

2017

High School Principal Leadership For The Implementation Of A Personalized Proficiency Education Paradigm In The State Of Vermont

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HIGH SCHOOL PRINCIPAL LEADERSHIP FOR THE IMPLEMENTATION OF A
PERSONALIZED PROFICIENCY EDUCATION PARADIGM IN
THE STATE OF VERMONT

A Dissertation Presented

by

Jennifer L. Stainton

to

The Faculty of the Graduate College

of

The University of Vermont

In Partial Fulfillment of the Requirements
For the Degree of Doctor of Education
Specializing in Educational Leadership and Policy Studies

October, 2017

Defense Date: August 23, 2017
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October, 2017

Abstract

As of 2014, the State of Vermont adopted a policy package directing schools to implement a new way of educating and graduating students. Vermont's Act 77 and Education Quality Standards require schools to identify specific skills and knowledge students must be proficient in to graduate and ensure each student has a personalized experience. Vermont's tradition of local control means high school principals are leading change in their schools. How high school principals are understanding, valuing, and acting to lead the implementation of Vermont's policies for personalized, proficiency-based education therefore varies by location. The purpose of this multiple case study was to explore high school principal leadership at a critical juncture of implementing Vermont's personalized proficiency education paradigm. Principals' understanding was analyzed using an accountability vs. flexibility framework influenced by Sturgis (2016) and Labaree (1997). Principals' action steps were considered through the lens of Frontier and Rickabaugh's (2014) five levers for school change. Principals' leadership style was analyzed using transformational leadership practices (Leithwood & Sun, 2012). The findings from five high school principals suggest that Vermont's policies were valued for their potential to improve student outcomes, student engagement, and future career opportunities. Principals' understanding of the policies varied, suggesting a lack of cohesive understanding of policy goals across the state. They leveraged school structures and education standards to enact policy implementation, suggesting a focus on proficiency over personalization at the time of this study. Principals in this study were leading school change by building teacher capacity and enabling teacher collaboration, suggesting they were accessing key transformational leadership practices to enable school change. The principals also identified sticking points to implementation, including: a lack of appropriate computer software for proficiency-based grading, a limited timeframe for implementation, limited leadership resources and supports from the state, and worries about a lack of equity of opportunity for all students. This study has implications for education policy developers, state-level education agencies, and other high school principals. The findings suggest school-based implementation of state-level education policy, even in local control states, can be facilitated by supports for growing leader understanding of policy intentions and facilitating policy implementation with suggested timelines and key steps. The findings also suggest high school principals access transformational leadership practices when engaging their schools in a change process. By increasing the breadth of these practices, they can facilitate the whole-school change in a personalized proficiency paradigm.

Dedication

To education policy implementers who persist
with optimism and work in the best interest of learners every day.

Acknowledgements

Thank you to my family. To my husband Rob, a gifted educator and coach, a persistent education optimist, a grounding presence in my life, an amazing father, and my personal champion. To my daughters, Ella and Farren, who graciously supported my doctoral work as they lived half of their life with a mother enrolled in graduate school. To my parents, Linda and John for unwavering love from afar. All of you have been amazingly supportive of my full-time teaching load and my graduate school work load. Without your support and encouragement, I would have never completed this research. This dissertation represents hard work on all of our parts. I'm blessed to have you in my life.

Thank you to the high school principals who opened up their schools and willingly shared their time, leadership practices, and wisdom. Your leadership is awe inspiring, and is vitally important to the implementation of Vermont's policies for personalized, proficiency-based education.

Thank you to Dr. Maureen Neumann, my dissertation advisor. You lead by example with your professionalism, attention to detail, and support of adult learners. Thank you for all of your support through this process. To Dr. Judith Aiken and Dr. Tammy Kolbe, thank you for developing and teaching courses that, in tandem, inspired this dissertation topic. You provided me with solid grounding in the areas of policy and leadership. To Ken Paige of the Vermont Principals' Association for your assistance with my dissertation research.

Final thanks goes to my educator colleagues. You all inspire me every day. Thank you for choosing this challenging and noble profession.

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Chapter 1: Introduction

By the year 2020, graduates of Vermont's high schools will leave with a diploma symbolizing the completion of an educational experience noticeably different from present-day high school graduates. The reason for this difference is newly enacted policies aimed at solving persistent, education-related issues that plague the state. The issues include the following: students unable to equitably access a high-quality education, students exiting high school with improper preparation for future 21st century jobs, students incognizant of future career opportunities, students lacking engagement in their own learning, students lacking skills in communication and collaboration, and students lacking aspiration for post-secondary enrollment (Vermont Agency of Education, 2013b, 2013c).

The policies developed to address these issues were the Act 77 (2013) subtitled *An Act Encouraging Flexible Pathways to Secondary School Completion*, and the Education Quality Standards (EQS) (2014). The policies were designed to increase individual opportunity while ensuring that "...all students in Vermont public schools are afforded educational opportunities that are substantially equal in quality and enable them to achieve or exceed the standards approved by the State Board of Education" (Vermont State Board of Education, 2014, p. 3). Act 77 and the EQSs, together, aimed to change what public schooling looked like in Vermont by modifying the student experience at the secondary level. The Vermont high school student experience joined a national shift away from a system that had been in place for over 100 years, characterized by traditional course progressions, grading methods, teacher direction, and Carnegie-unit seat time

measures of credits for graduation. Instead, the student experience would be focused on a personal interest-driven demonstration of proficiency for a number of different standards, called Proficiency Based Graduation Requirements (PBGRs), in each subject area (Fisher, 2013; Vermont Agency of Education, 2013b). Proficiencies could be met through multiple pathways, including internships, jobs, volunteer positions, summer experiences, college courses, online courses, or any other method a student selected that met the approval of their school requirements and satisfied the PBGRs. A student's personal pathway to graduation would be informed by a Personalized Learning Plan (PLP), a student-maintained document containing a continuously updated record of a student's abilities, interests, goals, and pathways to graduation. The plan would be developed in unison with teachers, parents, counselors, and other selected community members (Vermont Agency of Education, 2016).

Implementation of PLPs and PBGRs in Vermont's schools had the potential to bridge the competing education goals of flexibility and accountability by aiming to meet the needs and interests of each individual student while also remaining accountable to equitable proficiency outcomes for all students (Labaree, 1997; Sturgis, 2016).

Personalized proficiency education could change the dominant and traditional conception of what high school looks like. The typical four-year timeframe for graduation would disappear, with some students graduating early and others taking longer. The walls of the school would become more permeable, allowing students to gain proficiency beyond typical classes through connections with the local community and beyond through technology integration. Teachers would take on new counseling roles to help students

find pathways that meet their personal interests, thereby expanding a teacher's job beyond subject specialist and information provider. High school curriculum would reflect individual student interest, with class selection and instruction being tailored to facilitate individual student needs instead of focusing on whole-group content specific instruction. The method by which students learn and how schools serve students would change to reflect the personal needs and interests of each student (Bray & McClaskey, 2015; Clarke, 2013; Keefe & Jenkins, 2008; Zmuda, Curtis, & Ullman, 2015).

In 2013, Vermont enacted policies aimed to change the way we think about education, modify the methods we use to educate, reframe interactions between teachers and students, and relinquish our presently held beliefs about education (Zmuda et al., 2015). These policies required a new way of thinking about education. To best capture Vermont's education policy landscape and resulting changes in school-based practices, throughout this dissertation, I refer to this as a *personalized proficiency education paradigm shift*. Operational definitions and key terms used throughout this dissertation can be found in Appendix A.

Purpose

The goal of this qualitative research study was to explore the understandings, values, and perceptions of high school principals related to Vermont's personalized proficiency paradigm shift; and how their perceptions influenced the leverage points they accessed and leadership actions they took to enact school-wide change.

"Vermont is in the midst of a dramatic change of their education system," wrote Chris Sturgis in 2016 (p. 82). Despite the magnitude of the change called for, the

Vermont Agency of Education required no specific prescribed steps for the implementation of the new policies. As of the writing of this dissertation, three years after the policies were signed, the Vermont Agency of Education announced it was working on a manual for one aspect of the personalized proficiency paradigm—the implementation of personalized learning plans (Vermont Agency of Education, 2017a). Therefore, in lieu of direction from the Agency of Education, local decision-making structures determined the steps necessary for change. This work fell under the purview and responsibility of school leaders at the local levels. The shift to a personalized proficiency education paradigm posed a large challenge for school leaders due to the fact that the new paradigm required a break from past practices, and no one clear method for implementation. School leaders had to learn new skills and concepts around implementing policies for personalized learning and proficiency based grading (Heifetz, Grashow, & Linsky, 2009; Marzano & Waters, 2009).

Given the influence and importance of school principals in reforming schools for increased student performance, it was important to understand how high school principals perceived and implemented Act 77 and the Education Quality Standards (EQS) (Fullan, 2010; Leithwood & Menzies, 1998; Louis & Wahlstrom, 2011). School principals were assigned the ultimate responsibility for bringing about change in schools and were therefore empowered with the ability to inform local school boards to make local decisions for implementing the policies. In response to the new policies, each high school principal in the State of Vermont needed to lead locally relevant action steps for implementation and change.

A multitude of factors and key elements are involved in school change, and a variety of leadership approaches have emerged to foster innovation in schools (Frontier & Rickabaugh, 2014; Fullan, 2010; Marion & Gonzales, 2014; Rickabaugh, 2016). Transformational leadership practices can serve school leaders well when engaged in large-scale change (Frontier & Rickabaugh, 2014; Leithwood & Sun, 2012). The success of Vermont's new education policies will be strongly connected to how principals perceive the nature of the education shifts asked for by the policies, and how principals enact leadership to leverage change to implement the policies in their schools (Frontier & Rickabaugh, 2014). Therefore, a principal's understanding of policies, and how s/he leads early action for implementation of a personalized proficiency education paradigm is an important area to study.

Research Questions

Three research questions were identified for exploration in this study:

1) What constructed understandings, values, and perceptions do Vermont high school principals have about Act 77 (Flexible Pathways), the Education Quality Standards (Graduation by Proficiency), and the statewide shift towards a personalized proficiency education paradigm?

2) As principals engage in the early phases of making change for personalized proficiency to happen in their schools, what leverage points do they choose to apply, and how is this choice influenced by their understandings, values, and perceptions of Act 77 (Flexible Pathways), the Education Quality Standards (Graduation by Proficiency), and the statewide shift towards a personalized proficiency education paradigm?

3) How are the leadership practices of Vermont high school principals influenced by their understandings, values, and perceptions of Act 77 (Flexible Pathways), the Education Quality Standards (Graduation by Proficiency), and the statewide shift towards a personalized proficiency education paradigm?

Research Approach

For this dissertation research study, I applied a constructivist qualitative epistemology. I chose this epistemology for two reasons. First, it allowed me to capture the constructed reality of high school principals as they implemented a personalized proficiency education paradigm in their schools (Creswell, 2013; Merriam & Tisdell, 2016; Miles & Huberman, 1994; Yin, 2014). Second, qualitative data collected in the form of semi-structured interviews, documents, and site visits provided insights to how each principal's constructed understanding of the paradigm influenced their actions for policy implementation. I used a multiple-case study method of data analysis to explore a variety of high school principal perspectives on the implementation of Vermont's personalized proficiency paradigm while building an understanding of how their perceptions could influence leadership for school change in their particular contexts (Creswell, 2013; Merriam & Tisdell, 2016; Miles & Huberman, 1994; Yin, 2014).

Significance

Though Vermont was one of several New England states implementing proficiency-based graduation requirements at the time of this dissertation research study, it was considered a leader in implementing policies that were comprehensive of both personalization and proficiency-based graduation (Sturgis, 2016). Sturgis (2016)

suggested that the field of research examining the implementation of personalized and proficiency-based education was still relatively new at the time of this research study. She also suggested that the pieces of the system were in place in many schools in Vermont. As a full-time high school science teacher working in a school endeavoring to understand and implement the personalized proficiency paradigm, my personal experience suggested a bumpy transition for some schools. High schools around the state were steeped in the early phases of implementing Act 77 and the EQS, and in my conversations with teachers in Vermont, I gathered that the policies were far from well understood or fully implemented by leaders in high schools around the state. Therefore, I focused this study on the understandings, values, and perceptions high school principals have when leading the implementation of Act 77 and the EQS early in the change process, long before impact of their actions could be determined. The context for this study was different from previous studies (e.g., Leithwood, Louis, Anderson, & Wahlstrom, 2004; Leithwood, & Mascall, 2008; Leithwood, & Menzies, 1998; Sturgis, 2016) in that it focused on a critical moment of initial high school principal engagement with a state-mandated paradigm shift in schools towards personalized proficiency. These previous studies focused on change for improved student outcomes without the particular setting (time, place, policy context, principal focus) found in this study.

The number of states and school districts adopting policies for a personalized proficiency paradigm was increasing at the time of this study, reaching what Sturgis (2016) called a “tipping point.” New England states were steeped in the earliest phases of the implementation processes, and the paradigm was gaining steam nationally. The

findings from this study may provide useful information for future local and state-level policy makers as they developed policies for personalized proficiency, and also inform the leadership practices and decision of principals implementing change for personalized proficiency in their schools.

Summary

As Vermont high schools begin to shift towards a legislated personalized proficiency paradigm, it is important to capture a snapshot of principal understanding, value, and perception of the policies. The policies required a shift in educational practices due to their expectation that schools tend to the conflicting goals in education of accountability and flexibility. How principals understood the policies would influence how they acted to make change happen in their schools and the leadership practices they applied as they lead the change. In Chapter 2, I discuss the current literature about Vermont's policies and education goals as well as principal leadership and principal leverage points for making change happen in their schools. In Chapter 3, I describe the methods used in this study, the participants in the study, the procedures used for data collection, and the steps of data analysis. Chapter 4 provides the context for each principal and the location in the study. In Chapters 5, 6, and 7, I provide findings from an in-depth qualitative analysis of the findings for each research question. Chapter 8 provides a discussion of the themes from the research findings and implications for principal leadership towards policy implementation in a personalized proficiency education paradigm.

Chapter 2: Review of Literature

Introduction

Policy makers in the State of Vermont realized the public education system was in need of major changes for students to meet standards and the needs of future employers (Sturgis, 2016). Beginning in 2013, new policies were implemented in the State of Vermont to improve educational outcomes. At the time of this research study, high school principals across the State of Vermont were transitioning their schools towards a legislated personalized proficiency-based paradigm. A synthesis of the existing literature informed a conceptual framework for this study. In this chapter, I provide a literature review to synthesize, and describe the context for a state-mandated personalized proficiency paradigm and principal leadership for school change. The synthesis includes literature related to topics reported out in four major sections: 1) national and local context, 2) Vermont's policies for personalized proficiency, 3) competing education goals, and 4) leadership. In the first section, I explore the literature related to national education policy for reforms that led to the emergence of a personalized proficiency-based education in the United States, and events and policies that precipitated the emergence of personalized proficiency in Vermont. In the second section, I outline aspects of Vermont's Act 77 and EQS. In the third section, I discuss personalized proficiency's policy-based attempt to meet competing goals in education, key components of a personalized proficiency paradigm in Vermont, and second order, adaptive change in schools. In the fourth section, I examine the importance of principal

leadership, leverage points for effective school change in a personalized proficiency paradigm, and finally, transformational principal leadership practices for school change.

National and State Context for a Personalized Proficiency Paradigm

National context. The United States education system is immersed in reform efforts. The ongoing national conversation about school reform that led Vermont to choose personalized proficiency education can be tracked back to 1966 with the publication *Equality of Educational Opportunity* also known as *The Coleman Report* (Coleman, 1966). This report identified reasons for inequality in and between schools that related to the social composition of a school and a student’s family background. It also questioned the role of education in student success, and laid the groundwork for future education researchers to determine the most promising educational practices for student outcomes (Chubb & Moe, 1990). Years later, the landmark report titled *A Nation at Risk* (1983) spurred a national movement for education reform based on the premise that schools were under-preparing our nation for international competitiveness (Chubb & Moe, 1990; National Commission on Excellence in Education, 1983). The following years of education reform policies targeted excellence, achievement, accountability, and equity. Those policies produced cycles of educational changes that slowly made forward progress in the area of student success (Tyack & Cuban, 1997). The No Child Left Behind (NCLB) Act of 2001 was a major piece of national education reform legislation focused on excellence and accountability. The NCLB Act prompted 14 years of accountability-focused “coercive federal mandates” that led to overreliance on

standardized testing (McGuinn, 2012, p. 137). Partially in response to national pushback on NCLB's mandates, Congress passed the Every Student Succeeds Act of 2015 (ESSA).

The ESSA aimed to ensure that high school graduates were ready for college and/or a career, and emphasized state-level responsibility for reform and innovation in improving student learning outcomes (Duncan & King, 2015). The ESSA legislation language allowed states the opportunity to advance personalized proficiency education, though it was not mandated. Under ESSA, states had several options: implement statewide assessments that measure mastery, feature personalized learning in school accountability systems, use federal funding to further personalized pathways for underserved learners, measure continuous student improvement with multiple data sources in each student, and include personalized learning in educator quality standards (Knowledge Works Foundation, 2016; Sturgis, 2016). With responsibility to implement effective local strategies in education and innovation in the hands of states, Vermont implemented a personalized proficiency education paradigm.

State context. Vermont's personalized proficiency reform efforts began in 1999, when the State Board of Education and the then Vermont Department of Education (which changed to the Vermont Agency of Education in 2011) convened a task force to examine issues facing secondary schools in Vermont. The result of this work was a publication titled *High Schools on the Move* (Vermont Department of Education, 2002), which provided commentary on the state of high schools in Vermont and recommended 12 principles for high school renewal. In *High Schools on the Move*, the authors wrote, "High schools have become impersonal institutions where individual talents and dreams

easily are lost as students struggle to meet uniform curriculum requirements and accumulate Carnegie units” (p. 1). The authors determined the “one size fits all” form of education present in high schools today was unable to meet the educational needs of all students. The task force made the recommendation that high schools should “create small, personalized learning environments that provide students with stable support from adults, caring connections to mentors and a sense of belonging” (p. 11). The authors claimed personalized learning was the best way for students to take risks in a safe setting, and prepare for their lives after secondary education. *High Schools on the Move* marked the starting point of Vermont on its path towards a personalized proficiency education paradigm, jumpstarted some of the earliest programs for personalization in the state (Clarke, 2013), and “remain(s) at the heart of the reform effort today” (Vermont Agency of Education, n.d., p. 1).

State-level efforts to make personalized proficiency a reality continued to 2008 when the Vermont State Board of Education, in conjunction with the Vermont Department of Education, published a statement called *The Transformation of Education in Vermont*. This document placed emphasis on school transformation towards 21st Century Learning Environments. The necessary key components outlined in this document included “demonstration of competence” and “personalized learning” (State Board of Education, 2008, p. 2).

In 2010, Vermont unanimously passed a joint resolution to join four other New England states in the New England Secondary School Consortium (NESSC). The policy framework for NESSC had three parts. The first part was proficiency-based high school

graduation, the second was flexible and personalized learning pathways, and the third was new student-centered accountability systems (New England Secondary Schools Consortium, n.d.). By joining this consortium, Vermont became a part of a Northeastern United States drive towards personalized proficiency as a means to reform secondary schools (Sturgis, 2016).

With personalized proficiency gaining momentum, in 2011, The Vermont Department of Education assembled a policy research team comprising principals, superintendents, legislators, and education related organizations to “uncover both opportunities and challenges related to... flexible learning pathways and proficiency-based graduation models” (Vermont Agency of Education, n.d., p. 1). After researching the practices of three Vermont high schools, the team determined Vermont schools were ready for legislated innovations. The team’s recommendations included the following: introducing the phrase “flexible pathways” into law, requiring the state-level implementation of proficiency-based graduation, and earmarking funds to support the implementation of personalized learning plans in schools.

In his State of the State address on January 10, 2013, Vermont Governor Peter Shumlin announced his support of personalized learning plans that connected student interest and post-secondary goals. He also promoted legislation for flexible pathways to graduation (Vermont Governor Peter Shumlin’s State of the State Speech, 2013). By July of 2013, the Vermont legislature passed Act 77, The Flexible Pathways Initiative, and personalized learning through multiple pathways became law (Vermont Agency of Education, 2016).

Parallel to the legislation for personalized proficiency, the State Board of Education was working to replace the Vermont School Quality Standards with a new set of standards called the Education Quality Standards (EQS). The proposed content for the EQS included personalized learning plans and graduation by proficiency (State Board of Education, 2009). By December of 2013, the State Board of Education approved the new EQS. The new standards matched the policy framework of the NESSC and paralleled the legislation for personalized learning in Act 77. Personalized learning, flexible pathways, and proficiency-based graduation requirements were all featured in the new standards. By the end of 2013, the State of Vermont established policies for personalized proficiency education that had been in process for over a decade.

Vermont's Personalized Proficiency Policies

Act 77. Vermont's Act 77 was a state law comprised of seven parts: 1) flexible pathways to graduation, 2) personalization, 3) work-based learning, 4) career and technical education, 5) virtual/blended learning, 6) dual enrollment, and 7) early college programs (Vermont Agency of Education, 2013a). Flexible pathways were defined in Act 77 as, "any combination of high quality academic and experiential components leading to secondary school completion and postsecondary readiness which may include assessments that allow the student to apply his or her knowledge and skills to tasks that are of interest to that student" (p. 5). The Vermont Agency of Education summarized flexible pathways as meaning each student in the State of Vermont would have his/her own unique pathway to graduation that included in and out of school experiences. All potential student pathways were available through and supported by the school, and were

documented in a Personalized Learning Plan (PLP). A PLP was a central and important document to the process of personalizing education. Vermont secondary schools are required to implement PLPs for all secondary students (grades 7 through 12) by November 30, 2017 (p. 5). Broadly, the goal of Act 77 is to prepare students for postsecondary experiences by providing the opportunity to follow an academic pathway that best matched each individual student's abilities and interests. Act 77 legislated flexibility as a major component of a student's high school education.

Education Quality Standards. The EQS were considered common law set by the Vermont State Board of Education. The EQS were adopted in 2014 and set standards to which all schools were accountable. The standards reinforced Act 77, and were inclusive of personalized components. For instance, the standards required teachers to use personalized instructional practices. The standards also required schools to provide access to PLP-documented flexible pathways including dual enrollment and career and technical education. However, the standards added accountability to flexible pathways because schools were required to develop proficiency-based graduation requirements (PBGRs). The PBGRs were set by local school boards and were school-based standards all graduates must meet to obtain a diploma. The PBGRs were implemented for the graduating class of 2020, meaning the 9th grade class of the 2016-17 school year. With the requirement for PBGRs, the EQS removed the Carnegie unit-based graduation model, and stated, "credits must specify the proficiencies demonstrated in order to attain a credit and shall not be based on time spent in learning" (Vermont State Board of Education,

2014, p. 12). The EQS required schools to have accountability measures in place for their graduates through proficiency-based graduation requirements.

Competing Education Reform Goals: Flexibility vs. Accountability

Tyak and Cuban (1995) argued American education policy rhetoric was cyclical, with topics of education reform emerging again and again. They argued the cyclical nature was a result of conflicting values in education that emerged repeatedly and caused a pendulum-like effect on policy discussions.

Labaree (1997) described the struggle over conflicting values to explain the policy pendulum through three education goals. The first, democratic equality, had equity and citizen preparation the goal of the education system. The second, social efficiency, had future employees for the American workforce as a focus. The third, social mobility, had a focus on preparing each individual to be competitive for their own future social ranking in society. While democratic equality and social efficiency goals positioned education as a public good and had an accountability focus, the social mobility goal positioned education as a private good and had a flexibility focus. Labaree argued education reform for effectiveness in America was slowed by this perpetual goal conflict, and policies swung between attempts to meet accountability goals and flexibility goals.

In Vermont, policies for personalized, proficiency-based education were designed to implement an education system in which both standards (accountability) and students (flexibility) were the focus (Sturgis, 2016). Vermont's EQS required schools to graduate students by proficiency instead of seat-time measures, and thus tended to goals for equity of outcome for all students (accountability). Vermont's Act 77 legislated PLPs and

flexible pathways to graduation, and thus provided for student-based, private, or individual education goals (flexibility). When considered in tandem, Vermont’s policies for personalized proficiency attempted to bridge conflicting values-based goals for education in America. With the adoption of a personalized proficiency paradigm, Vermont education policies intended all public schools to operate in both a standards-driven and student-centered manner. As Figure 2.1 depicts, Vermont’s Act 77 and EQS made both accountability *and* flexibility the expectation in Vermont’s schools.

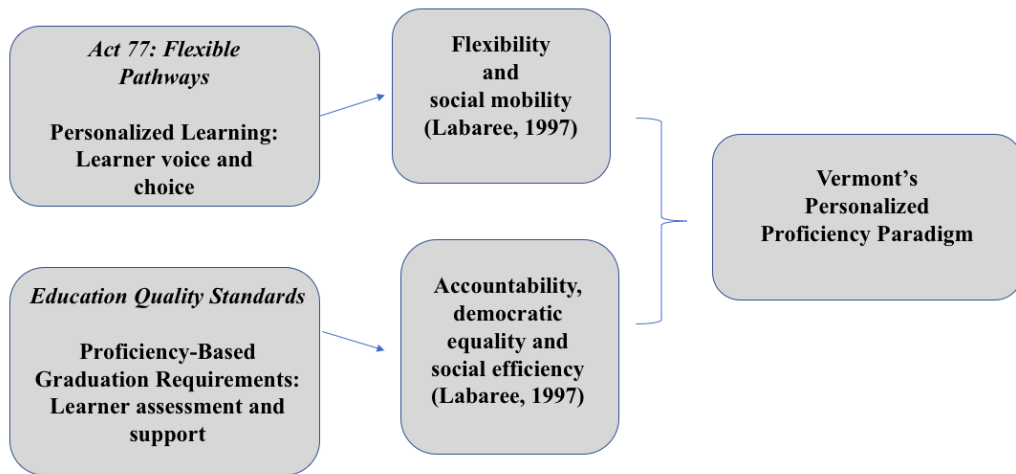


Figure 2.1. A model of the components of accountability and flexibility in Vermont’s personalized proficiency paradigm.

Flexibility and accountability of the personalized proficiency paradigm. A variety of terms exist in the literature to describe personalized proficiency. Depending on the author, school, or location, the terms were used to describe the accountability side of the paradigm: mastery, competency, proficiency, performance-based standards-based, and standards-referenced (Powell, Kennedy, & Patrick, 2013). The flexibility side of

policies in this paradigm was frequently called “personalization;” however, as Powell and colleagues commented, “To be clear, personalized learning is not equal to competency-based [proficiency-based] learning—but they are related and are often (mistakenly) used interchangeably” (p. 22).

Personalized learning: Implementing flexibility. Personalization and proficiency-based learning were mutually exclusive while also being interdependent in Vermont’s new policies. Definitions of personalized learning often included components of proficiency in the literature. For example, Powell et al. (2013) defined personalized learning as “tailoring learning for each student’s strengths, needs and interests—including enabling student voice and choice in what, when and where they learn—to provide flexibility and supports to ensure mastery of the highest standards possible” (p. 4). Zmuda et al. (2015) defined personalized learning as “...a progressively student-driven model in which students deeply engage in meaningful, authentic, and rigorous challenges to demonstrate desired outcomes” (p. 7). Though most educators and schools for the past century would agree that students were at the center of education, a personalized learning environment added key components that were missing from the traditional education system. The shift to a personalized proficiency paradigm was defined by the creation of learner-driven environments in schools (Bray & McClaskey, 2015; Clarke, 2013; Keefe & Jenkins, 2008; Rickabaugh, 2016; Zmuda et al., 2015). Bray and McClaskey (2015) posited the new paradigm reflected the notion that the learner (students) actively engage in the learning experience, provide focus and direction which enabled experiences that extend far beyond studying and content focused exams.

In a learner-driven environment, learning had greater depth, was retained longer, had more meaning for students, and increased student engagement (Zmuda et al., 2015). Powell et al. (2013) suggested the key components for personalized learning included increased student agency, flexible pacing, individual learning plans, deeper learning, and anywhere learning. These key components to flexibility and personalization of learning could be categorized into two learner-driven environment factors—learner voice and learner choice.

Learner voice. In personalized proficiency, bringing the “self” or learner voice into the process of education was powerful and important (Rickabaugh, 2016). Learner voice was initially captured through a PLP. It included information about how an individual learned best, what supports they needed for learning, aspirations, future career plans, personal goals, reflections on progress, or other areas that would help with creating a plan for learning that was shared with adults for guidance and mentoring (Bray & McClaskey, 2015; Osofsky & Schrader, 2010; Rickabaugh, 2016). Vermont’s policies for personalized proficiency required schools to develop PLPs in conjunction with students, parents, and school counselors. This plan captured a student’s voice in their educational decision-making process.

Learner choice. Learner voice informed learner choices in the content or skills needed to meet established standards, sequence of the learning, pace of the learning, environment of the learning, and demonstration of learning (Bray & McClaskey, 2015; Clarke, 2013; Zmuda et al., 2015). Learner choices were monitored and facilitated by teachers taking on a guidance role. Learner choices lead to greater engagement and

allowed a student to deeply engage with the content (Bray & McClaskey, 2015; Hargraves, 2006).

Proficiency-based graduation: Implementing accountability. Proficiency-based graduation is required by Vermont's EQS for the graduating class of 2020 (9th grade students in the 2016-17 school year). Students progress in their education through the demonstration of proficiency in standards selected by a school (Powell et al., 2013). Due to the fact that Vermont is a local control state, the Vermont Agency of Education (2017b) developed sample Graduation Proficiencies for schools and school boards to view as a guide in determining their own graduation proficiencies. The proficiencies included curriculum content in the areas of: literacy, math, science, global citizenship, physical education and health, artistic expression, and transferrable skills. However, the Agency of Education allowed local decision making for which aspects of the curriculum were translated into graduation proficiencies. Transferrable skills were applicable to any subject area. The Vermont Agency of Education suggested the following categories for transferrable skills: clear and effective communication, creative and practical problem solving, informed and integrative thinking, responsible and involved citizenship, and self-direction. The Agency website provided transferrable skills rubrics with scoring criteria for schools in Vermont to use (Vermont Agency of Education, 2017b). Sturgis and Patrick (2011) identified key components of proficiency-based grading and graduation, which included: 1) students advancing upon demonstration of proficiency, 2) transferable learning objectives that were clear to students, 3) assessments that were meaningful and positive, 4) supports for differentiated learning, and 5) assessments that included skills,

knowledge and dispositions. These five key components sort into two categories—learner assessment and learner support.

Learner assessment. In the new paradigm, the academic path a learner takes along the way can ultimately be assessed “as, for, and of” learning in relation to school-chosen proficiency standards (Bray & McClaskey, p. 10). In all three forms of assessment, the student self-assesses their progress, however each form varies with the amount of teacher involvement. In assessment “as” learning, a learner reflects on progress towards proficiency standards with teacher-monitored self-assessments. In assessment “for” learning, a learner reflects on feedback provided by teachers and peers, which then informs future steps for learning. In assessment “of” learning, summative assessments are evaluated and tracked by teachers for learner proficiency determination (Bray & McClaskey, 2015; Rickabaugh, 2016). Assessments in a personalized proficiency paradigm are grounded in a growth model. Learners are given ample feedback and opportunity for multiple attempts until proficiency is demonstrated. Assessments are authentic in nature, often incorporating audiences other than teachers at the summative level (Bray & McClaskey, 2015; Keefe & Jenkins, 2008).

