3-1-2016

Proficiency-based High School Diploma Systems in Maine: Local Implementation of State Standards-based Policy, Phase IV Policy Report

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March 2016

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Executive Summary

In May 2012, the 125th Maine Legislature passed the chaptered law *An Act to Prepare Maine People for the Future Economy* (S.P.439 - L.D.1422). Within this standards-based education mandate, Statute 4722-A describes the required components of a proficiency-based high school diploma. Since the passage of this law, the Maine Legislature' Joint Standing Committee on Education and Cultural Affairs has commissioned the Maine Education Policy Research Institute to conduct an ongoing study that examines the impacts, challenges and facilitators within implementation of this state policy.

In this current year, Phase IV, researchers collected new data from qualitative interviews and document analysis in six case study school districts in Maine, representing a range of demographics, geographic regions and implementation stages. 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. Findings suggested that Maine's proficiency-based high school diploma mandate had mobilized PK-12 collaborative professional work, but there was an evident need for even greater professional time for full systemic implementation. School districts were utilizing proficiency benchmarks and language to describe content standards that were varied across the state yet increasingly common within a district.

Many districts were engaged in work to enact their beliefs through proficiency-based practices and had encountered some challenges. These challenges included selecting an appropriate grading scale, developing a standards-based reporting system, assessing student work-study habits (in addition to content standards), securing public support for changes and understanding postsecondary expectations in a manner that best served all students while remaining compliant with state and federal reporting requirements. Alignment (or lack thereof) of local beliefs and practices with policies and postsecondary expectations was seen as a key component of implementation success. It was unclear to some stakeholders whether certain changes to traditional practices were required by law or only encouraged by reform agencies and district leaders. School and district leaders spoke of work to more clearly delineate the multiple pathways available to students in their K-12 journey to demonstrate proficiency while expressing

concern that inequitable access prevented the credentialing of some non-traditional opportunities in their current systems.

From the vast majority of stakeholders, a shared belief in holding students to specified standards was evident. School districts had made great strides and were continuing work to improve interventions to support students who were not meeting the standards. Where these 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. Clearly, despite the challenges, Maine educators, students and communities were working diligently to implement the state standards-based education law mandating proficiency-based high school graduation policies.

Proficiency-based High School Diploma Systems in Maine: Local Implementation of State Standards-based Policy

Maine Education Policy Research Institute

Context

In 1997, the *Maine Learning Results* were adopted by the Maine Legislature as statewide K-12 education standards. These standards, developed by Maine educators and educational leaders, included eight academic content areas as well as "Guiding Principles" that reflect civic engagement, work-study habits and other related standards. Districts began aligning curriculum, local assessments and professional development to these standards when they were introduced. The standards were updated ten years later, and legislation was passed requiring the annual state assessments to reflect students' proficiency levels in Mathematics, reading, and Science. At the same time, the *Maine Learning Results* were formally integrated within state policies related to school funding and accountability measures.

Although a statewide attempt to require a common local assessment system based on the *Maine Learning Results* standards ended unsuccessfully in 2007, practitioners had dedicated significant time discussing standards with students as well as building standards-based curricula and assessments (Miller, 2001; Silvernail, Stump, Fallona & Gunn, 2013; Stump & Silvernail, 2014). In 2011, Maine adopted the Common Core State Standards in Mathematics and English Language Arts while continuing to encourage local curriculum and assessment alignment to the state-developed *Maine Learning Results* in remaining areas.

In May 2012, the 125th Maine Legislature passed the chaptered law *An Act to Prepare Maine People for the Future Economy* (S.P.439 - L.D.1422). Within this mandate, Statute 4722-A describes the required components of the proficiency-based diploma, which all public Maine school districts were expected to incorporate by 2018. In 2015, the Maine Department of Education (MDOE) granted extensions postponing the deadline for full implementation into 2020 for many public school districts in the state. In the 127th Legislative Session, the Joint Standing Committee on Education and Cultural Affairs put forward a bill (LD 1627) proposing to amend the original law to require students of the class of 2021 to demonstrate proficiency in Mathematics, Science, Social Studies, English Language Arts and the Guiding Principles to earn a high school diploma and phase in one additional content area over the next four years

culminating in full implementation by 2025. (The Maine Legislature was still considering this bill at the time of this report's publication.)

This history reveals a strong tradition of standards-based education in Maine with on-going, complex implementation--occurring in schools and classrooms--that has been recently underscored with the mandated proficiency-based high school diploma systems. In support of this law and the implementation work in local school districts, 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 four years include an ongoing study designed to compile data, examine progress and explore impacts regarding implementation of this state policy within local schools and school districts across the state. 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, and detailed evidence from this year's Phase IV is discussed in the "Findings" section 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 <u>school</u> programs being implemented in Maine. Nine public schools, 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. Schools 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 schools may be found in the report, *Preliminary Implementation of Maine's Proficiency-Based Diploma Program,* or available at <www.usm.maine.edu/cepare>.

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 <www.usm.maine.edu/cepare>.

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 and plans to conduct district visits. Maine's law S.P.439-L.D.1422 requires 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 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 schools. Participants indicated that building a proficiency-based diploma system had encouraged more professional collaboration in schools, 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 <www.usm.maine.edu/cepare>.

Phase IV: Implementing Proficiency-Based Diploma Systems in Maine

Phase IV of this study collected new data from qualitative interviews and document analysis in six case study districts. 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 suggested that Maine's proficiency-based high school diploma mandate had mobilized PK-12 collaborative professional work, but there was an evident need for even greater professional time for full systemic implementation. Many districts were engaged in

work to enact their beliefs through proficiency-based practices and had encountered some challenges. These challenges included selecting an appropriate grading scale, developing a standards-based reporting system, assessing student work-study habits (in addition to content standards), securing public support for changes and understanding postsecondary expectations in a manner that best served all students while remaining compliant with state and federal reporting requirements. Alignment (or lack thereof) of local beliefs and practices with policies and postsecondary expectations was seen as a key component of implementation success. It was unclear to some stakeholders whether certain changes to traditional practices were required by law or only encouraged by reform agencies and district leaders. School and district leaders spoke of work to more clearly delineate the multiple pathways available to students in their K-12 journey to demonstrate proficiency while expressing concern that inequitable access prevented the credentialing of some non-traditional opportunities in their current systems. From the vast majority of stakeholders, a shared belief in holding students to specified standards was evident.

In combination, the findings from Phase IV of this study 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 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. Specifics of research findings from this Phase IV of the study are discussed in more depth in the "Findings" section below.

Summary of Phases I-IV

In Phases I-IV, parents, school board members, educators and administrators (school and district level) were interviewed. Phase I was conducted just following passage of *An Act to Prepare Maine People for the Future Economy* (S.P.439 - L.D.1422) in 2012. In this initial phase, students were also included in interviews and 105 classroom observations were conducted using an internally developed implementation level and instructional practices protocol. The next year, in Phase II, local business and civic leaders, school law experts, and college admissions administrators were interviewed. Phase III incorporated targeted examination of district-level

high school graduation policies as well as interviews. This past year, Phase IV revisited research questions from initial phases as schools and districts have progressed with the implementation of the state policy. A total of 302 interviews have been conducted to date, involving over 700 individuals.

This four-year sample included seventeen districts that represent a range of demographics and varied progress towards implementation of a proficiency-based diploma system. Districts from urban, suburban and rural communities, as identified by the National Center for Education Statistics (NCES), were included. (Note: Exact numerical descriptive data is rounded to maintain requested confidentiality of districts.) The 2015-2016 rate of students eligible for free or reduced-price lunch, as identified by the MDOE in these case study districts ranged from 5% to 70%. Enrollment in these case study districts also varied, from approximately 200 students to 3,800 students. High schools within these districts had enrollments from less than 80 to over 1,000 students. District enrollment size is designated as "large" (over 3,000 students), "medium" (2,000 to 3,000 students), "small" (1,000 to 1,999 students), or "very small" (less than 1,000 students). The sample of case study districts involved in Phases I-IV of this ongoing study is also described below in Table 1.

