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THE ROLE OF STUDENT VOICE AND CHOICE IN LEARNER-CENTERED COMPETENCY REFORM

By

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A DISSERTATION

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THE ROLE OF STUDENT VOICE AND CHOICE IN LEARNER-CENTERED COMPETENCY REFORM

Abstract

Progressive reforms, pervasive throughout American education, are once again beginning to reshape the established traditional system to provide our students with an educational experience and learning opportunities that will better prepare them with twenty-first century skills. These reforms, rooted in constructivism and social learning, are characterized by an updated progressive vision of competency education that places students in the center of their education. Giving students authentic voice and choice has potential to engage these most important stakeholders in educational reform. This qualitative case study set in eleven upper elementary classrooms in one school, explores the opportunities for voice and choice as learners engage with educators to co-create a more personalized educational pathway through standards of competency. Insights gained from interviews with teachers, student focus groups, observations and artifacts describe how students experience voice and choice, and provide an understanding of how voice and choice contribute to reshaping the learning environment and the experience of the learner. The results of this study help educators understand how voice and choice support a collaborative classroom culture, increase engagement with learning standards, and further considers the perspective of young learners who gained insights about themselves as learners and who connected voice and choice with core values of respect, pride and freedom. Examining competency reform at one school provides practical insights into the structural supports, roles of the teacher and students, use of tools, and specific factors that

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sustain and challenge the transformation. Empowering students through voice and choice is a powerful way to engage with learners as stakeholders who may play an important role in developing and sustaining learner-centered competency reforms. Doctor of Education Educational Leadership

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DEDICATION

This work is dedicated to my children who first inspired me to further study voice and choice, my mother and husband who gave me the time and supported me through these years, the educator colleagues engaged in this transformation and the students who were so honest and insightful.

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CHAPTER 1

INTRODUCTION

As public schools across the country strive to meet the needs of students and prepare them to succeed in the global economy, a contemporary wave of progressive reform is gaining momentum. Faced with significant economic, social and student achievement challenges, policy leaders, researchers and educational innovators are promoting learnercentered competency-based educational reforms. The rise of competency-based reform is a shift towards, "an intensive focus on what students know and can do rather than on what is taught" (Klein-Collins, 2013, p.4). This vision of transformation calls for redesigned schools that move away from traditional seat time structures and shifts the focus on ensuring that students attain the skills they need to succeed (U.S. Department of Education, 2013).

As learner-centered competency education takes root in schools, districts and states, it rests upon the foundation of constructivist pedagogy and standards-based reforms. Long-standing traditional structures in schools are being challenged as educators begin to embrace and enact transformed visions. This contemporary instructional reform calls for multiple pathways for students to demonstrate competence and pushes upon industrial age school structures. The focus on personalized pathways, a key component of competency reform, is described in the latest review of successful *Race to the Top* federal educational grant recipients. Characteristics of these competency instructional models included: teachers engaging each student in personalized instruction at the student's skill level, stimulating learning activities based on personal interest, and individual learning pathways created collaboratively with community, family and students (Tanenbaum, Le Floch, & Boyle, 2013, p.18).

While learner-centered competency reform is gaining momentum, there is no single model to simply adopt and implement. As a result, a significant component of stakeholder involvement is required at the local level to envision and redesign our schools. 'Stakeholder' in the age of personal learning *includes students*. The value of including students and giving learners a voice in their own education has been described as a powerful aspect of learner-centered competency models (Mitra, 2009; Delorenzo, Battino, Schreiber & Carrio; Quaglia & Corso, 2014; Sound Out, 2006).

Learner-centered Competency Transformation

In 2010 as the national trend was gaining momentum, a large rural-suburban district in southern Maine was engaging the community to develop a new strategic educational plan. School leaders within this district faced the challenges of ensuring that students meet higher college and career readiness standards as well as develop the capacity to create, innovate, think critically, problem-solve, communicate and collaborate (Partnership for 21st Century Skills, 2011). Stakeholders including school board members, educators, business leaders, parents, community members and students, collaborated to create a vision for the future of education in the district's schools. This broad representation of the community engaged in a multi-day facilitated, collaborative 'future search' process that synthesized *past, present* and *future* of the district to create a new strategic plan and vision for education.

This new vision for educating students within this district echoed the foundational principles of learner-centered competency education and described a vision for a transformed school experience that is to be personalized, relevant, engaging, technology-rich and no longer defined by traditional boundaries. Stakeholders wrote an initial blueprint that mapped out strategic direction, goals and action steps. Professional development designed to build capacity among the staff was provided to support all staff across the district, as the six schools began to interpret and implement this new vision. Among the characteristics associated with a learner-centered competency-based educational model, as described in the literature review, student voice and choice emerged as key components of instruction that supported the vision of personally relevant learning, individual goal setting, authentic experiences, and a more self-directed role for the student.