Learner support. The learning cycle in personalized proficiency requires a school to provide learner support in several areas that include (but are not limited to): clear rubrics for proficiency standards, choices in multiple pathways to learn, frequent feedback opportunities, one-to-one guidance and mentoring, proper access to resources including technology, and authentic assessments; while also being culturally responsive, and concerned about all aspects of the learners’ lives (Clarke, 2013; Zmuda et al., 2015).

Vermont's EQS require schools to incorporate supports to reach the needs of all learners as they progressed through a proficiency system (EQS, 2014).

Schools implementing reforms for both personalization/flexibility and proficiency/accountability need to take multiple pieces into consideration when developing a comprehensive reform plan. The reforms efforts required for this new paradigm are considered large and second-order change for schools. In the next section, I provide a review of literature related to school reform for implementing major components of the paradigm.

School reform for flexibility and accountability. The magnitude of change for school reform towards personalized proficiency can be described as second-order, adaptive change (Rickabaugh, 2016). Two order changes, first and second, are considered in this section. A first order change is considered incremental, fits within existing conceptions of education, has clear next steps to take, and can be reversible (Marzano, Waters, & McNulty, 2005). First order change occurs easily in school cultures where the leadership is transactional in nature, and where a principal's request for change is met by teachers and students through simple exchange interactions (Bass, 1985).

Second order change, on the other hand, "...is anything but incremental. It involves dramatic departures from the expected, both in defining a given problem and finding a solution" (Marzano et al., 2005, p. 66). Change at this level requires leadership that extends beyond simple transactions, and instead focuses on building shared consensus on change actions, building participant capacity, and ensuring growth of all parties involved (Bass, 1985; Leithwood & Sun, 2012). Heifetz (1994) considers change

of this order as having no presently accepted, adequate response, and therefore calls it “adaptive.” Change for adaptive challenges means more than modifying structures and policies. Rather, it aims to transform the core operational factors through a mutually accepted vision of new cultures and modes of operating (Clarke, 2013; Heifitz, 1994; Rickabaugh, 2016; Zmuda et al., 2015).

Vermont’s shift to personalized proficiency is second order and adaptive in nature because there exists no one pathway to follow for its implementation. Schools must reconcile that these policies require the implementation of two competing goals for education: accountability and flexibility. Schools also need to engage in a process of making meaning of the policies before decisions and steps can be made for local implementation. This requires school administrators, board members, and teachers to adapt their mindset to understand the new policies, leading them to “...examine and oftentimes abandon deeply held beliefs in order to reframe the role of the teacher and the student, the nature of what is to be learned, and the way in which it will be learned” (Zmuda et al., p. 149).

Leadership for School Change

Importance of the principal’s leadership in school reform. Research (Leithwood & Mascall, 2008; Leithwood et al., 2004) shows how principals use their awareness of school problems to develop a strong, shared mission and plans for reforming the structure and culture of a school. The principal’s influence trickles down to the teacher and student level. Therefore principals, as major influencing factors on schools, are entities worth examining to understand the second order change necessary to

implement a personalized proficiency educational paradigm in Vermont. Twenty-first century expectations of principals require a shift from manager to leader of organizational change and instruction. This reflects the effect principals are expected to have on student-level outcomes (Fullan, 2010; Leithwood et al., 1997; Marzano et al., 2005; Louis & Wahlstrom, 2008). Studies (Louis & Wahlstrom, 2008; Marzano & Waters, 2009; Sebastian & Allensworth, 2012) show the influence principals can have on teaching practice. This influence is a factor of their trustworthiness, shared leadership practices, and situational awareness of school culture and activities. Other studies (such as Leithwood et al., 1997; Leithwood et al., 2004) show the effect of principals on school planning, school culture, school structure, school organization and vision development as second only to classroom teachers. Blase and Kirby (2008) suggested that “if teacher behaviors carry primary weight, and leaders secondary, then the behaviors of leaders to motivate teachers for school improvement are doubly important” (p. 126).

Leadership for implementing flexibility and accountability. School change for personalized proficiency requires leadership that matches the magnitude of the change. It is necessary to facilitate a community of learners working together to create new and shared student learning (Hargraves, 2006; Marzano et al., 2005). To make adaptive, second order change like the kind required for the implementation of accountability and flexibility in a personalized proficiency paradigm, it is suggested school leaders apply appropriate levers for change along with the application of transformational leadership practices (Leithwood & Sun, 2012; Rickabaugh, 2016).

Levers for change. Frontier and Rickabaugh (2014) and Rickabaugh (2016) argued that meaningful outcomes for students in second order change for personalized proficiency occur as a leader applies five levers for change. For this research study, I split the five levers into actions for accountability and flexibility as seen in Figure 2.2. The first three levers are acknowledged by the authors as limited to first order change unless implemented with instructional changes and student/teacher role shifts. For my study, the first three leverage points correspond to the implementation of the accountability side of Vermont’s policies for personalized proficiency. The fourth and fifth leverage points from Frontier and Rickabaugh (2014) correspond with the implementation of the flexibility side of the policies.

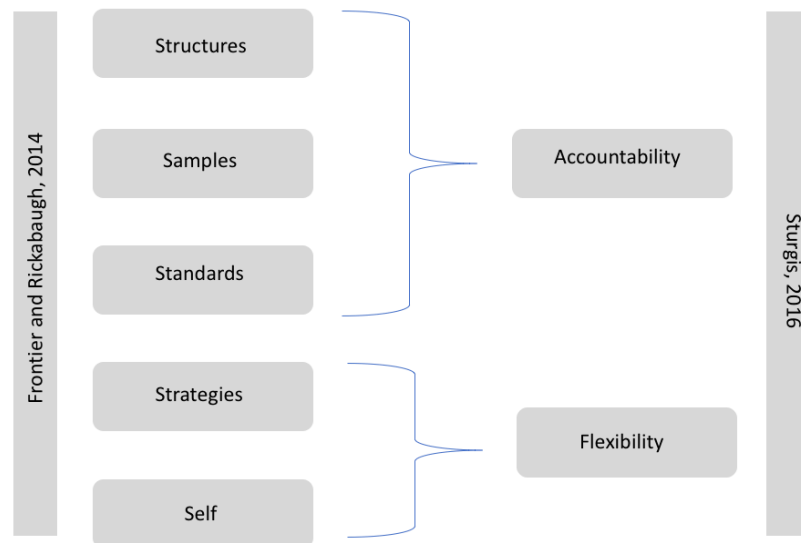


Figure 2.2. Frontier and Rickabaugh’s (2014) Levers for Action to Improve Learning Categorized by Sturgis’ (2016) Accountability and Flexibility.

Frontier and Rickabaugh's (2014) first three levers are structures, samples, and standards. Structure-based leverage points for change included the modification of schedules, grade books, facilities, and technology. The authors posited these leverage points are logistical and administrative in nature, and are "highly visible, often highly political, but this type of change is enticing because it is apparent for all stakeholders and often can be articulated in a linear planning process that includes specific dates for implementation" (p. 24). Frontier and Rickabaugh (2014) suggested it is a misconception that structure-based leverage points can lead to an improved learning environment, and rarely do so. When coupled with a focus on leadership for improved instructional strategies, collaboration, and empowerment of teachers, structure-based leverage points have greater potential for educational improvement.

Sample-based leverage points for change include changing how students are grouped by gender, age, or ability. Frontier and Rickabaugh (2014) argued this leverage point is grounded in the misconception that "placing students in the course, track, or level that has been designated for them will ensure their learning needs are met" (p. 43), and usually this leverage point leads to a reshuffling of students without any meaningful outcomes. The authors claimed that this leverage point is only effective when students have access to effective instructional strategies in heterogeneous groupings, the ability to move between levels based on mastery, and support to achieve standards.

Standards-based leverage points include the process of setting learning expectations for students. Frontier and Rickabaugh (2014) also asserted that this leverage point usually ends up looking like longer school days, more homework, and more content

coverage without significant improvement in student outcomes. They suggested this leverage point is only effective when standards are “prioritized based on their potential to affect the student learning across disciplines and using formative assessments that break standards into small, manageable pieces” (p. 62).

The fourth and fifth levers, strategies and self, Rickabaugh (2016) argued, are more powerful in changing learning outcomes for students in a personalized proficiency paradigm. The strategy-based leverage point includes the instructional strategies teachers use to “help students deepen their understanding of content and improve their ability to use important skills” (Rickabaugh, 2016, p. 91). The author stressed that as teachers access the most impactful learning strategies, the ability for students to reach standards increases. The fifth leverage point is the “self” (p. 122). The “self” Rickabaugh (2016) said, “is potentially the single most powerful lever for improving student learning outcomes. It involves changing students’ and teachers’ existing beliefs about learning and their roles in the learning process” (p. 26). This leverage point relies on both teachers and students to re-think their assumptions about their own and each other’s capacity to grow their knowledge and motivation. Frontier and Rickabaugh (2014) suggest allowing students to explore the self and shift their belief in their ability to grow and learn can have a “profound” impact on student learning (p. 123).

In this dissertation, Frontier and Rickabaugh’s (2014) five leverage points for improved learning outcomes are used as a framework for principal’s action steps in a personalized proficiency paradigm. I situate the first three leverage points as actions for the accountability side of the policies due to their emphasis on non-individual related

factors. The fourth and fifth levers, when taken together, improve student learning outcomes by flexibly tending to the needs of each individual learner. Next, I discuss the literature related to transformational leadership, a type of leadership practice that can serve school leaders well when engaged in school change.

Transformational leadership. Transformational leadership theory was first introduced by Burns' (1978) seminal book. He wrote that leadership had two forms: transactional and transforming. Transactional leadership, according to Burns, "is not a joint effort for persons with common aims acting for the collective interests... but a bargain to aid the individual interests of persons or groups going their separate ways" (p. 425). Burns (1978) proposed the importance of employing transforming leadership rather than transactional leadership due to its ability to bridge the interests of leaders and followers in a manner that allowed for shared purpose, morals, and goals. Bass (1985) expanded Burns' dualistic view of leadership and argued that though it was important to distinguish between transactional and transformational leadership, they were not mutually exclusive and could both have an important role in the work a leader did to move an organization forward in times of change. Leithwood (1994) agreed with Bass' position on the incorporation of transactional leadership practices within effective transformational leadership, and posited transformational leadership had significant direct and indirect effects on progress for school reform. Leithwood and Sun (2012) outlined the dimensions and practices of a transformational school principal. These dimensions included: setting direction, developing people, redesigning the organization, and improving the instructional program. They added a category named "other related

practices” that included more transactional leadership practices, which they noted could be accessed by a transformational leader when appropriate and in certain circumstances. All of these practices are outlined in Appendix B and are described more fully below.

Each of the dimensions of Leithwood and Sun’s (2012) transformational school leadership (TSL) model is characterized by specific practices. For example, when a principal is operating in the dimension of “setting direction,” a principal will set a vision, develop common goals through consensus, and hold high standards expectations for staff and students. When operating in the “developing people” dimension, a principal tends to individual opinions and needs, acts as mentor and coach, supports teacher individual professional development, challenges staff assumptions, stimulates creativity, provides information for effective teaching practice, models behavior, instills pride, symbolizes success, trusts their staff, and is willing to change their own practice. When working in the dimension of “redesigning the organization,” a principal works to form a cohesive school culture around a common set of values, builds an atmosphere of caring and trust in staff, distributes leadership, allows staff to participate in decision making, builds working conditions for collaboration, encourages parent involvement in school and home, and demonstrates sensitivity to community aspirations or requests. When working in the dimension to “improve the instructional program,” a principal will focus on instructional development with their staff.

In this study, Leithwood and Sun’s (2012) transformational leadership practices were coupled with Rickabaugh’s (2016) personalized leadership practices as a framework for exploring which high leverage transformational leadership practices principals in the

State of Vermont were accessing as they led their schools towards the personalized proficiency education paradigm. Table 2.1 outlines the relationship between these leadership perspectives. The two dimensions of Leithwood and Sun’s (2012) transformational leadership dimensions that were absent from Rickabaugh’s (2016) were the transactional “related practices,” and the transformational “setting directions.”

Table 2.1.

Leithwood and Sun’s Transformational Leadership Practices and Rickabaugh’s High Leverage Leadership for Personalized Proficiency.

Dimension and Practice Element Leithwood & Sun (2012)	Transformational School Leadership	High Leverage Leadership for Personalized Proficiency Rickabaugh (2016)
<p>Setting Directions</p> <ul style="list-style-type: none"> • Develop a shared vision and building goal consensus • Hold high performance expectations 		
<p>Developing People</p> <ul style="list-style-type: none"> • Provide individualized support • Provide intellectual stimulation • Model valued behaviors, beliefs, and values 		<p>Building Educator Capacity</p> <ul style="list-style-type: none"> • Individual professional learning profiles • Sharing professional learning
<p>Redesigning the organization</p> <ul style="list-style-type: none"> • Strengthen school culture • Building structures to enable collaboration • Engaging parents and the wider community 		<p>Building Collaborative Action Networks</p> <ul style="list-style-type: none"> • Action networks for improved adult learning that mimics instructional shifts for students

Improving the instructional program		Instructional Shifts
<ul style="list-style-type: none"> • Focus on instructional development 		<ul style="list-style-type: none"> • Focus on student learning • Instruction on demand • Driven by clear purpose • Building learning capacity • Ensuring success
Related practices	Transactional	
<ul style="list-style-type: none"> • Contingent reward • Management by exception 		

Parallel to Leithwood and Sun’s (2012) dimensions and practices of transformational leadership, Rickabaugh (2016) posited three leadership practices had greatest impact when a school leader was working to transform a school towards personalized proficiency. Rickabaugh’s (2016) three high-impact transformational leadership practices included: 1) shifting instruction, 2) building educator capacity, and 3) enabling collaboration and networking. Next, I describe all three of these high impact practices.

Shifting instruction for personalized proficiency, according to Rickabaugh (2016), requires leadership in five key areas. First, instructional design should begin “by focusing on where learners currently are and building from there to actions that will increase the likelihood that students actually learn and do well in the classroom” (p. 82). In the traditional paradigm, teachers designed units of instruction without knowledge of each student’s abilities. This shift requires teachers to know the people learning in their

classroom well in order to be able to adjust instruction and content to their personal needs. Second, Rickabaugh suggested instructional design should “offer students some voice in and ownership of their learning and to begin where students currently are and work from there,” or what Rickabaugh called “instruction on demand” (2016, p. 84). Third, instruction should have a clear and focused “purpose of learning to build relevance and concentrate student attention” (p. 86). Fourth, instruction should move away from rote memorization of facts, and instead should focus on “developing the skills, strategies, habits, and tools necessary for students to learn rather than asking them to carry isolated facts in their minds” (p. 89). Fifth, instruction should focus on ensuring access to learning opportunities, and success for all students. To this fifth key area, Rickabaugh (2016) noted, “If we allow ourselves to be satisfied with providing access alone, we deny our students the experience of a more intimate and productive relationship with their learning – one that can ensure their success, both now and in the future” (p. 90).

Building teacher capacity for personalized proficiency, according to Rickabaugh (2016), requires “professional learning experiences [for teachers] that are timely, customized to their learning needs and readiness levels, and available in a variety of formats (e.g., large group, independent, online)” (p. 99). The essence of Rickabaugh’s (2016) message is that all of the instructional shifts necessary for student learning are necessary for teacher learning as well. Key aspects necessary to build teacher capacity include individual professional learning profiles for each teacher and allowing teachers “opportunities to demonstrate new knowledge and skills” (Rickabaugh, 2016, p. 104).

Enabling collaboration and networking is a third key leadership practice for personalized proficiency (Rickabaugh, 2016). Rickabaugh found that for greatest impact, teacher and administrators should work in “action network approach.” In this network, groups of people worked together, “sharing our resources and experiences, and learning from each other we could move forward faster, avoid needless missteps and setbacks, provide mutual support (and sometimes protection), and share energy, enthusiasm and courage” (Rickabaugh, 2016, p. 116). He suggests action network groups focused on the transformation of education for personalized proficiency, where adults learn together, and focus on instructional practices.

As principals access the high leverage transformational leadership practices towards instructional leadership as suggested by Rickabaugh (2016), they lead towards the key leverage points of strategies and self, and towards the flexibility side of the personalized proficiency paradigm.

Conceptual Framework

The conceptual framework for this study is placed in Figure 2.3 below. The dotted (A) part of the concept map showed Vermont’s personalized proficiency paradigm, comprised of two major components shown in grey boxes (The EQS (2014) and Act 77 (2013)). The EQS provided rules for proficiency based graduation and accountability goals, while Act 77 was a policy for personalization and flexibility. The goal of this study was to explore how principals were engaging in leadership for school change while implementing Vermont’s state-mandated shifts for a personalized proficiency education paradigm. Central to this study was the idea that Vermont

implemented policies that required schools to act upon both accountability and flexibility, not just one or the other (Sturgis, 2016). Factors that potentially influenced principal leadership in this paradigm shift included principals' understanding of Act 77, the EQS, and the components of personalized proficiency (B). These principals' understandings connected to how they perceived the type of change (as standardization/accountability focused, personalization/flexibility focused, or both), and how they valued the change. Principal understandings also influenced the action leverage points and leadership practices for implementing personalized proficiency in their schools (C). This study examined how principals enacted their leadership by using five key leverage points for change (Frontier & Rickabaugh, 2014). The choice of which leverage point to use was influenced by a principal's understandings, perceptions, values, and leadership practices. Finally, this study incorporated the dimensions of transformational leadership that principals practiced when moving their schools towards personalized proficiency (D) (Leithwood & Sun, 2012; Rickabaugh, 2016).

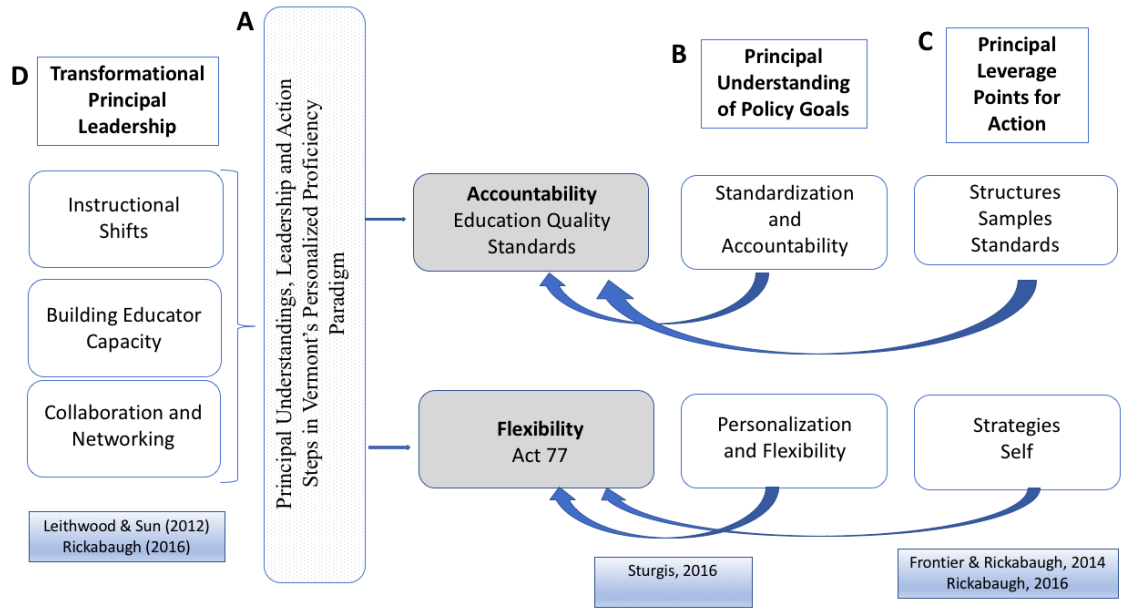


Figure 2.3. Conceptual model of the theory behind this dissertation research study.

Summary

In order to explore high school principal leadership for school change in a personalized proficiency paradigm, I focused my literature review on seven key areas. First, I discussed national education policy for reforms that led to the emergence of personalized proficiency in the United States. I then examined the events that precipitated the emergence of personalized proficiency in Vermont, and explored the components of Act 77 and the EQS. I considered the literature relating to the competing goals in education, and how Vermont's policies tended to all of the goals. I situated the personalized proficiency education paradigm as one that required second order, adaptive change in schools by defining the magnitude of change and exploring components of accountability and flexibility in the personalized proficiency paradigm. I described literature relating to principal action and leadership for effective school change. Vermont

high school principal leadership practices for school change towards a personalized proficiency paradigm may be influenced by the factors as stated in the literature review, their understanding of the goals of the policies for personalized proficiency, choice of leverage points for change, use of the dimensions of transactional and/or transformational leadership, and perception of the policies as being more accountability or flexibility oriented.

Chapter 3: Methods

This multi-case study explored how Vermont's high school principals understand and lead the implementation of policies for personalized, proficiency-based education in their schools three years after the policies were legislated and adopted by the State Board of Education. The overarching goal of this study was broken into three questions:

- What constructed understandings, values, and perceptions do Vermont high school principals have about Act 77 (Flexible Pathways), the Education Quality Standards (Graduation by Proficiency), and the statewide shift towards a personalized proficiency education paradigm?
- How are the leadership practices of Vermont high school principals influenced by their understandings, values, and perceptions of Act 77 (Flexible Pathways), the Education Quality Standards (Graduation by Proficiency), and the statewide shift towards a personalized proficiency education paradigm?
- How do the understandings, values, and perceptions related to Vermont's personalized proficiency paradigm influence principal leadership practices as they engage in the early phases of making change happen in their schools?

In this study, I interviewed five high school principals and five high school teachers presently experiencing and implementing state-mandated shifts towards a personalized proficiency education paradigm. Participant viewpoints on how the policies were understood and implemented by high school principals provided the evidence or constructed reality during this time of education paradigm shift in Vermont. This chapter describes this research study's methods, and includes a discussion about the rationale for

a qualitative case study research design, and provides information about the research participants.

Rationale for Qualitative Research Design

There were two reasons why I applied a constructivist qualitative epistemology. First, this allowed me to capture the constructed reality of personalized proficiency and its implementation by high school principals (Creswell, 2013; Merriam & Tisdell, 2016; Miles & Huberman, 1994; Yin, 2014). Second, a multiple-case study allowed me to explore a variety of perspectives on the implementation of a personalized proficiency paradigm while building an understanding of how principal perceptions of personalized proficiency legislation could influence leadership for school change (Creswell, 2013; Merriam & Tisdell, 2016; Miles & Huberman, 1994; Yin, 2014).

In designing an inquiry-based study, Guba and Lincoln (1994) suggest a researcher should answer three questions: 1) the ontological question, 2) the epistemological question, and 3) the methodological question (p. 108). Though Guba and Lincoln (1994) recognized the difficulty of answering these questions in their suggested order, I framed my study using these three questions.

The ontological question. To answer Guba and Lincoln's (1994) first suggested question, "What is the form and nature of reality, and what is there that can be known about it?" (p. 108), I explore the ways principals are understanding, valuing, perceiving, and leading change in their schools during the shift to personalized proficiency education. I, therefore, chose an inquiry paradigm reflecting the ontological assumption that multiple constructed viewpoints on reality can be used to shape knowledge

(Creswell, 2013; Guba & Lincoln, 2004). I assumed that no one single reality existed for how principals made meaning of Vermont's policies for personalized proficiency education, and no one single pathway existed for how principals would lead change for personalized proficiency in their schools. I, therefore, as Glesne (2011) stated, chose to "...see the world as more shaped by the mind, by how the mind perceives, categorizes, and interprets things." This study captured a snapshot of principal understanding and choices for action at an initial, and therefore critical, time in Vermont's statewide process of changing education from a traditional paradigm to a personalized proficiency paradigm. I believed the various forms of meaning of personalized proficiency made by principals, and the resulting choices principals made for leading policy implementation would be critical in shaping the landscape of the personalized proficiency paradigm in Vermont.

The epistemological question. Guba and Lincoln (2004) suggested epistemology and ontology overlap considerably when a researcher applies an ontology that accepts multiple viewpoints (p. 111). To respond to Guba and Lincoln's (2004) epistemological question, "What is the relationship between the knower... and what can be known?" (p. 108), I positioned this study in an interpretivist or constructivist framework, commonly applied to what Creswell (2013) refers to as an ontological viewpoint. Denzin and Lincoln (2011) described the interpretivist researcher as someone who "understands that research is an interactive process shaped by one's personal history, biography, gender, social class, race, and ethnicity, and those of the people in the setting" (p. 5). The findings from this study relied on the views of the individual study

participants. I found themes in the complexity of their views and then developed patterns of meaning from them (Creswell, 2013). My personal position was considered a lens through which my interpretation occurred. Therefore, I position myself as a researcher in the section titled “Ethical Considerations,” where I address how I bracketed myself as a practitioner during the research process.

The methodological question. Guba and Lincoln (2004) suggested a last question for framing a research study, which was, “How can the inquirer... go about finding out whatever he or she believes can be known?” (p. 108). I believed principal understanding of legislation for personalized proficiency, and the resulting leadership practices for implementing the policies, were best understood through the application of qualitative methodologies. A qualitative approach allowed for data to be collected on individuals implementing and experiencing leadership for change towards personalized proficiency in Vermont. The data collection procedures included methods for finding data that encompassed various participant viewpoints, including teachers’ and principals’ (Creswell, 2013).

Under a qualitative approach, a researcher analyzes data with a goal of inductively finding themes in the data (Glesne, 2011). Denzin and Lincoln (2011) suggested, “Qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of meanings people bring them” (p. 3). Merriam and Tisdell (2016) posited that qualitative researchers “are interested in understanding the meaning people have constructed; that is, how people

make sense of their world and the experiences they have in their world” (p. 15). Miles and Huberman (1994) suggested a qualitative researcher’s role in a study is to “gain a ‘holistic’ (systemic, encompassing, integrated) overview of the context under study: its logic, its arrangements, its explicit and implicit rules” (p. 6). In short, qualitative research is an inductive process where a researcher gathers data from the field to build an understanding of a case. For this study, I decided to collect data from Vermont high school principals and teachers experiencing and implementing state-mandated shifts towards personalized proficiency. I then determined the most fitting category of qualitative research for this study was a multiple-case study. The rationale for this determination is described in the next section.

Rationale for Case Study Methodology

Case studies are appropriate for research questions that begin with “how” or exploratory “what” questions (Yin, 2014, p. 11) like the two driving research questions listed at the start of this chapter. Merriam and Tisdell (2016) suggest a definition of the case, or “unit of study” rather than an investigation topic is what defines a case study (p. 38). In this study, the case is a group of principals leading school change for personalized proficiency in the State of Vermont. Case studies often include contemporary events without control of the individuals involved (Yin, 2014). In this study, none of the principal participants had experience or expertise in implementing every component of Vermont’s personalized proficiency paradigm, yet all were leading their schools in implementing a mandated personalized proficiency paradigm, the decision for which they had no control over.

A comparative or multiple case study is an appropriate data collection method when it is important to examine data from a variety of sources, including interviews, document analysis, website analysis, observations, and physical artifacts (Glesne, 2011; Merriam & Tisdell, 2016; Yin, 2014). Yin (2014) suggested that multiple case studies can be used to “draw a single set of cross-case conclusions” (p. 18). In this study, principals from high schools in a wide geographic distribution around the State of Vermont were interviewed in order to compile a rich description of how principals were understanding, valuing, perceiving, and leading change due to state-level policies for personalized proficiency. By interviewing multiple principals, I was able to unveil themes, patterns, and issues with how principals were making meaning of the policy and leading change at a critical and early time in the policy implementation timeline. Case studies require an in-depth understanding of context within each setting, which enables rich descriptions of the case (Creswell, 2013; Merriam & Tisdell, 2016). Multiple case studies involve developing descriptive, context rich outcomes (Merriam & Tisdell, 2016). In this dissertation, I provide a description of the setting in which all high school principals in the State of Vermont were operating at the time of this study: an educational setting shifting under a newly state-mandated personalized proficiency paradigm. I also provide a description of each principal’s context to the extent necessary to understand how the school setting influences decisions for personalized proficiency implementation without compromising participant identity. This information is found in Chapter 4 of this dissertation.

Research Participants

Vermont's Act 77 and EQS impact the education paradigm found at the secondary level in Vermont schools, shifting from a traditional paradigm to one of personalized proficiency. Though neighboring states of Maine and Rhode Island were also in the midst of personalized proficiency paradigm shifts at the time of this study, they were in different stages of implementation than Vermont. Vermont was in the earliest stages of statewide implementation, where principals were engaged in a process of making meaning of the policies, and making initial leadership decisions for school change. The State of Vermont was therefore the most appropriate setting to answer my research questions.

Two types of participants included in this study are principals and teachers. First, I solicited high school principals who were employed as a leader of a Vermont high school, and were engaged in the process of implementing Act 77 and the EQS. This criterion helped me explore the perceptions of principals who were engaged in a school-wide change process due to a state mandate. Second, I solicited principals working in schools that had not fully implemented personalized proficiency prior to 2013. I chose these criteria because I was interested in exploring principal leadership for school change in locations where the concept of personalized proficiency was relatively new, and therefore posed a large-scale, second-order and adaptive challenge for principals.

I initially solicited participants with the help of the Executive Director of the Vermont Principals' Association. The director sent my solicitation e-mail to all principals in the State of Vermont (Appendix C). The solicitation e-mail proved

ineffective because no principals responded to the participant request. The Director provided me with a complimentary copy of the Vermont Education Directory for 2015-2016. The Directory provided contact information for all Vermont Supervisory Unions, schools, and administrators. Using the Directory, information from school websites, and personal connections I have in the education community, I compiled a list of 20 principals to personally contact. I solicited their participation by re-sending the initial solicitation e-mail the director sent to principals (Appendix C). I then also followed up with a telephone call to each principal. This procedure led to a positive response from five principals, a negative response from two principals, and no response from 13 principals. Acknowledging the incredibly busy schedule of principals, and the lack of response from 13 principals, I accepted the participation of the five principals who responded positively to my solicitation. Though this procedure led to a seemingly unfavorable “convenience sampling” technique (Patton, 1990, p. 183), the five principals who responded positively fit the criteria of the study and were no less “information rich” (Patton, 1990) than if I purposefully chose principals from around the State of Vermont. All of the principals worked in high schools that were still in the midst of implementing the personalized proficiency paradigm shift called for by Act 77 and the EQS. The principals represented a wide geographic distribution across the State of Vermont. The reason for maintaining a wide geographic distribution was twofold. First, I acknowledged the role local decision-making played in the leadership practice of principals. Second, the themes that emerged from this study would have greater transferability within Vermont if high school principals from around the State of Vermont

were selected for this study. In Table 3.1, I summarize participant demographic information. To help protect the confidentiality of the participants in a small state like Vermont, I randomly reassigned the participant’s sex.

Table 3.1.