Table 1. Case Studies - 2015-16 Descriptive School District Data (MDOE & NCES)

DISTRICT	FRPL	Enrollment	NCES Locale
District 1	70%	Small	Rural: Distant
District 2	70%	Very Small	Rural: Distant
District 3	65%	Very Small	Rural: Distant
District 5	55%	Large	City: Small
District 6	55%	Large	City: Small
District 4	50%	Medium	Rural: Distant
District 7	50%	Medium	Town: Distant
District 8	50%	Small	Rural: Fringe
District 9	45%	Small	Rural: Fringe
District 10	40%	Large	Rural: Distant
District 11	40%	Very Small	Rural: Remote
District 12	35%	Medium	Rural: Distant
District 13	35%	Medium	Rural: Fringe
District 14	30%	Medium	Suburb: Small
District 15	25%	Medium	Suburb: Midsize
District 16	10%	Small	Suburb: Midsize
District 17	5%	Medium	Rural: Fringe

Review of Literature

Since No Child Left Behind was signed into law in 2001, many school districts across the United States have worked to implement standards-based education. Researchers have documented the challenge of developing common standards (Kober & Rentner, 2012) and incorporating the necessary reforms for students to meet the expected standards (Wong, 2011). In addition, the literature reveals the challenges in translating external standards with the intended fidelity of common standards (Hill, 2001) and the complexity of scaling-up adoption (Henry, Rose & Campbell, 2012). Variation in local environments and definitions (Scheopner Torres, Brett, & Cox, 2015) has contributed to the "mutual adaptation" (Berman, 1978; McLaughlin, 1976) of the original policy and local implementation. This adaptive practice reflects a common tendency among local, micro-system actors (e.g., teachers and school administrators) to transform external, macro-system (state or federal) policies to meet the needs of their immediate contexts. For example, the local school board in one community may decide students have to demonstrate foundational fluency in Spanish using the National Spanish Exam to exhibit proficiency in world language standards, while another local school board may approve the use of a local, teacher-developed assessment testing fluency.

Nationally, forty states have fully adopted the Common Core State Standards (CCSS), which identify content area skills and knowledge students should be able to demonstrate in Mathematics and English Language Arts so as to be college and career ready by the completion of high school. Correspondingly, a number of national evaluations of CCSS have examined the implementation and impact of standards based education on students' outcomes. The findings suggest that many states have varied definitions of proficiency and dissimilar standards (Carmichael et al., 2010; Jennings & Bearak, 2014; Lee, Liu, Amo & Wang, 2014; Phillips, 2016; Porter, Polikoff & Smithson, 2009). Even comparable, nationally recognized assessments often have different cut scores assigned to specific proficiency levels (Doorey & Polikoff, 2016). For example, a cross-examination revealed that the grade eight assessment designation of "proficient" by ACT Aspire and Smarter Balanced (SBAC) were equivalent to the National Assessment of Educational Progress (NAEP) designation of "partially proficient" while the Partnership for Assessment of Readiness for College and Careers (PARCC) assessment was equivalent to the NAEP in Mathematics but misaligned in English Language Arts (Phillips,

2016). Similarly, research examining the validity of certain textbooks with regard to their alignment with CCSS (usually Mathematics) suggests that the level of alignment, rigor and content fluctuates by text and even by lesson (Polikoff, 2015; Schmidt, Houang, & Cogan, 2002). These findings highlight the variation in implementation of standards-based education, and suggest that, despite the core goals, individual approaches to this reform differ in significant ways.

Despite evidence of statewide variations, this study reflected that the work in Maine to implement the proficiency-based diploma system resulted in more common practices within individual districts. Key components of this work included collective, embedded professional time to work on developing locally common standards-based curricula and assessments as well as robust intervention systems for students who were not meeting standards. Existing research suggests that collaborative professional development can result in improved student achievement (Desimone, 2009; Maine Commission, 2015; Wei et al., 2010), and a recent study by Harvard University found that a "marker of successful [Common Core] implementation was more professional development days" and was associated with "statistically significant higher student performance" (Kane et al., 2016, p.3). Scaling up is a complex task, an ongoing process of professional and community efforts to mobilize, enact and align local, state, and federal beliefs, practices and policies. Maine and many other states, as well as nations, are working diligently through this process with many lessons to learn from each other.

A lack of common operational definitions among participants and researchers may complicate the attempt to draw causal conclusions in related literature as well as local efforts to analyze internal data or implement with fidelity. However, it is evident that the interrelated and contextual nature of policy implementation, especially in public schools, must be recognized in order to better understand the needed resources to deal with pre-existing circumstances, intended and unintended impacts as well as potential benefits (Honig, 2006; Young & Lewis, 2015). While evidence from Maine supports national literature emphasizing that changes must be systemic to be implemented with fidelity (Chrispeels & Gonzalez, 2006; Noell & Gansle, 2009; Stump & Silvernail, 2014), the context of schooling cumulatively informs students' real experiences across their classrooms, schools, districts and communities, each of which work concurrently to put these reforms into practice.

The diversity observed in implementation processes is influenced by many factors, including, geographic place, student demographics, community resources, enrollment levels, grade configurations as well as existing practice, capacity for organizational change, workforce supply and other factors often found to contribute to student achievement and school performance. Although these variations present challenges for replicating policy implementation as intended by lawmakers in every district throughout the state, it also reflects the important unique characteristics of individual communities. Maine has honored this diversity within its respect for local control over how each district enacts these laws within their specific communities. This, too, presents challenges as well as benefits.

A review of literature revealed that balancing realities of educators and children with the intentions of policymakers and leaders is an ongoing, incremental process. In the local, state, national and global contexts, constant work integrates mobilization of beliefs as well as enacting practices and aligning these aspects with local and external policies. Maine's proficiency-based diploma law is an example of this process in motion. This report highlights some of the common and distinctive impacts of implementing *An Act To Prepare Maine People for the Future Economy* as it relates to Maine public school districts.

Methodology

The fourth phase of this ongoing research was a qualitative study examining the impacts of implementing proficiency-based diploma systems within six school districts from across the state. Three questions guided this research:

1. How do Maine public school and school district educators and administrators perceive the challenges and facilitators of implementing the state's mandated proficiency-based diploma system as described in *An Act To Prepare Maine People for the Future Economy*?

2. How do Maine public school and school district educators and administrators perceive the impacts of implementing the state's mandated proficiency-based diploma system as described in *An Act To Prepare Maine People for the Future Economy* on management systems and structures, fiscal allocations, school climate, instruction, as well as curriculum and assessment?

3. How are Maine public school districts defining proficiency and developing local PK-12 proficiency-based diploma policies?

The following is a description of the sample of districts as well as the data collection and analyses processes used to explore these questions.

Sample

In Phase IV, researchers collected qualitative and descriptive data in six public school districts, including three districts involved in the study for the first time in the 2015-16 academic year and three districts involved in previous phases of the research. These districts represented a range of demographics (e.g., student enrollment, geographic region, percentage of students on free and reduced lunch). Districts from urban, suburban and rural communities, as identified by the National Center for Education Statistics (NCES), were included.

This phase of the study included 45 focus group or individual interviews with district and school professionals (administrators, teachers, guidance counselors, instructional coaches, and technology coordinators) as well as parents and school board members. Participants were asked to share their perceptions regarding the impacts, benefits and challenges of implementing a standards-based education curriculum and developing a proficiency-based diploma system as mandated in *An Act to Prepare Maine People for the Future Economy* (S.P.439 - L.D.1422). In

addition, relevant documents and district demographic data from the MDOE and the NCES were reviewed.

All case study districts in Phase IV had been implementing some aspects of a proficiency-based education system for at least the past few years, but each district received an implementation extension from MDOE until at least 2020. Thus, many of the districts had standards-based systems in place for the high school graduating class of 2018 as initially required in S.P.439 - L.D.1422. However, some of the districts were still working to develop local policies regarding key components of proficiency-based high school diploma requirements, such as building course pathways that have common minimum required standards and designating minimum proficiency scores.

Conceptual Framework

To inform the ongoing work of Maine school districts implementing proficiency-based diploma systems and state policymakers' efforts to respond to stakeholders' needs, we have developed a conceptual model as a framework of education policy implementation (see Figure 1) based on existing theory and empirical data from this four-year study. This model may be used to provide a common language across stakeholders and policymakers as well as identifying key components for examining education policy implementation.

Figure 1. Conceptual Framework of Proficiency-based Education Policy Implementation
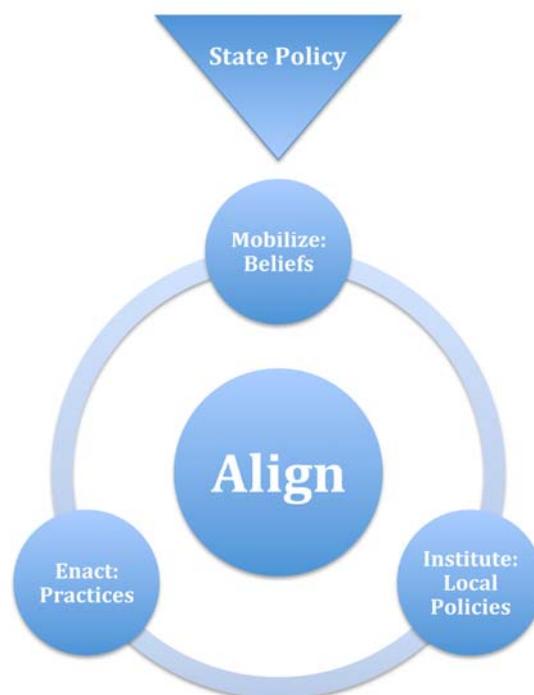
Our work with data from the case study schools and districts in Maine offers analysis of the local-level implementation of a state-level policy. To accomplish this, the implementation of a statewide proficiency-based high school diploma policy was studied from the standpoint of students, parents, educators and district leaders and as it was put into practice in classrooms and school districts.