Subsequently, this qualitative case study focuses on one of the six aforementioned schools. The site school is an elementary school whose staff has worked to align the vision and strategic goals with the district's progressive vision. Professional development designed to support educators as they transitioned from vision to practice have been offered at both district and the site levels. Professional development resources were provided to all teachers in support of the strategic plan. These resources included: reading and discussing professional anchor texts, workshops and trainings with Reinventing Schools Coalition, collaboration with local and regional networks such as Maine Cohort for Customized Learning and Great Schools Partnership, as well as ongoing dedicated professional learning time at the school.

Maine Law

In 2012, two years *after* the development of the district's vision, Maine passed legislation that both supported and politicized the interpretation and implementation of the district vision. *LD 1422*: required all students to graduate with a proficiency-based diploma by 2017 (Maine DOE, 2013). Proficiencies required for graduation included academic standards identified in Common Core State Standards and Guiding Principles aligned with 21st century skills. The Maine Department of Education and its delegates began actively

promoting both a learner-centered and competency transformation. During this period, it was important both at the district and the school levels to reclaim the vision as originating from the community, and clarify that it had not been handed down by the governor, the commissioner of education or any other potentially polarizing political affiliations. The combination of district-based and state-based transformation initiatives: progressive, political and practical, make for a multifaceted backdrop for the transformation in progress at the siteschool.

The School Context

It is important to understand the site and how the context of the school built the foundation for the learner-centered competency transformation aligned with the district vision and Maine law. The number, depth, and pace of curriculum transitions and initiatives at the school are additional factors that help to build a better understanding of the school setting including curriculum and instructional focus areas and teachers' experiences. These contextual factors include: leadership, culture and collaboration structures, academic and social curriculum initiatives, as well as the depth of initiatives and the pace of change. Consideration of these major initiatives helps to more fully understand the setting of the study and contextualizes the findings of this qualitative classroom-based case study.

Increasing collaboration and building capacity for shared leadership have been the leadership priorities over the past six years the site as has actively cultivated and developed a professional learning community (PLC) model. The PLC structure is the vehicle for shared leadership through which all initiatives are implemented. Within the past six years the school purchased core programs for both reading and mathematics instruction, developed a host of interventions for reading and math based on a response to intervention (RTI) framework of research-based strategies (Fuchs & Fuchs, 2009), as well as a framework for Positive Behavioral Supports and Interventions (Sugai, & Horner, 2010). Over the four prior years, teachers also worked to align curriculum targets to Common Core State Standards in Math and English Language Arts. Finally, the addition of the standards-based reporting system was the latest in a long list of transformative technology-related changes at the site. The number of initiatives and pace of change in recent years are significant when considering the full context of the school and the educational transformation in progress.

Certainly the past several years has been a period of dramatic change in perspective, personnel and practice resulting in all the typical impacts, both positive and negative, that such fundamental, disruptive change brings about in an organization (Wheatley, 2006: Fullan, 1997). The supportive messages at the site and district are: 'check and adjust', 'learn from our mistakes', 'be willing to take risks' and have a 'growth mindset' and educators are working hard to do just that. To really understand the purpose, research questions, method, and findings of this case study, the quantity, pace and depths of initiatives at the school are complex and important factors to consider.

This qualitative case study, set in an elementary school, for students in grades four and five engaged in developing a more learner-centered competency model of education, sought to understand the role of student voice and choice as key aspects of the instructional transformation. The study further described how voice and choice were experienced by students and by teachers in this elementary school, as well as factors that contributed to sustaining and challenged the learner-centered competency-based instructional environment.

Statement of the Problem

While promising learner-centered competency reform has gained momentum and has been developed in some schools, including the school in this case study, progressive reforms have historically not been sustained. By mid-20th century John Dewey, 'father of progressive education' questioned its sustained impact on public schools saying that progressive education had "not really penetrated and permeated the foundations of the educational institution" (Kohn, 1999, p. 7). Despite the ongoing national conversation about school reform, our traditional educational system has remained virtually unchanged since the industrial era in which it was designed and has not progressed to meet the contemporary needs of society or of individuals (Pace, Moyer & Williams, 2015; Sturgis, Patrick & Pittenger, 2011; Schwahn, & McGarvey, 2013).