Participant Demographics Matrix Snapshot

Participant (by pseudonym)	School (by pseudonym)	Years as principal in current school
Carol Rumney	Valley Run Regional High School	8
George Brighton	Grandview High School	2
Ellen Longlee	River Regional High School	3
Barbara Bell	Highlands High School	10
Roger Dibbs	Maple Tree High School	1
Total N=5		

As another data point, in addition to the principal self-reports, I solicited the participation of one teacher from each principal’s school for an interview (Appendix C). The reason for interviewing one teacher in each location was to include another data point in addition to principal interviews. To solicit teacher participation, I asked each principal to provide the name of at least two teachers to contact in their building. The requirements for teacher participation was that the teacher interviewee must be aware of the principal’s actions for implementing personalized proficiency at their school. The teachers comprised the second type of data point for this study.

Overview of Research Design

This section contains a brief overview of the steps I used to carry out this qualitative research study. Figure 3.1. represents a flowchart of the steps I used to complete this study.

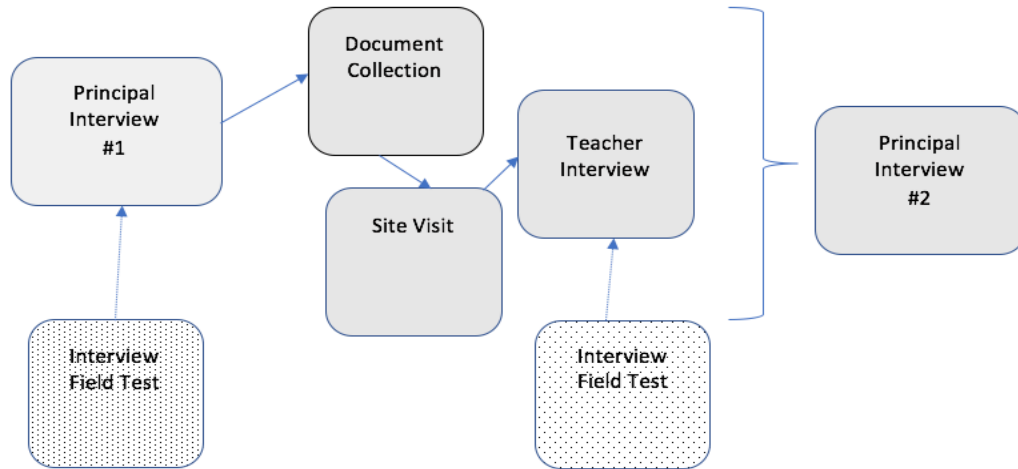


Figure 3.1. Research design flow chart.

First, I conducted a literature review to understand the major contributors to research in the areas of personalized learning, proficiency-based grading, Vermont policies for personalized proficiency, principal leadership, and leverage points for school change. This literature review also informed apriori codes for the study. Potential research participants were solicited by e-mail and phone calls. Five Vermont high school principals agreed to participate. I began the study by developing an initial list of semi-structured interview questions, which I field-tested on one high school principal. This field test revealed which questions were most informative, least informative, and also revealed some questions to add to the interview for increased richness of information. I set up and conducted semi-structured in-person interviews. Interview responses were coded using apriori codes. Code amendments were made to increase clarity of code application (more on this in section titled Data Analysis). Transcripts were coded a second and third time as the data analysis progressed. Each principal provided the name

of at least one teacher in their school, whom I contacted for a semi-structured interview to be another data point in addition to principal interviews. The teacher interviews were coded. Following the teacher interviews, I conducted a site visit to the school of each principal participant to see their leadership in action. For the five site visits, I observed one leadership team meeting, two teacher professional learning community meetings, one supervisory union level proficiency meeting, and one whole-school professional development meeting. I also obtained documents from principals, visited websites, read principal blogs, and reports in local newspapers. I provided transcripts of the first interview to principals for their edification. I followed all of this data collection with a second, shorter principal interview to extend duration of interaction, and to ask interview questions that were added or amended throughout the research process. All of the data was analyzed within and between cases. In the next section of this chapter, I explain the data collection methods in depth.

Data Collection Methods

Data collection occurred between August of 2016 and January of 2017. Data was collected using four methods: semi-structured in-depth principal interviews, teacher interviews, document analysis, and observations (see Figure 3.2).

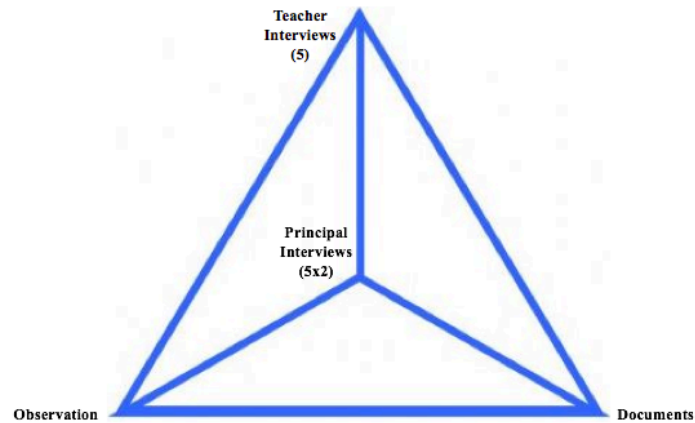


Figure 3.2. Schematic showing forms of data collected for this study.

Interviews. Interviews are frequently used as a data collection method in qualitative, exploratory case studies (Creswell, 2013). The interview of principal and teacher participants in this study were conducted in a one-on-one format. Interview questions were developed and pilot tested on one principal and one teacher prior to their use in this study to refine the questions (Creswell, 2013; Yin, 2014). The interviews followed a semi-structured format, with predetermined questions that were open-ended enough to allow for tangential conversations that might enrich the data (Creswell, 2013; Glesne, 2011; Merriam & Tisdell, 2016). Two interviews with the principals occurred, one prior to the observation and one after the observation to allow for a longer engagement time with the participants.

Documents. Yin (2014) argued, “There is little excuse for omitting a thorough review of documentary evidence” (p. 107) in a qualitative study. In this study, I asked principals for documents related to the steps they have taken for personalized proficiency at their school. I also searched the school website, read principal blogs, watched supervisory union level videos and looked through local newspapers for other

documentation. The main use of these documents was to add another data point in addition to the personal statements of the principals. Yin (2014) outlined the strengths and weaknesses of documents as a source of evidence in a multiple case study.

Documents can be viewed repeatedly, are unobtrusive, give specific details, and can give a broad perspective to a researcher and therefore have strengths as evidence. However, a researcher has to be clear about the nature of the documents to be collected, else they might vary in importance or be irrelevant altogether. In addition, collected documents can be voluminous and require lots of time to wade through, organize, and analyze. Both principals and teachers provided documents for review in this research study. The nature of the documents included meeting minutes, mission statements, professional development outlines, three-year plans, newspaper articles, public videos found on school websites, blogs, and curriculum documents. From each principal I asked for a copy of the school's Continuous Improvement Plan (CIP), also known as an Action Plan, so that I could have one similar document from each school. A CIP is a document each school in the State of Vermont develops and submits to the Agency of Education on an annual basis. According to the Vermont Education Quality Standards (2014), CIPs are needed for schools to develop a comprehensive plan for continual improvement in meeting local, state, federal, or other requirements (Vermont Agency of Education, 2014). I read all documents and determined which best helped with answering the research questions. I cited the documents in the interview notes when mentioned by principals. I maintained an annotated bibliography of the documents for quick and easy reference (Yin, 2014).

Observations. “Observational evidence is often useful in providing additional information about the topic being studied” (Yin, 2014, p. 114). Merriam and Tisdell (2016) suggest research observations have a distinct point of reference to add to a study because the data “represent a firsthand encounter with the phenomenon of interest rather than a secondhand account of the world obtained in an interview” (p. 137). To include data from a firsthand encounter, I obtained permission to do a one hour site visit to observe principal actions for implementing personalized proficiency. I asked principals to provide suggestions of observable evidence of their leadership, and I asked them to provide potential dates for site visits. While on site, I entered with the intention of being a complete observer. In two of the site visits, the participants allowed me to take on the complete observer role. In three site visits, the participants expected me to take on the role of *observer as participant* (Merriam & Tisdell, 2016) citing it made them feel awkward to have me sitting on the outskirts of the activity. While in the “observer as participant” role, I sat within a circle of participants who were aware of my research activities. At times the participants felt compelled to clarify the context of information or participant statements for my behalf, and did so without my solicitation. I did not participate in the events in any way other than sitting within the group.

Often, principals suggested the most informative example of their leadership was in instances where they were not even present. For example, one principal suggested I attend a committee meeting where teachers were in the lead and the principal was absent. The nature of the observations included: leadership committee meetings, grade book tutorial meetings, teacher small group proficiency discussions, district-level proficiency

planning meetings, and whole-school teacher professional development for personalized proficiency. I interacted with the principal either before the site visit or while on site to understand the context of the observation, and I followed-up with a second principal interview using the observation as a reference point in the interview. The goal of the observation was to provide valuable field notes on leadership practices and actions for change the principals applied. A field note sheet was created prior to the first observation to serve as a leadership framework for the observations, allowing me to write descriptively about what I was seeing (Merriam & Tisdell, 2016) (see Appendix D).

Data Analysis and Synthesis

Merriam and Tisdell (2016) suggested data analysis was “the process of making sense out of the data... to answer your research questions” (p. 202). Next, I explain the process used to analyze the four categories of data I collected in this study.

Principal interview analysis. For the first principal interview, an in-person interview was conducted lasting 60 minutes. Appendix E provides the interview protocols used for the first principal interviews; however, due to the semi-structured nature of the interviews, the questions in each case were slightly modified to best fit the context. This interview was audio recorded and a note sheet was used to jot down key thoughts and words. Following each interview, a post-interview memo (hot memo) was written to, as Miles and Huberman (1994) say, capture my thoughts “on the fly” (p. 75). These initial memos allowed for recording of the conceptual, free thoughts that developed through the data collection process and assisted with theme development (Miles & Huberman, 1994). These memos also prevented narratives from being reduced

through the transcription process, as Glesne (2011) said, “without practical depth or detail” (p. 75). The interviews were transcribed, and returned to the principals for edification. Following transcription, I coded the documents using the apriori codes (Appendix F) I had developed from the review of literature because, as Miles and Huberman (1994) said, “Coding is not just something you do to ‘get the data ready’ for analysis, but... something that drives ongoing collection” (p. 65). The apriori codes were applied using two methods. First, I read through the transcripts and coded them by hand. Second, I put the transcripts into HyperRESEARCH to code using a computerized system. Following this process, the codes were amended and added to as the coding of the first interview progressed. By constantly referring to the coding list, coding drift was avoided. Two colleagues checked segments of interviews for inter-rater reliability. Feedback from their coding process helped me to understand the necessity of a coding list with descriptive quotes. As I was coding, I also found the apriori code list required greater description, and added in quotes from the literature to help with the coding process. In addition, I found particular codes in the leadership portion of my code list required additional information because the code check revealed a gap in information. For example, the category of “Improving Instructional Program” had only one indicator that was vague. I added in codes for key shifts to the instructional program that were important for personalized proficiency. In Table 3.2, I provide a sample of the coding table with a supplemental descriptive quote.

Table 3.2.

Example Code List with Descriptive Quote for the Third Research Question

Leadership: Setting Directions	Code
Develop a shared vision and building goal consensus: “Leaders identify, develop, and articulate a shared vision or broad purpose for their schools that is appealing and inspiring to staff...Build consensus among staff about the importance of common purpose and more specific goals, motivate staff with these challenging, but achievable goals, and communicate optimism...” (Leithwood & Sun, 2012, p. 400).	SDV
Hold high performance expectations: “Leaders expect a high standard of professionalism from staff, expect their teaching colleagues to hold high expectations for students, and expect staff to be effective innovators” (Leithwood & Sun, 2012, p. 400).	SDPE

Initially, the apriori codes lacked any match to my first research question related to principal understanding and value of Vermont’s personalized proficiency paradigm, so I added in codes for that research question. As I worked my way through the transcript analysis, I also realized each principal spoke to some of the sticking points they encountered while implementing the paradigm shift, so I added in a code for that. The final code set was placed in Appendix G of this report.

For the second principal interview, I provided principals the choice of an in-person interview, a phone interview, or a written response to constructed questions. I offered this choice due to the difficulty with scheduling the first set of face-to-face interviews. Of the five second interviews, three were by phone and two chose a written response to constructed questions. The goal of the second interview was to clarify: events observed during the site visit, wording found in document evidence, statements from the teacher interview, or statements from the previous principal interview (Merriam

& Tisdell, 2016). Extensive notes were taken during the second interview. The notes were coded by hand and also added to HyperRESEARCH for electronic coding as suggested by Creswell (2013). Additional thoughts were added to the hot memo written following the first principal interview. A chronological log of principal contact and interview dates was kept for organizing purposes.

Teacher interview analysis. Appendix H shows a modified interview for the teacher participants, aimed at collecting substantiating data. Each principal provided the name of two or more teachers they felt could speak to their leadership in Vermont's new personalized proficiency paradigm. I contacted one teacher in each school by e-mail (Appendix C) to set up a phone interview. Prior to each phone interview, I provided the teachers electronic copies of their rights as research participants. Of the five teacher interviews, one was face-to-face and four were conducted by phone. Direct quotes were recorded, and notes from these interviews were added to the hot memo. I coded the notes and quotes by hand, and then imported them into HyperRESEARCH for electronic coding.

Observation analysis. A site visit to each principal's school allowed me to collect observational data on each principal's leadership. To help frame my observations, I took notes about the setting, participants, activities, conversation, and other subtle factors on the observation note sheet I developed prior to the site visit (Merriam & Tisdell, 2016). In each case, I spent one hour on the site visit, and immediately following the visit, returned to the field notes to write a hot memo on my initial thoughts after the visit. I then went back to the field notes at a later time to code the observation note sheet.

Document analysis. From each site, I collected a wealth of primary document data. This included a variety of written sources, including Action Plans, Handbook of Studies, vision statements, and schoolwide goals. In addition, I collected document data from school websites, including Frequently Asked Questions, principal blogs, demographic information, and videos of principals discussing the new paradigm shift. To keep track of all of these documents, I created an annotated bibliography for quick and easy reference (Creswell, 2013; Merriam & Tisdell, 2016). I then conducted a “content analysis” (Merriam & Tisdell, 2016), where I applied codes to these documents by hand, and removed documents that did not provide “information or insights relevant to the research question(s)” (p. 180). I then pulled out pertinent excerpts from these documents to include in the findings section of this dissertation. When referenced in the findings section, I made sure to identify the nature of the documentation.

Comprehensive analysis. Yin (2014) argued in a multiple-case study, “both the individual cases and the multiple-case results can and should be the focus of a summary report” (p. 59). Merriam and Tisdell (2016) suggested there are two stages to analysis in a multiple case study, “the within-case analysis, and the cross-case analysis” (p. 234). Therefore, for each research question I presented my findings on the individual case level, and then presented the findings in a cross-case format (Yin, 2014). To do this analysis, I took each research question and reported out findings on individual components of the question for each case. Then, I found themes within the individual components and examined them in a cross-case analysis and reported on commonalities and differences across the cases.

Trustworthiness

Trustworthiness in qualitative research is a process used to design studies with credibility, transferability, dependability, and confirmability in mind (Creswell, 2013; Lincoln & Guba, 1985). In this multiple-case study, I applied three validation strategies for trustworthiness (Creswell, 2013; Lincoln & Guba, 1985): triangulation, providing a thick and rich description of the participants, their site, and context, and clarifying my positionality in relation to the research.

First, I addressed trustworthiness in this study through triangulation. Yin (2014) discussed triangulation as “converging lines of inquiry,” explaining that different sources of data allow for more “convincing and accurate” conclusions to be drawn (p. 120). In this research study, I built in two forms of triangulation as outlined by Denzin (1978)—by method and by data source. I collected data through three different methods: semi-structured interviews, document analysis, and on-site observations. I substantiated the principal self-reports with an on-site observation of their implementation of personalized proficiency and examined documents they send to constituents (such as teachers, students, and parents) or make public through websites. I also collected data from five sources—principals who had “different biases, different strengths”—which Miles and Huberman (1994) say provide multiple viewpoints thus representing data source triangulation. I substantiated each individual principal interview with one teacher interview to substantiate the principal self-reports.

Second, I addressed trustworthiness by providing a “thick description” of the setting in which each principal enacted their leadership (see Chapter 4 of this

dissertation), and a thorough description of the “transactions and processes” that were relevant to leadership in a personalized proficiency education paradigm (Lincoln & Guba, 1985, p. 362). This helped provide context for the study and delineate potential transferability.

A good case study researcher, argued Yin (2014), must ask good questions, be a good listener, understand the issues being studied, and stay adaptive as unanticipated changes occur during the study. All of these characteristics of a prepared case study researcher are negated, argued Yin (2014), if a researcher operates without ethical considerations in place (p. 76). Therefore, as the last step to ensure trustworthiness, I positioned myself within the study by revealing aspects of my own identity, and I addressed how I maintained an ethical practice in my development and implementation of this study. This is reported next.

Ethical Considerations

Prior to the start of this dissertation research study, I acknowledged that my life experience in education had the potential to influence how I interacted with participants and how I interpreted themes during the data analysis phase of this research project. My reasons for choosing the research question and sub-questions for this study were grounded in my own experience as a high school science teacher for 18 years. I was interested in learning how school leaders make large scale change happen in their schools. It was natural for me to apply a positivist perspective on leadership because it was my experience that a principal was absolutely key in determining school culture and structure. It was also natural for me to apply a constructivist epistemology for this study

because my experience with each of the nine high school principals I worked under over time taught me that no one best way to lead a school exists, and each leader goes through a personal process of developing their own understanding as they engage in school change.

When I took on the topic of this dissertation research study, I did not realize that I would be living the difficulty of implementing the paradigm shift while studying it. As I began my engagement with participant interviews for this study, I also began my employment as one of a small group of teachers at my school piloting aspects of the paradigm shift. The pilot proved to be incredibly time consuming, confusing, and frustrating. I had to make sure to bracket my own experience as a teacher operating in the paradigm shift while I conducted this study. Bracketing, as explained by Merriam and Tisdell (2016), is when “prior beliefs about a phenomenon of interest are temporarily put aside, or bracketed, so as not to interfere with seeing or intuiting the elements or structure of the phenomenon” (p. 26). I took several actions to bracket myself during this study.

First, I engaged with participants at a time and location away from my daily job. In some cases, I traveled several hours by car for an interview, and that distance allowed me to prepare to hear participant perspective, mindful of the very different physical locations and contexts that exist in schools in Vermont. Creswell (2013) suggested a definition of bracketing that included “suspending our understandings in a reflective move that cultivates curiosity” (p. 83). I felt as though I operated in Creswell’s definition of bracketing. I would exit my context frustrated and confused about the paradigm shift,

and I was very willing to let that fall away as I fed my curiosity about how others were going about implementation around the State of Vermont. I chose this study because it was going to be informational for me as well as for other people in the state, and I took the stance of learner/researcher as I engaged with this research study.

In addition to my positionality as a researcher and actor in the personalized proficiency paradigm shift, my experience could have been a source of bias due to the fact that I believe the practices of transformational leadership reveal an excellent way for a principal to lead schools in times of second order change. This bias is revealed here and in how I interpreted the multiple-case study data, because I mostly applied Leithwood and Sun's (2012) transformational leadership model as a lens for analyzing principal leadership.

Since I am a teacher practicing in a Vermont school, there was the potential that the study participants could shift their responses to match what they think I want to hear. On two occasions, principals asked me a question about what my school was doing to implement personalized proficiency. Both questions were related to which computer system we were using, to which I gave a quick answer of a name with no opinion statement, and no follow up discussion ensued. I answered the question because I am acutely aware of the fact that schools in Vermont are struggling with reporting out on proficiencies with a computer system that matches their needs, and as I realized through my study, no perfect system exists yet. Other than those two questions, I stuck to my role as a researcher. I carefully crafted questions that did not lead the participants to particular answers prior to engaging with the principals and teachers. I listened and

questioned without leading through verbal or nonverbal behavior. I clearly delineated the goal of the research for participants in writing and verbally, guaranteed anonymity, substantiated principal statements, and collected data from multiple sources (Creswell, 2013).

Chapter 4: Context

Introduction

Vermont's policies for personalized proficiency leave maximum decision-making control for policy implementation in the hands of local districts (Vermont Agency of Education, 2014). With no state-mandated path for implementation, each school and/or supervisory union in the State of Vermont had the opportunity to develop a locally-relevant plan for implementation. Vermont policymakers expected school districts to have systems in place that allowed for both increased flexibility of the path to graduation and increased accountability for what constitutes a high school diploma (Sturgis, 2016).

In this chapter, I provide a description of each participant's context in which they were understanding the policies and making decisions for the implementation of the personalized proficiency paradigm. First, I provide demographic information about each school and location. Then, I describe the background knowledge of each principal in the personalized proficiency paradigm. Third, I report how much of a priority this paradigm shift was for principals using two pieces of evidence: the school's Comprehensive Improvement Plan (also known as an Action Plan) and principal self-reports of the time they dedicated to the implementation of personalized proficiency. Finally, I discuss each schools' organizational structures that are in place to support the implementation of personalized proficiency.

Information for this chapter is summarized in Table 4.1 below, and unpacked in the following sections. In Table 4.1, the first column provides the participant pseudonym, grade levels at school, school pseudonym, number of years as principal in

present location, and any experience with personalized or proficiency-based learning prior to 2013. The second column gives the school demographic information, including: 1) number of students; 2) number of teachers; 3) population count proximal to the school, which is not inclusive with other communities actually sending students to the school; 4) percent of students enrolled in the school's Free and Reduced Lunch program (a measure of poverty in schools); and 5) percent of students identified as having a minority status. Two factors related to the priority given to the paradigm shift are found in the third column. These represent the principals' self-reports of time spent implementing Vermont's personalized proficiency paradigm, and components of the paradigm outlined in the school's Comprehensive Improvement Plan (CIP). The last column outlines information about the organizational structures in place that assist with the implementation of personalized proficiency.

Table 4.1.

A Summary of Participant Demographics and Context

Participant	Demographics	Priority	Organization
Carol Rumney Valley Run (9-12) 8th year No prior experience with personalized proficiency	850 students 96 teachers Local population 18,000 39% FRL 6% minority	10% time spent on personalized proficiency School CIP includes proficiency and PLP Additional 3-year plan delineates steps for standards-based grading implementation	-Administrative team (Carol and 3 associate principals) -Faculty cabinet of department chairs -Guidance handling PLPs -Teacher PLCs on proficiency-based grading -Teacher and committee research groups -SU level meetings with middle school
George Brighton (9-12) Grandview 2nd year Prior experience with proficiency- based grading in previous position as teacher	750 students 82 teachers Local population 60,000 38% FRL 6% minority	80% time thinking, 50% work time on personalized proficiency School CIP includes proficiency and advisory	-Administrative team (George and 2 assistant principals) -Leadership team of department chairs and PLC leaders -Work-based learning coordinator (part- time) -Guidance handling PLPs
Ellen Longlee (K-12) River Regional 3rd year Prior experience with proficiency	145 students (9-12) 43 teachers Local population 700 50% FRL 3% minority	50% time working towards personalized proficiency and consolidation	-Supervisory union level curriculum coordinator -SU level team of teachers and

based grading in technical education		CIP emphasized competency-based learning models	principals for proficiency implementation -Teacher developed PLPs (summer work) -Work-based learning coordinator (non-PLP)
Barbara Bell (9-12) Highlands 10th year Prior experience implementing proficiency based grading at another school	300 students 25 teachers Local population 2000 40% FRL 6% minority	30-45% time working towards personalized proficiency CIP included student voice and personalization, proficiency, and support systems	-SU level curriculum director and council -High school redesign committee -School climate committee -Leadership team with reps from each content area -Guidance managing PLPs
Roger Dibbs (9-12) Maple Tree 1st year No prior experience with personalized proficiency	700 students 55 teachers Local population 17,000 20% FRL 6% minority	50% of time thinking about paradigm, 10-15% of time implementing CIP included defining proficiencies and training staff in personalization	-Professional development coordinator -Instructional coach -PLP coordinator -Administrative team (Roger, 2 assistant principals, Director of student support) -Leadership team (cross-departmental representation)

Carol Rumney, Valley Run High School

Demographics. Valley Run High School had 850 students and 96 teachers serving students in grades 9-12. It was located in a town of 18,000 residents. The school was attached to a technical center, where students could access career and technical classes. It also had two off campus programs serving students with alternative academic needs. There was a 39% free and reduced lunch report, an indicator of the percent of the student body classified as economically disadvantaged. Less than 6% of the student body represented a minority status. About 30% of the students at Valley Run attended the school due to school choice. Valley Run High School had two feeder elementary schools and two feeder middle schools.

Principal information. Carol Rumney had the position of principal at Valley Run High School for eight years. Previously, she was a teacher in a variety of middle and high school settings, including Valley Run. Carol had no experience with personalized learning or proficiency based education in her previous employment settings.

Priority. At the time of this study, Valley Run was engaged in the implementation of Vermont's policies for personalized proficiency. The school's 2016-17 CIP emphasized three areas related to personalized proficiency: 1) Proficiency-tracking Vermont's Transferable Skills, 2) Standards-referenced grading, and 3) Identifying appropriate computer tracking for PLPs. In addition, the school had a three-year plan that focused on the development and implementation of standards-referenced grading for teachers, administrators, and students. Carol said the implementation of

personalized proficiency was a focus of the school's efforts. Carol said 10% of her time was spent on the implementation of personalized proficiency.

Organization. Valley Run had organized leadership structures in place that aided in the implementation of policies for personalized proficiency. These structures included: 1) an administrator team comprising Carol and three associate principals, 2) a "Faculty Cabinet" made of department chairs, 3) a guidance department leading the PLP efforts, 4) individual teachers and teacher committees who researched specific topics to bring back to the school community and share problems of practice at staff meetings, and 5) teacher Professional Learning Communities (PLCs) working at the subject level. A PLC is a small group of teachers working to focus their learning on one particular topic for improved learning outcomes. In addition, Carol met every two weeks with the local middle school to develop clear 7-12 plans for the implementation of standards-referenced grading.

George Brighton, Grandview High School

Demographics. Grandview High School had a student population of 750 students and 82 teachers serving students in grades 9-12. It was located in a small, urban setting with a population just under 60,000 people. The school was attached to a technical center, where students could access career and technical classes. The free and reduced lunch count for Grandview was recorded at 38%. Principal George Brighton stated the actual number of students who could qualify for this program was around 50% to 60%, though many did not sign up. About 6% of the student body represented a

minority status. Students came to Grandview from two surrounding towns, each of which had its own elementary and middle schools.

Principal information. George Brighton was in the position of principal for three years. Prior to becoming principal at Grandview, George was a teacher and department chair at Grandview for over 10 years. George had some experience with proficiency-based grading. Early in his career, George taught in a K-6 school that adopted reform policies for standards-based grading.

Priority. At the time of this dissertation research, Grandview was engaged in the implementation of Vermont's policies for personalized proficiency. The school's 2016-17 CIP emphasized five areas related to personalized proficiency: 1) aligning instruction and assessment practices with proficiency based learning through professional development for teachers, 2) meeting the needs of all learners through multi-tiered system of supports, 3) communicating about proficiency to the public, 4) tracking proficiencies in classes with the use of computer software, and 5) implementing and growing an advisory program. Advisories are often employed by high schools to increase the frequency of adult-student communication about individual student needs (Leblanc-Esparza, 2010). George alluded to a five-year plan that was kept internally with the school administration. George said 80% of his thinking time was focused on personalized proficiency, and 50% of his work time was dedicated to its implementation.

Organization. Grandview had organized leadership structures in place that aided in the implementation of policies for personalized proficiency. These included: 1) an administrative team made up of George and two assistant principals, 2) a leadership team

comprising department chairs and Professional Learning Community (PLC) leaders, 3) a part-time work-based learning coordinator, and 4) two PLP managers who were also guidance counselors. The leadership team met weekly to ensure internal messaging was consistent in relation to grading policies.

Ellen Longlee, River Regional High School

Demographics. River Regional enrolled 145 high school students embedded in a Pre-Kindergarten through 12th grade school, that had a total of 400 students. It was located in a small town with just under 700 residents. There were 43 teachers in the school, and the graduating class of 2016 was under 50 students. The total number of children in the school enrolled in free and reduced lunch was 50%, and the principal reported feeding over 100 students three meals per day. Three percent of the students were minorities. Students attending River Regional came from three combined middle/elementary schools. At the time of this study, River Regional was located in a district examining a merger potential with other local school districts.

Principal information. Ellen Longlee was in her third year as principal at River Regional High School. Prior to her placement at River Regional, she was employed in technical education as both a teacher and administrator for 20 years. Ellen had experience with proficiency-based education due to the fact that the technical center she worked in graded students by proficiency, which required students to possess certain skills before they could move on from the program. Ellen had no prior experience in implementing personalized proficiency in a traditional high school setting.

Priority. At the time of this study, River Regional was engaged in the implementation of Vermont’s policies for personalized proficiency. The school’s CIP (2013-18, last updated in 2013) emphasized one area related to personalized proficiency—evaluate competency-based learning models. Ellen reported she spent about 50% of her day focusing on implementing personalized proficiency and working to consolidate with other schools. She felt unable to separate the two in her answer due to the nature of the combined proficiency work happening with other schools in anticipation of district consolidation into one supervisory union.

Organization. River Regional had organized leadership structures in place that aided in the implementation of policies for personalized proficiency. These included: 1) a curriculum coordinator assigned to focus on the implementation of Proficiency Based Graduation Requirements at the consolidated supervisory union level, 2) a team of teachers and principals from schools in her Supervisory Union to implement proficiency-based grading, 3) a system developed by two teachers for PLPs, and 4) a work-based learning coordinator (but Ellen reported this position did not link to personalized pathways yet).

Barbara Bell, Highlands High School

Demographics. Highlands High School enrolled close to 300 high school students. Highlands was attached to a middle school, but had separate operations and principals. It was located in a town of 2,000 residents and the school served four nearby towns. There were 25 teachers in the school. The total number of children in the school enrolled in free and reduced lunch was 40%. Under 7% of the students were identified as

minorities. Highlands was one of two high schools in the supervisory union. Two elementary schools and one middle school fed into Highlands High School.

Principal information. Barbara Bell was the principal at Highlands High School for 10 years. Prior to leading Highlands, Barbara worked to design competencies in another school. In the other school she said, “We designed our own competency-based/standards-based thing... so we didn’t have a traditional grading system... and it was pretty well set by the third year.” Prior to the implementation of Vermont’s Act 77 and the EQS, Barbara reported that Highlands had a robust “Multiple Pathways” program for students, but the proficiency-based grading was not well developed.

Priority. At the time of this dissertation research, Highlands High School was engaged in the implementation of Vermont’s policies for personalized proficiency. Barbara reported she spent about 30-40% of her day working on instructional shifts for personalized proficiency. Components of the personalized proficiency paradigm in the CIP included: 1) facilitating student engagement and voice through personalized learning, 2) providing multiple pathways to learning, 3) developing proficiency-based reporting and learning systems, 4) and implementing a Multi-Tiered System of Supports (MTSS) within the school to support student learning.