Acknowledging local capacity and variability as key components of the policy implementation process requires them to be duly examined. In addition, this model offers a common language for continued analysis of related and future education practices and policy implementation. With this perspective and analysis of findings from Phase I-III of this study, we identified a path of implementation in which **state policy mobilized beliefs** that were then **enacted within school and district practices** then **instituted as local policies**. In addition, **alignment** between policies, beliefs, and practices is acknowledged in the model as well. In this way, our data suggested that the state policy was an impetus for many educators and leaders to examine their beliefs and attempt to improve their local practices and policies. This process involved critical awareness of the level of alignment among these components that could either facilitate or impede implementation efforts.

A key distinguishing feature of this model is that it is based on empirical data gathered within Maine from four years of this ongoing study and emphasizes the central role of local educators, schools and districts. This empirical model can help to build a common language and clarify existing contexts, thereby contributing to a greater understanding of how practitioners are implementing policy and why certain barriers may exist. Using the components of this model to guide analysis and discussion, the following sections of this report describe the findings and recommendations regarding the examination of the facilitators and challenges in implementing Maine's proficiency-based diploma system policy.

Four years of data surrounding how Maine educators are implementing the 2012 legislation, *An Act to Prepare Maine People for the Future Economy* (S.P.439 - L.D.1422), have shown that educators and all participants engaged in extensive work. While there are commonalities and variation across the districts, deliberate efforts to understand the law and implement local practices that best serve all students were evident in every community. Analysis

of evidence from classroom observations, document review and qualitative interviews revealed that districts go through common stages of implementation to mobilize, enact, institute and align their beliefs, practices and policies. Common themes in the findings as well as supporting empirical evidence are shared in the sections below.

Data Collection & Analysis

Case study methodology included document review conducted with collected materials outlining current and proposed local district high school graduation policies, curricula, implementation timelines, grade reporting systems, course pathway progressions, and academic support systems from all case study districts. In addition, the districts' initial and any revised Confirmation of Readiness or Extension Applications submitted to MDOE were reviewed. The forty-five voluntary focus groups and individual interviews were conducted at school sites by a team of MEPRI researchers.

Then, a review of related literature was completed to examine theories and empirical studies regarding standards-based education reform, implementation of the Common Core State Standards, local interpretation and implementation of state policy, competency-based and proficiency-based education approaches as well as alignment of curriculum materials and instruction practices to standards.

Multiple researchers analyzed the empirical data and literature for dominant themes, trends and local policy implementation practices among the six case study districts. Continued challenges and benefits of implementing this state policy and proficiency-based education approach that were expressed by participants across the four years of this ongoing study were also noted. Researchers confirmed that the *Conceptual Framework of Proficiency-based Education Policy Implementation* reflected the findings of this fourth phase of the study utilized to guide analysis as well as Phases I-III. Cross-case and targeted single case data was examined. Experts in the field validated themes and findings identified by researchers.

The findings and evidence from Phase IV of this study examining the impacts of proficiency-based education policy implementation in Maine as they relate to the enduring conceptual framework are presented in the section below.

Findings

Mobilize: Beliefs

The state-level education policy, *An Act to Prepare Maine People for the Future Economy* (S.P.439 - L.D.1422), mandating implementation of a standards-based education system and proficiency-based high school diploma requirements had clearly mobilized change and increased examination of long-held beliefs in Maine's public school districts. Across case study participants, many stakeholders agreed that the expectation that all students meet a common standard to graduate from high school had inspired educators, leaders, parents and community members to take a closer look at practices and attitudes regarding school climate, student failure and professional collaboration. While this examination resulted in varied levels of change in practice, the state policy was frequently given credit for motivating more deliberate consideration of current traditions.

A Culture of Learning

It was evident from our case studies that most educators believed that implementing a proficiency-based system required a **school culture in which all students were academically supported and challenged as learners**. A district administrator said that admitting school culture needed to change was the biggest challenge to implementing a proficiency-based system, "We are a high performing district. Lots of us thought, 'We are already doing the right thing. Look at our successes.' It took some work, it is taking some work, to make everyone see that we can do better by our struggling students." A high school leader in the same district said, "We're in the position of having a competitive school profile on the postsecondary receiving market. Our students are successful already. Well, the vast majority of them." But both administrators and educators in that district agreed that developing a standards-based system in which student performance not meeting proficiency was promptly identified and addressed highlighted the district's need to better support students who were not meeting standards, even if they were not "the vast majority." A school leader said, "This law has given us a sense of urgency about this work. We know that a culture of learning is the foundation of success. That culture was created here many decades ago." Another teacher from that district indicated that the culture was in place, but they needed to "put structures in place for identifying learning needs that made communications happen that had probably never happened at the high school level before, and

then just kept consistent messaging around student support and beliefs and making kids successful for their own individual selves. I think that was uncommon at our high school." This deliberate work included "lots of follow-up conversations and work behind the scenes to support students. Then, we put pathways for students who were struggling."

This impetus was shared in other case study districts as well, but it was more likely to be described as a substantial challenge when a greater portion of the student population required interventions to meet the established standards. One district administrator said, "We have about 25% of our students identified as needing special education services, most of them are not on grade level. We will need more teachers, more physical space, more time to meet their needs." Again, this state policy had appeared to mobilize "a lot of really purposeful conversations, sometimes difficult conversations, but good, ongoing conversations" about meeting the needs of students. The belief that all students should meet common minimum standards was shared by many people in all our case study districts, but it was evident that implementing the necessary practices and upholding this belief was going to take a substantial shift in the school and learning culture in some districts. One educator said, "In this district, all kids graduate unless there is a big problem. There is not support for sticking to such a policy." Another teacher agreed, "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."

Therefore, some districts were utilizing this opportunity of mobilization to engage in school- or district-wide reforms to improve school climate, instructional practice as well as student outcomes. The specific improvement approaches or reforms varied by district and included "student-centered learning," "customized learning," expeditionary learning," and others. These reforms often promoted pedagogy that was similar to or complementary to proficiency-based learning but also included recommended practices that were not explicitly required by the state law. In addition, the MDOE incorporated some of these recommended practices for school reform into supporting technical resources for model implementation or to guide local development of a proficiency-based diploma system. In a few districts, the integration of improvement measures and the district's work to mobilize change required in the state law had caused some confusion among stakeholders trying to distinguish components of the state law from recommended reform approaches. For example, one school board member said, "We thought until just this minute that the law required us to change to a 1-4 grading scale. Do you

mean that is not required by law?" More nuanced uncertainty about what requirements were local and what expectations were in the state mandate was evident as well. One teacher said, "I totally agree with proficiency-based education, but I'm not sure I agree with customized learning for every child all the time. Is that required by the state?"

Regardless of the district's approach to improvement, a common understanding across the various participants and case studies was that implementing a proficiency-based diploma system required a positive culture of learning in the schools supported by the community. Some districts appeared to have this type of well-established culture among the majority of their students and were focusing their work around the attitudes and structures available to students who were not meeting standards in a timely fashion. Other districts were engaging in larger-scale efforts to build a positive school culture that concentrated on learning and changing community beliefs about education.

Professional Collaboration

Another common theme across the seventeen case study districts reflected the evidence that Maine proficiency-based diploma legislation had mobilized K-12 public education **professionals to engage in increased collaboration**. Collective development of a cohesive K-12 curriculum and assessment system to standards that were common across the district required significant professional time and cooperation. One superintendent said, "Unity is important to us. This unity is a foundation for appreciating individuality, but we must come together for a core experience to learn from our individual experiences." The practice of collaborative processes to adopt changes, adapt standards, align curricula and assessments, calibrate grading practices and create systemic intervention structures was already in place for some teachers, but it was a shift for other teachers. A high school teacher said, "You can't do this work unless departments work together, unless you break down the walls."