Unfortunately, in the age of data-driven decisions and high-stakes testing and accountability, other promising reforms of recent decades such as site-based management, block scheduling, small high schools, turnaround schools, and privatized charter schools have all shown limited gains in promoting student academic achievement (Lubienski & Lubienski, 2006; Ravich, 2011; Tyack & Cuban, 1995). The ubiquitous classroom structure of students sitting in rows, listening to lectures, reading the same textbooks, answering the same questions in the chapter summary, pop quizzes, grading curves and a teacher-centric, predetermined pathway to graduation, are constructs of an outdated and ineffective educational system (Delorenzo, Battino, Schreiber, & Carrio, 2009; Reigeluth, & Karnop, 2013; Schwahn, & McGarvey, 2013; Sturgis, Patrick, & Pittenger, 2011). This 19th Century schooling model was designed to mass educate during the industrial revolution and sort between those who would attend college and those who would be production workers. In the

global economy this is no longer acceptable. However, despite initial excitement, promising models have not been fully sustained and the established traditional public school instructional model remains dominant.

Given a historical pattern of more school reform failures than successes (Ravitch, 2011; Tyack & Cuban, 1995) and the magnitude an educational reform, guided by progressive the learner-centered movement, the transformation will require fundamental and sometimes disruptive structural changes to the status quo (Bartunek & Moch, 1987). There contemporary models, driven by research on the types of instructional strategies related to supporting instruction that promotes student learning, are continuing to emerge and are pushing against the established structures of traditional schools. Examples of these models can be observed from Barack Obama Charter School in California to James Bean Elementary School in Maine and Lindsay Unified High School in California. As a distinguishing feature, contemporary progressive models promote the idea of *placing the student at the center of curricular and instructional decisions* (Bray & McClaskey, 2013).

These promising student-involved educational models are being documented across the country, and may be a key to supporting a reshaping our schools (Pekrul & Levin, 2005; MCCL, 2014). The changing role of the student learner from an object to be acted upon to a participating decision maker and responsible partner in his or her own learning is a disruptive move from the traditional classroom. Giving students a say or voice and engaging them in making choices are foundational elements of progressive competency models. Learning from and with students are essential elements in a learner-centered classroom (Mitra, 2009; Patrick, 2013; Harris & Cullen, 2008). Employing strategies for providing voice and choice allows learners and educators to co-create an engaging instructional experience based on collaboration, understanding of student's perceptions, learning styles, and interests. Where other progressive reforms have failed to bloom, could engaging students as real stakeholders be a sustaining element in this transformation?

Purpose and Significance of the Study

The purpose of this qualitative case study was to examine the role of student voice and choice within the larger context of an educational transformation. In this study I sought to understand how teachers provided opportunities and created classroom environments or structures that supported voice and choice. Another important purpose of the study was to understand the role of voice and choice from the perspective of the students. I sought to more fully understand how students experienced voice and choice and the potential implications related to learner-centered classroom instruction. This study further explored factors that supported and challenged the incorporation of voice and choice and considered the potential for student voice and choice to sustain a more learner-centered competency model of instruction. The study findings add to the understanding of the role of students as stakeholders and how their insights, perceptions and interests can inform curriculum and instruction.

Our national educational system requires substantial restructuring to meet the challenges and opportunities of a new world; global, customized, technological, collaborative, with a focus on innovation, communication, creativity and problem solving. In a study of 35 districts across twenty states involved in restructuring education, districts are finding the transformation to a student-centered approach promising yet complex and many are still in the very early stages of reformation. Despite the promise of the range of student-centered learning possibilities, district policies, practices, and priorities are impeding the

development of transformed models (Levin, Datnow, & Carrier, 2012). Schools and districts across the country are facing the challenge of transforming the traditionally established educational model.

In the forefront of this educational transformation, many Maine schools have made the commitment to this learner-centered transformation (MCCL, 2014). The staffs within these schools in Maine have begun to align curriculum, involve stakeholders, and explore new pathways and alternate structures in support of a learner-centered instructional model. Complexities of this deep reform include addressing well-established traditional structures. Competency education is not designed to promote student competition for grades. Grades are not averaged across classrooms, grade level or courses, rather they are provided in reference to student mastery of individual learning standards. Students do not necessarily progress through standards at the same rate. Learning opportunities are not provided in a rigid stepwise progression because not all learners learn the same way or at the same time. Given the implications for scheduling, grade levels, grading systems, and traditional school structures combined with lack of understanding and commitment, this level of reform will require tremendous supports from all stakeholders, *including students* if the vision is to be operationalized and sustained (Mitra 2006; Mitra 2008; Schwann & McGarvey, 2013).

These learner-centered transformations in progress in Maine and throughout the nation have many names and variations. They cannot be singularly defined but the majority of models fall into the following categories: competency education, standards-based learning, personalized learning, customized learning and *learner-centered instruction* (Great Schools Partnership, 2013; Sturgis, Patrick, & Pittenger, 2011). The latter term aligns with the focus of this study, which places primary emphasis on shaping instruction for individual learners

by authentically engaging with the students as partners in their education. While there are other terms for this type of instruction, I have chosen to use "learner-centered instruction" in this research study of the role of student voice and choice in reforming instructional practices. Student contributions to framing the learning experience yielded understanding of the potential of including their voices in the evolving educational reform efforts. The research questions below framed my study to examine the role of student voice and choice in reforming instructional practices from the perspectives of teachers and students.