Organization. Highlands High School had organized leadership structures in place that aided in the implementation of policies for personalized proficiency regardless of the fact that Barbara had no assistant principal to work with. Instead, Barbara worked with various committees made of high school teachers, students, guidance counselors, and other non-school based positions at the Supervisory Union level. The committees

included a high school redesign committee made up of staff and students to look at proficiency-based learning and a schedule change and school climate committee made up of staff and students, and connects to the advisory program. Barbara also worked with a leadership team made up of one teacher from each content area, and a group of guidance counselors managing PLPs. At the Supervisory Union level, Barbara relied on a supervisory union curriculum council with teacher representation from each content area in each school in the supervisory union that was led by a supervisory union level curriculum coordinator.

Roger Dibbs, Maple Tree High School

Demographics. Maple Tree High School enrolled just under 700 students and 55 teachers serving students in grades 9-12. It was located in a town of just over 17,000 residents. Maple Tree had a 20% free and reduced lunch eligibility. Less than 6% of the student body reported as being a person of color. One middle school fed into the high school in the district.

Principal information. Roger Dibbs had been the principal at Maple Tree High School for less than one year at the time of this dissertation study. Roger taught at Maple Tree for just over 10 years before becoming principal, and was also the school's instructional coach and professional development coordinator prior to taking on the principalship. Maple Tree was not engaged in school change towards proficiency-based graduation prior to 2013; however, the school had a strong work-based learning program in place for students.

Priority. At the time of this research study, Maple Tree High School was engaged in the implementation of Vermont’s policies for personalized proficiency. Roger reported personalized proficiency work taking up 10% of his daily work as a principal, with general instructional leadership taking up 15-20% of his daily work. He added the caveat that 50% of his “brain time” was dedicated to this work, and he relied on other people in the school who had a large portion of their responsibility dedicated to this work (described in “Organization” section below). The CIP for Maple Tree High School included goals in the areas of proficiencies and personalization. Goal action steps included work by departments to research and define proficiencies, and determine what suffices as proficient. Also included was professional development for teachers around personalization.

Organization. Maple Tree High School had several paid positions specifically related to personalized proficiency. These positions included: 1) a 20% professional development coordinator, 2) a 20% instructional coach for classroom instructional shifts, and 3) a 20% PLP coordinator. Roger had other positions and committees in place, such as an administrative team made up of two Assistant Principals and a Director of Student Support Services, a leadership team made up of 12 teachers from across departments, a professional development coordinator, and an instructional coach. All of the administrative and support structures were in place prior to Roger taking on the job of principal. The PLP coordinator was the only new position at the time of this dissertation research study.

Summary

In this chapter, I provided demographic and contextual information about the five Vermont principal participants in order to situate the findings of the next three chapters. As Table 4.1 summarized, the principals had a breadth of years of experience, came from immediate communities ranging in size from 700 to 60,000 people, and led schools ranging in size from 125 to 850 students. The amount of time the principals reported spending on implementing personalized proficiency ranged from 10% to 50% of their work time. Most of the principals in this research study developed CIPs for Continuous Improvement that showed intentional work towards personalized proficiency. Organizational structures in place, at the time of this research study, had some similarities – most schools operated with a structure in place for an administrative team and/or a leadership team made up of administrators and teacher representatives. The EQS (2014) state a “... superintendent or his or her designee must:...create a school leadership team consisting of administrators and teachers (and students as appropriate) with compensation either in time or financial reimbursement or a combination of both for all teachers” (p. 8). The common leadership team structure found in each setting could be a result of this state requirement. In the next three chapters of this dissertation study I report the findings from the data collected to explore principal leadership towards personalized proficiency.

Chapter 5: Principals' Understanding, Value, and Perception

Introduction

Principals in the State of Vermont were acting to shift their schools towards a personalized proficiency paradigm at the time of this research study. In this chapter I present a summary of the findings for this study's first research question: What constructed understandings, values, and perceptions do Vermont high school principals have about Act 77 (Flexible Pathways), the EQS (Graduation by Proficiency), and the statewide shift towards a personalized proficiency education paradigm? In chapters 6 and 7, I present the findings for the second and third research questions. Embedded within the summary are tables that provide a snapshot of the data supporting the findings. I also provide a visual with a description to show the process I used to come to the findings. I then discuss the detail of findings through an individual case analysis and then by a cross-case analysis. Data analysis in multiple case studies should analyze both the individual case and cross-case levels (Merriam & Tisdell, 2016; Yin, 2014).

Overview of Findings

Uniformly, the principals in this study perceived positive value in Vermont's policies for three reasons: 1) learning for students will improve as they aim to meet clear and consistently applied standards (accountability), 2) work and college readiness will improve as schools focus on teaching and assessing transferable skills (accountability), and 3) student engagement will improve as students access flexible, personalized options for gaining proficiency (flexibility).

Understanding the goals of Vermont’s education policies varied for principals, with some focusing on the accountability side of the policies (standards identification, proficiency-based grading), and others focusing on both accountability and flexibility (ensuring standardization and personalization). Principals’ knowledge was formed by a wide variety of resources, including hired national and local education consultants, state-provided workshops, classes, conferences, collaboration with other principals, and books.

In Table 5.1, the data on principal understanding is summarized. The first column of this table gives the pseudonym for each individual case. The second column of this table provides a list of resources principals accessed to build their understanding. The quotes in the last two columns reveal each principal’s understanding of Vermont’s personalized proficiency shift. Two principals’ responses focused more on the accountability side of the paradigm. One principal’s response centered more on the flexibility side of the paradigm. The last two principals’ responses included both goals of the paradigm, and therefore span two columns in the table.

Table 5.1

Summary of Principal Understanding

Case	Resources	Principal Understanding	
		Proficiency & Accountability	Personalization & Flexibility
Carol Rumney, Valley Run	Marzano Education Consultants Research on paradigm other schools	“You have to show mastery in order to get towards graduation”	
George Brighton, Grandview	Web searches Guskey & Bailey (2010)	“Students who receive a high school diploma, had a certain skill level... It's nice to think of flexible pathways broadening [how students show their skills], but at the same time not when we're focusing in on the standards”	
Ellen Longlee, River Regional	Great Schools Partnership Graduate work District-level meetings with other schools Act 77 implementation team meetings Heflebower et al. (2014)	“I understand the personalized nature and not every student is going to go the same route.... Get them a pathway to pick something that they want to learn and then we need to adjust to them about how are we are going to fit our needs of those proficiencies around that.”	
Barbara Bell, Highlands	Great Schools Partnership Rowland Foundation Tarrant Institute for Innovative Education Teaching All	“Trying to personalize education and provide multiple opportunities for students and bring equity to the system... I think the proficiency piece will lend itself to equity in terms of... credits and that sort of thing.”	

	Secondary Students Informed superintendent Principal collaborative proficiency meetings	
Roger Dibbs, Maple Tree	Great Schools Partnership League of Innovative Schools Graduate work Guskey & Jung (2016) Heflebower et al. (2014) Moss & Brookhart (2009) Wormeli (2006)	“I think the state has been pretty clear in my eyes, that they go in tandem, and that proficiency-based graduation requirements are just really clearly for schools to delineate: what does it mean to graduate? And then ACT 77 is about, now let's shake up the way they get there.”

Principals in this study capped their positive value statements with a caveat—their perception of Vermont’s policy implementation process was a concern. The principals shared they were spending considerable amounts of time trying to figure out what the policies were actually asking schools to do. They also noted that they encountered conflicting or absent answers from the Vermont Agency of Education when contacted, and doubted the capacity of the state (meaning both Vermont Agency of Education and state-level policy makers) to successfully support schools with policy implementation. In Table 5.2 provides evidence (quotes from each principal) that demonstrates their perception of the policy’s value and the caveat they placed on it.

Table 5.2.

Summary of Principal Perceptions

Case	Value	Caveat
Carol Rumney, Valley Run	“Having a better set of guidelines for what a curriculum should be is important, and that’s in the EQS. I like the concept of these overarching [transferable] skills that we should be teaching towards and that makes sense.”	“I don’t feel they [the state] have the capacity to help us that much.”
George Brighton, Grandview	“I think [this initiative is] in students’ better interest, I think this is rich for students.”	“There's been absolutely no direction from the state, and there's no clarity when you try to speak to them about it. So do I understand what their intent is? I think I know what their intent is. Do I think I know their direction? No. Because they can't give you the same answer twice.”
Ellen Longlee, River Regional	“I think it's a good move ...Everybody has different needs and it doesn't have to happen in the brick and mortar of a school... I would rather teach to a mastery approach where the variable is time and the constant is learning.”	
Barbara Bell, Highlands	“I’m excited about our shift to a more personalized and proficiency-based learning system because it is great for students and it fits with our current and historical work.”	“We provide tons of resources, but they're [early college, dual enrollment students] not officially enrolled in the school anymore... There's been some [state level] changes made, some implementations around funding... but it's not all the way there yet.”
Roger Dibbs, Maple Tree	“I definitely see value... I love the idea of a proficiency-	“I worry that the state threw this to the wind, and now there's a lack of

based graduation requirements. I like the idea of being really clear about what it means to be “done.” And the idea that... it might look different for each and every student on how to get there, I think it's powerful.”

clarity about what we mean by any of this. The way schools are doing it, it's too much reinvention of wheels. I worry that it's taking way too many resources up in schools and I don't mean resources actually putting into place Act 77 and proficiencies but figuring out what it is and how to do it.”

Data Analysis Process

The flow chart below (Figure 5.1) shows the process I took that led me to the findings for the first research question.

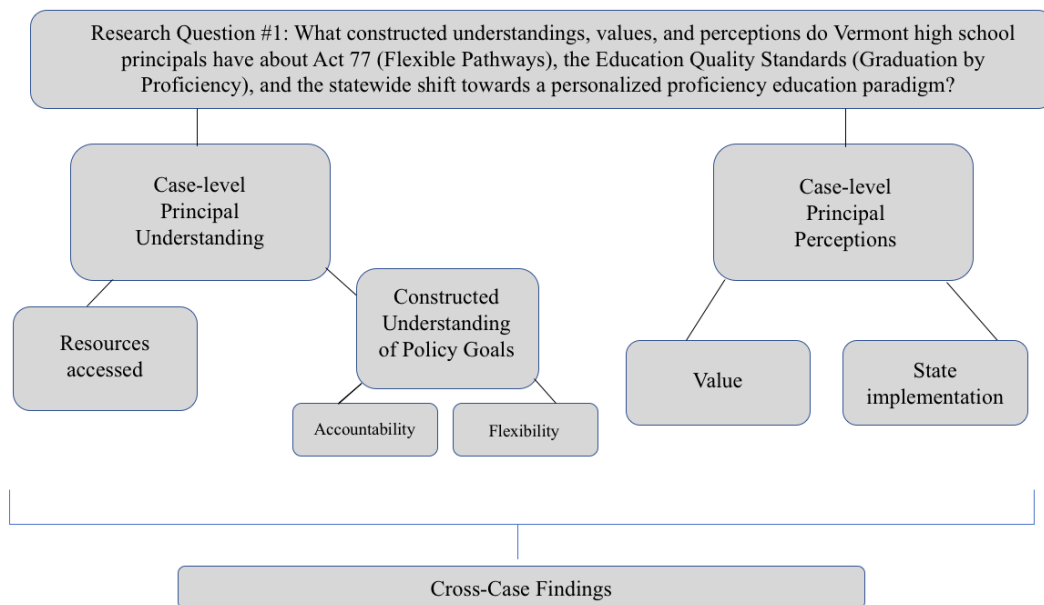


Figure 5.1. Flow chart of analysis of findings for first research question.

For the analysis of the data, I first detail the findings at the case level in two broad categories: 1) principal understanding of the paradigm, and 2) principal perceived value of the paradigm. In the first category, I describe each principal's constructed

understandings about the goals of Act 77 and the EQS. In addition, I examine the resources principals used to build their understanding. I then position each principal's understanding of the policies using an accountability vs. flexibility framework (Sturgis, 2016). For the second category, I report findings related to the principals' perception of the value of the policies. In addition, I discuss principals' perceptions of the state's rollout of supports for the implementation of the policies. I end the chapter with cross case findings, where I describe the findings that extend beyond a single case.

Principals' Understanding of Personalized Proficiency Policies: Case Based

Findings

Here, I present findings about the constructed understandings of the goals of Vermont's policies for personalized proficiency for each principal. In addition, this section describes the resources principals accessed to inform themselves about Vermont's personalized proficiency paradigm shift, as revealed through interview, observation, and document data.

Carol Rumney at Valley Run High School. Carol attributed the majority of her understanding of Vermont's move to personalized proficiency to the work her school engaged in with an education consulting agency hired by the school district to help with the implementation of standards-referenced grading K-12. The school district hired the consulting agency two years prior to the implementation of Act 77 and the EQS as a part of a school transformation process. Carol said the school transformation process was influenced by *High Schools on the Move* (2010), a state-written document recommending schools in Vermont move towards a more personalized, proficiency-based system for

secondary-school improvement. Carol described her success with the system in the following way:

The whole district is using the Marzano system... We've done a lot of training with the Marzano folks and they've been great. I think we've been very thoughtful, consistent, and comprehensive. We've had a plan in place for the past couple of years... I love the Marzano system... it's simple and it's easy... just clearly states that this is how it's done so that's what I think is one of the best resources out there.

Carol's understanding of the goals behind Vermont's personalized paradigm shift was captured best when she said:

What I see... is to be really clear on curriculum and have it match what is outlined in the EQS... kids are going through a set of proficiencies established by a school district and tied to... whatever standards you have. You have to show mastery in order to get towards graduation... This is what I have to master in this class and I can do eight of these things... but there's two things I'm not doing too well so the teacher and the student work together in the classroom to get better at mastering those two things—I think that's the goal of the system ultimately.

With curriculum, proficiencies, and mastery of standards as main components of her summary of the goal, Carol's understanding of the goal for Vermont's adoption of policies for personalized proficiency had a focus on accountability.

George Brighton at Grandview High School. George gained an understanding of Vermont's policies for personalized proficiency in a self-directed manner, mostly

using resources found online (including the policies themselves). He felt unable to connect with other schools for collegiality or help through the process of understanding. George commented:

I have spent a lot of time trying to read and research, and see what other schools are doing because why figure out for yourself when, we're educators, so we even steal from everybody else... I've really focused on other states that are far ahead of where we are. And even if you look at the Agency [Vermont Agency of Education] website, they're just sending you off to the partnerships or to Maine. So I've done a lot of searching the internet and looking at resources. I'm trying to reach out to schools, the challenge with reaching out to other schools is, you know, they have things to do, too, and then "it's nice that you have some questions, we did too... figure out." So, I haven't had a lot of great responses from other schools. So I've had to really rely upon the web but I do a lot of research, a lot of reading. And so we focused on Guskey's work.

Guskey and Bailey's (2010) book titled *Developing Standards-Based Grading*, was the resource he showed during the interview. George's understanding of Vermont's policies for personalized proficiency had a strong student and school accountability focus to his answer. He reflected on the policymakers' intent when he said,

I believe their [policymakers'] intent is, and guarantee might be a strong word, but to in a sense guarantee to our community partners that students who receive a high school diploma had a certain skill level, and that when you have students who graduate from high school, and they can't do basic computation, or they

can't read, and there's some push back as to an unskilled labor force...they're also saying we need to have 100% graduation rate.

George mentioned the flexibility side of the policies in his understanding when he explained the work his school completed to incorporate more flexible pathways for students, but thought that accountability was the larger focus when he said, "It's nice to think of flexible pathways broadening [how students show their skills], but at the same time not when we're focusing in on the standards."

Ellen Longlee at River Regional High School. Ellen cited several resources that helped build her understanding of Vermont's education policies. She explained that she read Vermont's policies as one way to build her understanding. Ellen also referenced her background in Technical Education, and constructivist education classes she took during her master's degree that helped to build her understanding. Ellen described how the two came together to build her understanding.

When I took that class, I was in Technical Education as a teacher at the time. So, it was an easy transition for me to look at a rubric and assess based on a rubric and not on an A, B, C or a numerical grade. So, it was an easy transition for me...

Another experience was Ellen's involvement with an Act 77 implementation team at the state level, a group made of principals from local school districts working on building policies for proficiency-based graduation in anticipation of a potential future district merger, and the Vermont Agency of Education-sponsored workshop series with an education consulting agency named the Great Schools Partnership (GSP). The GSP is a

non-profit organization “working to redesign public education and improve learning for all students,” and was hired by the Agency of Education to help schools in Vermont with the implementation of proficiency-based grading (Great Schools Partnership, 2017).

Also, Ellen’s work with other schools in the new supervisory union was being informed by *A School Leader’s Guide to Standards Based Grading* (Heflebower et al., 2014) and by a strategic plan put in place for the new supervisory union.

In describing the goal of Vermont’s personalized proficiency policies, Ellen began with a focus on flexibility and student engagement, specifically stating the policy will help students she identified as being in the “middle,” and do not receive special services and therefore are disengaged with their education.

I think someone planted that seed up there [in the State Capital] and it grew.... I understand the personalized nature and not every student is going to go the same route... I understand that it’s also an opportunity to try and re-engage some kids in their education who have just disengaged. They’re going through the motions because they’re compliant. The ones that don’t comply are the ones that we deal with usually in a negative way. There’s nothing positive that happens for them in the school. They walk through the door and they just don’t want to be there and the day spirals downward for them. So, yeah, I understand that personalized nature because everybody learns differently. Everybody is going to go at a different pace... Or, as I’ve said even with my own kids, you’ve got the upper half that gets everything or the upper third that gets everything. The lower third gets a ton of services from Special Education and those in the middle, they

flounder. Who's working for them? And those are the kids that Act 77 I believe will help. Get them re-engaged. Get them a pathway to pick something that they want to learn and then we need to adjust to them about how are we are going to fit our needs of those proficiencies around that.

Ellen followed this up with three statements: "They need to be able to read. They need to be able to write. They need to be able to do basic math." Ellen's three statements added her understanding of the accountability aspect of the policies, where students must meet certain proficiencies to graduate. Overall, Ellen's expressed understanding of the goals of the policies had components of both flexibility and accountability, but had a larger emphasis on flexibility.

Barbara Bell at Highlands High School. Barbara worked in a school district that established what she considered to be a strong multiple pathways program prior to the state-level adoption of policies for personalized proficiency. She said her superintendent was a part of a state-level committee on dual enrollment, and the superintendent served as a resource in her own understanding of the flexibility side of Vermont's policies for personalized proficiency.

Barbara discussed other resources that formed her understanding of the policies, including four state-level partnerships. Barbara said her school's work with an education organization named Teaching All Secondary Students provided support in leveraging neuroscience to implement proficiency-based education (VT-HEC, 2016). Barbara discussed the fact that teachers in her school attended workshops with the GSP arranged by the Agency of Education. The GSP was described above in the River Regional

section of the dissertation. Also, some teachers in Barbara's school focused on researching topics related to personalized proficiency through Rowland Foundation Fellowships. The Rowland Foundation is a privately funded organization that provides support in the form of a fellowship to teachers in Vermont who are interested in leading systemic change in their schools (The Rowland Foundation, n.d.). Barbara's school also partnered with the Tarrant Institute for Innovative Education, which is a privately funded organization based at the University of Vermont with a mission to "support technology integration in middle schools as a means of increasing student engagement and decreasing dropout rates here in Vermont" (Tarrant Institute, n.d.). Barbara mentioned a cohort of principals in her region of the state that met to discuss solution-oriented leadership practices and obstacles related to the implementation of personalized proficiency in their schools. From this meeting she realized, "We are all in different places [with implementation], we all have different strengths and leverage points and room to grow, we all have varied interpretations, and everyone is trying to do this with fidelity."

Barbara was able to succinctly state her understanding of the goal of the policies in the following way: "Trying to personalize education and provide multiple opportunities for students and bring equity to the system." Equity, she argued, would be bolstered by proficiency-based graduation. "I think the proficiency piece will lend itself to equity in terms of... credits and that sort of thing." Overall, Barbara's understanding encompassed both the flexibility and accountability parts of the policies for personalized proficiency.

Roger Dibbs at Maple Tree High School. Roger cited reading the policies as a major source of information for building his understanding. While enrolled in a class at a local college, he examined Vermont’s policies through a self-driven project, and felt this aided his understanding of the goals behind personalized proficiency. Roger discussed authors that informed his understanding. The authors included Moss and Brookhart (2009), Wormeli (2006), Heflebower et al. (2014), and Guskey and Jung (2016). Roger used these resources to build the school’s Handbook of Learning, where he referenced these authors.

In addition, Roger cited work his school engaged with from the GSP (described earlier in this chapter) and The League of Innovative Schools, which is a professional learning community for schools organized by The New England Secondary Schools Consortium and the GSP (The New England Secondary Schools Consortium, 2017). Roger commented, “We were starting to go to some of their trainings... workshops, conferences, talking about proficiency-based learning... and their website resources definitely informed some of our thinking around this too.”

Roger’s understanding of Vermont’s policies for personalized proficiency was best captured through the following statement, which comprised an analogy for the paradigm shift.

I think the state has been pretty clear in my eyes, that they [flexibility and accountability] go in tandem, and that proficiency-based graduation requirements are just really clearly for schools to delineate: what does it mean to graduate? And then ACT 77 is about, now let’s shake up the way they get there.

So, the analogy we always use or that we started using a while back with our faculty is, imagine that high schools are a mountain and the top of the mountain are your proficiency-based graduation requirements. Like, by the time you graduate Maple Tree High School you will be at the top of the mountain. How you get to the top is ACT 77 and Flexible Pathways. So, you might take the chair lift up, and you might hike up, you might ski up... there's all sorts of different ways to get to those clear learning outcomes but, we can't start making Flexible Pathways without a known outcome. With the outcome just being Carnegie Units, it wasn't clear enough what that really means and it wasn't based on learning outcome, it was based on seat time. So, I think, that's my view of what the state wanted.

Roger's mountain analogy revealed his understanding of the goals behind Vermont's policies for personalized proficiency, which reflected his view that components of both accountability and flexibility were important.

Principal Perceptions of Policy Value: Case-Based Findings

In this next section I present findings about each principals' perceptions of the value of Vermont's personalized proficiency policies. Also in this section, I explore findings on each principal's perceptions about how Vermont policy makers and agencies rolled out the implementation of the policies. I report the two ideas together because interview transcripts revealed these two aspects of the data were often intertwined, with principals revealing their perceptions on both issues in the same sentence or within the same answer.

Carol Rumney at Valley Run High School. Carol Rumney said the following about Vermont’s new paradigm shift: “I think it’s completely the right direction... everybody is saying this is what you have to do... the state is not wrong in saying this.” When Carol referred to “everybody” in her quote, she was referring to the Marzano education consultants, and the people she learned from while researching the transition to personalized proficiency. She went on to discuss the content of the EQS and how the document outlined content areas for proficiency and the transferrable skills. Carol said, “Having a better set of guidelines for what a curriculum should be is important, and that’s in the EQS. I like the concept of these overarching [transferable] skills that we should be teaching towards and that makes sense.” Carol acknowledged the scale of the paradigm shift, and shared her perception of it as follows:

I don’t know if the state realizes if that’s what they are really asking for, fine, but the implications for that are pretty big. That’s a real, gigantic shift from what traditional education has been practicing. And... my understanding is, there are very few schools in the country, because we worked on this [researched] a little bit, there are some that are doing it but they still struggle with it.

Valley Run did not participate in the GSP workshops offered by the Agency of Education early in the implementation process. Carol said the school was already mid-process with the Marzano consultants at the time of the training. She questioned the capacity of the State of Vermont to implement the paradigm when she said:

I don’t feel they have the capacity to help us that much. To me, the Education Quality Standards are a big, big, big thing and this alone could be a big task for an

agency to get all schools to do this... they have other obligations, too... I even e-mailed different people at the AOE [Agency of Education] that I know to say “you know, you’ve created this document, the Education Quality Standards, you’ve said we’ve got to go to this but you don’t have a way, you don’t have a structure”.

Carol suggested the State of Vermont might consider applying the Marzano system statewide to implement the accountability requirements of the State Board of Education’s EQS, if it were not for Vermont’s tradition of local control. She commented,

That’s a great tool, and it’s already built, and people are using it around the country. Even whole states have adopted it... I would love to see our state do something like that but I feel like... and this is my judgement... we’re a state that says ‘local control’ and ‘do it the way you want to do it.’ I don’t know if that would ever take place.

Carol found value in Vermont’s shift to a personalized proficiency paradigm. Her response suggested a distrust of the capacity for Vermont’s Agency of Education to support schools as they implemented the policies, and therefore made the decision to work with a consulting agency to provide guidance as Valley Run began proficiency-based work.

George Brighton at Grandview High School. George Brighton, principal at Grandview High School, revealed his perceptions related to Vermont’s policies for personalized proficiency while also commenting on implementation actions by the

state. George clarified that his use of the term “the state” meant both the policies developed by the State of Vermont and the Vermont Agency of Education.

I’m worried that the state hasn’t done their homework behind this. And that they don’t have enough supports... and if we don’t have support and direction from the state, I fear that not only that this initiative is going to die, which quite frankly, I think [this initiative is] in students’ better interest, I think this is rich for students. I just don’t really believe that we’re going to get all 100% of our students to graduate and meet all of the proficiencies at a high school level... it’s going to make that jaded effect on the teaching force—this is just going to change and this is going to go by the wayside and who cares what the next initiative is even if it’s great—and that’s what worries me.

This quote reflects George’s perceived positive value in the goal of the policies, citing his perception that this is in the best interest of students. The quote also revealed an underlying skepticism toward expected outcomes, and worry that a lack of implementation support at the state level could lead to a repeal of the policy. This skepticism continued as George went on to explain:

There’s been absolutely no direction from the state, and there’s no clarity when you try to speak to them about it. So, do I understand what their intent is? I think I know what their intent is. Do I think I know their direction? No. Because they can’t give you the same answer twice.

George also perceived the timeframe for implementation as unrealistic, as evidenced by this quote.

It's a very tight timeframe and... I think that their rollout expectations are part of the problem. For something this large to be rolled out in a two- to three-year timeframe from when they initially made this statement to when we're having to have it implemented is not a realistic timeframe but we are going to do the best we can.

In summary, George perceived a value in Vermont's shift to personalized proficiency. However, his response suggested frustration with state-level implementation in terms of its lack of direction and in terms of its short timeline for implementation.

Ellen Longlee at River Regional High School. Ellen discussed the fact that she had “no problems with Education Quality Standards or Act 77.” She went on to say, “It makes perfect sense to me.” She explained her thinking behind this statement further.

Someone had to stand up and say it's time to change what education was because what I experienced in the 70s, when I walked down the halls in high school, I see a lot of the same. We're 30 years, almost 40 years into that and it hasn't changed. And it needs to change. Some of that is driven by industry because industry's saying “I want kids who can think.” We aren't training kids to think in a lot of cases. We cram information into their head and on Friday we give them a test. And be damned if on Monday they can use it again in a meaningful way. So, I think it's a good move, but some shifts on both sides have to change in how we teach, in how we deal with our kids, in how we set up our days, how we organize the students' day. I'd love to be able to snap my fingers or wave a wand and have

it change. But there's too many deeply ingrained thoughts, ideals, ways that we've always done it. Those just don't go away overnight. I wish they would.

Ellen's comments reflected her background in technical education and its goal to provide an industrial workforce. When she said "shifts on both sides" she was referring to traditional education and technical education, suggesting neither form of education was working successfully for all students. Ellen expressed that she found the most value in the flexible pathways portion of the policies.

Everybody has different needs and it doesn't have to happen in the brick and mortar of a school. It doesn't have to. I learn more by going out and picking up a tool and using it than from watching a video of it. In fact, I'm not going to pick much up [if I watch a video]. But if I go out and do that, I'm going to learn a lot more. And I value that.... So, it just makes sense to me.

Ellen also discussed her interest in removal of seat-time measures. She commented:

I'm fully behind not having Carnegie units. I don't believe that seat time is an indication of anything other than seat time. That's it. I would rather teach to a mastery approach where the variable is time and the constant is learning. We don't do that. The constant is time; the variable is learning. It can't vary. It's got to be the same for every kid.

Ellen took a more self-reflective view of the implementation process, never suggesting state policymakers or the Agency of Education was lacking in its support. She said:

It bothers me when I go home at night and when I look at other schools and they're so much farther ahead. And I say, "wow, I'm really dropping the ball

here.” But I’m doing what I can because I know as an educational leader I can’t dictate it. I can only shepherd that process through.

Overall, Ellen perceived value in Vermont’s policies for personalized proficiency. Her response suggested a perception that the paradigm could meld the positive aspects of traditional education and technical education, making flexibility the way to engage all students and hold them accountable to learning outcomes.

Barbara Bell at Highlands High School. Barbara Bell previously worked at a school that employed competency-based grading. Her perception of the implementation of policies for personalized proficiency in Vermont was enthusiastic. “So, I was totally on board. I’ve been waiting. I was waiting for this. When the law passed, I was like, hallelujah, now people have to start listening to me.” Highlands High School was in a supervisory union that posted a video of Barbara talking about the implementation of personalized proficiency. In this video, she said, “I’m excited about our shift to a more personalized and proficiency-based learning system because it is great for students and it fits with our current and historical work.”

Though Barbara was excited about the shift, she was less enthusiastic about the dual enrollment and early college provisions of the policies. When it came to these aspects of the policies, she said some students might be limited in being able to access the fruits of flexibility equitably.

We try to make it work for everybody, but sometimes you have to buy textbooks, you need transportation, you need to have flexibility with your schedule, you need to not need to get on the school bus, that sort of thing. So even though it’s

intended to provide, and it does in our case, opportunities for students who might not be able to do those courses otherwise or get that first year [of college] under your belt, save a lot of money. There are some students who, I think, don't think they can do it because, "How am I going to get there?"

Barbara's comments reveal a concern about all students being able to access opportunities. She added on an additional potential obstacle. Highlands High School experienced budgetary impacts around early college policies. Barbara explained it in the following way:

We lose money if [students] dis-enroll from the school. But we still provide guidance, they play on sports teams, they come to all kinds of student activities, they participate in clubs, student leadership, NHS. We provide tons of resources, but they're not officially enrolled in the school anymore. They're playing on our soccer team this afternoon.

She described this as free service provided to students. Barbara's superintendent engaged in work at the state-level to change funding for dual enrollment and early college programs in light of this issue. Barbara said, "There's been some changes made, some implementations around funding... but it's not all the way there yet."

To summarize, Barbara was an enthusiastic supporter of policies for personalized proficiency. Barbara's responses suggested she was leery of whether the flexibility side of the policies could be implemented equitably for students, or with financial fidelity for schools.

Roger Dibbs at Maple Tree High School. Roger Dibbs found Vermont's policies for personalized proficiency valuable from both the accountability and the flexibility perspective. He said the following:

I definitely see value... I love the idea of a proficiency-based graduation requirements. I like the idea of being really clear about what it means to be "done." And the idea that... it might look different for each and every student on how to get there, I think it's powerful. And it's a philosophy that aligns with where this high school has been for years, and years, and years, in terms of classroom instruction, differentiated instruction.... That's something really firmly believed here at this high school that, we have to really look to see what works for every student. And so, that for me ACT 77 and proficiency-based graduation, in many ways is systematizing a philosophy around differentiated instruction at a school level, rather than just what happens if this in the classroom. So, that speaks to me, that resonates with me.

In the statement above, Roger expressed value in the policies, particularly because he felt the policies were "systematizing" differentiated learning practices at the state level. However, Roger stated his unease with how the policies were being implemented.