While the majority of professionals expressed the belief that greater collaboration benefitted both their individual practice as well as student learning, the challenge of finding sufficient time and resources to do this collective work was substantial in most districts. "It's a tremendous amount of work." Some districts were able to add embedded common professional time for teachers within the contractual day; other districts were compensating teachers for additional time during vacations and summers. Especially districts in the early stages of aligning

common standards to curriculum found that the traditional professional time was insufficient: "We have professional days, five of them each year. We're grateful for them, but it's just not enough." Providing common time for professional learning and work was particularly challenging in smaller or geographically isolated schools: "This is supposed to have greater collaboration, but who do we collaborate with? Our staff collaborates within the school, but we don't have resources to collaborate outside the school. Even when we do, there is such a different context and situation being discussed; it isn't really worth the great effort to send our staff. But when we stay in our school, there are only two Science teachers, so it is hard." A teacher said, "We don't have time to plan, collaborate and build material cross discipline. Common work time isn't possible when I am the only teacher in my grade or content area."

It was evident from case study school districts across the state of Maine that *An Act to Prepare Maine People for the Future Economy* (S.P.439 - L.D.1422) had mobilized educators, students and their communities to examine some of their traditional beliefs and practices. This examination had inspired conversations about students who were struggling to meet standards as well as the efficacy of certain education practices. In some cases, substantial change was seen as the path to improvement, while in other cases, simply acknowledging a persistent situation and refining traditional practice was considered best for students. Even when responses or beliefs diverged, this state policy appeared to have brought the conversation to the forefront regarding how to best serve Maine's children in the K-12 public education system.

Enact: Practices

In the work across Maine to enact *An Act to Prepare Maine People for the Future Economy* (S.P.439 - L.D.1422) within the local practices and policies of each public school district, the scope of change appeared to be varied, but districts seem to be engaged in some common work to implement components of the law. All seventeen districts in this study had at least begun to align their K-12 curricula and assessments to common standards developed or adopted by the district. Building a proficiency-based system also included systemic interventions for students who had not yet met the required standards. All stakeholders indicated that proficiency-based and standards-based education were increasingly the main focal areas of their professional development and collaborative work as a result of this state law and its impending implementation deadline. School, district and community leaders all agreed that maintaining

deliberate communications and positive public relations was a critical element of successful implementation as well.

Standards-based Curricula & Assessments

Maine has a decades-long history of standards-based education. Collective efforts of K-12 teachers, administrators, MDOE as well as civic and business leaders have provided statewide standards in academic content areas, learning habits and citizenship since the 1990s. Due to this, many public school districts are familiar with learning standards and have had standards-aligned components for many years although the extent to which curriculum and assessment systems were fully aligned to common standards varied significantly by district and even by school, grade level or subject area. Having consistent content area goals for student learning seemed to be more prevalent in elementary grades, but some high schools in our case studies had longstanding traditions of "core assignments" in certain subjects, especially English, common to all students, regardless of their courses pathways or levels.

Therefore, it may not be surprising that the vast majority of our districts were deeply engaged in the professional work of **adapting academic standards and building curricula that aligned with these standards**. Although districts were referring to national or externally developed standards (such as the Common Core State Standards and Next Generation Science Standards), most local standards were written in adapted language. One administrator explained, "Our standards are written in student-friendly terms. Common Core formed a jumping off point for writing our own content standards." For example, a group of Mathematics standards in the Common Core for high school Algebra is categorized as "Arithmetic with Polynomials and Rational Expressions." In a district that has adopted these standards, they are categorized as "Algebra: Expressions, Equations and Inequalities." In a different district, the same standards are described as, "Algebra: Students will be able to solve and interpret situations using multiple representations." And another district states these standards as, "Solve problems by using algebraic skills." Then, similar to the structure of the Common Core, these general standards were usually broken into more discrete criteria (that again had language often unique to each district), which were directly aligned with instruction and assessments.

As discussed more thoroughly in the report, *Proficiency-Based Diploma Systems in Maine: Implementing District-Level High School Graduation Policies* (Stump & Silvernail,

2015), it was evident that definitions, calculations and discrete criteria designated to the level of "proficiency" required for students to demonstrate in order to "meet" a standard varied across the districts in Maine and were still a work in progress in many districts. A district leader said, "A challenge is defining proficient. We continue to revisit our definitions. When we first developed the required levels for achieving proficiency, kids were taking a really long time to demonstrate proficiency so we had to revise the target levels." Another administrator indicated, "Each district has the discretion to choose their proficiency level. We don't want to set a standard too high so current students end up not graduating." However, the process of creating assignments as well as formative and summative assessment materials that aligned with local standards and "match that definition of proficiency" was being implemented in all case study school districts.

Student Work-Study Habits

One element of a proficiency-based education approach that revealed diverse beliefs as well as practices in implementation was the method of teaching and assessing students' **work-study habits**. Traditional practice in most American schools required students to complete assignments in a designated timeframe with due dates common to all students in a class. The individual teacher policies regarding the consequences of not meeting deadlines usually varied by school, grade level and even assignment. Early in the adoption of proficiency-based or competency-based or customized learning reforms, a key belief was that students should be allowed to learn at their own pace and not have a "superficial" timeframe imposed upon them.

In the first years of this longitudinal study, many educators expressed enthusiasm for embracing a "student-paced" curriculum and instructional practice. However, in recent years, this approach had been modified by most practitioners as **"teacher-pace or faster."** Both research and first-hand experience had demonstrated that many children, especially students who needed academic support and interventions in order to meet standards, were not able to maintain a pace of achievement that would allow them to meet the required high school standards in thirteen or fourteen years in the public school system. One principal said, "When we let students move at their own pace, we had students who hadn't mastered one target in a whole year." Especially when a culture of learning had not been thoroughly established in a school, teachers expressed concern about students who were not independently pushing themselves to stay on pace: "There still needs to be a consistent foundation and framework for structure or some kids become

complacent. Teachers feel like they're working harder than students since there is a lacking clarity of consequences for not completing work or not meeting standards." Another teacher said, "We made some mistakes in the beginning. For example, telling kids they've got all year to [demonstrate proficiency in a standard]. Kids aren't great at deadlines. We realized that habits of mind are equally important, if not more important, than academic targets. In our current system, habits of mind are meaningfully taught." Additionally, as students matured, many educators believed the responsibility of meeting deadlines was an important aspect of college and career readiness. A guidance counselor shared, "There is no late work policy here. But alumni have returned saying that they have to learn very quickly in college that there are deadlines and consequences. I don't feel like our students learn how to study. There is no concern or complaint about the rigor of work in college but some students don't know how to work within the deadlines and consequences at the college level."

Therefore, evidence from Phase IV case studies showed that many teachers and districts were implementing practices that now included reporting grades assessing the "soft skill" of students' work-study habits. Some schools had specific standards, often linked to Maine's Guiding Principles, reported in each course or each grading period related to "habits of mind," "habits of work," or "work-study practices." These grades reflected the student's ability to complete work in a timely manner, ask for assistance when needed, engage in group work or class discussions as well as attendance. As a curriculum coordinator described, "In grades K-5, there is a 1-4 scale for habits of work and a 1-4 scale for core areas; those are segregated. In middle school and high school, habits of work are factored in the individual course syllabus, and students receive one final habits of work grade." (It may be interesting to note that the state of New Hampshire recently adopted statewide "Work-Study Practices" standards as part of their competency-based education approach.) Other districts in Maine had sustained more traditional practices, such as upholding course-level late work policies and attendance policies. One high school leader said, "Our traditional, credit-based system is addressing the soft skills mentioned in many approaches: habits of mind, grit, leadership, time management, etc. ...Homework and due dates are a great example of soft skill development. This is explicit training for industry and college." Despite use of various school policies or grading practices, it was evident that educators were returning to the use of assessment to motivate and report students' work-study

practices instead of expecting the child to be solely responsible for his/her own pace of achievement.

Interventions for Struggling Students

As part of enacting a proficiency-based education system, educators regularly assessed students to determine the student's level of achievement. Again, although the scope and sequence of specific standards or the age/grade level designation attributed to certain standards varied by district, there was common evidence that all districts were developing a K-12 system to identify students' levels of proficiency. When a child was asked to demonstrate proficiency in a certain standard and failed to show his/her ability to meet the standard, immediate action was usually taken to engage the student in additional opportunities to demonstrate proficiency and/or further instruction to remediate the situation. Students were not usually held back: "We have not been a society that has allowed students to be retained." A district leader described, "We have grade level benchmarks, but students still progress with their cohort regardless of performance. We have common age-based benchmarks, then individual, differentiated supports and interventions."

In some districts, there was a very clear system of established interventions that often integrated with Response to Intervention (RTI) structures. As one educator said, "Supportive pathways and RTI join hands. They're really very similar." In other districts, work was still in progress to build a K-12 system. "High school RTI is a big challenge," shared one superintendent. Regardless of the current level of development, **creating robust, systemic interventions for students not "meeting standards"** was a focal point of implementation in all districts.