Research Questions

The following research questions were designed to develop a better understanding of the role of student voice and choice in the educational transformation to learner-centered competency education in one upper elementary school in Maine.

- What is the role of voice and choice in a learner-centered classroom?
- How is voice and choice experienced in classrooms transforming from a traditional to a more learner-centered instructional model?
- How do students and teachers experience voice and choice in a learner-centered classroom?
- How do students and teachers describe the factors that support or suppress voice and choice in a learner-centered classroom?

Theoretical Framework

The theoretical framework for the study was grounded in constructivist epistemology and related psychological learner-centric pedagogical and social learning development theories. Vygotsky, Piaget, von Glasersfeld, Varela, Wittgenstein and Bateson among others describe the implications of constructivism for teaching and learning (Ernest, 1995; Heylighten, 1993). Constructivist epistemology presents learning as a process whereby the individual constructs meaning by making sense of experiences, where there are many paths, multiple perspectives and many realities (von Glasersfeld, 1987).

Learner-centric pedagogy grounded in the foundational education theories of John Dewey, Jean Piaget, and Lev Vygotsky, support a student-centered learning model (Dewey, 1938; Piaget, 1952; Vygotsky, 1962). Psychologist Carl Rogers' humanistic beliefs about the formation of the individual, as well as trust and the perspective of the learner also aligned with student-centered pedagogy (Motschnig-Pitrik, & Holzinger, 2002). Maria Montessori was another influential proponent of learning through independent self-directed interaction (Ultanir, 2012). The body of work of these theorists informed and influenced the evolving view of a contemporary educational model designed to meet the needs of individuals and communities of learners.

The related works of McCombs emphasized the role of learner-centered pedagogical factors such as positive feedback, the importance of an encouraging climate, learning both in and outside the classroom as well as the importance of individual perspective and diverse approaches in learner-centered instruction (McCombs, 2001; McCombs, 2004). Markowitz, Ndon, Pizarro and Valdes (2005) described the value of learner-centered communities that embrace student differences, promote taking intellectual risks, and foster shared knowledge. Further characteristics of learner-centered instruction include active engagement, shared control, collaboration, directed skills instruction and self-reflection as key features of learner-centered teaching (Weimer, 2013).

Complementary to the learner-centered educational foundations are the principles of humanism, social development theory, social justice and equity that support the inclusion of student voice and choice in education. Carl Rogers and Abraham Maslow shaped learning theory from a humanistic perspective that focused on the development of the individual as a whole person (De Carvalho, 1991). Alfred Bandura explored learning as social development of the individual related to attention, motivation and intrinsic reward (Heylighten, 1993). Further, social development theory (Vygotsky, 1978) supports the value of active participation within a community of learners where interactions and communication are the foundation for internalized learning.

As a core element of American education, the value of voice in the development of the individual, and the development of a just and equitable community was a foundational principle. Dewey (1938) promoted equitable educational opportunities, which broke down barriers of race, class and nations. Progressive educators envision schools as having potential to build democratic communities by fostering inclusive values, a balance between freedom and responsibility to the group, active participation, and sharing in leadership (Apple & Beane, 1995). The values of social justice, equity and respect are promoted in a learning community that provides meaningful opportunities for voice and choice, fosters engagement, communication, and problem-solving thereby developing more capable democratic citizens (Markowitz, Ndon, Pizarro & Valdes, 2005; Morrison, 2008). Voice and choice are essential elements of a socially just and equitable learning environment.

Given the potential and history of educational reform movements, there are implications from a transformational leadership perspective. The magnitude of the contemporary evolution from early standards-based education to the creation of a contemporary learner-centered educational system is a significant challenge. For decades we have been involved in school reform, yet momentum and support decline over time and the status quo remains (Bartunek & Moch, 1987; Harris & Cullen, 2008; Levin, Datnow & Carrier, 2012; Ravich, 2011; Tyack & Cuban, 1995). In a change of this order, exploring the role of students' voice and choice both in the classroom and in terms of sustaining a learner-centered model, may provide relevant insights to educators and school leaders engaged in the transformation (Mitra & Serriere, 2012; Apple & Beane, 1995; Fielding, 2006; Mitra, 2001; Sound Out, 2013).

Definition of Terms

There are specific definitions of educational terms that provide a more complete understanding of the concepts used in this study. A brief definition of each of these terms is included as they are relevant to the context of the study. These terms will be introduced and discussed more fully in the literature review. Due to the ambiguity of some of these terms, understanding which terms are used and how they are synonymous or related to other key concepts in the literature are important in order to best understand the study. Important definitions for this study include: traditional learning, standards-based education, constructivist learning theory, competency education, student engagement, learner-centered instruction, student voice and choice, and mass customized learning.