I worry that the state threw this to the wind, and now there's a lack of clarity about what we mean by any of this. The way schools are doing it, it's too much reinvention of wheels. I worry that it's taking way too many resources up in schools and I don't mean resources actually putting into place Act 77 and proficiencies but figuring out what it is and how to do it. And it's so silent but

everyone's spending all this time and energy, and I'm worried that it won't have a payoff with student learning and engagement... because we did it this way... And I'm just at a point where I'm worried that no one knows what we mean anymore when we say standard based grading or standards based learning or proficiencies, there's no common definition anymore. And so, schools they're saying, "We're doing it" or "We're not doing it" and they're probably doing the same exact thing. But the words have become messy, we just have not clearly defined them.

Roger perceived value in Vermont's policies for personalized proficiency. However, Roger's responses suggested unease with a lack of common statewide understanding for what the paradigm shift meant.

Principal Understanding and Perceived Value: Cross-Case Findings

Yin (2014) suggested multiple case studies provide robust information when findings are at first reported at the individual case study level, followed by cross-case analysis. In the previous section I reported findings on components of my first research question on an individual case basis. In this final section of the chapter I explore cross-case findings related to the first research question: What constructed understandings, values, and perceptions do Vermont high school principals have about Act 77 (Flexible Pathways), the Education Quality Standards (Graduation by Proficiency), and the statewide shift towards a personalized proficiency education paradigm? First, I report cross-case findings related to principal understandings of the policies and the resources they relied on to build their understanding. I follow this with a report on cross-case

findings related to principal perceptions of policy value and quality of implementation of the policies by the State of Vermont.

Principals' understandings. The principals in this dissertation study built their personal understanding of Vermont's policies for personalized proficiency using a myriad of resources, some of which overlap. In common, the principals read the EQS and Act 77 documents. They also accessed the resources available on the Vermont Agency of Education website, particularly the sample graduation proficiencies and PLP resources. A summary of resources the principals accessed is located in Table 5.1. Chris Sturgis (2016), researcher at iNACOL, wrote about the implementation of Vermont's education policies. She said, "Great Schools Partnership has provided a vital role on promoting proficiency-based learning... It has provided training and technical assistance to districts and schools." The GSP partnered with the Vermont Agency of Education to build statewide capacity for implementing Act 77 and the EQS. Sturgis (2016) reported 50% of Vermont school districts participated in GSP trainings in 2015-16 with 30 planning or implementing proficiency-based grading. Three principals in this research study participated in some version of the GSP trainings.

Sturgis (2016) also suggested inter-state partnerships facilitated the implementation of personalized proficiency in New England. One principal named an influential inter-state resource (League of Innovative Schools (LIS)), which was a regional professional learning community of the New England Secondary Schools Consortium (NESSC). In addition, principals in this study were accessing local and national consultants and authors on the topics of brain-based research and best practices

related to proficiency-based grading. Vermont-based resources that principals accessed included well-informed superintendents, coursework at local colleges, fellowships with philanthropic organizations (like The Rowland Foundation), partnerships with university-based organizations (like The Tarrant Institute), and self-assembled collaborative meetings of principals around the state.

An analysis of principals' statements about their understanding of the goals of the policies determined whether their constructed understandings included both of the accountability and flexibility aspects of the policies (Sturgis, 2016). Responses from two principals in this study equally reflected the dual policy aspects of accountability and flexibility in their responses. Three of the principals emphasized one of the aspects of the policies more in their responses. Table 5.1 provided a summary of the findings for principal understanding, including quotes that position their understanding as accountability or flexibility oriented. All of the principal participants included components of accountability in their understanding of Vermont's policies. At the time of this dissertation research study, three years after Vermont's legislated decision for personalized proficiency, all of the principals were deeply engaged with teachers on the accountability side of the policies. Aspects of flexibility were missing from the responses of two principals. Both of these principals did not participate in the GSP trainings facilitated by the Vermont Agency of Education.

Principals' perceptions. Through cross-analysis it was determined that the principals participating in this study had a common perception and value of the goals behind Vermont's adoption of a personalized proficiency-based education paradigm. All

of the principals were quick to share the perspective captured by one principal's words, "It's in the right direction." Just as quickly, however, four of the principals capped their statements with a caveat. The caveat focused on their perception of Vermont's policy implementation process. Two principals focused their responses on a lack of clarity of expectations from the state, sharing how schools were spending time just trying to figure out what the paradigm shift meant, and finding conflicting or absent answers. Another principal doubted the Vermont Agency of Education's capacity to implement this kind of paradigm shift because the organization was confronted with competing items to manage. A fourth principal questioned the expectations of the policies when it came to budgetary impacts of early college. Table 5.2 provided a snapshot of findings related to principal perceptions of the paradigm shift. In it I summarized the four principal perceptions that extended their answers to include a caveat as having a "yes... but..." perception of the policy. Yes, they described the decision to move Vermont towards a personalized proficiency paradigm as a good one... but... they were worried about the capacity of the state to implement the policies in a way that allowed schools to move forward with clarity.

Chapter 6: Principals' Action Steps

Introduction

In this chapter, I report findings related to the second research question: As principals engage in the early phases of making change for personalized proficiency to happen in their schools, what leverage points are they choosing to apply, and how is this choice influenced by their understandings, values, and perceptions of Act 77 (Flexible Pathways), the Education Quality Standards (Graduation by Proficiency), and the statewide shift towards a personalized proficiency education paradigm? I begin the chapter with an overview of the findings for the second research question. In this section, table 6.1 provides a snapshot of the data supporting the findings. Then, I provide a visual with a description to show the process I used to arrive at these findings. Finally, I provide a thorough analysis of the data used to develop the findings on by case and cross-case.

Overview of Findings

Principals in this study understood the deadlines for the implementation of PLPs preceded deadlines for the implementation of PBGRs. Principal-directed action steps to meet PLP deadlines resulted in documents that lacked meaning for students and teachers, and the documents were quickly put aside as schools began focusing on the phase-in of proficiency-based grading and graduation deadlines. Principals reported creating PLPs out of compliance, and said the PLPs later became a “backburner issue” that lacked real meaning for student personalization of learning, particularly because cohesive flexible pathways and proficiency-based grading practices were not established in schools.

At the time of this study, principals were acting to build structures and standards that focused on the accountability side of the policies in their schools (Frontier & Rickabaugh, 2014). Principals were ensuring the adoption of standards, the development of clear proficiency scales for grading, the determination of graduation requirements, and the exploration for or use of suitable software to track proficiencies. In most cases, principals were focusing on this to the exclusion of personalization.

Three sticking points were identified by principals in this study. The first was related to technology for tracking student proficiency completion and housing PLPs. They reported considerable amounts of time spent on choosing, using, and adjusting to appropriate technology. The second was a concern for building flexible pathways programs in their schools that ensured student equity of access to opportunities, especially when transportation and other fees could be problematic for some students. Lastly, principals expressed frustration with the timeframe the state set for policy implementation, stating it was too short.

A summary of the data for principal action steps and sticking points is in Table 6.1. The three columns list principals' action steps for the accountability side of the policies, the flexibility side, and the major issues plaguing the paradigm shift.

Table 6.1

Summary of Principal Action Steps and Sticking Points

Case	Principal Action Steps		Sticking Points
	Proficiency & Accountability	Personalization & Flexibility	
Carol Rumney, Valley Run	<ul style="list-style-type: none"> -Hired consultants for standards-referenced grading -Grade work habits apart from content -Standards-course alignment -Teacher PLC on grading -Advisory structure 	<ul style="list-style-type: none"> -PLP: “It has kind of been a backburner thing” -Service-learning internships -Access to career and tech -Advisory for PLP 	<ul style="list-style-type: none"> -Technology for grading and reporting proficiencies -Technology for PLPs
George Brighton, Grandview	<ul style="list-style-type: none"> -All teachers on 4-pt scale -Grade work habits apart from content -Transferrable skills rubric applied weekly in all classes -Teacher PLC on grading -Advisory structure -Transferrable skills for athletic eligibility -Advisory structure 	<ul style="list-style-type: none"> -PLP: “It’s a dead document,” redesign in process -Work-study program -Advisory for PLP 	<ul style="list-style-type: none"> -Technology for grading and reporting proficiencies -Contracts for class size, teacher workload -Work based internship legalities -Lack of Time
Ellen Longlee, River Regional	<ul style="list-style-type: none"> -Structures for meaningful collegial discourse, including proficiency focused committee -Supervisory union level work to identify graduation proficiencies -Advisory system 	<ul style="list-style-type: none"> -PLP: “Not where I want them to be, we have some work to do” -Work based learning program -Advisory for PLPs 	<ul style="list-style-type: none"> -Lacking trust in administration -PreK-12 workload

Barbara Bell, Highlands	<ul style="list-style-type: none"> -SU level grading advisory group participation -SU hired communications expert -Identified scholarly habits and wrote rubrics for assessment -PD and collaborative work time 	<ul style="list-style-type: none"> -Student choice in class -Independent projects -Differentiated instruction -Multiple pathways program -Action plan with flexibility focus 	<ul style="list-style-type: none"> -Technology for grading and reporting proficiencies -Contracts for teacher workload -Equity of access to opportunities
Roger Dibbs, Maple Tree	<ul style="list-style-type: none"> -Administrative positions: PD coordinator, PD team, Instructional coach. -Grade work habits apart from content -Discipline proficiencies identified -Departmental mission statement -Whole staff grading meetings 	<ul style="list-style-type: none"> -PLP: “We have PLP 1.0 right now... not as far along as our proficiency work.” -PLP Coordinator -Advisory for PLPs 	<ul style="list-style-type: none"> -Lack of Time -PLP management -Equity of access to opportunities

Data Analysis Process

Figure 6.1 visually describes each step taken in the data analysis process. For the analysis of the data, I first report out a case-based analysis of principal self-reports related to action steps they took when implementing personalized proficiency at their school. I categorized the action steps according to Frontier and Rickabaugh’s (2014) framework of “five levers” for improving student learning. A summary of each leverage point is provided during the analysis of each case. I substantiate principals’ reports of action steps with data from teacher interviews, documents, and site visits. Next, I explore which paradigm goal each principal emphasized through their actions and leverage points, using the accountability vs. flexibility framework (Labaree, 1997; Sturgis, 2016). I end the

case-based analysis with findings on sticking points each principal confronted as they act to implement the policies. Principal discussion of sticking points was an important additional finding that I felt needed acknowledgement in this section of this dissertation research study. Action steps that principals took were influenced by their perception of barriers, issues, or worries, all of which I categorize as sticking points and report out on in this section.

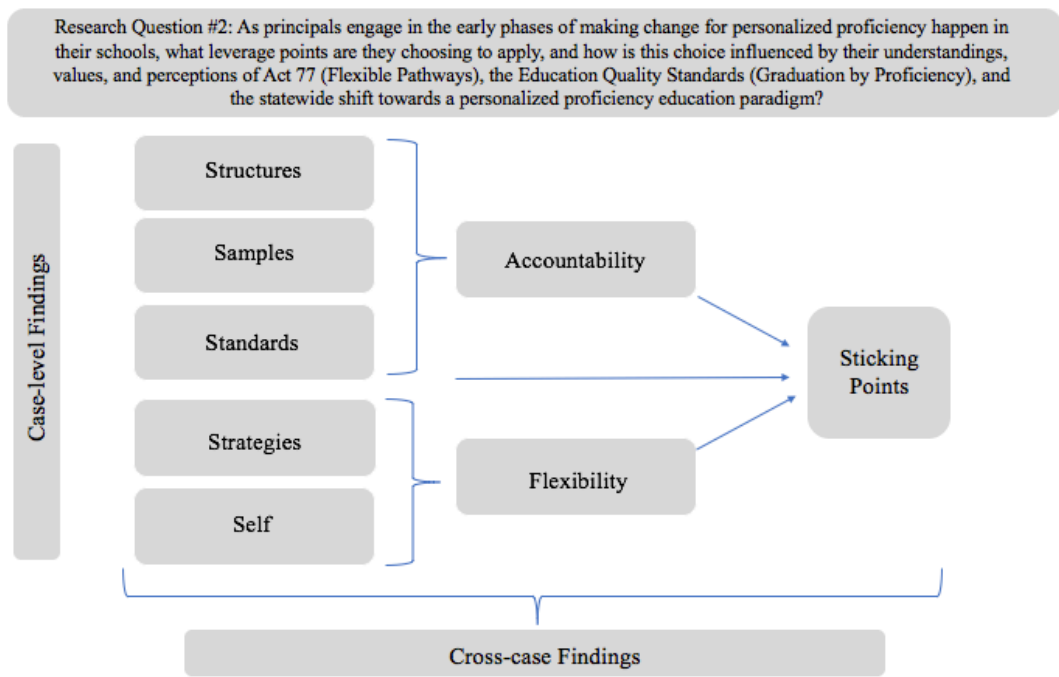


Figure 6.1. Flow chart of analysis of findings for second research question.

Action Steps and Leverage Points: Case-Based Findings

Carol Rumney at Valley Run High School.

Levers for action. Prior to the implementation of Act 77, Carol had Valley Run start the process of examining and revising its grading practices and curriculum due to a

state-mandated improvement process. As a part of this improvement process, the school began focusing on standards-referenced grading to add clarity to classroom expectations and reporting of grades. To help guide this improvement process, the school hired a consulting agency and began training teachers in standards-referenced grading. With Vermont's adoption of policies for personalized proficiency, Carol said, "This kind of pushed us forward to say 'we've talked about doing some kind of standards-based, standards-referenced reporting but now we have to, so let's get going on it.'" Teacher professional development focused on standards-referenced grading, reporting student work habits separately from content grades, and making sure teachers in all departments were grading in the same way. Carol stated:

We have really focused on looking at the curriculum, being really clear about what every course is supposed to teach and what the expectations for departments are...really focusing on standards and a standards-referenced reporting system... Every course has specific standards, every course has proficiency scales, and the next step that we've taken in the last couple of years is then teaching to that process and assessing in that way.

Personalizing learning for students was less of a focus for Valley Run High School at the time of this research study. Carol reflected:

We worked a little bit with developing the PLPs... we don't have that clearly established... I'm thinking we are going to need to do some kind of form or some kind of portfolio or something like that maybe through our [online communication] system... because I don't feel like we've done a good job with it.

It has kind of been sort of a backburner thing. I know it is required in [the personalized proficiency policies], it's something we've kind of taken care of to the extent that they say we have to. But this [standards-referenced grading] is so much harder, so much more time consuming, so we've focused on that.

As captured in the literature review of this study, Frontier and Rickabaugh (2014) identified five leverage points educational leaders could access when implementing school change for improved student outcomes. The leverage points were structures, samples, standards, strategies, and self. Structure-based leverage points included factors like calendars, schedules, and technology. The data collected in this study revealed three ways in which Valley Run accessed this leverage point. First, Valley Run was evaluating and shifting its technology resources to match grading and reporting practices, which also proved to be a sticking point and is discussed later. By focusing on this technology, the school was establishing a structure for communicating grades to students and parents. Second, Carol established a Professional Learning Community (PLC) structure, which met for one hour one morning per week. Small groups of teachers met in the PLCs for activities related to the implementation of standards-referenced grading, including shifting standards to student-friendly "I can" statements, incorporating proficiency scales into day-to-day teaching, and reporting out on proficiencies. Carol's action steps to bring teachers together in PLCs was leverage for building teacher capacity for standards-referenced grading. A Valley Run teacher commented:

I think the PLC was the most important leadership decision made by our principal. It walked us through the steps of picking the overarching standards,

writing proficiency scales, and the fact that there were baby steps... and lots of them.

Third, Carol developed a three-year plan for implementation of the policies and consciously stuck with it by having regular meetings to discuss progress with other leaders in the supervisory union. The three-year plan structure, in Carol's mind, was a key leverage point in her ability to lead Valley Run towards cohesive school change.

Frontier and Rickabaugh's (2014) sample-based leverage points included ways of grouping students for improved learning outcomes. Though Valley Run made no adjustments to student grouping in terms of age or ability for the paradigm shift, a form of student grouping existed through a Teacher Advisory (TA) system. In this TA system, small groups of students (~11 students each) met with a teacher on a weekly basis to implement the personalized aspects of the policies including PLPs.

Standards-based leverage points (Frontier & Rickabaugh, 2014) included setting standards and making expectations clear when it came to student progress on benchmarks. Valley Run spent several years focusing on identifying standards, clarifying expectations, and practicing standards-referenced grading.

When Carol was asked to report her view on the most important action step for implementation of Vermont's personalized proficiency policies that she took to date, she identified two. She said hiring the Marzano consultants was important because "it put us in a good position compared to other schools around us. The Marzano system is established, thought through and logical." Carol described the work of Marzano consultants as being focused on establishing systems of standards referenced grading.

Strategy-based leverage points (Frontier & Rickabaugh, 2014) included instructional strategies to improve learning for students. Carol reported Valley Run was beginning to shift the focus of teacher practices towards classroom strategies for standards-referenced grading. Carol said, “We’ve had staff meetings where we focus on how to take a standard to the next level in our classes. Teachers share their work on this with other teachers.” The teacher substantiated that this staff meeting share-out process was influential on teachers’ practice towards proficiency-based grading. The teacher reflected, “Two years ago we began sharing out at staff meetings... and now it is all coming together.”

Finally, self-based leverage points, Rickabaugh (2016) argued, were the most powerful lever for improving student outcomes. In self-based leverage points, both teachers and students rethink their roles in education so students become the decision-maker and driver of instruction. A Valley Run teacher shared actions Carol took to build and maintaining systems that leverage self-based education in three ways. First, teachers at Valley Run received Carol’s support to be a part of a Rowland Fellowship focusing on the development of service-learning internships, a potential new pathway for learners to take at Valley Run. Second, students were made more aware of pathways they could choose for course completion, including courses already offered at the honors level at the local technical center. Third, Valley Run completed work to make sure a PLP document was in place by the legislated deadline, though Carol mentioned issues with the document (discussed in sticking points later in this section). Student-driven instruction was not

mentioned during any data collection procedures. Instead, standards-referenced instruction and grading practices were strongly emphasized by Carol.

Accountability vs. flexibility. With a heavy emphasis on leverage points like structures and standards, Valley Run entered the personalized proficiency paradigm with an emphasis on accountability. The school was tending to the state mandate for a document that tracked the flexible pathways students might take in a personalized learning-focused system with a PLP. However, Carol admitted the personalization aspect of the policies was a “backburner issue” at the time of this research study. Carol added, “This [standards-referenced grading] is so much harder, so much more time consuming, so we’ve focused on that.”

Sticking points. Carol discussed two sticking points for the implementation of personalized proficiency at Valley Run, both of which related to technology. Carol said two forms of software were limiting Valley Run’s ability to implement personalized proficiency well. First was the supervisory union-wide grading and reporting software. Carol reported, “It’s a struggle to go through so many steps to get the grades to reflect where teachers think a student is.” Observation of teachers during a weekly Professional Learning Community (PLC) meeting substantiated Carol’s concerns. Teachers in the PLC reported recent trouble with the grading and reporting system, saying that despite the work of Valley Run’s Vice Principal to create a step-by-step guide to reporting in the system, some teachers were having problems entering their grades correctly, and feeling frustrated with redundancies and the total amount of time it

took to complete report cards. The second technology issue was due to software the school was presently housing PLPs on. To this, Carol said the following:

We tried to use [one system] and either I'm not getting it or it's not working so well... we have two people in the building that are working on that... and they're trying to say if this is the system we are going to stick with or not.

By the end of this study's duration of engagement with Valley Run, the school decided to abandon the PLP software discussed by Carol in the previous quote. A Valley Run teacher revealed the school was implementing a new computer system for housing PLPs, and emphasized the fact that the abandoned software was perceived as a true sticking point for the process of PLP implementation.

George Brighton at Grandview High School.

Levers for action. Prior to the implementation of Vermont's Act 77 and EQS in 2013, Grandview High School was not in the process of school change for personalized proficiency. After the implementation of the policies at the state level, George worked to inform himself and develop a theory of action for implementing personalized proficiency by conducting his own research, accessing authors such as Guskey and Bailey, 2010. George said:

If you look at Guskey's work, he is really [saying] the philosophical stuff should all be in place before you get into [the] details. We didn't have time to do all of that. Because to philosophically move somebody and to help their teaching practice evolve, that takes time. That takes a lot of professional development and that takes a lot of support, and you can't do that in five months, no matter how

talented your system is.... And I know some schools are only doing this with their freshmen because they have to do it with their freshmen... we have so many mixed classes and we have so many teachers that teach all of it... we all agreed 100% we're in, we didn't want to do this partial piece.

Realizing how frequently freshmen were in classes with older students, George felt any early action steps had to occur with all teachers at Grandview, as opposed to working with small pilot groups. By the time of this dissertation research study, George made other decisions for implementation that were structural in nature, including grading on a 4-point scale, separating out student work habit-related grades from content knowledge grades, developing rubrics for transferrable skills, and assessing transferable skills on a weekly basis in 100% of classes. Though these leverage points were structural in nature, George described them as having both practical and philosophical aspects for teachers.

We're focusing on getting the details of, what does the report card look like? How are we grading and, you know, here are the cooking steps that you have to do, and these are the kinds of things you're going to assess and then—by the way we're also shifting your philosophical way you teach, and way you assess, and way you reassess, and how you meet students where they're at and help them meet the standards.

Another structural leverage point was implemented with Grandview's shift to personalized proficiency. The leadership team increased its meeting frequency to weekly, up from every other week to do what George called, "lots of tweaking and fixing." Some of that tweaking and fixing was happening at the leadership and teacher

level with one particular structure, the computer-based “gradebook” or standard tracking computer system. Considerable amount of teacher PLC time was dedicated to teasing out and solving the issues with the grading system.

Sample-based leverage points included a multi-age advisory system which met one time per week, and was put in place to aid the implementation of PLPs. George said the intention behind grouping students in a multi-age system was to allow the heavy PLP work (for 9th grade students) to be distributed among several teachers as opposed to being managed by a small number of 9th-grade only teachers.

George and teachers at Grandview accessed the standards-based leverage point most extensively, having spent considerable time identifying standards for each course, clarifying grading policies, and dedicating PLC time to proficiency-based learning and grading.

Strategy-based leverage points, or action steps a school could take to improve the strategies used to instruct students for improved learning outcomes, were limited at Grandview. A Grandview teacher noted:

We have a new grading policy in place, but we need to change our teaching practice. All of our conversations are about [our computer-based grading system] and how are you setting your gradebook up? How are you coding standards in our gradebook? Use of technology is presently our focus. There’s little discussion about how to change teaching practices, or at least no real formal conversation about changing teaching practices. Lots of informal conversation.

This quote revealed the teacher's attention to the technical aspects of a computer-based grading system rather than classroom instructional strategies. The teacher added, "We have a new grading policy in place. But we need to change our teaching practice."

Finally, self-based leverage points, or action steps to re-define the role of students in education, could be considered accessed because Grandview had a PLP document in place. However, George described the PLP document at Grandview as a "dead document" that two counselors were working to redesign along with a group of teachers. George described the PLP process at his school in the following way:

The PLPs we had to implement this last year... by November of last year. We were in compliance. That means every incoming student as well as our dual enrollment students had a document that we made a template of the year before. That's about as much as I will say about that, we were in compliance. Because again we are focused on the proficiency piece and richness behind what it is. And how can you talk about the different options for students when you haven't even designed what those options are or realized what options there are?

George's statement was substantiated by the teacher interview. The teacher commented, "This year we were supposed to update the PLP with sophomores and start PLPs with 9th graders, but this hasn't happened this year... we haven't done them yet." Grandview was tending to the state mandate for a document that tracked the flexible pathways students could take in a personalized learning-focused system. However, the result was a document that had little meaning for students, was late in implementation, and needed

revising. In his second interview, George said little progress had been made on PLPs at Grandview.

Other action steps for bringing the self into learning that George described included a work-study program aimed at helping students find internships in the local community. George considered this work-study pilot informative and a step forward in revealing how to make flexible pathways work in the future at Grandview. George commented that the part-time work-study teacher position would be full time in the next school year. He added, “So there is something I am working towards... within five years [I] want all students, 100% of our students, to do some level of community service as a graduation requirement.”

When George was asked to report his view on the most important action steps he took to date, he said, “Using transferrable skills for athletic eligibility. We did not have that last year. I heard from teachers and students that it put meaning behind the transferable skills, previously people didn’t value it.” This action step was a change to a logistical component of the school (a simple check-off on transferrable skill scores in a gradebook), meaning it fit into the category of structural leverage points. A Grandview teacher revealed another key action step that George took—finding ways to communicate the grading shifts with the public. The teacher said a newspaper reporter at a school board meeting wrote an article in the local newspaper about proficiency-based grading at Grandview. This article, argued the teacher, helped the school get the message out to the community in a way they previously could not. The teacher explained:

We claim we have messaged to parents. We use Facebook and the school website, but not a lot of parents access those resources. We are forcing parents to do the searching rather than us pushing information out in a very purposeful way to those parents.

The board meeting allowed George to explain the information to key stakeholders and the newspaper article facilitated getting the message heard by a wider public audience. George also increased the frequency of evening parent information sessions to aid in communication. School communication, and the structures that need to be in place to aid in communication, fall into the logistical component of school leverage points, and are structural in nature.

Accountability vs. flexibility. At the time of this dissertation research study, action steps at Grandview emphasized logistical structures and proficiency-based grading policies. Administrator and teacher time was dedicated to grading systems and structures to communicate with the public. Though George acknowledged the importance of a redesigned PLP, and was supporting a small pilot to explore and build flexible pathways through a work-based internship program (more on this in the sticking points section), this work was small in scale compared to the school-wide emphasis on proficiency-based grading. George's actions for implementing Vermont's policies for personalized proficiency had an early emphasis on accountability. This was substantiated by a Grandview teacher who said, "Honestly, teachers are more concerned with the grading system than PLPs."

Sticking points. George identified three concerns about implementing policies for personalized proficiency at Grandview. First, George discussed technology as an issue. He said, “We have three PLCs about proficiency-based learning, and they are tripping over each other now and focusing on [our computer system] instead of proficiency.” George’s statement was substantiated during my site observation of a PLC related to proficiency-based learning. The hour-long meeting observed was focused on how to use the computer grading system. Teachers debated how to enter grades, how the gradebook should look to students and parents, and how much time a teacher should spend working with the system. The PLC ended with one teacher commenting, “We need to tackle a philosophical question—is [this system] for parents or for students?”

A second problem George identified was related to policies already in place at Grandview. These policies were for class sizes, outside enrollment in courses already offered at the school, and teacher workload.

We’re a little bit worried about having teacher cuts because it doesn’t meet our class size policy when these students are being, quite frankly, outsourced to different partnerships and yet it’s way more work on us to figure out [how to place them to meet standards]...what I worry about is when the budget is going to pass and they’re going to be looking for budget cuts as everyone is, and say, “Well, you know, your enrolments are down because they are not enrolled in the class, they are enrolled in a work based learning opportunity.” And then... contractually, language says we can’t have students taking courses that we offer, because again that’s outsourcing. But if I say you can get your English credit

through this alternative pathway, the state is directing me that I have to do that, but my teacher contract says I can't do that and it's in conflict. So, are the things where you talk about those little details that we have to figure out, those are pretty big details. And I don't have control over those things. I mean that's negotiations, that's teacher contract versus superintendent.

George shared that he felt as though these issues were out of his hands, yet were a sticking point for implementation of policies for personalized proficiency at Grandview.

A third concern George brought up was the implementation of work-based internships, one of the key ways George was tending to the flexibility side of the policies.

Honestly, the biggest challenges have been around legality: insurance, background checks, and transportation. We have realized our timeline is a little messed up and backpedaled it... we need three months to find partnerships for students and for the community. We don't have the rolodex of partnerships so [there is] a lot of work upfront. In hospitals, students have to be TB tested, and some parents have said no to those kinds of tests. So, those kinds of things are having to be figured out. Alternatives have to be developed.

In an effort to keep the pilot rolling despite the set-up issues, two students were able to be placed in internships during the time of this dissertation research, a much smaller pilot size than George originally anticipated.

Ellen Longlee at River Regional High School.

Levers for action. At the time of this study, River Regional was engaged with implementing policies of personalized proficiency, however much of this work was

influenced by two major events. First, much of this work was done in conjunction with other high schools in River Regional's Supervisory Union due to a potential future district consolidation. Second, Ellen reported turmoil in the school building due to a previous principal's tenure. Ellen said, "There was no trust of any administrator in this building when I walked through the door." The lack of trust built context for understanding the leverage points Ellen accessed at this early stage of policy implementation.

The structural and logistical-focused leverage points Ellen was accessing were mostly focused on developing structures for meaningful conversations among teachers and rebuilding a culture of collegiality. "I haven't been able to have a meaningful conversation with the staff here about curriculum, assessment, even the proficiency-based graduation standards to the level that I would've liked to," Ellen said. "[I'm] just trying to build trust." To build trust and promote discussion, Ellen developed a teacher committee structure to allow for discourse related to personalized proficiency and other important topics. She determined the committees would meet once a month for half of a regular faculty meeting. She determined the committee topics, which included assessment, curriculum, and school climate. A River Regional teacher interview revealed one committee was dedicated to proficiency-based grading. It was made up of six teachers, guidance counselors, and Ellen. The teacher said, "This committee was tasked with developing professional development for the full faculty, and the teachers who sat on the committee volunteered and saw a benefit in moving towards [proficiency-based

grading].” The committee structure Ellen put in place allowed for conversations about grading practices, showing action for proficiency and collaboration.

The teacher interview provided information on standards-based leverage points. “We identified performance indicators and mapped them to our curriculum... and we identified assessments that would measure those performance indicators... as a supervisory union, we’ve now set all of our graduation requirements. We selected 10-20 [standards] that we value the most as teachers.” Standards identification was a key action step to move forward in proficiency-based grading.

Ellen asked two teachers to join her in attending monthly meetings with other principals in the district to be involved in the supervisory-union level discussions. A site visit to one of these meetings revealed action steps planned and conducted in conjunction with other high schools in the supervisory union. The group developed a plan for identifying 9th grade proficiencies, a process they anticipated would eventually lead to the identification of proficiencies in grades 6-12. Ellen reflected on the implementation process in combination with potential supervisory union consolidation and said, “We’ve started and stopped and started and stopped... We’re now trying to wrap our heads around what’s that going to look like, because that’s a pretty big change. Pretty big change.”

Sample-based leverage points at River Regional included an advisory system. Advisories met every Friday with teachers. Once every two weeks the advisory had an academic focus with curriculum provided by the guidance counselors. One of the academic advisory sessions had a focus on note taking.

In the leverage point category of strategies, Ellen reported little focus on instructional strategies as leverage points. “We’re not at that point yet,” Ellen said. “We are focused on what are the proficiencies, across the disciplines, for everyone to receive a River Regional diploma? Once that work is done, then changes can happen in the classroom.” This quote indicated Ellen’s point of view that identification of standards and proficiencies was important before strategies for instructional improvement could be leveraged. When it came to self-based leverage points for personalization and flexibility, Ellen said:

PLPs are in place but not where I want them to be. We have some work to do. We now have an advisory system for the high school and middle school homeroom, and staff are more involved with this, helping with goal setting, college and career. We’ve taken the first step.