Proficiency-based Professional Development

In order to build these intervention systems, align curricula and assessments as well as construct the pedagogical foundation of standards-based education, **substantial professional work** was evidently required. "This takes time, dedicated time free of students to learn, reflect, collaborate and do," said one school principal. Another educator reinforced this idea: "Teachers need a more reflective practice. Professional development [days are] targeted work, but they do not have time to reflect." Leaders and educators in our study repeatedly indicated that the focus of a majority of their professional time had shifted to work related to implementing a

proficiency-based education system. One teacher said, "I've never seen so much professional development in this district than I have in the last couple of years."

However, many district leaders indicated that it was a challenge to provide sufficient professional time. A guidance administrator said, "Another struggle we've found is the time to do all of this, in terms of professional development. Our superintendent tried to push for us to have more time for professional development [one morning per week] but the community would not support it. The question becomes, when do we do it? How do we do it?" Another educator conveyed, "We need time and consistency. In my opinion you don't do a big change by going to one workshop in August another in January and another in March…We had a workshop that Math and English went to and others didn't. Now you have a group of teachers who have that information. Then the rest of the staff will get that, one time in October, one time in January, and third in March. It's going to be a whole year before the whole staff has that training." As well as learning about proficiency-based education and developing curriculum, practitioners shared that there was an increased need for time to conduct some of the recommended practices: "We need time to input the student data." "We need more time to assess all the students' revisions of assignments that didn't meet the standard." "Personalizing instruction takes a lot more time to prepare."

Districts also seemed to have various professional development needs. Schools and educators who had been implementing proficiency-based education for several years now suggested work within their district was the most efficient type of professional time: "Help from external districts, experts or models is minimal at this point. They can't take us past the theoretical reform. We've never gotten any applied professional development from the [people] supposed to be the experts." Yet, other districts relayed the critical importance of their collaborative work with regional groups or guidance from supporting organizations. Again, smaller and more geographically isolated rural districts expressed the challenges of releasing teachers for conferences or training: travel costs, availability of substitutes, relevance to small school environment, etc. Additionally, high school teachers specifically shared concerns regarding the loss of content-specific professional learning: "I used to come back from a workshop with inspiring ideas for teaching poetry or literary analysis. Now I spend whole days talking about the how and why of converting A-F grades to a 1-4 scale."

Despite unique challenges, facilitators and needs in professional development, educators and leaders in this study agreed that currently the majority of their professional work was dedicated to understanding and implementing Maine's proficiency-based diploma mandate.

Public Relations

Many educators and administrators said that a key element to successful policy implementation was **maintaining positive public relations** among staff, students, families and the community. Clear communication about pending changes that may affect students was critical, but deliberate planning of when and how to share information in a beneficial manner was also essential. Lack of public understanding and support for a district's proposed changes was cited as one of the most perplexing barriers to implementation for school and district leaders.

Since grade reports are a consistent means of communication between students, teachers and families about a child's achievement, many administrators considered very carefully any changes to grade scales, report cards, transcripts or credentialing of student performance. Some districts had chosen to remain with traditional A-F grading, while others had switched to a 1-4 or a hybrid system using both scales. One principal shared, "We have been working with standards for almost ten years...We thought we were ready for this. We had school board support. We met with parents a lot. So we switched last year. Then, students and parents said they didn't want proficiency-based grading. They wanted to go back to traditional grading. It was so painful. So, we went back to traditional grades using a 100-point scale, and who knows when we'll be able to implement that 1-4 grading scale now." An administrator at a different district said, "We thought we were clear with communication, but we were not. People were not understanding. The right people were not getting it at the right time. We had parent meetings, but not a lot of people came." Other districts reported a smooth transition to changed practices or had decided to retain traditional practices. Regardless of the local decisions and methods for approaching public relations, every district leader indicated that community and student support was critical.

Some district administrators had utilized guidance from school coaches, supporting organizations and professional learning opportunities directly related to public relations techniques. Other leaders had worked closely with local stakeholders and key public personnel to build understanding of the proficiency-based diploma law as well as the district's vision for implementation. Many administrators shared that having a solid, consistent understanding among

school professionals was a critical characteristic to moving forward with a clear message to students, families and the public. However, they also agreed that finding this clear understanding was challenging, even among willing professionals deeply engaged in implementation: "We're not confused on the philosophy, the purpose, the effectiveness of proficiency-based education. The staff get that. But we don't have a clear idea of the management stuff--the busses, the budgets, the schedule." "Even when we begin to wrap our heads around it, it seems to change."

Even with the challenges of public relations and varied experiences among case studies, it was evident that a deliberate method for sharing and communicating a district's and school's approach to the state policy was beneficial to the interactions among students, families, educators, leaders and the community.

Institute: Local Policies

Another key step in the phase of implementation to enact this state policy was the development and establishment of **district policies upholding a proficiency-based diploma system**. Many districts in our case studies were creating various proficiency-based policies, including those mentioned in previous sections of this report, regarding work-study practices, grade reporting, student progress, learning pathways, multiple opportunities for demonstrating proficiency and high school graduation requirements.

The level of local policies and whether they had been established district-wide usually depended upon the district's stage of implementation. A few districts, which characterized themselves as having enacted a "deeply implemented" proficiency-based education system, had gained school board approval of proficiency-based policies regarding high school graduation requirements, grade reporting (report cards and high school transcripts), as well as multiple pathways. Although, even among these districts, changes from year to year across the four years of this study were evident, and district leaders often said such policies were under constant review as they refined their work. Some policies were more frequently determined at the school or classroom level, and, in some cases, there were small groups of teachers piloting proficiency-based practices and commonly implementing certain policies in their classes.

Multiple Pathways

Provisions for multiple pathways for students to demonstrate proficiency was a common area that had been established in district-level policy, but many leaders expressed concern about

the **lack of equity for opportunity to access pathways outside the traditional school structure** (schedule and location). In most cases, district policy required that students be allowed to pursue alternative experiences. School and district leaders reported that they worked individually with student to **credential learning outside of the traditional schooling experience**. However, many school principals and superintendents shared the reality that only a few students took these opportunities and were often limited by systemic supports. One principal said, "External pathways are a logistic challenge. How do I make the experience look challenging? It's now up to the individual student to develop the program. We help when we can. But they need to provide their own transportation. A challenge is how to scale up this opportunity." So, while local policy allowed for and encouraged the opportunity, practitioners said structural supports were often not in place for all students to engage in the experience. In addition, most elementary and middle school educators indicated that they had not fully explored and were not familiar with appropriate structures outside of school for younger children.

Multiple pathways within existing school structures did appear to be an area of pride for many educators. A district leader said, "This proficiency effort has taken us to a higher level, given us the liberty to think outside the box to provide pathways and choice for our students." Most of the cited opportunities were for high school students within a course of studies or graduation policies. A high school principal said, "Our curriculum is pretty common K-10, but that allows--in fact, encourages--students to pursue various pathways for application and integration in grades eleven and twelve. We have lots of electives and more inquiry-based requirements." These **multiple pathways available to high school students** included career technical education, various state and regional early college programs, online learning, collaborative projects with local universities, pre-professional training and career internships.

Proficiency-based High School Graduation Requirements

Some case studies had established district policy revising strictly credit-based, time-based **high school graduation requirements to incorporate mandatory demonstration of proficiency** on certain standards. Other districts in this study were engaging in work to develop proficiency-based high school diploma requirements but had not yet instituted these local policies.

The process of identifying the required level of proficiency a student must demonstrate in order to earn a high school diploma was a challenge for some districts. One superintendent said, "What standards do we choose as our definitions of proficiency? How do we determine a level that all students should meet before earning a diploma? The law doesn't require certain levels of proficiency in standards. That makes it hard for us to argue to our community that the [level of] standards we choose should determine a child's graduation or not." Educators were working diligently and passionately to develop a core set of standards they believed represented the essential skills a child should have upon graduating from high school. A teacher said, "We have a strong Speech program in the high school. We are one of the few schools that have a graduation requirement that includes some sort of speech requirement. We get consistent feedback as how powerful that is. This is not really expected in the standards we have: there is a whole piece of the delivery that isn't addressed. Speaking and listening is so important, so we come together and try to find a target that they can come around." Some districts had implemented these requirements within their district policy, as one high school principal explained, "Graduation requirements starting with the class of 2018 are that students must earn a three [meets the standard] in selected measurement topics of each of the eight content standards. They can meet these standards at any age or grade but must still legally stay enrolled and attend school until age sixteen." Each of these situations highlighted education professionals identifying essential standards and proficiency levels to be reflected in the process of earning a high school diploma. Establishing this common district requirement and instituting it as local policy was clearly important and challenging work.

