

ACCOUNTABILITY

1. Do you believe student performance has improved due to the implementation of a proficiency-based diploma system? Identify some examples that support your belief.

2. Will your school and district transition to proficiency-based diploma requirements lower graduation rates? Why or why not?

3. How does student progress affect the perception and expectations of your school/district/di from the school/district board? students' families? local community? larger public (region, state, post-secondary institutions)?

4. What policies or structures are in place in your school/district to address liability issues if a student doesn't meet proficiency expectations by age twenty?
5. What opportunities, structures and supports are in place in your school/district for students who meet proficiency expectations in less than the years of school/districting they are expected to attend?

UNDERSTANDING WHAT IS MEANT BY A PROFICIENCY-BASED DIPLOMA SYSTEM (PBDS)

6. Describe your vision of PBDS successfully implemented.

   Possible Probe Questions:
   - How would you define Standards Based Education? Is it distinct from or synonymous with Proficiency Based Learning?
   - What is the role of the teacher?
   - How do students gain knowledge, learn new skills, improve upon prior knowledge, etc.?
   - How is student work assessed? What is the purpose of assessment?
   - How are work habits, enthusiasm for learning, collaboration and organization developed in students?
   - How do students progress through their learning goals and the education system?
   - What role do learning experiences outside of the traditional school hours and building play in all students' education?
   - How is equity maintained?

7. Identify specific barriers you perceive in scheduling, school/district policy, transportation, and/or fiscal resources that may prevent a proficiency-based progression system to occur as you have described.

8. What is needed (from your school, community, district, state, etc.) for your district to successfully implement PBDS?

   Possible Probe Questions:
   - Predicting what your district will look like five years from now, do you think these steps to implement PBDS will be further developed, maintained or abandoned?

CURRICULUM & INSTRUCTION

9. How are curriculum and instruction different from prior to implementing PBDS? What supporting structures and/or barriers have been a part of the change?

   Possible Probe Questions:
• What past practices have been commonly discontinued? What new practices have been commonly implemented?

• Do educators use external curriculum materials, such as textbooks, packaged units, online learning units/programs, worksheets, etc.? If so, do you feel there has been an increase or decrease in these externally developed, standardized materials in curriculum and instruction since adopting PBDS?

• What role has technology played in providing instruction and curriculum to students?

5. Can students access courses or learning experiences outside of the school/district's offerings, e.g. online courses, college courses, advanced courses not offered by the school, content areas not offered by the school, internships, etc.? How are these course/learning experiences aligned with defined standards? How are students assessed and/or determined to be "proficient" in these courses/learning experiences?

10. Are all courses in your high school aligned to common standards for demonstration for proficiency-based graduation requirements? If not all, your department? your courses?

11. What is the implementation timeline for your district to adopt approved proficiency-based high school graduation requirements for all students in all required subject areas?

LEARNING MANAGEMENT SYSTEM

12. How is student assessment data recorded, shared, accessed, and managed in your school and district?

• Does your school/district use online services or software programs to manage student work or student assessment data? If so, please identify the provider or program. What are the strengths and weaknesses of this program/service? Would you recommend it for use in other schools implementing PBDS?

• Is student assessment information coordinated with additional student records (IEPs, attendance, discipline, state/national assessment scores, etc.)?

13. What are the supports and barriers/hurdles to development and/or maintenance of a robust, effective learning management system?

PROFESSIONAL DEVELOPMENT

14. Have the opportunities and focus of professional learning time that is required or contractually reimbursed changed for your school/district since adopting PBDS?

15. Does the professional development work regarding PBDS involve all educators and administrative leaders? If not, who is involved?

16. Does your school/district receive coaching or assistance from external intermediaries (e.g. school/district coach, professional collaborations, etc.)?
ROLE OF THE COMMUNITY

17. How has your greater community supported the school/district adoption to PBDS? What barriers/hurdles has it presented?

   Possible Probe Questions:
   ○ How has the greater community (local professionals, businesses, other educational institutions, higher education institutions, etc.) helped to provide extended day or multiple pathways learning opportunities to your students?
   ○ How does a school/district communicate a student's achievements and proficiency levels to parents/families? Is this appropriate and fully developed? If not, how could it be improved?
   ○ How does a school/district communicate a student's achievements and proficiency levels to other external agencies (colleges, military, transferring institution)? Is this appropriate and fully developed? If not, how could it be improved?

18. How does the community respond when students are not meeting proficiency?

Thank you for your time.