The teacher interview substantiated Ellen’s report of having less focus on the personalization of learning with the following statement:

The PLP did not have much teacher involvement and we have not had much progress other than developing an advisory program over the summer... I don’t think it is oriented enough towards Act 77. We spend time on note taking skills, time management, and test taking strategies. It doesn’t capture the vision of Act 77 because only one month out of all of them was for filling in the PLP template. We’re not giving it the time it deserves to make it meaningful... the PLP piece is not as rich [as the proficiency piece].

River Regional had a work-based learning coordinator, but Ellen reported, “It’s still more of a basic internship piece. It is not tied to any proficiencies or anything that can be considered multiple pathways. It is an elective credit based on amount of time spent.” Though Ellen worked to put the structure of a work-based learning coordinator into place, the impact of this structure on the self-based leverage point was minimal at the time of this study.

When Ellen was asked to share her view on the most important action steps she took to date, she commented:

Putting together a group of teachers and students to look at an academic advising system for MS and HS and put in a committee structure with groups focusing on specific things, gathering data, and making recommendations. It took me two years of settling in and getting information, but this year we are making it happen. We now have a means for having pedagogical discussions, to make decisions that are meaningful for classroom instruction.

Many of the action steps Ellen took for the early implementation of Vermont’s personalized proficiency paradigm were limited to structures, standards, and samples. She built structures for teacher committees, worked at the supervisory union level to identify standards, and accessed sample-based leverage points in building an advisory program.

Accountability vs. flexibility. River Regional was tending to the state mandate for a document that tracked the flexible pathways students might take in a personalized learning-focused system. The implementation of an advisory program revealed efforts to

bolster the PLP and pull the self into education, though both Ellen and the teacher acknowledged the advisory's lack of power to truly personalize learning for students at River Regional. The supervisory union level consolidation efforts led to work on proficiency-based graduation requirements for all schools. Early action steps for policy implementation at River Regional had an emphasis on accountability over flexibility.

Sticking points. Ellen expressed two policy implementation issues at River Regional. The first was a school culture that lacked trust in administrators. The second was related to the nature of a principal's job in a Pre-Kindergarten through 12th grade school. To this problem, Ellen explained the following:

A Pre-K to 12 school is almost undoable in today's world. I have not checked my email today because my door is always open... I do [that] because if I don't I lose the trust... I haven't had an opportunity yet to build that leadership capacity, to bring people together on a common vision.

As an administrator of a small Pre-K to 12 school, Ellen cited the dual demands she must juggle to implement Vermont's policies at River Regional: building culture and building trust.

Barbara Bell at Highlands High School.

Levers for action. Barbara Bell at Highlands High School was already working on implementing personalized, proficiency-based education when Vermont's policies were enacted. "We started working three years ago on understanding...getting a better understanding of scales and targets, progress, mastery, formative, summative. And I guess within that, differentiation, though we haven't had really a direct PD around

that.” Barbara’s focus during that time was on structure-based leverage points, often due to direct support from the supervisory union. To track proficiency-based grading, the supervisory union adopted a new computer system. There was also a supervisory union-wide advisory group made up of a curriculum council and a curriculum coordinator for the purposes of directing the implementation of personalized proficiency. “They wrote the action plan,” said Barbara. She continued, “They helped write our mission-related goals.” A Highlands teacher said the supervisory union also invested in a communications expert to message the paradigm shift to parents through the creation of a website. The website included a written vision, videos about the paradigm shift with principal voices, and a statement of meaning for students.

To build teacher capacity with the new system, Barbara set up structures including both teacher support groups and time for training during staff meetings. Barbara also supported the application of one school counselor to the Rowland Fellowship as a way to increase teacher capacity.

Standards-based leverage points included writing clear learning targets, writing assessment scales, and identifying what mastery looked like. As a part of that work, teachers were developing a way to assess student learning habits. Barbara said:

We also came up with a bunch of, what we call, scholarly habits, but it’s like transferable skills that we’ll assess separate from content. And we’re still trying to figure out how to do that and how to do that well. We’re in the very early phase of that, but we have this really clear set of habits.

The scholarly habits teachers were trying to assess were in the areas of problem solving, communication, and responsible citizenship.

Samples-based strategies applied at Highlands for the implementation of personalized proficiency included a teacher advisory. During advisory teachers and students worked to populate PLP documents that were housed on a Google Site. The advisory time was also used as a strategy for influencing instruction, allowing advisors the opportunity to work with students to individualize their learning with the multiple pathways already available at the school.

Strategy-based levers at Highland High School included the regular incorporation of student voice to “empower students as agents in curriculum, instruction, and assessment” (Frontier & Rickabaugh, 2014). A Highlands teacher described students involved in committees throughout the school, including committees to evaluate curriculum, re-write mission-related goals to ensure they were written in student friendly language, and school culture.

Leverage points for self were evident at Highlands High School and were developed years before the implementation of Vermont’s policies for personalized proficiency. According to Frontier and Rickabaugh (2014), self-based leverage points could include bolstering student autonomy, student confidence, and a school-wide focus on growth mindset. Barbara discussed a shift to self-based strategies when students were provided choices in class and opportunities to engage in independent projects throughout their high school careers. Students at Highlands had access to a well-developed multiple pathways program and a robust independent studies program. The supervisory-union

level Action Plan focused on shifting the roles of students and teachers to make for more student-centered instruction with several goals related to personalized learning, student reflection, and multiple pathways.

Accountability vs. flexibility. Highlands High School had a robust teacher advisory and PLP program that was supported by the counseling department with clear independent and multiple pathways that students were highly encouraged to access. Barbara was working with teachers to develop proficiency scales with clear learning targets for students. At the time of this research study, Highlands High School was acting to implement both the accountability and flexibility aspects of Vermont's personalized proficiency paradigm shift.

Sticking points. Barbara and Highlands High School entered Vermont's personalized proficiency paradigm with action towards personalized education already in place. She commented on three issues she encountered during implementation. The first was related to teacher expectations and contracts. Barbara said the following:

With contracts... people have different expectations about their time and what they can or can't do, and say, "I'm not going to do that, it's my lunch break"...

We're here in the building, let's do the work. It's taken a while to sort of change the philosophy around.

A second concern Barbara mentioned was related to equity of access to the flexible pathways opportunities for all students in her school (also discussed in Chapter 5).

The site observation revealed a third problem: the computer system the supervisory union adopted to track proficiency. In a leadership team meeting I attended,

teachers expressed frustration with the amount of work required to properly design scaled reports, establish consistency of grading practices among departments, and communicate the change of system to students. It was clear that by the end of the first quarter, teacher implementation of the newly adopted computer system varied widely, leading to teacher and student frustration.

Roger Dibbs at Maple Tree High School.

Leverage for action. Maple Tree High School had some helpful structures already in place by the time Vermont's policies for personalized proficiency needed implementation. The structures were administrative positions in the school, which included a professional development coordinator, a professional development team, and an instructional coach dedicated to helping improve classroom instruction schoolwide. New to the school at the time of this research study was a PLP coordinator, which Roger described in the following way:

It's just a .2 FTE position... and what she's doing right now, at the beginning of the year, is going through [our computer system] and all the kids' PLPs just to see what's in there.... And then, she's going to meet with focus groups of students to talk about, okay if you had a PLP that felt good and authentic to you, what would it look like? What would it have in it? Where would you be working on it? So, it will really bring our PLPs to the next level. And then... next year, will pilot that with just a group of students.

Computer systems were also a structural leverage point for Maple Tree. Computer systems in place included one for tracking PLPs, and others to support proficiency-based

grading and reporting. The school recently converted to a system that would allow student learning dispositions to be reported out separately from content grades. A final structural leverage point that Roger accessed, as revealed through the school website, was early release days once a week. These early release days allowed for teacher professional development and collaboration time, though this structure was in place prior to the implementation of the policies.

Student sample groups for improvement of outcomes for personalized proficiency at Maple Tree included an advisory program. Through this program, PLPs were developed with the assistance of an advisory teacher. The guidance department at the school was mostly in charge of the PLPs.

A site visit to Maple tree High School provided information about how standards-based leverage points were being applied. I observed a morning of teacher professional development dedicated to refining course-level proficiencies to match learning targets for each subject area. By refining proficiencies, teachers were directly interacting with standards, and applying them to their courses. Roger reflected on where the school was in this process, and made the following comments:

Right now, where we are not getting rid of our Carnegie units. But we have our discipline proficiencies and a lot of the work that we've been doing is making sure that our required courses line up with the proficiencies. So, a lot of it has been like, "Okay if we say this is what's most important in math, let's make sure that the courses we're asking kids to take demonstrate those proficiencies... I know some of the schools are getting rid of the Carnegie unit [and are] setting up

the system for then tracking the proficiencies. As of now, we have not gone that route yet. I don't know if we will... let's just make sure that when we say you've taken a credit in biology and you passed, let's make sure that that class, that biology class, is completely based on the proficiencies. So that we're comfortable saying that you passed that class, you have that proficiency.

Maple Tree High School was working to make the shift from the traditional paradigm to the personalized proficiency paradigm by being clear about what proficiency meant in each course, altering the meaning of "credit" from seat time measures to demonstration of proficiency in specific standards.

The Maple Tree CIP document revealed instructional strategies as a leverage point. One of the goals for improvement stated, "Teachers [should] increasingly personalize instruction at the classroom level." Roger reflected on the importance and difficulty of shifting instructional strategies for personalized proficiency, regardless of the CIP's written intentions and a funded administrative position in the school for instructional coaching. He explained, "I believe teachers can get behind the idea of [this paradigm], but I think a challenge is translating that understanding into actual changes in practice is a real challenge—the implementation dip." Prior to becoming principal at Maple Tree, Roger was a professional development coordinator at the school. He discussed his early role in ensuring a schoolwide focus on instructional strategies, and how his work on getting teachers to differentiate was a step in the right direction. When asked to reflect on the most important action steps he took for the early implementation of personalized proficiency, Roger commented,

I think the work we did to really evaluate and change how we grade and many of our grading practices has been some of the most important work we've done. It's led to so many conversations about how students learn, what's most important in a class, and how we teach.

Roger reflected on the fact that Maple Tree was focused more on the proficiency side of the policies, rather than the personalization side. He explained this in the following way:

I would say that we have the PBGRs that are developed. Kids have PLPs. Like, when we talk about it internally, I would say we have PLPs 1.0 right now... kids have goals, they do the survey things and the planning. But... I would not say that students have PLPs that are meaningful and that drive their high school career, and that are based on their passions. Like a version 2.0... So, I would say, that that's probably not as far along as our proficiency work has been.

PLPs are one of the key components necessary for Act 77 and an important part of self-based leverage points for the flexibility side of the policies, as are flexible pathways. The Maple Tree website revealed some options for pathways for students, including dual enrollment options with local colleges and ways for students to access those opportunities.

Accountability vs. flexibility. Action steps in the direction of flexibility were underway at Maple Tree with the hiring of a PLP coordinator and guidance department efforts to bring opportunities for personalized learning to the students via an advisory. Roger identified some issues related to the flexibility side of the policies, including management of PLPs, meaning of PLPs for students, and equity of access to

opportunities for flexibility. A Maple Tree teacher and Roger both described how schoolwide efforts were focused on the accountability side of the paradigm shift with professional development activities focused on standards and learning targets. This was further expressed by the teacher who explained, “Classroom teachers feel more ownership of proficiency because they are in their wheelhouse.” Roger felt the most important steps he took to date related to grading practices in the paradigm shift.

Sticking points. Roger identified four areas of concern with the implementation of Vermont’s personalized proficiency policies. First, he identified a “really big challenge” was lack of time. Second, Roger described traditional school structures and teacher contract issues surrounding the flexibility side of the policies as problematic.

Roger made the following comment:

I would say a... big challenge has been who owns the PLP. Is it a guidance thing, is it a teacher thing? So, I would say the traditional structure of high school has been a barrier to us doing a PLP 2.0. And... so, now if we have teachers who are monitoring 15 kids’ PLPs, is that an extra duty, is that a class, how would we get there like, the board would have to approve that, the budget fails all the time here.... So, how do you do something very different in the same structure and system without breaking the system? So, how do you mold it to do these PLP's?

Roger questioned how teacher contract obligations and traditional school structures could allow for the flexibility side of Vermont’s policies. Equity was an issue also identified by Roger, when he discussed the following:

How do you make available these opportunities for students? One—there’s just not enough of them like especially with local internships. And two—often a lot of our experiences cost money, and there’s an equity piece there. That’s very, very challenging, I would say. And so, as we see more, and more, and more, one of my concerns is that it’s going to be more and more opportunities for our students that started with opportunities and not for some of our other students.

A final issue Roger mentioned was technology. He said, “Technology is still a hiccup in terms of housing and tracking this work and these ideas.” This was evidenced by the site visit, where teachers expressed concern about reporting student grades in the new system.

Action Steps and Leverage Points: Cross-Case Findings

In the previous section I reported findings on components of my second research question on an individual case basis. In this section, I explore cross-case findings related to the second research question. Frontier and Rickabaugh (2014) suggested five leverage points school leaders could access for school change to greater personalized learning. Of the five leverage points, Rickabaugh (2016) argued the first three—structures, samples, and standards—had important roles to play in the change process; however, he claimed the last two leverage points—strategies and self—were the “most powerful and dependable” for improving student personalized learning (p. 26). For this dissertation research study, Rickabaugh’s (2016) first three leverage points are categorized as meeting the accountability goals of the personalized proficiency paradigm, while the last two are categorized as meeting the flexibility goals of the paradigm. Here, I report out on the cross-case themes related to accountability, flexibility, and sticking points.

Accountability is reported out first, beginning with a visual representation of conceptual framing in Figure 6.2.

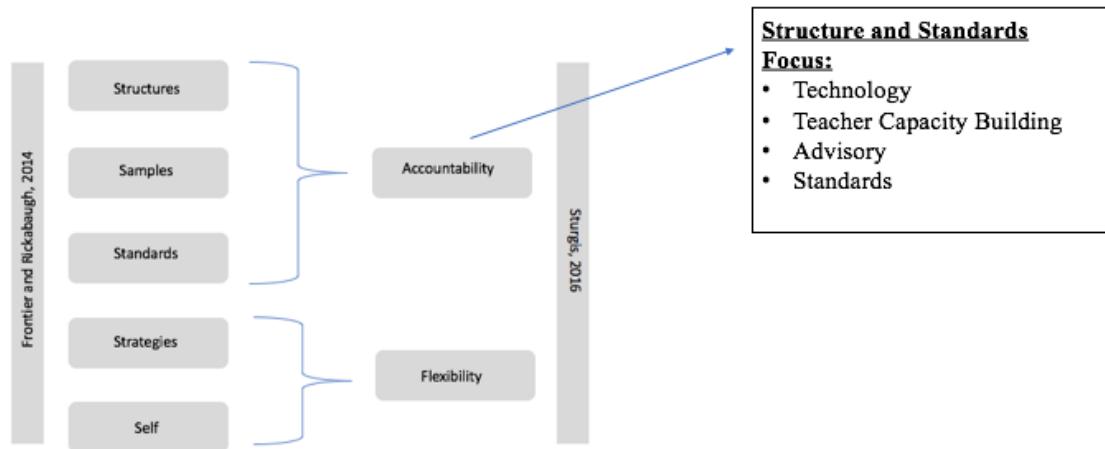


Figure 6.2. Cross-case findings on accountability goals in principal action steps.

Accountability. Of Rickabaugh’s (2016) leverage points in the accountability category, evidence collected during this research study suggested that principals and schools in this study were heavily focused on applying leverage in the areas of structures and standards. Themes emerged in four areas—technology; teacher capacity building, whether through a PLC system or school-wide professional development; advisory systems; and identifying standards, defining proficiencies for classes and/or schoolwide and developing proficiency scales.

Technology. Four of the five schools in this study adopted computer software to track and report out on proficiency-based grading. Two of the schools recently adopted new computer software and were in the midst of building teacher capacity in using the software. Two of the schools had software in place that required tweaking to meet the needs of the new paradigm. Of the schools in this study that were using a system to

report out in a proficiency-based style, all of them reported frustration with the system. These frustrations included the lack of ease when using the computer program, the cumbersome nature of the report for students and families, the time it took to populate the gradebook, and the learning time for the new system. One school had a computer software program in place, but was not ready to change grading and reporting practices and therefore did not mention this as a structural component of implementation.

Teacher capacity building. All of the schools had pre-existing or newly implemented structures for teacher professional development in the new paradigm. Prior to these policies, two schools already made adjustments to their weekly school schedule so that one day per week was shortened, allowing for teacher professional development time. Other schools required after school meetings. These times allowed for groups of teachers to meet in PLCs or committees charged with certain aspects of the paradigm shift.

Advisory. All five schools in this study had a student-teacher advisory system in place, with structured class time during the school week dedicated to it. In all five schools, the advisory structure was used, in part, to develop student PLPs. However, this is not sufficient to truly personalize learning.

Standards. All five schools reported a process of identifying standards, and efforts to determine what proficiency looks like in each of those standards. Of the five schools in this study, four of them had a greater emphasis on proficiency scales than on personalization. Based on this information, a theme emerged that principals and schools

were tending to the accountability side of the policies during the early implementation of personalized proficiency.

Next, I report a cross-case analysis of principal action steps and leverage points related to policy goals for flexibility. A conceptual analysis is found in Figure 6.3.

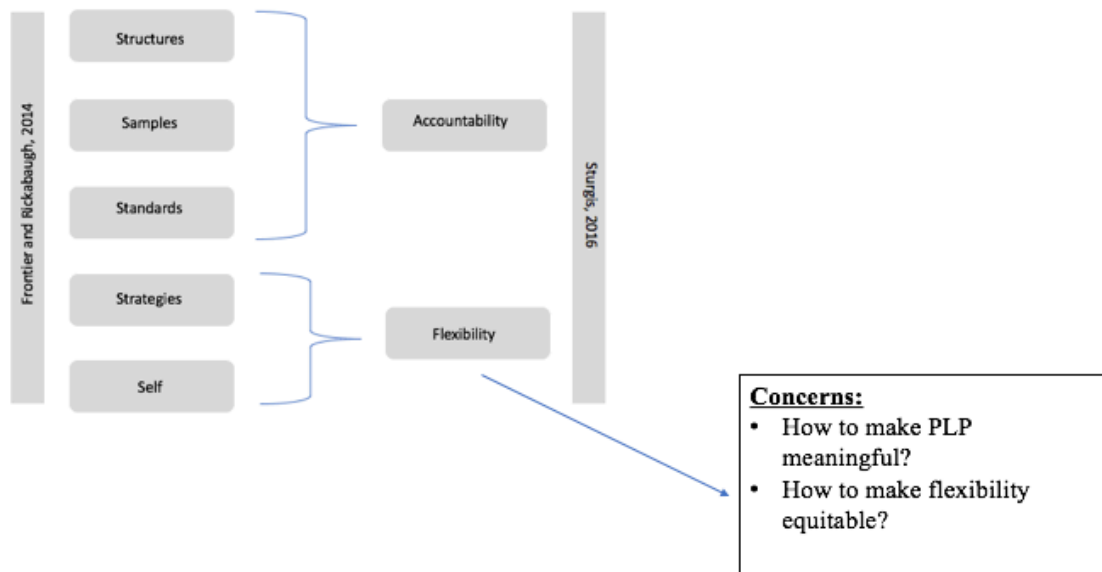


Figure 6.3. Cross-case findings on flexibility goals in principal action steps.

Flexibility. Flexibility is represented by two of Rickabaugh’s (2016) leverage points: strategies and self. These leverage points aim to improve student learning outcomes through excellent instructional strategies for personalization and empowerment of students, and a change in the role of students and teachers to foster a student-driven growth-mindset focus on learning. As a theme, principals and schools in this study were providing the least emphasis on flexibility at the time of this study. Schools were quick to create a structure for PLPs in their schools to fit the timeline set by Act 77. They were true to the law and made a record of the PLP aspects recommended by the Agency of

Education. In four of the five schools in this study, principals reported that the PLP documents lacked meaning for students and were not driving personalized learning. The schools participating in this study were attempting to build multiple pathways through their guidance programs. Two schools were building or reforming work-based internship programs at the time of this study.

In summary, two factors were of concern for principals when it came to flexibility. These included making the PLP meaningful for students and allowing opportunities for flexibility to be equitably accessed by all students. Principals in this study were engaged with the earliest phases of action for implementing the personalized proficiency paradigm in Vermont. They ensured that their schools tended to the law by building PLP documents for students and building structures for multiple pathways in their schools. However, at the time of this study, principals and teachers reported focusing on proficiency-based grading, a change in schools that principals and teachers saw as a far greater need than the PLPs. Cross-case findings show an emphasis on accountability at the time of this study.

Sticking points. Two themes emerged in relation to sticking points. First, four of the five principals claimed the technology available to report out on student proficiencies and manage student PLPs was difficult or insufficient. Teachers and site visits substantiated this theme. Time during the school day and outside of school was being used to understand and manage proficiency grading and reporting systems. Teachers reported spending extra hours using the computer systems and principals

reported extra hours were being used by administrators to try to bring clarity to the use of technology systems.

The second theme was in relation to teacher contracts and job descriptions. Three of five administrators mentioned the fact that the nature of a teacher's job might change within the personalized proficiency paradigm, shifting to more of a counseling role, and potentially adding to their workload. The principals also discussed the issue of smaller classes if students access out-of-school education, violating class size contractual agreements. The role and/or job description of a teacher might have to change contractually before shifts can take place in schools.

Chapter 7: Principal Leadership

Introduction

In this chapter, I report findings on the third research question for this study: How are the leadership practices of Vermont high school principals influenced by their understandings, values, and perceptions of Act 77 (Flexible Pathways), the Education Quality Standards (Graduation by Proficiency), and the statewide shift towards a personalized proficiency education paradigm?

Overview of Findings

To lead their schools towards the implementation of policies for personalized proficiency, principals in this study applied transformational leadership practices to build the capacity of their teachers. These included structures for collaboration that focused on teacher instructional shifts and intellectual stimulation (Leithwood & Sun, 2012; Rickabaugh, 2016). Though administrative structures varied among the schools where principals worked, most had a committee structure in place to aid in collaboration. Committee structures included: leadership teams, administrative teams, professional development teams, and teacher PLCs with dedicated time to meet on a regular basis. The committees focused on shifting instruction away from content delivery and toward clear learning outcomes for students through scoring rubrics based on standards. To build capacity for teachers to develop the clear learning outcomes, principals provided access to whole-group intellectual stimulation through hired national and local education consultants, in-house workshops facilitated by trained groups of

teachers, faculty-meeting share-out of teaching practice, and readings targeted at building knowledge.

Table 7.1 is a summary of the data gathered for principal leadership in three areas of transformational leadership (Leithwood & Sun, 2012). In the first column, participant pseudonym is listed. In the table, I provide evidence of principal leadership practices for improving the instructional program through shifting instruction, building teacher capacity, and fostering collaboration and networking.

Table 7.1.

Summary of Data Analyzed for the Third Research Question

Principal	Improving the instructional program/ Instructional shifts	Building teacher capacity	Collaboration and networking
Carol Rumney Valley Run	<p><i>Increase clarity:</i></p> <ul style="list-style-type: none"> -ID standards -ID vocabulary, skills, and content -Write proficiency scales -Assessments focused on standards 	<p><i>Individual consideration:</i></p> <ul style="list-style-type: none"> -Small steps -Clear communication of expectation for each step -Providing collaboration time <p><i>Intellectual stimulation:</i></p> <ul style="list-style-type: none"> -PLCs Marzano consultants -Faculty share work for practice norming -Evaluate and discuss proficiency data 	<p><i>Collaboration between teachers:</i></p> <ul style="list-style-type: none"> -PLCs -Faculty meetings <p><i>Community:</i></p> <ul style="list-style-type: none"> -Website -Mail -1:1 meetings <p><i>Networking:</i></p> <ul style="list-style-type: none"> -Found other schools unresponsive -Work with other schools in district
George Brighton Grandview	<p><i>Increase clarity:</i></p> <ul style="list-style-type: none"> -Focus on assessments and standards 	<p><i>Individual consideration:</i></p> <ul style="list-style-type: none"> -Teacher decision making on standards and gradebook set-up. <p><i>Intellectual stimulation:</i></p> <ul style="list-style-type: none"> -PLCs focused on grading practices 	<p><i>Collaboration between teachers:</i></p> <ul style="list-style-type: none"> -PLCs <p><i>Community:</i></p> <ul style="list-style-type: none"> -Website -Board meetings -Community monthly forum <p><i>Networking:</i></p> <ul style="list-style-type: none"> -Lack of good response
Ellen Longlee River Regional	<p><i>Increase clarity:</i></p> <ul style="list-style-type: none"> -Separate habits of work from content grades -Lack of leadership for change in classroom practice 	<p><i>Individual consideration:</i></p> <ul style="list-style-type: none"> -Supporting teacher proposals for classes and summer work on PLPs <p><i>Intellectual stimulation:</i></p> <ul style="list-style-type: none"> -Teacher 	<p><i>Collaboration between teachers:</i></p> <ul style="list-style-type: none"> -Committees -Trust building <p><i>Community:</i></p> <ul style="list-style-type: none"> -Website -Lack of responses from parents <p><i>Networking:</i></p>

		participation on school committees -2 teachers on SU level committee -Group of teachers plan for whole-faculty conversations	-SU level work with other schools
Barbara Bell Highlands	<i>Student voice for purposeful learning outcomes:</i> -Scholarly habits -Mission related goals in student friendly language -Curriculum	<i>Individual consideration:</i> -Differentiated teacher professional development <i>Intellectual stimulation:</i> -Bringing in experts in cognitive science and technology -Informing herself to pass along to teachers and students -Modeling behaviors, acting as learner	<i>Collaboration between teachers:</i> -Committees: leadership, climate <i>Community:</i> -SU developed resources -Website -Availability to parents <i>Networking:</i> -Joining a group of principals from around the state on the topic of personalized proficiency
Roger Dibbs Maple Tree	<i>Increase clarity:</i> -Define discipline specific proficiencies <i>Building learning capacity and ensuring success:</i> -Differentiation -Personalization -Outcome based -Supports for students	<i>Individual consideration:</i> -Committee focus on addressing teacher concerns <i>Intellectual stimulation:</i> -Professional development committee leading faculty education -Faculty share out of practices with grading scales	<i>Collaboration between teachers:</i> -Leadership team -PD committee -Subject-based meetings <i>Community:</i> -Open house -Newsletters

Data Analysis Process

To answer the third research question, I explore the leadership practices of principals as they made change happen in their schools for personalized proficiency. To make adaptive, second order change like the kind required in a personalized proficiency paradigm, it is suggested that school leaders apply high impact transformational leadership practices (Leithwood & Sun, 2012; Rickabaugh, 2016). Leithwood and Sun (2012) outlined the dimensions and practices of transformational principal leadership. They include: setting direction, developing people, redesigning the organization, improving the instructional program, and other “related practices” that included more transactional leadership practices. These practices corresponded with Rickabaugh’s (2016) high impact leadership practices of shifting instruction, building educator capacity, and enabling collaboration. Information about these leadership practices were explained at depth in the literature review and were captured in Table 2.1 of this paper. Leadership behavior, Leithwood (1994) argued, is best understood in light of a principal’s internal thought processes and context, both of which eventually influence the outcome of leadership. In previous chapters, I explored the context each principal works in and their thought process related to understanding, values, and action steps. To answer the third research question, I begin by reporting out evidence of high impact transformational leadership practices on the individual case level. Then, I describe cross-case themes in principal leadership as the five principals in this study moved their schools towards the statewide shift to a personalized proficiency paradigm. Figure 7.1 is a visual representation of the data analysis process.

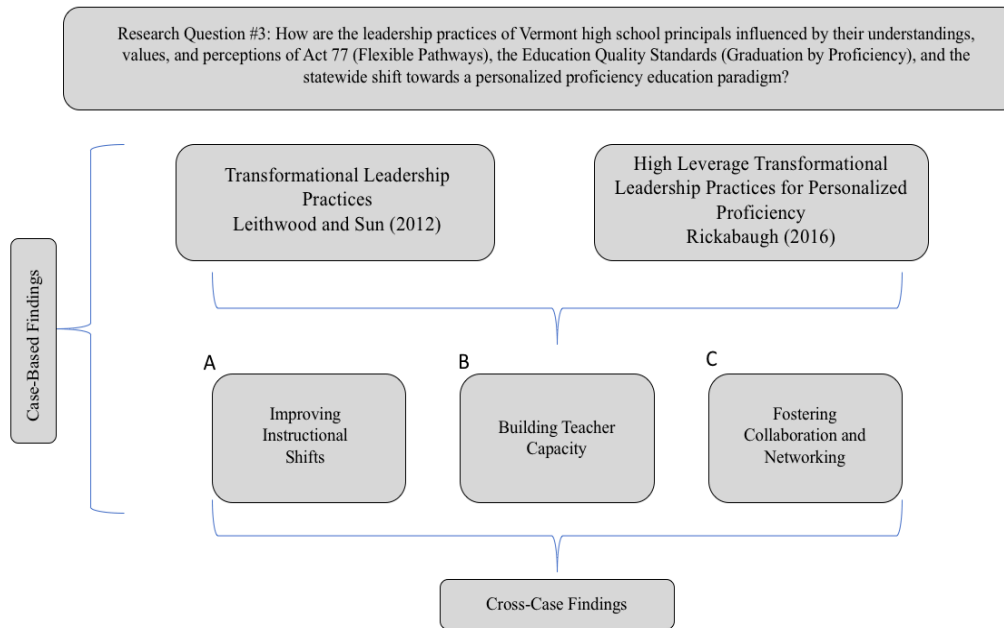


Figure 7.1. Flow chart of analysis of findings for third research question.

In each individual case that follows, I report out evidence on three high-impact transformational leadership practices: 1) Improving the instructional program through instructional shifts (labeled with A in Figure 7.1), 2) Building teacher capacity (labeled B), and 3) Fostering collaboration and networking (labeled C).

Principal Leadership for Personalized Proficiency: Case-Based Findings

Carol Rumney at Valley Run High School

Improving the instructional program. Leithwood and Sun (2012) posited transformational school leaders worked to improve a school’s instructional program. Rickabaugh (2016) suggested five key shifts needed to occur for instruction to improve and change for personalized proficiency. The five shifts included focusing on student learning rather than content delivery, increasing student voice and ownership, making

learning outcomes and purposes clear, building student capacity for learning rather than content accumulation, and ensuring student success in addition to student access to excellent instruction. Carol's leadership practices provided evidence of work in instructional improvement. To implement personalized proficiency, Carol asked teachers to make their classes more "goal focused." She explained her teachers were working to make sure

Assessments are more focused on the standards. Teachers have to clearly identify prerequisite skills and content students need to know in order to meet the standards. Teachers need to identify the vocabulary, content and skills and then teach to them to make sure their lessons and assessments align with the standards.

Carol's work on standards with her teachers showed leadership to make learning outcomes and purposes clear, which is the third of Rickabaugh's (2016) suggested instructional shift-based leadership practices.

Building teacher capacity. Leithwood and Sun (2012) claimed transformational leaders developed people in their organization by attending to individual opinion and needs, providing intellectually stimulating professional development, encouraging creativity, helping staff members evaluate and refine practices, and by modeling valued behaviors, beliefs, and values. Rickabaugh (2016) claimed building teacher capacity was a high impact leadership practice for personalized proficiency particularly when teachers had individual professional learning plans and were expected to share their learning with others. In this study, I found evidence of Carol attending to individual needs, helping teachers evaluate and refine their practices, and asking teachers to share their learning

publicly. Carol tended to the individual needs of her teaching staff by taking small steps for implementation, communicating clearly about the expectations for each step, and providing collaboration time in PLCs. More information about Carol's use of PLCs is described in the next section of this paper on Carol's leadership for collaboration.