Align: Beliefs - Practices - Policies

In the fourth year of implementing a state policy mandating the development of a proficiency-based diploma system and after decades of working with standards-based education, teachers and administrators in Maine have consistently contended with issues of alignment between beliefs, practices and policies. The call for a standards-based education system has remained strong in the United States for decades. Maine educators have engaged in related work for over thirty years. As with any belief or theory, there are often existing practices and structures that pose barriers to change and practical implementation. It is important to note that this **misalignment does not explicitly place fault on either the belief or the practice**.

Evaluations, research and experience may present certain methods or techniques as "best practice" or show their positive relationship with improved student learning over time or in specific contexts. There may also be ample evidence that a certain belief or theory corresponds with improved student outcomes. However, there are often situations in which practitioners overwhelmingly report that they must deal with conflicts: when beliefs, practices, policies, implementation, logistics, resources and traditions do not align with each other. The solution to this conflict may be to change the belief, change the practice, change the policy, or change a little bit of each.

Therefore, as we report the perceived alignment and misalignment between beliefs, practices and policies related to implementing Maine's proficiency-based diploma law, it is critical to understand the following:

a) The data in this study are qualitative evidence reflecting the research participants' perceptions and self-reported practices. Researchers did not conduct directed observations to determine the validity of each participant's responses.

b) Researchers did not conduct any type of program evaluation to determine the efficacy of certain beliefs, practices or policies as they relate to student achievement or other established outcomes.

So, the following sections identify areas in which common beliefs and practices related to proficiency-based education as it is being implemented in Maine were seen as aligned or not aligned by the participants in this study. Misaligned practices should not be interpreted as bad practices, and aligned practices should not be interpreted as best practices. In some cases, it may be best to alter beliefs, while in other cases it may be best to alter practices or policies. This study does not offer analysis of which is best; it only identifies the alignment or misalignment. However, it would be safe to say that a conclusion of these findings could be that education practitioners and leaders found it very challenging to implement practices that were misaligned with beliefs held in their community or required external policy.

Figure 2 (see below) outlines common beliefs either required or recommended within the text of Maine's proficiency-based diploma law or found in technical supporting resources provided by the Maine Department of Education to assist in implementing *An Act to Prepare Maine People for the Future Economy* (S.P.439 - L.D.1422). In addition, since it has been often

stated that this legislation is intended to improve Maine students' college readiness, some common components of these beliefs are also included.

It should also be noted that there is often variation, even in rigorous research, concerning the defining elements of college readiness. This study examined alignment only using the characteristics of college readiness as they were expressed by the study participants. Career readiness was another intended outcome of this law; it was mentioned briefly by some participants but not predominantly raised in the interviews conducted for this study. However, it would be prudent to examine this aspect in a more targeted manner within future research since it is a critical intent of *An Act to Prepare Maine People for the Future Economy.* Evidence and further examination related to the alignment of beliefs, practices and policies shared by participants in this study are discussed in the sections that follow.

Figure 2. Proficiency-based Diploma System Implementation Alignment

BELIEFS	ALIGNED PRACTICES & POLICIES	MISALIGNED PRACTICES & POLICIES
Common Content Standards	Common Standards (within District)	Variation in Content Standards (across Districts)
Proficiency-based Advancement	Proficiency-based HS Diploma Requirements	Age-based, Time-based Progress (K-11) HS Graduation Rate Calculation Special Education Birth to 20 Regulation Staffing (World Lang & Special Education) Increased HS Student Enrollment
Multiple Pathways	Personalized Interventions Extended Learning Opportunities Differentiated Instruction HS Course Pathways Alternative Learning	Age-based Grade Cohorts Teacher Certification (HQT) Common Textbooks, Core Curriculum Time-based Calendar/Day
College Access & Readiness	Traditional 100-pt Grade Scale GPA, Class Rank Course-based HS Transcript National Content Standards Maine Guiding Principles	Definitions of "Beyond Proficient (4)" HS Transcript w/out GPA or Class Rank HS Transcript without Course Pathways Local HS Proficiency Benchmarks Time to Implement National Standards

Belief: Common Content Standards

As discussed in earlier sections of this report, standards-based education reforms are often initiated with the intent of creating a system in which all learners are held to common minimum standards. Evidence in Maine, the United States and even internationally indicates that substantial work is being done to achieve the goal of common standards, but variation across groups still exists. Local efforts do seem to be resulting in more consistency within certain groups, such as school districts. Therefore, district-wide practice to build a **core standards-based curriculum and assessment system supported with local policy** adopting a specific set of academic standards is identified as aligned with this idea of common standards for all students. Such practices and policies were evident within most districts in this study of Maine's proficiency-based diploma system implementation. However, the aforementioned variation of language and grade-level sequence comparing standards in various districts in Maine does represent a practice misaligned with the fundamental belief of common standards for all students.

Belief: Proficiency-based Advancement

A key component of Maine's proficiency-based diploma system law is that it not only requires learning instruction and materials to be affiliated with specific standards but also mandates that "**student advancement and graduation are based on student demonstration of proficiency** in meeting educational standards" (S.P.439-L.D.1422, Sec.1.20-A). Participants in this study consistently indicated that students in their district were still moving through a traditional time-based education system advancing annually with an age-based, grade-level cohort. One principal explained, "We don't hold kids back. We identify the standards they have not met, but they advance to the next grade regardless of the number of proficiencies they have met." There is solid research suggesting that grade retention can have negative or mixed effects on student performance (Andrew, 2014; Jimerson, 2001; Manacorda, 2012), so this practice has become less common in the United States in recent decades. Therefore, this misalignment may be a practice that is beneficial to students, but it reportedly still created challenges in implementing a proficiency-based diploma system in some districts.

In our longitudinal study, most elementary and middle school practitioners supported age-based cohort advancement with a robust system of interventions to offer support for students struggling to meet standards. However, high school teachers and administrators admitted that this

practice could result in students entering ninth grade substantially below grade level. A teacher said, "If you're not going to hold students accountable to some degree to some level before high school, you could end up having kids in the high school who are still on an eighth, sixth or fourth grade level. How do they catch up in four years?" Another teacher said, "The responsibility falls heavier on the shoulders of the high school when students have not met standards." Some districts were addressing this issue with more immediate interventions and more rigorous standards in the earlier grades. One superintendent explained, "We had to re-align our elementary math curriculum to increase the standards that allowed students to be ready for high school, to be ready for college in thirteen years. We had growing pains with this, but it was a priority." However, other district leaders expressed concerns that they could not adequately staff certain areas, especially World Languages and Special Education, throughout grades K-8 in order to provide the necessary instruction for students to demonstrate proficiency at the high school level in thirteen or fourteen years.

Traditional practice was reportedly somewhat more aligned with a proficiency-based system of advancement in high schools since many subject areas had course pathways based on skill level, such as a Mathematics course sequence of Algebra I, Algebra II, Geometry, etc. But, administrators did share trepidation about increased enrollment and calculating graduation rates if students were needing more than four or five years in high school to meet the required graduation standards. A district leader said, "It will be a significant financial burden on our community if we keep more kids until they are nineteen or twenty years old. About a quarter of our entire district is not on pace to meet standards in their thirteen years at school. Are we ready to pay for another 50 students to enroll each year, to pay for the special education teachers needed to teach them, to pay for the physical space required by law to accommodate them?" Many schools were enhancing their intervention systems and providing multiple opportunities for revisiting standards. A high school principal shared, "Our interventions have improved student performance. Previously, 25% of the ninth grade had to redo at least one subject in summer school. With the proficiency-based approach, they didn't have to come all summer, only a few weeks or even one week to meet the standard they had missed."

Structures were evidently being put in place in some districts to address the concerns relating to students not meeting standards in thirteen years, but proficiency-based progress still presented some challenges and misalignment, depending on how "advancement" was defined

and the needs of specific student populations. Despite potential challenges in grades K-11, all districts in our study were developing or had established new high school graduation requirement policies that made demonstration of proficiency in the eight mandated content areas and Maine's Guiding Principles a prerequisite for earning a diploma. Work was still being done to solidify the language of the high school standards and adopt new requirements as official district policy, but instituting a proficiency-based high school diploma system was a clearly aligned goal in every case study district.

Belief: Multiple Pathways

In Maine's proficiency-based diploma system mandate, the law indicates, "students must be allowed to gain proficiency through **multiple pathways**" (S.P.439-L.D.1422, Sec.7.20-A). Section 4703 of this Title lists possible pathways as career and technical education, alternative education programs, apprenticeships, career academics, advanced placements, online courses, adult education, dual enrollment as well as gifted and talented programs. Many districts had most of these pathways in place as opportunities for students to access at the secondary level. There was not always significant enrollment in these pathways, but they were offered in many high school programs.