Traditional learning. The American educational model based on academic and industrial era efficiency with a focus on standardized educational outputs (Carnegie Units) and faculty workloads, teacher-centered instruction, single sense stimulation, single media, isolated work, information delivery, passive learning, factual, knowledge-based, isolated, artificial context, and discrete pathways and traditional grade levels.

Students advance through the system at the same pace as other students of the same age and will advance with varying levels of knowledge and skills.

Standards-based education. Standards provide the foundation of instruction in contemporary educational reforms wherein student learning targets represent key content-specific concepts, skills, and knowledge applied within or across content domains. The system is based on defined number of learning levels. Students advance through the system based on meeting established achievement levels. Student progress is measured and used to determine instructional decisions to support advancement at the learner's own pace. Learning is the constant and time is the variable (Marzano, 2003).

Constructivist learning theory. Constructivism is an educational approach based on observation and scientific perspective that people construct their own understanding and knowledge of the world, through experiencing things and reflecting on those experiences through questions, explorations, and assessing what we know. In the classroom, constructivist practices include encouraging students to use active techniques (experiments, real-world problem solving) to create more knowledge and then to reflect on and talk about what they are doing and how their understanding is changing with the support of an insightful teacher as facilitator (Great Schools Partnership, 2013).

Student engagement. The degree of attention, curiosity, interest, optimism, and passion that students show when they are learning or being taught are factors of student engagement. These factors extend to the level of motivation students have to learn and progress in their learning. The concept of engagement is grounded in the belief that learning improves when students are inquisitive, interested, or inspired, and that learning suffers when students are bored, or generally not interested (Great Schools Partnership, 2013).

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Competency education. (*Synonym* Proficiency Education) Competency education is an educational model in which students advance upon mastery. Competencies include explicit, measurable, transferable learning objectives that empower students. Assessment is meaningful and a positive learning experience for students. Students receive timely, differentiated support based on their individual learning needs. Learning outcomes emphasize competencies that include application and creation of knowledge, along with the development of important skills and dispositions (Competency Works, 2011).

Student voice and choice. Tenets of learner-centered instruction, voice and choice provide access to values, opinions, beliefs, perspectives, and cultural backgrounds of individual students and groups of students in a school. Instructional approaches and techniques are based on student choices, interests, passions, and ambitions. An instructional model based on student voice and choice can be seen as an alternative to more traditional forms of governance or instruction in which school administrators and teachers may make unilateral decisions with little or no input from students. Methods to elicit voice and choice often include the use of purposeful protocols, collaborative culture, voting, activism, formative learner feedback, service projects, opinions, and shared leadership (Mitra, 2001; Mitra, 2004; Sound Out, 2013).

Learner-centered instruction. (Synonyms *Personalized Learning*, *Student-centered Learning*) Learner-centered instruction includes a diverse variety of educational programs, learning experiences, instructional approaches, and academic-support strategies that are intended to address the distinct learning needs, interests, aspirations, or cultural backgrounds of individual students. Learning is generally seen as an alternative to one-size-fits-all approaches to schooling in which teachers may provide all students in a given course with

the same type of instruction, the same assignments, and the same assessments with little variation from student to student. Processes to elicit voice and choice create an engaging environment that connects learning with learner's interests, talents, passions, and aspirations, including actively participating in the design and implementation of their learning (Great Schools Partnership, 2013).

Mass customized learning. The vision for an instructional model of a welldeveloped performance-based, learner-centered instruction, mass customized learning, includes clear definition of what learners need to know and be able to do, in which students goal set and monitor their progress to competency that allows for fluid movement of students through multiple learning opportunities, supported by a user friendly, transparent reporting system, successful integration of technology, embedded continuous improvement and shared leadership among students, staff, parents and community (Schwahn & McGarvey, 2013).

Assumptions and Delimitations

In this study the assumptions about the instructional model and classroom culture were based in the belief that students are a critical dimension of the learning environment and are an untapped resource in enacting necessary educational reform. If educators are to create a more effective competency system yet go about it from the traditional top-down directive approach, we will be missing an opportunity to involve students, our most important stakeholders. Findings of the study were limited to the experiences from one site and will not necessarily hold true for other sites engaged in similar reforms. While the research was not intended to be generalizable to all classrooms, the insights and the voices of the learners are important to the field of education. The contributions of understanding an instructional model that invites student voice and the ideas expressed by those voices may inform and inspire learners, parents, educators and policy makers within the site and beyond who strive to develop and sustain progressive instructional reform.