Carol described her leadership for implementation in the following way: "I think we've been very thoughtful, consistent, comprehensive. We've done this incrementally bit by bit. We've had a plan in place... And so this year we are going to a full-blown system of standards-referenced reporting." A Valley Run teacher explained the importance of Carol's decisions to take clear baby steps. The teacher said, "The PLC process is stepping us through it: picking the overarching standards, writing proficiency scales... and the fact that there were baby steps and lots of them was helpful." For those teachers who were ready, Carol wanted to provide intellectual stimulation. For those who were not she held off and let other teachers take the lead. However, after the implementation of the EQS, Carol made sure to provide intellectual stimulation on the topic of proficiency-based education to all teachers. She said,

We tried to go through a learning process... Then we tried to train as many people as we could afford at the time to participate in some Marzano stuff and that was great. We were able to get people jump started on some of these ideas and they were the ones who started to shift towards a standards system and then when the EQS came out we said, "Look we really need to get going on this and get everyone involved and make a whole school approach to this," because we were kind of doing this based on whether people wanted to get involved or not. My

role and the other administrators, we tried to encourage it... once the EQS happened... we contracted with the Marzano guys and brought them in to really help us get the system in place and that was good because we were able to say... “Let’s get as much training as we can.”

Taking teacher interest into consideration when planning initial implementation steps was evidence that Carol intended to listen to individual teacher’s opinions and needs in the process of building teacher capacity at Valley Run.

Observation of a teacher PLC meeting showed Carol’s work to evaluate and refine teaching practices. One teacher in the meeting said, “At some meetings we look at proficiency data, guided by SMART goals that are set by teachers, using a format that everyone uses school-wide” to evaluate how proficiency implementation is going and help staff members evaluate and refine their practices. In addition, teacher share-outs at faculty meetings were further evidence of building teacher capacity. Teachers said Carol would regularly ask teachers to share work to the whole group for feedback and for practice norming. Carol described this:

Some people had a hard time understanding what a 4 really meant and what an activity in a classroom would get the grade... so there was some confusion... And we spent a lot of time last year actually getting samples from other teachers and we would have a faculty meeting... in the library where people were all over the room looking at other people’s assessments, and getting an understanding... “oh I see how you do this in English and I see how you do this in science” and getting that idea.

Through the regular staff meeting practice of teacher sharing, Carol was able to set high expectations and build teacher capacity.

Fostering collaboration and networking. Leithwood and Sun (2012) claimed transformational leaders worked to redesign the organization by strengthening school culture, building structures that enabled collaboration among teachers, and engaging with parents and the community by listening to their requests and encouraging them to become actively involved at home and in school. Rickabaugh (2016) argued leadership aimed at building collaborative structures within and beyond school walls was important for personalized proficiency. In this study I found evidence of Carol enabling structures to build collaboration among teachers. The structures for collaboration that Carol discussed and I observed included committees, PLCs, and the share-out practice at faculty meetings. By placing teachers in committees, Carol provided teachers the time to work together to shape key aspects of their standards-based grading program. Carol explained,

We had a number of teacher committees who worked on the different components of the [grading] system so there was a report card committee, and there was a committee for how we deal with co-curriculars like honor roll or athletic participation. Those committees did research and they proposed how we might change our systems, and we kind of pulled it all together at the end of last school year... we are working on now redesigning those committees. We've solved some of those problems and now we are on to the next step.

In addition to the collaborative committee work, PLCs were working toward the implementation of standards-referenced grading. During the site visit I observed teachers

working without administrators present to discuss instructional shifts in teaching toward proficiency scales and to modify standards to student friendly language.

To connect with the community, Carol discussed how she was communicating about this paradigm shift with parents. “We have talked about it in open house kinds of settings, we talked about it through mail, we have just put up a pretty good explanation of the whole process of the system on our website.” Carol was mindful of a fact that the teacher interview revealed, “Parents have concerns about colleges and how they are looking at this.” To this issue, Carol reported, “We have a product here and we want to make sure it is not tarnished by bad decisions or bad implementation.” Carol described how some parents requested one-on-one meeting time to better understand the new grading policies at Valley Run. Carol believed the baby steps to implementation that the school provided in the three-year plan and clear communication with parents alleviated most parental concerns.

Carol understood the power of collaborative networking with other schools to move personalized proficiency forward. She tried to connect with other high schools in her region of the state, but found the other schools unresponsive to her offers. “It felt it has to do with more turf issues... some smaller schools out there... don’t want to be told what to do by a larger district.” Carol focused on building collaborative structures within her district by meeting regularly with the middle school principal instead of pushing for a network with other schools.

George Brighton at Grandview High School.

Improving the instructional program. George said the focus of his work on the instructional program at Grandview High School was asking teachers to “think about what you are grading, what you are assessing, and how this matches with the standards.” George believed beginning with assessment and grading practices was a “backwards” approach to change, but felt he had to. He explained, “I’m moving teachers towards realizing ‘I can’t teach the way I used to because I’m not assessing the way I used to,’ and focusing on what proficient looks like.” George’s focus on the end product, the grading and assessments, showed leadership to make learning outcomes clear to students and teachers, the first of Rickabaugh’s (2016) instructional shifts for personalized proficiency.

Building teacher capacity. In the area of people development, evidence revealed George working in the areas of intellectual stimulation and individualized support. In the area of intellectual stimulation, George set up a PLC system where teachers chose one of three PLC groups based on topics. At the time of this study, teacher PLC topics focused on the implementation of proficiency-based grading. A site visit to a PLC revealed teachers were engaged in a colleague-directed hour long discussion of the computer grading system and how to use it effectively. In this meeting, teachers presented their understanding of grading for personalized proficiency, helped one another understand the options for entering grades into the system, and debated many of the philosophical issues behind proficiency-based grading. George described the PLC in the following way:

The focus has been around grading practices... Mostly having teachers thinking about what are you grading, what are you assessing, how does this match up to standards. We are moving towards realizing “I can’t teach the way I used to because I’m not assessing the way I used to.”

In terms of individualized support, evidence revealed George’s interest in supporting the unique needs and practices of teachers. First, teachers had the opportunity to choose which PLC they belonged to based on what they were most interested in. George commented that some are ahead of the curve and others were just holding on.

I definitely have a cohort of people that are like, “I’m bored, ready to jump in with both feet.” I have some people that are a little hesitant, then I’ve got some that are like scared to death. But in order to get my middle people to be like, it’s like you kind of have to do it, you can’t do “sort of” proficiency-based teaching and assessment.

To tend to the needs of the teachers interested in moving forward with personalized proficiency, George allowed them the opportunity to pilot pulling transferrable skills out of their regular grades. This group of teachers shared their work with the whole faculty. George attributed a lot of the school-wide philosophical shift to the work of this motivated group of teachers and their presentation to build teacher capacity.

Other evidence for individualized support was allowance for teacher decision making on the set-up of gradebooks. George explained,

We give the flexibility to anybody who wanted to identify their standards and create however they wanted to. So, some teachers were using power law and

some teachers were using the mode of the last three, mode of last five, because that's how I see functions, and somewhere the traditional averaging, whatever. But what we did was, everybody was given the flexibility, the only requirement was that you communicated very clearly with your students.

Once shared with other faculty members, this grading flexibility led to clarity of expectations for students and intellectual stimulation of teachers. George acknowledged the fact that not all teachers had shifted their philosophy regarding the paradigm shift, but shared his intent to focus on building their capacity, saying, "I've focused so much on my teachers. And they're not completely all shifted either."

Fostering collaboration and networking. George showed leadership in the areas of building teacher collaboration and networking with wider community, two key components Leithwood and Sun (2012) suggested were necessary for redesigning the organization. Rickabaugh (2016) argued they were important for implementing personalized proficiency. George provided a clear statement about his intention to actively collaborate with teachers and other people in the building to implement personalized proficiency. He said,

One important thing for me as the education leader of this school, it's not about me and I can't be leading this charge all by myself. So, I really have to rely upon everybody having a piece of it, and I think that makes us stronger as a school. Because if I were to take on the parent group, and I was to take on this, and I was to take on that, and it's all because of me, if I go away, then where is the school at? My job is to make sure that the school is strong and that whatever is put into

place as an initiative will continue without me, because if it's only working because I'm here, then I'm not doing my job.

To build collaborative structures, George promoted the PLC program. In addition, he allowed staff to participate in the process of informing the public about the paradigm shift. George explained,

I made a four-page document of frequently asked questions that I just gathered through a bunch of research and with answers. And then shared it with the faculty first and had them respond and react to it. And then shared the same document with a few tweaks to it, because as teachers would say, "Oh, I didn't quite understand this," or "is this really what you meant by this?" or whatever so that it would be clear. But they knew first. So that it was like they understood what message was going out and then over the summer, basically we just put it out there that we were going to be shifting to this but parents don't really understand what that is.

Because he felt the public did not understand the paradigm shift, he spent time messaging to the public to broaden his network. For this, George developed a monthly community forum where either he or his vice principal would meet with parents in the community to discuss pertinent topics, like proficiency-based grading. To this, he said,

We've had some parents freaking out over the change. We're working hard on communication and messaging and getting them to understand. Many of them have misperceptions. We are also surveying parents, pushing message alerts to parents, Facebook, e-mail, website messaging. All of our energy is presently

going into the website, we are constantly putting frequently asked questions there. We've done presentations to the school board, and that is videoed for the whole community.

When it came to developing a network with other schools to support his work towards personalized proficiency, George expressed his struggle, "I'm trying to reach out to other schools—the challenge with reaching out to other schools is, you know, they have things to do too... I haven't had a lot of great responses from other schools."

Ellen Longlee at River Regional High School.

Improving the instructional program. At the time of this research study, Ellen believed few instructional shifts were happening in the classrooms at River Regional. "We are focused on what are the proficiencies, across the disciplines, for everyone to receive a diploma. Once that work is done, then changes can happen in the classroom," Ellen said. The teacher interview substantiated Ellen's statement, revealing instructional development was stagnant at River Regional. The teacher said, "Instructional leadership is not happening in the school right now." The teacher went on to say that Ellen was a good "vision person" adding,

She embodies and believes in importance of it—and the importance of separating the habits of work from the content. She does a really good job of promoting it and being enthusiastic—it is important to hear that our administrator believes in it. Even if teachers think this is going to be repealed, but she is good about always having faith in this new paradigm shift, that it will be a good one.

With a focus on identifying proficiencies and a positive vision for personalized proficiency, Ellen was leading in a direction to increase clarity of outcomes despite the lack of instructional shifts in classrooms at the time of this study.

Building teacher capacity. In the area of people development, this research study revealed evidence of Ellen promoting intellectual stimulation and individualized support. Ellen did this by providing individualized support to people already accepting of the proficiency paradigm and promoting collaborative structures to aid in adult learning about personalized proficiency. Ellen bolstered the intellectual stimulation of teachers who were ready to move forward for personalized proficiency in three ways. First, she asked two teachers to join her in supervisory-union level work to identify graduation proficiencies. Second, she supported one group to work through the summer to bolster the school's PLP efforts. Third, she established a group of teachers to a plan for whole-faculty conversations about personalized proficiency. Ellen also indicated action towards individualized support. Ellen shared, "I've actually had an English teacher come to me with a proposal like that [outside of class learning] and I said, 'go for it I want to work with you.'" By being an advocate and collaborator in an individual teacher's proposal towards school improvement, Ellen showed leadership for individualized support.

Fostering collaboration and networking. Evidence collected during this study revealed examples of Ellen working to build collaboration and promote a sense of trust in the building. With frequent principal turnover prior to Ellen's tenure, a culture of administrative distrust existed among teachers at River Regional. Ellen described the distrustful culture at River Regional.

There was no trust of any administrator in this building when I walked through the door. [I] haven't been able to have a meaningful conversation with the staff here about curriculum, assessment, even the proficiency-based graduation standards to the level that I would've liked to.... trust building... trying to build someone who's willing to come to the table and willing to take a risk... I had a tremendous hill to climb. And I'm still climbing that, but it's a gentle grade now. And I have to be very careful about what I do and what I say and really be cognizant of what I'm saying to people. I have to think about it, put myself in their shoes. Sometimes you can and sometimes you can't.... you always go backwards a little bit before you finally get to the top. We have the implementation dive. All those things happen.

To grow a collaborative culture, Ellen expressed an intention to first build trust among her staff. Though she acknowledged she was not successful in gaining the trust of everyone yet, Ellen laid the intention to distribute the leadership and grow a collaborative culture. This was further revealed when she discussed growing teacher leadership and collaboration in the building.

It's been fits and starts and little things here and there. We'll get there. The amount of time...think about it all the time. That's what drives me to keep coming here is—how can we get another group of people because I can't stand out there and do that. So how do I get people involved? How can I get enough people who will stay the course and help with this? I've got that now, I think, and

now it's a matter of coming up with the process they're comfortable with.... So, I think we're on the right path.

Ellen was optimistic that she was taking the right steps to build a collaborative culture in the building, despite the bumps she encountered along the way. She was also asking herself questions that pushed her to involve other staff members. A step Ellen took to build structures for meaningful and inclusive conversation among her staff included placing all teachers on one of five committees, to meet once a month. Ellen described the meeting agendas.

Half of that meeting is going to be for the entire staff. For the other half ... we're going to talk about assessment, we're going to talk about curriculum, we're going to talk about climate, we're going to talk about guidance and transitions, and we're going to talk about professional development.

Ellen's decision to build teacher committees was an attempt to increase teacher collaboration on instructional improvement. Ellen explained this leadership decision caused a "huge uproar," but ultimately led to increased conversations among teachers.

I forced them into the committees, just to say here's your charge. What works? What doesn't? What changes would you make? So, trying to give them some voice. They have to have voice or they're not going to buy into anything. We've started the year pretty smooth. The conversations that are happening, they're starting to survey each other about what are your professional development needs? What do you have for curriculum?

By forcing teachers into committees to enable a transformative leadership practice of collaboration, Ellen accessed one of the “other related” leadership practices that was more transactional in nature. Beyond the committees, Ellen established a group of teachers to develop whole-faculty conversations about personalized proficiency. As the group was planning, the teacher commented, “Ellen was more of a participant and less of a leader in figuring it all out together.”

Ellen networked with other schools in the supervisory union through participation on a supervisory union team to establish PBGRs. On her office wall, Ellen had a handwritten sign with a goal about engaging the community in the implementation of PBGRs. However, Ellen explained that despite diligence to write newsletters and put information on the website, she was “still not getting responses or parents actively engaged in a conversation.” She discussed how parents only communicate with the school when they are unhappy.

Barbara Bell at Highlands High School.

Improving the instructional program. Evidence from this study showed Barbara leading Highlands High School teachers and students to collaboratively improve curriculum, instruction, and assessment. Barbara shared a “mantra” that she claimed to have repeated for years as an educator, even prior to becoming principal at Highlands High School: “Passionate self-directed learners (passion with purpose).” Barbara made decisions to grow the capacity of teachers in two strategic areas—proficiency and cognitive science—to help with student-centered proficiency statements. Once teacher capacity in these areas was built, Barbara brought together teachers and students to set

goals for the school. In the substantiating interview, a teacher commented, “Student voice is a huge part. We have been looking at curriculum and re-writing the mission-related goals with kids to make it student friendly language.” Barbara also worked with students and teachers to develop a list of scholarly habits for all students that were assessed separately from content. Barbara’s leadership showed evidence of Rickabaugh’s (2016) instructional shifts of increasing student voice and developing learning outcomes that are clear and purposeful for students.

Building teacher capacity. In the transformational leadership area of developing people and building teacher capacity, this research study revealed evidence of Barbara leading by providing individualized support, intellectual stimulation, and through modeling behaviors. First, Barbara modeled behaviors of being a leader and learner of personalized proficiency. The teacher interview revealed evidence of this. The teacher said the following:

She is constantly trying to improve her own understanding. She is constantly observing classes. Just last week she asked me if she could talk to my students. I left my classroom and she was in there asking them questions.... She is public about her own learning, she says “this is new for me too.” She studies so hard.

Second, I found evidence that Barbara provided intellectual stimulation for her teachers and students. She brought in a variety of outside resources for professional development, including brain-based learning experts and higher education-based experts in personalized technology and curriculum. The substantiating teacher asserted, “Access to professional development about proficiencies has been over the top incredible.”

Realizing some of her teachers were struggling with the new software for grading by proficiency, Barbara set-up steps to build teacher capacity in this area. She did this by paying teachers to attend meetings after school that the supervisory union curriculum coordinator organized, bringing in people from the supervisory union who knew the system well to train teachers, training three teachers to be in-house experts, and dedicating time in staff meetings to support teachers.

Third, I found evidence that Barbara provided individualized support to staff and teachers. In building the capacity of teachers in her building, Barbara was mindful of individual teacher needs. “[I’m] trying to differentiate,” Barbara said. She continued,

So, I’m really avoiding, “We’re all going to do this thing today at our staff meeting.” And trying to use my leadership team and talking to people about what are the needs, what do people need, and set up the supports, find those supports either within our system or outside of our system to help people if they’re stuck with something, like [our computer grading system]. Or if they need some more help with looking at student work in relation to a scale or whatever it is, trying to navigate that and use our time effectively so people don’t feel like they’re idling somewhere where they would rather be working.

Further evidence of Barbara’s work to tend to the needs of each teacher was revealed in Barbara’s plan for a week-long teacher in-service in August. The plan allowed teachers to pick their professional development activities based on their individual needs. The plan also required them to sit with Barbara for a 15-minute long meeting to discuss their professional development plan for the week and their future needs for professional

development. These actions match Rickabaugh's (2016) key component to building teacher capacity—individualized teacher professional development plans.

Fostering collaboration and networking. This dissertation research study revealed evidence of Barbara's leadership to build school culture and enable collaboration and networking. In the area of building school culture, Barbara discussed leadership steps with individuals and the entire school community. First, Barbara established a "school climate committee" made up of an adult responsible for school climate, teachers, and students to keep tabs on school culture and work with teacher advisory groups to build a strong culture. The teacher interview described the climate committee as "the application of cognitive science to build youth/adult partnerships that are strong so we all have positive associations with school." Second, during my engagement with Barbara at Highlands, she was in the middle of planning a surprise whole-school trip to a local park for a sunny afternoon as a culture building activity.

I found evidence that Barbara enabled collaboration at Highlands High School through committees she established, including the climate committee, redesign committee, and a leadership team with teacher representation from all subject areas.

In the area of engaging parents and the wider community, I found evidence of Barbara communicating with the community and networking with other principals from around the state. In the area of communication, Barbara connected with the public through a blog, the school website, and through the supervisory union level proficiency website. She also worked to inform the school board on the proficiency shift through presentations at board meetings and inviting board members into other activities at

Highlands. She commented, “We’ve invited the board to school level and staff professional development opportunities to gain understanding.” The teacher interview revealed Barbara’s interest in engaging with the community. “[Barbara] is excited to engage with the community. During parent teacher conferences, she sat in the front the whole day so she could field questions from people.” In the area of networking, Barbara learned of a group of principals from around the state meeting once a month to discuss the implementation of personalized proficiency. She joined the group, and found the information and connections valuable to her practice.

Finally, the supervisory union of Highlands High School hired a communications expert to develop a website that explained the paradigm shift to the community. A video was created and placed on the website to broadcast a succinct statement of vision related to personalized proficiency. This vision focused on three big ideas for the implementation of personalized proficiency at Highlands High School. The three big ideas were, “What do students need to know and be able to do and succeed in life, how do we know if they are mastering these things, and when we discover if they do or don’t get it, what conditions do we create to help them move forward?” In addition, Barbara’s voice overlay discussed the school’s plan to shift towards more student-centered systems, quotes from teachers talking about the shift in the paradigm, and reference with how this paradigm shift fits with supervisory-union wide goals.

Roger Dibbs at Maple Tree High School.

Improving the instructional program. In reflecting on his work to lead Maple Tree High School towards improving the instructional program for personalized proficiency, Roger said the most important work he completed to date was “the work we did to really evaluate and change how we grade and many of our grading practices... it’s led to so many conversations about how students learn, what’s most important in a class, and how we teach.” To make this happen, Roger had his teachers first focus on identifying discipline-specific proficiencies, and then focus on instructional practices. Roger explained, “Transcripts will look the same, but the experience [students] have in class will have shifted.... We could spend all of this time [on standards] but be doing the same thing in classes and not changing the teaching practices really.” To change instructional practices, Roger argued, “We have [developed] courses that are really personalized, outcome based, differentiated, with strong support for students. We thought about what happens for intervention when kids aren’t reaching proficiencies.” The teacher interview revealed Roger’s intention to impact classroom instruction. The teacher commented, “Roger has made clear this isn’t cookie cutter, and that if we are going to do this well, we have to change what we are doing at the classroom level.” Roger acknowledged the importance and difficulty of instructional shifts in the implementation of personalized proficiency. Roger explained, “I believe teachers can get behind the idea of it, but I think a challenge is translating that understanding into actual changes in practice is a real challenge.” Roger focused on Rickabaugh’s (2016) instructional shifts of clarity of purpose, building learning capacity in students, and ensuring success.

Building teacher capacity. Evidence from this study revealed Roger built teacher capacity by providing intellectual stimulation and individualized support. To promote the intellectual stimulation of teachers, Roger grew the size of the professional development committee at Maple Tree to have more diverse voices and was careful to set time aside to allow that committee to work with teachers to develop their understanding of proficiency-based grading. The site visit revealed whole-faculty professional development related to personalized proficiency, with members of the professional development committee leading a portion of the day, and small groups of teachers working in subject-specific groups for other parts of the day. The teacher interview revealed further evidence of building capacity.

There are formal times to make change happen in our school during professional development, but there are informal times like team meeting times. We've been sharing out (from all parts of the school) here's how I'm using these scales, here's what's happening on the cutting edge. Sharing what we are trying, and creating a bit more of that motivation for all classroom teachers.

By providing formal and informal venues for sharing of teaching practices, Roger created an environment that promoted the intellectual stimulation of his teachers. Evidence also showed Roger supported the individual opinion and needs of teachers in the building, as seen in his interest in supporting early adopters, or go-getters.

We often at this school will look at our teachers who are most interested in this type of work, that is, our early innovators around this, and do a lot of work in training with them, and learning beside them at the same time.

He also discussed staying informed of teacher concerns and addressing them through professional development opportunities.

So, whether it's an in-service or faculty meeting, we are really looking to see what are the concerns people are having, what should we be tending to, what should be conversations we have with faculty? And then, we structure conversations for that.

By knowing the opinions and needs of his teachers, Roger was aware of which teachers were ready to move forward and which teachers needed targeted professional development. From this information, he made leadership decisions accordingly.

Fostering collaboration and networking. Evidence from this research study revealed Roger's leadership in the areas of building a culture of trust and building structures for collaboration. Roger was in his first year as principal and evidence from this research study showed he entered into the job with teacher trust firmly in place. The teacher interview supported this with the following:

Roger was the previous professional development coordinator. He did a lot of work on teacher's perspective and had been a big driver of this vision. The takeover seemed pretty natural to teachers because he had been a big part of this work previously. He was fortunate in this new role that he had some of that trust built already.

With trust in place, Roger had the opportunity to establish a strong professional development committee and leadership team that collaborated to build a vision and move

the entire teaching staff forward in their understanding of proficiency-based grading. He commented,

It's very collaborative with a sense that I'm probably the holder of the vision... I would say they [professional development committee] play a huge piece in the visioning of this, as does our leadership team which is separate from our professional development committee, our leadership team is mostly the department heads, and I would say both groups are pretty hands-on with this work, but I'm probably driving the bus.

Collaboration was evident during the site visit. The professional development team provided subject-based teams of teachers the time to work together to discuss and develop learning targets for standards.

Engagement with parents and the wider community was an area that Roger felt was lacking at the time of this study. He said the following:

I would say that there's probably a divide there as far as the community understands. We talk about it during open house... and in newsletters. I know schools have done forums on this, we haven't. I don't know if I will. It's not just something I've thought a lot about. So, I would say there's a variation in how much people understand it. It was a big emphasis at my open house presentation... There's a lot of work to do there.

Roger discussed networking with other school leaders at conferences, but did not discuss building or participating in any long-term intentional network for personalized proficiency.

Principal Leadership for Personalized Proficiency: Cross-Case Findings

In this section, I explore evidence of the transformational leadership practices for personalized proficiency by Leithwood and Sun (2012), and Rickabaugh (2016) across all five cases. Of the leadership practices explored in this dissertation study, evidence was found in three broad categories: 1) improving the instructional program, 2) building teacher capacity, and 3) collaboration and networking (Rickabaugh, 2016). In the category of improving the instructional program, a cross-case theme emerged in leadership for providing a clear purpose for learning. In the category of building teacher capacity, two cross-case themes emerged in leadership for individualized support and intellectual stimulation. In the category of collaboration and networking, a cross-case theme emerged in leadership for communication with the community. Each category and cross-case theme is explained next.

Improving the instructional program.

Providing a clear purpose for learning. Of Rickabaugh's (2016) high impact leadership practices for personalized proficiency, one emerged as a theme across the cases in this dissertation research study. This was in the area of providing a clear purpose for learning. Rickabaugh (2016) said, "When the purpose for learning is clear, compelling, and specific, students are more likely to engage in the efforts necessary to absorb what they are taught and retain what they learn" (p. 86). Principals in this research study were engaging their teachers and administrators in a process of identifying standards and/or student work habits, and writing them in a format that was clear and accessible to both students and teachers. Through this process, principals were taking

explicit steps to make the purpose for learning clear, specific, and focused on student learning outcomes, therefore laying the groundwork for a proficiency-based grading system.

Building teacher capacity.

Providing individualized support. All of the principals in each case discussed one situation where teachers had the opportunity to have their individual opinions heard, needs met, and professional development supported. At Valley Run, Carol allowed a group of teachers to be trained earlier than the rest by the hired consulting agency. She said, “We were kind of doing this based on whether people wanted to get involved or not.” At Grandview, George showed evidence of tending to individual needs in a similar fashion to Carol. To tend to the needs of the teachers interested in moving forward, George allowed them the opportunity to pilot pulling transferrable skills out of their regular grades, reporting back the results of their efforts to the whole staff. Ellen at River Regional had a teacher request to grow a program, to which Ellen responded, “Go for it. I want to work with you.” Roger at Maple Tree reported tending to teacher concerns by collecting information about those concerns through surveys and water cooler conversations and then addressing them through whole-school professional development. Barbara at Highlands High School had the most comprehensive method for meeting individual needs—flexible week-long professional development agendas that teachers could navigate according to their own needs, supported by a meeting with Barbara. The depth of individual engagement varied in each case, but each case had one example of leadership to meet individual needs.

Providing intellectual stimulation. Evidence collected in each case showed principal leadership for intellectual stimulation. This leadership practice took several forms, but in each case was meant to increase teacher understanding of the philosophical and practical shifts in practice that come along with the personalized proficiency paradigm. In this study, intellectual stimulation of teachers was evident through hired consultants, professional development committees, teacher presentations at staff meetings, teacher PLCs, conference attendance, professional development coordinator-led faculty meetings, and the work of supervisory-union level curriculum directors.

Fostering collaboration and networking.

Building structures to enable collaboration. Collaboration was evident in the leadership practices of principals in this case study. Each school operated with a system of committees meant to distribute leadership and collaborate on decision making for implementation of the personalized proficiency paradigm. One structure all schools had in place was a committee titled “administrative team” or “leadership team.” This team had representation from a variety of subject areas found within the school. In each case, this team served the role of sounding board and informant for the principal. In addition, PLCs were in place in four of the cases. Teachers were either assigned or were able to choose which community to join to collaboratively build capacity in proficiency-based grading practices. Though many schools had committee structures in place prior to Act 77 and the EQS, the topics of the committees shifted to fit the needs of a school moving in the direction of personalized proficiency.

Networking through engaging parents and the wider community. Leithwood and Sun (2012) wrote transformational leaders will “actively encourage parents and guardians to become involved in their children’s education at home and in school” (p. 410). While I did not find compelling evidence of principal leadership practices where parents were being actively encouraged to become involved in schools, I did find each principal working to communicate about the paradigm shift with their school board, parents, and local community. Principals and teachers interviewed for this study discussed the difficulty of parent-school communication. Each principal was working to communicate with the public by posting information to the school website and some were adding on blogs. However, parents must take the initiative to access these resources, and schools had no control over that. Other ways that principals were communicating with the public was through presentations at open house nights and through supervisory-union-level web-based resources.

A transformational leadership practice that was emphasized less, but was still present in the evidence I collected during this study, was leadership to strengthen school culture. Two of the principals revealed practices that actively involved culture building within the school. Ellen at River Regional High School was focused on building a culture of trust in her school after years of administration distrust that was built by previous principals. Barbara at Highlands was intent on developing culture in her building. She hired a position dedicated to school culture and established a committee made of students and teachers to focus on this topic.

Another transformational leadership practice, improving the instructional program (classroom shifts) through distributed leadership, seemed to be on every leader's mind as a necessary aspect to the paradigm shift. However, the evidence revealed only small steps in this direction in most of the sites involved in this study. Transformational leadership practices that were mostly absent in the evidence I collected during this research study included the "related practices" of leadership by contingent-reward and management by exception.

Chapter 8: Summary, Limitations, and Implications

In chapters 5 through 7 of this dissertation, I reported out case-based and cross-case findings related to the three research questions of this study. For the first research question, I reported out evidence of principal value, perception, and understanding of the goals in Vermont's personalized proficiency paradigm, and situated the principals as having an accountability or flexibility focus. For the second research question, I reported out evidence of principal action steps and leverage points for the implementation of personalized proficiency in their schools, and situated these actions as either being accountability or flexibility focused. For the third research question, I reported out evidence of principal use of high impact transformational leadership practices for implementing personalized proficiency and highlighted themes in leadership practices applied by principals. Findings from the data provide information about principal leadership for the implementation of Vermont's personalized proficiency paradigm and are summarized below.

Finding Value in Vermont's Policies for Personalized Proficiency Education

Principals in this study found value in Vermont's policies for personalized, proficiency-based education. Three themes emerged for why principals value the policies. First, they thought learning would improve as students worked towards meeting clear and consistently applied standards. Second, they thought student readiness for work and college would improve as schools focused on teaching and assessing transferable skills like communication and collaboration. Third, they thought student engagement

would improve as students accessed flexible, personalized options for gaining proficiency.

Principals' Frustration with State-Level Implementation

The majority of participants in this dissertation study expressed skepticism and/or frustration with state-level implementation of the policies. Two themes emerged in this area. First, principals were skeptical of the state's ability to support schools as they implemented the policies in terms of human and financial capital. Second, principals felt adrift with little direction or clarity from the state, leading to an unnecessary and time-consuming "reinvention of the wheel." These two factors, in combination with what two principals believed was a short timeframe for implementation, led to the feelings of frustration.