Credentialing students for "apprenticeships," internships or pre-professional study opportunities outside of the school was one type of pathway cited as a challenge by high school and district administrators. One principal said, "It's hard to set the bar for what is acceptable, high quality programming outside school in an equitable fashion. In fact, it's hard to just schedule all their other necessary courses around another program. We haven't really looked at that yet." Students and parents shared experiences reflecting logistical barriers to participating in pre-professional training programs that were offered during the traditional school day. A high school junior said, "I am in a pre-professional program ... that meets every day starting at one o'clock in the afternoon. It's really hard to schedule my required core courses all in the morning, and they say I can't get [certain content area] credits for my program even though it is a nationally certified school." A guidance counselor in a different high school said, "Some kids have great opportunities, but who aligns their work to standards? Who adds them to their caseload of over 120 students? How do you schedule every student's customized pathway?" A teacher said, " We don't have enough manpower to manage it, it's a really tough thing. We don't

know how to manage it."

Other pathways being explored by students were a source of pride for many school leaders. A principal shared, "We have the opportunity and we offer a number of dual enrollment courses for kids that are advanced." A guidance director said, "We offer online high school courses and dual enrollment college courses." Although, the external credentialing was sometimes not aligned with their school's expectations. A teacher said, "It's hard when we make this big deal to shift to proficiency-based grading with 1-4, then we encourage kids to take online courses or dual enrollment courses where they get an A-F grade." One guidance counselor expressed confusion: "An external standard isn't always best either. We have students enrolled in online dual credit courses in math. They are earning an A and college credit in that online course. Then, they can't reach the benchmark in math on the Accuplacer to test out of remedial math classes. How is that?" Other traditional programs such as career technical education, alternative education and adult education remained critical pathways supported by practitioners and utilized by students regularly.

Although the laws list those several specific options for multiple pathways, the MDOE's documents have also expanded the definition of "multiple pathways" to encompass an approach called "**personalized pathways**." Referenced as a synonym to multiple pathways, "personalized pathways are premised on the idea that learning does not have to occur at the same time every day, be delivered exclusively by teachers or be confined to traditional classrooms" and learning can be delivered using "mass customization" appealing to individual student's preferences and pace (Maine Department of Education, 2016). Practitioners in this study indicated that there were both practices they implemented that aligned with these beliefs and misaligned practices or policies. All school districts had personalized interventions systems, including RTI and Individualized Education Plans (IEPs) for student eligible for special education services. Classroom teachers referenced ongoing professional work to enhance and sustain their practices of differentiated instruction and individual support for struggling students integrated with group instruction. One teacher explained her method of what she called "hybrid customization": "We don't always individualize or customize. That's just not appropriate at the younger grades. I teach a lesson as a whole group. Then, I identify students struggling to meet the standards and conduct target lessons with small groups. Then students individualize to accelerate or get even more help in that target. But we all come back again as a group for the next target." Educators in many

districts also shared that personalized pathways existed as "extended learning opportunities taking place during the school day" and outside of traditional school time (summer, vacations, afternoons, etc.) as well as using technology to explore online learning materials and educational programming.

However, several traditional structures were also mentioned as barriers to equitable access or opportunities in personalized learning. Some elementary school teachers specifically indicated that they were working to embrace customized learning but continuing to have age-based grade configurations for their class groupings, required grade-level text books and grade-level teacher certification made it challenging to develop systemic structures for students to move at their skill level. One teacher said, "We say to kids, 'You can't move on because you didn't meet these standards or measurement topics.' But literally where is the student going to go? They have to be in classroom. I have to classroom manage them. I still need to give my other students the same educational experiences. That conflicts." Another teacher mentioned, "I still get a group of kids as my 'fifth grade class' based on their age. I still get the pink 'fifth grade math textbook' that we must all work through regardless of their skill. We are supposed to customize, but the resources I'm working with are not customized." There was also some concern raised by certain teachers that they were not certified or could not be deemed as a "highly qualified teacher" under federal regulations when working with students outside a certain grade level. One middle school teacher said, "I'm certified to teach [grades] 7-12. But now I'm expected to customize my curriculum for students at a fifth grade level or a third grade level. I'm not sure I know how to do that."

Some high school teachers raised concerns about their district's proficiency-based grading policy, which incorporated a grading system that did not provide a student with a grade until they had met a standard; not meeting standards resulted in an incomplete or blank grade until the standard was met. However, this caused uncertainty about how to identify a student's status under requirements for interscholastic eligibility. Other teachers expressed a philosophical disagreement with constant personalization: "Sometimes at the high school level individualization isn't best for students. In some situations I feel like I am robbing students of learning when they are asked to do their own work over in one corner while other students do their work in another corner. It really would be so much richer if we were doing it all together." Some teachers believed they needed a clearer understanding of an "appropriate balance" of

personalized instruction and group instruction since there were reportedly inconsistent messages from leadership.

While many of these practices related to multiple pathways may not be explicitly required under Maine's proficiency-based diploma law, some practitioners were under the impression that they were required either by state or district policy. Educators and school leaders were evidently working to integrate practices that benefitted their students while adapting recommendations that seemed to be misaligned with best practice. This process evidently caused some uncertainty, but it also appeared to mobilize increased communication about what was best for Maine students.

Belief: College Access & Readiness

In recent years, more and more high school graduates in the United States are planning to continue their education in postsecondary institutions of learning. Meanwhile, gaining a solid comprehension of the college admissions, financial aid, and scholarship opportunities appears to be getting more and more complicated. Understanding how to advantage students in this process is not an exact Science and has even been the topic of recent lawsuits, entire businesses, extensive research and numerous dinner table conversations. Combined with the local variations of defining proficiency and language of standards, it is not surprising that there is inconsistency in the perceptions of how standards-based reporting (especially high school transcripts and grading practices) affects students' navigation of the **postsecondary application processes**. Therefore, this section of the report shares some of the most common impacts and approaches educators and administrators in this study identified with regard to developing a proficiency-based diploma system that enhances students' opportunities for accessing college and other postsecondary learning experiences. Evidence from interviews of college admissions personnel in Phase II of the study is also integrated into these findings. However, further examination of topic may be prudent in order to help clarify some of the uncertainty among education practitioners in Maine.

As Maine's public school districts more fully implement the mandated proficiency-based diploma system, specifics of traditional practices were under heightened scrutiny with regard to alignment of the philosophical beliefs of a standards-based education approach and the logistics of high school graduation. Data from this study identified that there was still fundamental

disagreement about whether a high school diploma should commonly certify college readiness. One high school principal said, "We have done a lot of research, with local colleges and businesses as well as national. We believe a high school diploma should represent that a student is college ready. They may choose not to go to college, but it is our job as an educational institution to prepare them for that opportunity, to offer them that choice. We should not choose for them what their postsecondary pathway is. Now that's student choice. Students in our district will have choices with the foundation of an education at our schools." While another high school administrator said, "A problem with the new grading system is that proficiency levels are geared toward everyone going to college. Not everyone is going to college. Does that mean they shouldn't get a high school diploma?" This discrepancy in the interpretation of a high school diploma's meaning highlights central practices that must be implemented in the change to a standards-based education system that includes proficiency-based high school graduation requirements. These beliefs appeared to be a primary focus of a district's selection of its level of proficiency benchmarks and vision for its students' postsecondary experiences.

Even when stakeholders agreed that a high school diploma should certify college readiness, there was uncertainty about how to best report a student's achievement. Again, decisions to maintain or change grade scales (1-4 or A-F) were locally made by district and community leaders. Often, these changes or lack thereof were done with an acute awareness of how proficiency would be reported on the high school transcript. All participants wanted a transcript and reporting system that worked for their students in the processes of postsecondary admissions and scholarships, but it was sometimes unclear what that looked like.

One issue raised was information necessary to qualify for scholarships or athletic eligibility. A teacher said, "The high school has the problem with going to college and scholarships--and that's why parents are upset. If they're changing [the grade scale and transcript], it's causing all these issues. The parents are going to fight it if kids are not going to qualify for scholarships because they have no GPA or class rank." A parent shared, "We were told some standards could not earn a 4, that perfection was not really attainable. So there was no way my daughter could not have a 4.0 GPA. It would be fine if that was the same for everyone, but she's competing for scholarships with kids who can, and do, earn a 4.0." A guidance counselor added, "Scholarship requirements for GPA and class rank haven't changed. Ignoring these structures can be detrimental to our students; they won't get those scholarships." Therefore,

some school districts and model transcripts available on the MDOE website report proficiencies by standard and include a traditional 4-point grade point average as well. A high school athletic coach supported this hybrid reporting system, "NCAA [Division I and II] student-athlete eligibility requires at least a 2.0 GPA and credit in sixteen core courses. We do have students depending on the chance to play in college and the possibility of a sports scholarship." Some districts were considering the discontinuation of the GPA and class rank due to the belief that such practices were not aligned with a proficiency-based approach. One guidance counselor said, "What are we doing with class rank? We have a number of math students who have incompletes because we are on a time-based system for our reporting, so within our curriculum, we've taken that time-based element out...As we set to send out our traditional midyear reports, we have done that with a GPA and class rank, we're finding that that's becoming more and more difficult."