Summary

The purpose of this qualitative case study was to explore the role of student voice and choice in contemporary educational reform. Given the potential of progressive learnercentered competency instruction in the face of traditional school structures that have been resistant to sustained change, it is important to understand the role of student voice and choice as an element of progressive reform that engages students as stakeholders and partners in the transformation.

This study sought to understand one school's efforts in incorporating student voice and choice within learner-centered competency reform. This qualitative case study set in an elementary school engaged young learners from eleven classrooms and their teachers to help develop a richer understanding of how voice and choice were experienced, supported, challenged, and considered the value of engaging with learners as stakeholders to sustain instructional transformation.

Chapter 2 contains foundational and current literature in relation to the study. Chapter 3 describes the research design and methodology used in the study including data collection and analysis methods. Chapter 4 includes the results of the case study. Chapter 5 discusses and conclusions and implication. Supportive appendices include focus group and interview questions as well as participant outreach documents, teacher data table, Maine legislation, and classroom protocols.

CHAPTER 2

REVIEW OF THE LITERATURE

In setting the foundation for the study of the role of voice and choice in a learnercentered educational environment, this review of the literature identifies relevant themes and creates a conceptual framework supporting a contextual understanding of the topic of learnercentered instruction and related reform. The names of several of the instructional models described are often used interchangeably and share multiple defining characteristics that will be described and clarified in the literature review. The philosophical, pedagogical and progressive foundations of the related theories will also be explored. Together, they create a cohesive and engaging framework from which to further explore the research questions about the role of voice and choice of the learner in informing learner-centered competency school reform.

Learner-centered Education: a Constructivist Pedagogy

Learner-centered education has its roots in early American Progressive educational philosophy. Reflecting his social and democratic beliefs, Dewey believed knowledge emerges only from situations in which learners draw from and engage in meaningful experiences (1938). Researchers describe Constructivism as an epistemology that further offers an explanation of the nature of knowledge and how individuals learn. The theory explains that real understanding of a concept is constructed from the learners' previous experience and background knowledge. Constructivists maintain that learners construct their own understandings or knowledge based upon what they believe and the ideas, events, and activities they experience. In this educational model the teacher is not the leader of learning who lecturers to present the knowledge, but is a facilitator who encourages learners to question, solve problems, and formulate their own ideas, opinions and conclusions (Ciot, 2009; Cannella & Reiff, 1994; Ismat, 1998; Ültanir, 2012).

From the 1930's through the 1990's, there were several cycles of educational reform efforts during which progressive educators attempted to bring their beliefs into mainstream education. Examples of progressive education appeared in Montessori Kindergartens, 70's small schools, experiential outdoor education, schools within schools, progressive charter schools and others. Efforts to evaluate student learning, structural challenges, lack of scalability, buy in and stakeholder input were key factors limiting these efforts (Kohn, 1999; Ravich, 2011; Tyack & Cuban, 1995). Beginning in 1990 and continuing throughout most of the decade, the American Psychological Association synthesized research to identify fourteen learner-centered psychological principles to support educational reform:

The perspective that couples a focus on individual learners - their heredity, experiences, perspectives, backgrounds, talents, interests, capacities, and needs - with a focus on learning - the best available knowledge about learning and how it occurs and about teaching practices that are most effective in promoting the highest levels of motivation, learning, and achievement for all learners. This dual focus then informs and drives educational decision making. Learner-centered is a reflection in practice of the Learner-Centered Psychological Principles - in the programs, practices, policies, and people that support learning for all. (McCombs, 2000, para. 15)

While agreed upon as a dominant model in educational reform, a caution is offered to those who may solely promote a singular vision of the learner-centered education. If we accept that learner-centered pedagogy means that individuals learn in many different ways then we should be careful not to promote a singular learner-centered instructional design as the only standard for all learning experiences (Richardson, 1997). There is no correct way, no packaged program or established model that ensures successful learner-centered experiences for all learners in all settings. Learner-centered instruction is being interpreted by stakeholders, explored and piloted in programs in classrooms and schools across the country. It is designed and evolves in different ways at individual schools (Levin, Datnow, & Carrier, 2012; MCCL, 2014). This perspective reminds us we must seek to expand our foundational understanding and further explore the related concepts in instructional design and its implications.

Standards-based Education

The movement towards standards-based education reform emerged after the seminal 1983 report, *A Nation at Risk: The Imperative for Educational Reform* (National Commission on Excellence in Education, 1983). According to the report, our goal must be to develop the talents of all students to their fullest. Attaining that goal meant that we expect and assist all students to work to the limits of their capabilities and we expect schools to have high standards and for parents to support and encourage their children to make the most of their abilities (National Commission on Excellence in Education, 1983).