Principals' Understanding of the Policies Predominantly Focused on Accountability

Vermont's policies for personalized, proficiency-based education intentionally incorporate aspects of accountability and flexibility. The policies require schools to hold students accountable to standards, while meeting each student's personal educational interests and needs at the same time. Principals' understanding of the goal of Vermont's policies varied. Two principals' understanding of the policies centered on standards identification and proficiency-based grading, reflecting an accountability-focused understanding of the policies. One principal's understanding focused on the flexibility side of the policies. Two principals understood the policies as having aspects of both accountability and flexibility. These principals focused their understanding on standards, proficiency-based grading, and personalization of learning for students. Though their

understanding of the policy goals varied, most principals were focused on implementing the accountability side of the policies at the time of this study.

Building an Understanding of the Policies in a Variety of Ways

Principals in this study built their understanding of Vermont's policies in a variety of ways. Some principals accessed state-provided workshops with the Great Schools Partnership. Other principals accessed national and state consultants to help with a breadth of personalized proficiency-related topics, including standards-based grading and brain-based education. Many of the principals read books and articles related to grading. At the time of this study, these principals were just beginning to form collaborative groups to discuss implementation of the policies, with mixed success. A source of information in common for the principals was the Agency of Education website with materials related to PLPs and sample proficiency-based graduation requirements.

Leveraging Standards and School Structures as Action Steps for Change

To implement Vermont's policies in their schools, the principals in this study leveraged action steps in two areas: school structures, and education standards. These two areas represent the accountability side of the policies. For school structures, principals were spending time on clarifying grading policies, manipulating technology for grading, developing structures to discuss grading practices with teachers and the community, implementing an advisory system for students to create PLPs, and creating administrative structures to implement proficiency-based practices. For education standards, principals strived to identify subject-based and transferable skills standards and delineate habits of work for teachers and community members. At the time of this

study, the majority of the principals considered the implementation of PLPs a “backburner” issue, thereby demonstrating their focus on the implementation of standardization and accountability aspects of the policies over personalization and flexibility.

Encountering Sticking Points

Sticking points for policy implementation, as expressed by principals in this study, included three themes: 1) a lack of appropriate computer software for proficiency-based grading, 2) a limited timeframe for policy implementation, and 3) a worry about lack of equity of opportunity for all students with flexible pathways.

Grading technology was a concern for a variety of reasons. A majority of the principals were tweaking grading software to track proficiency-based grading to meet school needs, requiring lots of time on the part of administrators and teachers, training for teachers, and communication with the community. Principals were also exploring new software options that might fit their proficiency-based grading needs better. Principals expressed the state’s implementation timeline as a sticking point. To graduate the class of 2020 under a proficiency system, schools had to have their systems in place by the 2016-17 school year. Principals reported having too little time to fully prepare themselves and their teachers for this transition. Finally, principals expressed concern over issues of equity in students accessing flexible pathway options. Off-campus opportunities could require transportation costs and materials costs, which principals perceived as a potential limitation to equitable student access.

Principals Used Transformational Leadership Practices

Principals in this study led school change by accessing three transformational leadership practices: 1) improving the instructional program, 2) building teachers' capacity for change, and 3) increasing collaboration and networking. To improve the instructional program, most principals focused on increasing the clarity of standards and grading policies for students, teachers, and the community. Principals acknowledged the lack of focus on improving classroom instruction citing that clarity of standards was a necessary precursor for change.

To build the capacity of their teachers, principals worked to understand and meet the needs of their teachers on an individual level. Principals attempted to do this by providing differentiated professional development that allowed for teacher choice of activities, enabling teachers to make decisions about gradebook use rather than requiring one grading method, supporting teacher proposals for courses, and making sure to hear and address teachers' concerns. Principals also built teacher capacity through intellectual stimulation to increase teacher understanding of the paradigm and to build their ability to work creatively and effectively within it. Participants in this study did this by bringing in national and local consultants, promoting faculty share-outs of grading and teaching practices at faculty meetings, reading articles and books by authors experienced in the field of personalized and proficiency-based grading, and finally, providing time for PLCs to meet and discuss personalized proficiency education practices.

Principals also fostered an environment in which teachers could work more collaboratively with each other. To increase collaboration between teachers, principals

enabled PLC meeting time during the regular school day and encouraged teacher participation on committees related to curriculum and professional development. Some principals began purposeful outreach measures between the school and community to facilitate the transition to this new paradigm shift in educational philosophy. Principals did this through websites, open houses, newsletters, board meetings, and monthly forums. Principals created networks to build their own capacity within the new education paradigm. They connected with other schools within their district and collaborated with principals from other school districts during monthly meetings.

Limitations

The findings of this dissertation research study have limitations in terms of their generalizability and transferability due to sample size and setting. The five principal participants in this study represent a small sample size, even for a relatively small state like Vermont, accounting for less than 6% of high school principals in the state. Generalizing these findings to represent all principals in the state therefore would not be appropriate. However, despite this small sample size, the participants represent a wide geographic distribution, a variety of school sizes, and a 2:3 ratio for female to male gender.

Vermont has a particular policy context that makes transferability of findings difficult. Personalization and proficiency-based grading were implemented at the same time, and decision making for how to implement was left to local leaders and school boards. In states where proficiency based graduation was the focus of policy

implementation, or in states where directed steps for policy implementation were provided to schools, transferring the findings of this study might not be appropriate.

Implications

This multiple case study examined five principals' engagement with policy implementation in the State of Vermont and unveiled themes that, though limited in transferability due to this study's size and context, can be informative to state-level policy developers and school-based policy implementers.

Implications for state-level policy developers. One data point from this study was the perspective of principals who participated in a multi-day Agency of Education-sponsored training with the GSP. Their understanding of the paradigm was comprehensive of both accountability and flexibility unlike other principals in the study, suggesting the training was influential in shaping their view of the policies. Not all schools participated in this training and the training is no longer available. However, whether they participated in the GSP training or not, principals noted a lack of support from the state in the form of resources and also described the timeframe for implementation as short.

Another data point from this study is that high school principals are willingly engaged in change for personalized, proficiency-based education because they believe it is a valuable direction for student success. Policy buy-in from school administrators is high. However, the heavy lifting for policy buy-in is falling on the shoulders of principals in each location around the state as they lead their teachers and communities in school change.

These data points suggest an implication for states working to develop personalized, proficiency-based education policies. States should provide and require that school-level policy implementers experience effective professional development that is clear, useful, and includes accessible resources such as sample timelines with key action steps for policy implementation. The timeline for implementation should be sufficient so all schools in the state can participate in the professional development. The professional development should focus on supporting principals as they create buy-in in their local contexts.

In addition, state-level policies should be written comprehensively to include funding to make resources accessible to schools and students prior to the implementation deadline and continue to be available after the deadline, so that all schools can engage with policy implementation effectively to ensure equity of student access to opportunities through flexible pathways.

Implications for school-level policy implementers. Principals in this study were accessing transformational leadership practices to build teacher and community buy-in. Participants were frequently implementing leadership to build the capacity of their teachers and community through intellectual stimulation and collaboration. By broadening the range of transformational leadership practices they access, principals could grow their capacity to create buy-in in their local contexts and facilitate the implementation of action steps for whole-school change.

Future Research Directions

At the end of this dissertation research study, several questions emerged that could prove to be fruitful for future research. Vermont's policies for personalized proficiency are new, ambitious, and pose an implementation challenge for principals. Future research could focus on the sticking points principals identified in this study. For example, computer software for tracking student proficiencies was a major issue identified by most principals. As schools continue to search for the right software, and as software companies realize the need for tracking new forms of assessment, it will be important to examine how technology can promote or hinder the implementation of personalized proficiency education. Another concern for principals in this research study was a worry about equity related to flexible pathways. Future research could evaluate how schools design their flexible pathways programs so that equity of opportunity is available for all students.

In this dissertation, I focused on high school principals in Vermont. A future research direction could extend beyond the high school level to explore how Vermont's policies for personalized proficiency education impact the use of personalized learning practices and proficiency-based grading at the middle and elementary levels.

Finally, and importantly, future research could evaluate how well Vermont's policies for personalized, proficiency-based education have addressed the persistent problems the policies were developed to solve. Have these policies increased student engagement in learning or student aspiration? Is student readiness for post-secondary success on the rise? Are Vermont graduates gainfully employed in 21st Century jobs?

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Appendix A: Operational Definitions

The following terms were used throughout this study:

Personalized Proficiency Paradigm: The educational setting in Vermont that exists as of 2013, with the implementation of policies for personalization (Act 77) and proficiency (Education Quality Standards), requiring schools to meet conflicting education goals for flexibility (Act 77) and accountability (Education Quality Standards).

Act 77: Vermont legislation requiring schools to implement flexibility for students in terms of the path they take to high school graduation.

Education Quality Standards (EQS): Standards for accountability each public school in Vermont must meet, “in order to carry out Vermont’s policy that all public school children will be afforded educational opportunities which are substantially equal in quality, and in order to ensure continuous improvement in student performance...” (EQS, 2014).

Proficiency-Based Graduation Requirements (PBGRs): Accountability side of the paradigm, with “systems of instruction, assessment, grading, and academic reporting that are based on students demonstrating mastery of the knowledge and skills they are expected to learn before they progress to the next lesson, get promoted to the next grade level, or receive a diploma” (EQS, 2014)

Personalized Learning Plan (PLP): “a plan developed on behalf of a student by a student, a representative of the school, and, if the student is a minor, the student’s parents or legal guardian, and updated at least annually” (EQS, 2014). The PLP captures a

student's abilities and interests, and serves as a map to high school completion and postsecondary readiness. Flexibility side of the paradigm.

Professional Learning Community (PLC): In this study a PLC is a group of teachers working together to focus on a particular topic and improve their practice. In 2004, Dufor called PLCs "A powerful new way of working together that profoundly affects the practices of schooling" (Dufor, p. 11).

Appendix B: Transformative Leadership Dimensions and Practices

From: Leithwood, K., & Sun, J. (2012). The nature and effects of transformational school leadership: A meta-analytic review of unpublished research. *Educational Administration Quarterly*, 48(3), 387–423.

Dimension and Practice Element	Summarizing description
Setting Directions	
1. Develop a shared vision and building goal consensus	Leader sets vision, develops common goals through consensus, keeps goals at forefront
2. Hold high performance expectations	Leader has high standard for professionalism from staff, high expectations for students, expects innovation
Developing People	
3. Provide individualized support	Leader tends to individual opinion and needs, acts as mentor and coach, and supports teacher individual professional development towards their full potential
4. Provide intellectual stimulation	Leader challenges staff assumptions, stimulates creativity, provides information for effective teaching practice
5. Model valued behaviors, beliefs, and values	Leader models behavior, instills pride, symbolizes success, is willing to change own practice, trusts staff
Redesigning the organization	
6. Strengthen school culture	Leader forms cohesive school culture around common set of values, builds atmosphere of caring and trust in staff
7. Building structures to enable collaboration	Leader distributes leadership, staff participates in decision making, build working conditions for collaboration
8. Engaging parents and the wider community	Leaders encourage parent involvement in school and home, demonstrates sensitivity to community aspirations and requests

Improving the instructional program	
9.Focus on instructional development	Described by Marks & Printy (2003), as “shared instructional leadership” where teachers and principal work together to “share responsibility for staff development, curricular development, and supervision of instructional tasks” (p. 371)
Related practices	
10.Contingent reward	Bass (1984) transactional leadership where Leader rewards for agreed-upon work. Application of this practice is transformational when reward is psychological and not material (Bass & Riggio, 2006)
11.Management by exception	Leader monitors performance and converses with individuals when performance is not meeting expectations. Leader can take direct action (active), or can wait until complaints are received (passive) (Bass & Riggio, 2006)

Appendix C: Solicitation E-Mails

INITIAL PRINCIPAL E-MAIL

TO: High School Principals in Vermont
FROM: Jennifer L. Stainton, University of Vermont Ed.D. Candidate
SUBJECT: Principal Leadership Study Participation

Dear Colleague,

Thank you for taking a moment to read this e-mail. My name is Jennifer L. Stainton and I am a doctoral candidate at the University of Vermont and a high school science teacher in Vermont.

I am writing to solicit your participation in my doctoral dissertation study titled: "Principal leadership models for school transformation: A study of personalized proficiency education paradigm implementation in Vermont." I am looking for participants that fit the following two criteria:

- Have been in place as a principal in Vermont since 2013
- Have NO experience in implementing personalized learning or proficiency-based education prior to 2013

The goal of this qualitative research study is to explore the understandings, values, and perceptions of high school principals related to Vermont's personalized proficiency paradigm shift; and how their perceptions influence the application of the practices and principles of transformational leadership for school-wide change.

If you fit the criteria and you consent to participation, you will be interviewed by me for 45-60 minutes, two times, at a time, location and date convenient to you. I will audiotape our conversation for transcription. I will also ask you to provide documents related to your leadership. I will also interview one teacher in your building as another data point for the study.

There are no benefits, compensation, or anticipated risks for participating in the study. The data I collect will be analyzed and reported in a written dissertation. I may use quotes and/or summaries of your responses. Your participation is strictly voluntary and you are free to withdraw your participation at any time without penalty. You will not be penalized for refusing to answer a question, and your identity will be disguised to ensure anonymity.

Thank you, in advance, for considering your participation in this study. If you fit the criteria and are willing to participate in this study, please send an e-mail to Jennifer L. Stainton, Principal Investigator, at that simply says "I will participate in your study." I will follow up with you by e-mail and/or phone shortly thereafter.

Information regarding your rights as a research volunteer may be obtained from:
University of Vermont Research Protections Office
213 Waterman Building
85 South Prospect Street
Burlington, Vermont 05405
(802) 656-5040

Sincerely,
Jennifer L. Stainton
Doctoral Candidate, Education Leadership and Policy Studies
University of Vermont

FOLLOW-UP E-MAIL TO PRINCIPAL RESPONDANTS TO INITIAL E-MAIL

TO: High School Principals Agreeing to Participate in Study
FROM: Jennifer L. Stainton, University of Vermont Ed.D. Candidate
SUBJECT: Principal Leadership Study Participation

Dear (participant name),

Thank you for your willingness to participate in my doctoral dissertation study titled: "Principal leadership models for school transformation: A study of personalized proficiency education paradigm implementation in Vermont."

I would like to set up a time to speak on the phone, for the following reasons:

- 1) To schedule the first interview at a time, location, and date convenient to you.
- 2) To discuss types of documents I would like to collect for the study.
- 3) To set up an observation date and time
- 4) To answer your questions related to the study.

If you agree to the phone call, please respond to this e-mail with an afternoon day/time that works for your schedule.

Again, thank you for your willingness to participate.

Information regarding your rights as a research volunteer may be obtained from:
University of Vermont Research Protections Office
213 Waterman Building
85 South Prospect Street
Burlington, Vermont 05405
(802) 656-5040

Sincerely,
Jennifer L. Stainton
Doctoral Candidate, Education Leadership and Policy Studies, University of Vermont

TEACHER E-MAIL

TO: High School Teacher
FROM: Jennifer L. Stainton, University of Vermont Ed.D. Candidate
SUBJECT: Principal Leadership Study Participation

Dear (participant name),

I am writing to solicit your participation in my doctoral dissertation study titled: "Principal leadership models for school transformation: A study of personalized proficiency education paradigm implementation in Vermont."

I would like to set up a time to speak on the phone to ask you questions about your principal's leadership practices related to the implementation of personalized learning and proficiency-based graduation requirements (Vermont's Act 77 and Education Quality Standards). Your principal is aware that I am contacting one teacher in your school for this study.

If you agree to the phone call, please respond to this e-mail with an afternoon day/time that works for your schedule.

Again, thank you for your willingness to participate.

Information regarding your rights as a research volunteer may be obtained from:
University of Vermont Research Protections Office
213 Waterman Building
85 South Prospect Street
Burlington, Vermont 05405
(802) 656-5040

Sincerely,
Jennifer L. Stainton
Doctoral Candidate, Education Leadership and Policy Studies
University of Vermont

Appendix D: Observation Field Notes Sheet

Researcher: J. Stainton

Date:

Place:

Event:

Purpose: To observe principal leadership practices for personalized proficiency on site.

Dimension and Practice Element	Field Notes
Setting Directions	
1. Develop a shared vision and building goal consensus	
2. Hold high performance expectations	
Developing People	
3. Provide individualized support	
4. Provide intellectual stimulation	
5. Model valued behaviors, beliefs, and values	
Redesigning the organization	
6. Strengthen school culture	
7. Building structures to enable collaboration	
8. Engaging parents and the wider community	
Improving the instructional program	
9. Focus on instructional development	
Related practices	
10. Contingent reward	

11.Management by exception	
----------------------------	--

Leverage Points	Field Notes
Structures	
Samples	
Standards	
Strategies	
Self	

Appendix E: Principal Interview Protocols

Principal Interview Protocol #1

Participant Pseudonym:

Position:

Date:

Location Pseudonym:

Interviewer:

Interviewer Introductory Statement:

“The goal of this qualitative research study is to explore understandings, values, and perceptions of high school principals related to Vermont’s personalized proficiency paradigm shift; and how their perceptions influence the application of the practices and principles of transformational leadership for school-wide change. I would like to remind you that participation in this study is completely voluntary and you may withdraw at any time without consequence. I will now give you a consent form that you may take time to read and sign before we continue.”

Obtain signed consent

Interview Questions

1. What would you like your personal pseudonym to be for this study?
2. What would you like your school’s pseudonym to be for this study?

Topic: Understanding

1. Please describe your awareness and understanding of what Act 77 is requiring/asking of schools in Vermont.
2. Please describe your awareness and understanding of what the Education Quality Standards (2013) are requiring/asking of schools in Vermont.
3. What resources have informed your understanding of these policies?

Topic: Perceptions/Values

1. How would you summarize the goals of these policies?
2. Are these policies good? OR do they have valuable for improving Vermont’s schools? Why or why not?
3. How would you describe the time and energy you’ve put into creating your own understanding of Act 77 and the EQS?
4. How much of a priority are these policies for you as you complete your work on a daily basis right now?
5. Has the state and the AOE provided the resources and information necessary for you to successfully implement Act 77 and the EQS?

Topic: Leadership Practices – Setting Directions

1. What initial action steps have you taken to implement Act 77 and the EQS in your school? Why did you choose these initial action steps?
2. After the initial steps, what follow-up actions have you taken? Why did you take these actions?
3. Do you have a written plan for personalized proficiency implementation at your school?
4. Do the teachers in your building understand the education changes called for by Act 77 and the EQS? Have you done anything to help this? What is their response? How do you know?
5. Does your community understand the education changes called for by Act 77 and the EQS? Have you done anything to help this? What is their response? How do you know?

Topic: Leadership Practices - Developing people and redesigning the organization

1. What roles are teachers playing in making change for personalized proficiency at your school?
2. Do you have teachers who are reluctant to adopt a personalized proficiency mindset? How do you know? How have you worked around or with these teachers?
3. Are parents or the community playing any role making change for personalized proficiency at your school?

Topic: Leadership Practices - Instructional program

1. What changes are happening at your school in terms of instruction since Act 77 and EQS?
2. Looking ahead to the next year or so, what kinds of leadership actions do you plan to take to continue moving your school towards a personalized proficiency paradigm?
3. What resources do you plan to rely on/consider when implementing these actions?
4. Do you have any thoughts on how you will assess the effectiveness of these actions?

Principal Interview Protocol #2

NOTE: These questions will be adapted after the first round of interviews and after the observations. Below is an outline of the anticipated questions I will ask.

Participant Pseudonym:

Position:

Date:

Location Pseudonym:

Interviewer:

Interviewer Introductory Statement:

“The goal of this qualitative research study is to explore understandings, values, and perceptions of high school principals related to Vermont’s personalized proficiency paradigm shift; and how their perceptions influence the application of the practices and principles of transformational leadership for school-wide change. I would like to remind you that participation in this study is completely voluntary and you may withdraw at any time without consequence. I would like to remind you that you signed a consent form at the start of our last interview. Would you like to review the consent form?”

Topic: Understanding

1. Please describe if/how your understanding of what Act 77 is requiring/asking of schools in Vermont has changed since our last interview.
2. What resources have informed your understanding of these policies since we last spoke?
3. What resources are you feeling like you are missing or needing at this point?
4. Last time you talked about... in the observation I saw...Follow-up type question.

Topic: Perceptions/Values

1. Have had any changes in how you perceive these policies (good/bad for schools)? Why or why not?
2. How would you describe the time and energy you’ve put into creating your own understanding of Act 77 and the EQS since we last spoke?
3. How much of a priority are these policies for you as you complete your work on a daily basis right now?
4. Last time you talked about... in the observation I saw...Follow-up type question.

Topic: Leadership Practices—Setting Directions

1. Have you created or modified a plan for implementing personalized proficiency in your school since we last spoke?
2. How have parents and the community been involved in the shift towards personalized proficiency since we last spoke?
3. Last time you talked about... in the observation I saw...Follow-up type question.

Topic: Leadership Practices—Developing people and redesigning the organization

1. Have the roles teachers are playing in making the shifts personalized proficiency at your school changed since we last spoke?
2. How have you worked with the reluctant teachers since we last spoke?
3. Last time you talked about... in the observation I saw...Follow-up type question.

Topic: Leadership Practices—Instructional program

1. What changes are now happening at your school in terms of instruction since Act 77 and EQS? How do you know this?
2. Looking ahead – what are your goals for the end of this school year?
3. Last time you talked about... in the observation I saw...Follow-up type question.

Appendix F: Start List of A-Priori Codes

Leadership: Setting Directions	CODE
Develop a shared vision and building goal consensus	SDV
Hold high performance expectations	SDPE
Developing people	
Provide individualized support	DPIS
Provide intellectual stimulation	DPINT
Model valued behaviors, beliefs, and values	DPB
Redesigning the Organization	
Strengthen school culture	ROSC
Building structures to enable collaboration	ROCL
Engaging parents and the wider community	ROPC
Improving the Instructional Program	
Focus on instructional development	IIP
Related Practices	
Contingent reward	RPCR
Management by Exception	RPME
Leverage Points	
Structure	LP1
Samples	LP2
Standards	LP3
Strategies	LP4
Self	LP5

Appendix G: Final Codes

Research Question #1: What constructed understandings, values, and perceptions do Vermont high school principals have about Act 77 (Flexible Pathways), the Education Quality Standards (Graduation by Proficiency), and the statewide shift towards a personalized proficiency education paradigm?	
Title	Code
1. Principal <u>understanding</u> of Act 77 and EQS	UNDERST
2. Principal's thoughts on <u>value</u> of the policies	VALUE
3. Principal's <u>perceptions</u> related to the policies	PERCEPT
4. Principal summarizing <u>goals</u> of policies	GOAL
5. <u>Resources</u> principals use to inform their thinking	RESOUR
6. Principal's <u>priority</u> for implementing policies	PRIORITY
7. Principal discusses <u>Time</u> as an issue/limitation	TIME
8. <u>Sticking Point</u> in this paradigm for a leader	STICKING

Question #2: How do the understandings, values, and perceptions related to Vermont's personalized proficiency paradigm influence decisions for action steps as principals engage in the early phases of making change happen in their schools?	
9. Structure: manipulate structural elements such as calendars, schedules, class sizes, grade configurations, improved facilities and equipment, and even technology to improve performance. (Rickabaugh, 2016), (Zepeda & Mayers, 2006), (Tamim, et al. 2011)	LP1 LP1-Tech
10. Samples: Grouping students strategically for instruction by ability, age, interest, gender, or current performance. (Rickabaugh, 2016), (Pahlke, Hyde, & Allison, 2014), (Worthy, 2010)	LP2
11. Standards: Raising or establishing new standards. (Rickabaugh, 2016), (Loveless, 2012)	LP3
12. Strategies: Specifically chosen instructional strategies to engage, nurture learning, and improve performance. (Rickabaugh, 2016), (Marzano, 2007), (Hattie, 2009), (Hall, et al, 2012)	LP4
13. Self: Changing teachers and students existing beliefs about learning and their roles in the learning process. (Rickabaugh, 2016)	LP5
14. Flexibility: Principal discusses action steps to add flexibility for students in the form of PLPs and Flexible Pathways (http://www.inacol.org/wp-content/uploads/2016/09/CompetencyWorks_ReachingTheTippingPoint_VT.pdf)	FLEX
15. Accountability: Principal discusses action steps to add accountability for students to reach proficiency (http://www.inacol.org/wp-content/uploads/2016/09/CompetencyWorks_ReachingTheTippingPoint_VT.pdf)	ACCT

Research Question #3: How do the understandings, values, and perceptions related to Vermont's personalized proficiency paradigm influence principal leadership practices as they engage in the early phases of making change happen in their schools?	
Title	Code
Leadership: Setting Directions	
14. Develop a shared vision and building goal consensus: "Leaders identify, develop, and articulate a shared vision or broad purpose for their schools that is appealing and inspiring to staff.... Build consensus among staff about the importance of common purpose and more specific goals, motivate staff with these challenging, but achievable goals, and communicate optimism..." (p. 400, Leithwood and Sun, 2012)	SDV
13. Hold high performance expectations: "Leaders expect a high standard of professionalism from staff, expect their teaching colleagues to hold high expectations for students, and expect staff to be effective innovators." (p. 400, Leithwood and Sun, 2012)	SDPE

Developing people/Building Educator Capacity	
14. Provide individualized support: "...leaders listening and attending to individuals' opinions and needs, acting as mentors or coaches to staff members, treating staff as individuals with unique needs and capacities, and supporting their professional development" (p. 400, Leithwood and Sun, 2012)	DPIS
15. Provide intellectual stimulation: "Leaders... challenge the staff's assumptions, stimulate and encourage their creativity, and provide information to staff members to help them evaluate their practices, refine them, and carry out their tasks more effectively" (p. 400, Leithwood and Sun, 2012). This includes building teacher understanding about personalized proficiency.	DPINT
16. Model valued behaviors, beliefs, and values: "providing a model of high ethical behavior, instilling pride, respecting and trusting in the staff, symbolizing success, and demonstrating a willingness to change one's own practices as a result of new understandings and circumstances" (p. 400, Leithwood and Sun, 2012)	DPB
17. Individual professional learning profiles: includes elements of-self assessment, descriptions of professional learning goals, an ongoing action research project, a portfolio or representation of progress, a description of how achieving learning goals will benefit students and the school, personal reflections. (p. 103, Rickabaugh, 2016)	IPLP
18. Measuring the effects of professional learning: "provide teachers with opportunities to demonstrate new knowledge and skills... approaches such as these can impart the richness of professional learning while informing the practice of colleagues." (p. 104, Rickabaugh, 2016).	MEAS

(continued...)

Redesigning the Organization/Collaboration and Networking	
18. Strengthen school culture: "promote an atmosphere of caring and trust among staff, build a cohesive school culture around a common set of values, and promote beliefs that reflect the school vision" (p. 400, Leithwood and Sun, 2012)	ROSC
19. Building structures to enable collaboration: "Leaders ensure that staff participate in decisions about programs and instruction, establish working conditions that facilitate staff collaboration for planning and professional growth, and distribute leadership broadly among staff" (p. 401, Leithwood and Sun, 2012). This includes distributing leadership.	ROCL
20. Engaging parents and the wider community: "Leaders demonstrate sensitivity to parent and wider community aspirations and requests, reflect community characteristics and values in the school, and actively encourage parents and guardians to become involved in their children's education at home and in school" (p. 410, Leithwood and Sun, 2012)	ROPC
21. Action networks: "Networks... are voluntary and commitment driven... flexible enough to shift focus and absorb new information... encourage and support divergent ideas." (p. 106, Rickabaugh, 2016)	AN
Improving the Instructional Program for Personalized Proficiency	
22. Focus on instructional development (AKA "shared instructional leadership - school specific): "Active collaboration of principal and teachers on curriculum, instruction, and assessment... the principal seeks out the ideas, insights, and expertise of teachers in these areas and works with teachers for school improvement... principal and teachers share responsibility for staff development, curricular development, and supervision of instructional tasks... the principal is not the sole instructional leader but the 'leader of instructional leaders'" (Glickman, 1989, p. 6) in (Marks and Printy, 2003, p. 371)	IIP
23. Instructional shift #1: "Requires teachers to understand what their students already know, what they're ready to learn, and what they are likely to find compelling enough to pursue." (p. 82, Rickabaugh, 2016)	IS1
24. Instructional shift #2: "Asks educators to offer students some voice in and ownership of their learning and to begin where students currently are and work from there." (p. 84, Rickabaugh, 2016)	IS2
25. Instructional shift #3: "Focuses the purpose of learning to build relevance and concentrate student attention." (p. 86, Rickabaugh, 2016)	IS3
26. Instructional shift #4: "Focus on helping students to develop an understanding of systems, relationships, concepts, strategies, and processes related to their learning." (p. 88, Rickabaugh, 2016).	IS4
27. Instructional shift #5: Students have "...a more intimate and productive relationship with their learning – one that can assure their success, both now and in the future." (p. 90, Rickabaugh, 2016).	IS5

Related Practices	
28. Contingent reward (Bass, 1985 = transactional leadership): "The leader rewards staff members for completing agreed-on work" (p. 401, Leithwood and Sun, 2012)	RPCR
29. Management by Exception: "Leader monitors the performance of staff members and interacts with them when their behavior deviates from expectations" (p. 401, Leithwood and Sun, 2012)	RPME

Appendix H: Teacher Interview Protocol

Participant Pseudonym:

Position:

Date:

Location Pseudonym:

Interviewer:

Interviewer Introductory Statement:

“The goal of this qualitative research study is to explore understandings, values, and perceptions of high school principals related to Vermont’s personalized proficiency paradigm shift; and how their perceptions influence the application of the practices and principles of transformational leadership for school-wide change. I would like to remind you that participation in this study is completely voluntary and you may withdraw at any time without consequence. I will now give you a consent form that you may take time to read and sign before we continue.”

Obtain signed consent

Interview Questions:

1. What would you like your personal pseudonym to be for this study?

Topic: Understanding

1. Is your principal aware of Act 77 (2013) and Education Quality Standards (2014)? How do you know this/In what ways are you seeing evidence of this?
2. Please describe how your principal has helped with your understanding of what the Education Quality Standards (2013) are requiring/asking of schools in Vermont.

Topic: Perceptions/Values

1. Does your principal believe these policies good or have value for improving Vermont’s schools? Why do you think this?
2. How would you describe the time and energy your principal has put into creating his/her understanding of Act 77 and the EQS?
3. How much of a priority are these policies for your principal as they complete their work on a daily basis?

Topic: Leadership Practices – Setting Directions

1. What initial action steps has your principal taken to implement Act 77 and the EQS in your school?
2. After the initial steps, what follow-up actions has your principal taken?
3. Does your school have a written plan for personalized proficiency implementation?

4. Do the teachers in your building understand the education changes called for by Act 77 and the EQS? Has your principal done anything to help this?
5. Does your community understand the education changes called for by Act 77 and the EQS? Has your principal done anything to help this?

Topic: Leadership Practices - Developing people and redesigning the organization

1. What roles are teachers playing in making change for personalized proficiency at your school? How has your principal influenced this?
2. Do you have teachers who are reluctant to adopt a personalized proficiency mindset? How has your principal worked around or with these teachers?
3. How has your principal built trust?

Topic: Leadership Practices - Instructional program

1. What changes are happening at your school in terms of instruction since Act 77 and EQS? How has your principal influenced this?
2. What resources are your principal relying/considering when implementing these actions?