A recurring question raised by high school students, parents, school board members and educators was about the high school transcript. A guidance counselor asked, "One of my concerns is when we go to standards-based grading, what is the transcript? What is that going to look like? What are colleges going to want?" Many Northeast college and university leaders have "endorsed proficiency-based approaches" and pledged "proficiency-based transcripts will not be disadvantaged in any way" (New England Secondary School Consortium, 2014). However, another guidance director said, "We still report out information to universities in a way that best serves our students in any postsecondary institution, from Harvard to the community college. We maintain traditional reporting to make it as easy as possible for any college admissions to admit our kids. I have spoken to lots of college admissions people across the nation from various levels of selectivity. We provide for every student what is needed to benefit them in the most selective college, whether they decide to apply there or not. They can, they have the choice. They are advantaged by what we do, not disadvantaged. It doesn't matter if I like how a college does it or if I agree with their process, my job is to be as helpful as I can to every student in our school." College personnel have indicated that it is important to for admissions staff to clearly, quickly understand the rigor of a student's course selection and work-study habits as well as translate and compare a school's grading system (Stefanowicz, 2016). One college admissions counselor interviewed for this study said, "Achieving proficiency means very little because of various definitions of proficiency. We want to know what sort of high school classroom have the students been in."

Access to postsecondary education opportunities can be a complex network. All participants in our study wanted Maine students to have high quality, productive experiences after high school. But, uncertainty still existed about how K-12 school districts and specifically high schools could best support and inspire students. It appeared that some of this inconsistency might have come from variation in the selectivity and criteria for specific postsecondary opportunities. For example, it is evident that some scholarships do still require numerical data such as a class rank, GPA or standardized test score; colleges often still need information about the courses students take, not just the standards they meet. The level of importance of this data may depend upon the selectivity of a program: traditional numerical data may advantage students in more selective colleges and scholarships, while students may easily earn admission to a less selective program without this traditional data. It would be valuable to examine these situations with further research in order to best serve Maine's students in their postsecondary opportunities.

National literature and ongoing conversations in Maine regarding necessary preparations for success in postsecondary pursuits are abundant. However, even more complex than discussions about college access and high school transcripts, defining the specific characteristics required for "**college readiness**" remain inconsistently referenced among the participants of this study and our nation's population at large. Business, civic and university leaders calling for improved preparation for postsecondary learning and work directly inspired national content standards, such as the Common Core State Standards (CCSS). In Maine, a similar collective of business and education leaders and practitioners developed the Learning Results inclusive of crosscutting standards for citizenship, work, communication, etc. in the Guiding Principles.

While most educators shared their support for efforts to improve student achievement and raise academic expectations, they also widely agreed that implementing every standard in the CCSS verbatim would take too long and not be accessible to many students. One superintendent simply said, "It's just too much." A teacher said, "When Common Core got adopted, the standards for math are very complicated. So we've had to develop our Power Standards, which we identified as being more important based on what we as teachers needed kids to know to be what we considered to be proficient in math." This process of local adaptation created variation in the sequence and language of district-level proficiency benchmarks across the state.

Often college readiness is defined by a student's ability to gain admission to a postsecondary institution, enroll in credit-bearing (not remedial) courses, and persist to earn a

degree. However, identifying whether local proficiency levels align with this definition of college readiness is further complicated with the great variety among colleges and universities in their remediation policies. Some colleges offer remedial courses or support, others do not. (Further examination of college readiness in Maine can be found in the MEPRI report, *Developing College Readiness Indices for Maine High Schools: An Exploratory Study* (Silvernail et al., 2014).) So, although many participants in this study believed college readiness was an important target for high school graduates, they also expressed that it was a moving target not easily defined. One guidance counselor said, "We have determined from our research that college ready means Algebra II. It means no remediation will be needed." Another educator said, "All contents have core common assignments in courses taught at multiple levels by multiple teachers. All content areas have common exam requirements and common tasks. It is part of our dedication to college readiness: students must be practiced in on-demand and processed demonstration." A high school leader said, "We've seen no significant change as far as college readiness goes with the standardized tests. Whether it is SATs or PSATs, there are certain cut scores. So, we haven't seen a huge change in cut scores." It could be concluded that college readiness was a predominant belief incorporated within most participants' vision of a proficiency-based high school diploma system, but strict benchmarks or definitions of readiness were inconsistent. Therefore, although there were certain existing practices that traditionally aligned with college access and readiness, variations of more recently adopted practices believed to be more reflective of a standards-based education approach (such as proficiency-based grade reports using a 1-4 scale) were still in transition and not clearly aligned with some postsecondary institutional practices.

Aligning educational beliefs with practice is a critical and challenging task. As was seen in this data from this study, even some of the fundamental beliefs of a proficiency-based education approach were unclear or inconsistent among various stakeholders. There was also evidence to suggest that beliefs may shift as practitioners delve more deeply into recommended practices or further implemented components of the law. Additionally, beliefs may vary depending on the populations or contexts with which educators were engaged. Regardless of variation, a clear theme in this study was that misalignment between beliefs and practices caused substantial challenges for implementing Maine's proficiency-based diploma systems. Also clear

was that educators and leaders were working diligently with students, families and communities as well as practitioners from postsecondary institutions to develop local practices that advantaged the children in their schools.

Policy Recommendations

Future policy regarding *An Act to Prepare Maine People for the Future Economy* (S.P.439 - L.D.1422) and work to improve the opportunities and outcomes of Maine's children should encourage educators and local leaders to continue efforts to engage community members in setting a culture of learning where high expectations for students are understood and supported. Our recommendations highlight areas raised in this research warranting further study as well as concentrated components needing focused attention. Considering the critical evidence examined in this four-year study of the process to implement Maine's proficiency-based diploma law, we propose the following considerations for policymakers as they support the children and educators across the state:

- ❖ Continue to be informed of **impacts, challenges and facilitators** in implementing Maine's proficiency-based diploma system and standards-based education laws so as to assess the necessity of any appropriate policy revisions.
- ❖ Explore additional ways to support school districts as they implement S.P.439 - L.D.1422, particularly with regard to **World Languages and Special Education**. (For example, targeted resources could be made available to higher poverty and geographically isolated school districts struggling with certain teacher workforce supply limitations and/or greater numbers of students with identified special education needs.)
- ❖ Develop and issue rules or guidance to increase **consistency and clarity** with regard to communication about practices *required* by state law versus practices *recommended* as possible implementation models.
- ❖ Analyze the 2015 **Every Student Succeeds Act** (ESSA) for potential areas of improved alignment of state and federal policy with Maine's proficiency-based diploma system laws (e.g. extended time for calculating graduation rates, "highly qualified teacher" regulations, etc.). Identify potential ways to leverage and align federal funds to support increased student achievement and target resources to lower performing schools.
- ❖ Initiate and lead state and local efforts to identify **common characteristics of "college and career readiness"** that are aligned with adopted learning standards as well as business and university/college practices at all levels of selectivity.

Conclusion

Policy implementation at any level is a complex process requiring ongoing examination, analysis as well as substantial work. Maine is truly leading the nation in its efforts to scale-up standards-based education adoption statewide as well as mandating proficiency-based high school graduation requirements. The enduring efforts to balance local control and state oversight as well as honoring community-level traditions while encompassing state-level visions are a testament to the relationship of policymakers and practitioners in Maine. Educators, administrators as well as families and community leaders have indicated that *An Act to Prepare Maine People for the Future Economy* (S.P.439 - L.D.1422) mobilized the examination of beliefs about education and student learning. In turn, professionals have enacted targeted practices to enhance opportunities and outcomes of the children in their schools. This was especially evident in the robust intervention systems created to support struggling students. Certain challenges, and even barriers, have also been evident in the implementation of this policy. Time and relevant resources for professional work were often cited as limiting factors in realizing needed practices and improving the culture of learning. In addition, misperceptions regarding the scope of the state law in relation to local reform practices were sometimes seen as potential detractors from an efficient, effective implementation process. In these ways, misalignment between beliefs, practices and policies was cited as a hurdle to fully understanding and enacting the proficiency-based education mandate. However, many school district case studies involved in our research demonstrated significant effort towards implementing the state law with fidelity. Some communities had instituted district-level policy incorporating proficiency-based requirements for students to earn a high school diploma, while other districts were fully engaged in developing such policies. With full recognition of the complex, ongoing process of policy implementation, it was evident that Maine's students, educators, communities and policymakers were moving forward in their diligent work to provide meaningful learning opportunities for Maine's children.

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