In response to the national focus on educational reform, the field of education has evolved to support and refine standards-based curriculum, instruction, and assessment models since the nineteen-nineties, (Glaser & Linn, 1993). During those years, many schools merely developed standards-referenced systems. The distinction between *standardreferenced* and *standards-based* is often a source of confusion among educators and the public. There is a critical distinction: standards-referenced means that what gets taught or tested is based on standards, while standards-based refers to the practice of ensuring students learn what they were taught and achieve the expected standards. In a standardsreferenced system, teaching and testing are guided by standards; in a standards-based system the focus is on learner outcomes. Standards reform is more than grading based on standards, it is fundamental educational restructuring of all components of the education system that are designed to work toward a common set of goals. A standards-based system places emphasis on using standards to provide instruction that is academically challenging and promotes the importance of maintaining high expectations for all students including those with different socioeconomic, racial, and cultural experiences. Further, it is a data-driven education system in which policy and practice are driven in large part by the measurement of academic outcomes (Great Schools Partnership, 2013; Marzano, 2003; Marzano, 2007, Marzano, Pickering & Pollock, 2001). Standards reform requires more systemic shifts than a simple realignment of academic standards.

Supportive of the transition to and value of a standards-based model, a broad body of related research describing the positive effects of standards on instructional design has been established. Positive associations include: the effects of formative feedback, communicating learning targets, the value of performance assessment, differentiation, and performance rubrics (Hattie & Timperly, 2007; Marzano, 2003; Marzano, 2007; Black, Harrison, Lee, Marshall, & William, 2004; Frey, Fisher, & Nelson, 2013). The increased clarity about the importance for students of transparent learning targets, formative feedback about progress, and differentiated options for meeting targets set the stage for future progressive educational transformations.

As the value of having standards and established learning targets became clear, schools, districts and states began the significant work of aligning curriculum and instruction. Following No Child Left Behind legislation and the adoption of academic standards (currently in most states the Common Core State Standards or CCSS) a standards-referenced system has been established. While the focus on standardized summative assessment intensified, the development of a transformative *standards-based* system, in contrast to a superficial *standards-referenced* assessment system, was not fully operationalized in most public education settings (Mathis, 2010; Shepard, Hannaway & Baker, 2009; Svicarovich, 2009). Schools test and teach to standards as they continue to develop structures that support comprehensive standards-based reform.

As the standards movement progressed, instructional models evolved and expanded upon the basic principles of standards-based education as they were operationalized and interpreted in individual schools, in districts, regions and states. This evolution is responsible for the various closely-related contemporary perspectives, including: proficiency-based, competency-based, and performance-based educational models. Of these predominant models, competency-based education, the most prevalent term in national educational literature, is used and further described in this study of voice and choice in progressive educational reform.

Competency and Personalization

The distinguishing shift from standards-referenced to standards-based, also called competency or performance-based education has been described in the book *Delivering on the Promise: The Educational Revolution* (Delorenzo, Battino, Schreiber, & Carrio, 2009). The shift in the educational approach is described as one in which all students are expected to progress from following uniform courses to earn credits or *seat time* to attain relatively low levels of academic performance, where students can 'pass' with 70 percent of the knowledge,

to one in which students progress individually by demonstrating learning, in a variety of ways, at an individualized pace that supports higher levels of academic performance (Delorenzo, Battino, Schreiber, & Carrio, 2009). Another key pedagogical feature of the model supports engagement in learning through authentic explorations and meaningful applications of the content (Cordova & Lepper, 1996; Deniz & Dolan, 2010).

Currently states and districts across the country are engaged in the transformation to competency educational reform (Pace, Moyer & Williams, 2015; Sturgis, Patrick & Pittenger, 2011; Sturgis, 2013). Key features of competency education, more commonly referred to in Maine as proficiency, are described below:

Competency education (synonymous with proficiency-based education) builds upon and enhances standards-based education with the following common features: Standards-based: Explicit learning outcomes or targets are derived from well-defined standards that clearly articulate what students must know and be able to do. Student-centered instruction: The individual student is at the center of the learning process; the teacher acts on the expectation that all students will achieve at a proficient level given the necessary supports. Teachers adjust instruction to allow students to learn at their own rates and provide appropriate supports to all students. Student engagement: Once students understand the learning targets and proficiency levels to be attained, they take responsibility and ownership for their learning with appropriate teacher support. Students are active, intentional partners in the learning (Oregon Department of Education, 2011, para. 9).

Customization

Educators and policy-makers, including the Maine Department of Education, further describe a proficiency/competency system that is customized allowing for *multiple pathways*. There is a recognition that each student learns differently. One student might learn best by reading text, watching the teacher demonstrate the concept and practicing with paper and pencil. Another might learn better through a combination of watching instructional tutorials and playing video games that incorporate concepts. Some may benefit more from collaborative projects and real-life applications. Learning through multiple pathways may even occur outside of the school day and off school grounds (Maine Department of Education, 2011; Schwahn & McGarvey, 2013; Delorenzo, Battino, Schreiber, & Carrio, 2009).

With its roots reaching back to principles of individualism within a humanistic psychological model (Maslow, 1962), customization is another powerful aspect of the emerging national vision for competency education. Educators for decades have recognized that students each have unique learning style preferences and skills. In an equitable contemporary learning environment, each would be taught and assessed in a way that is personalized for the learner (Gardner, 2010; Cordova & Lepper, 1996). Gaining momentum over the past fifteen years, the trend towards customization is reaching across boundaries from Starbucks to Amazon to iphones to Harley Davidson motorcycles to MIO drink flavoring to Kraft mashed potatoes (Bryson, York & Cancino, 2011). The concept has implications for education. The idea of mass customization recently made possible by transformational technologies is also a strong and disruptive trend with the power to transform education wherein individualizing, and personalizing to meet the learning needs of every learner, is the future vision of education (Mathieson, 2012; Miliband, 2004; Schwann & McGarvey, 2013).

Critical Perspective and Potential

Great Schools Partnership, a Maine-based non-profit organization that provides support to educators engaging in proficiency reform, offers insights into some of the challenges as well as the potential. Critics of this reform argue that the transition will require already overburdened teachers to engage in extra planning, preparation, and training (Great Schools Partnership, 2013, para. 8). Opponents believe that competency learning can be difficult to implement, particularly at a statewide level (Pace, Moyer & Williams, 2015). Some critics also take issue with the learning standards, specifically Common Core State Standards that competency systems reference and federally mandated high stakes assessments associated with those standards (Mathis, 2010; Shepard, Hannaway & Baker, 2009; Svicarovich, 2009).

On a practical level, progressive reforms can create a disconnect for parents. Given the context of their own experiences in traditional schools and how they understood that system, some parents express concern about the abandonment of traditional letter grades, report cards, transcripts, and other familiar grading systems. Parents worry that changes will disadvantage students who are applying to colleges because the reporting will be unfamiliar to admissions professionals. Some also worry that these more individualized systems may also eliminate many of the competitive aspects of academic achievement, such as GPAs or class rank, which historically favor high-achieving students (Great Schools Partnership, 2013; Reeves, 2007). While competency reforms face a variety of practical and political challenges, the potential value for students continues to engage stakeholders in the work.

Competency reforms that tailor instructional experiences for individual learners could signal the end of many elements of traditional education as we experienced it; quiet students in rows, listening to lectures, completing worksheets, reading textbooks, producing what the teacher assigned on a singular pathway of a learning track. The vision of this transformation is a learning environment where students are at the center of their own personally relevant educational plan. Students engage with and have a say in the authentic learning experiences that are designed to enable each child to meet high standards at different times and in different ways (MCCL, 2014; Deniz & Dolan, 2010).

The possibilities of this expanded model include learning beyond the classroom. Learning does not stop at the end of the school day or at the end of the academic year. Experiential learning, mentoring apprenticeships, student-directed project-based learning, technology-supported blended learning and credit for life's authentic learning experiences are all aligned with the vision (Delorenzo, Battino, Schreiber, & Carrio, 2009; MCCL, 2014; McCombs, 2000; Palmer, 2013). Clearly these expanded opportunities provide for and rely upon a more active role of the learner.

Student Voice

Fundamental to the progression towards an expanded vision of learner-centered education that is more personalized, is the role of student voice. Authenticity of listening to student voice is supported through choice. Students have a say in aspects of classroom culture, procedures, instruction, curriculum and interest-based activities. The role of voice and choice in schools has progressed beyond the limited scope of the traditional student council activities and planning dances and has evolved to include many aspects that reach beyond the walls of schools. The vision of student voice allows learners to express their opinions and be actively involved in planning, implementation, and evaluation of their personal learning plans (Quaglia & Corso, 2014: Sound Out, 2013; Flutter, 2006). This contemporary perspective on voice is not new to education. The value of voice in learning has its roots in foundational learning theory.

Early social learning theory identified the role of communication and the social context of learning. Inherent in communication is voice and consideration of the perspective of the speaker (Britzman, 1989; Vygotsky, 1962). Student voice represents the individual perspective and the collective actions of young people in the learning environment in which learners express their feelings, share knowledge, beliefs, ideas and aspirations (Quaglia, 2014; Sound Out, 2013). In addition to contributing to the classroom or learning environment, voice gives students the ability to participate in decisions about policies and programs while creating a culture of shared leadership (Mitra, 2009; Delorenzo, Battino, Schreiber, & Carrio; Sound Out, 2013). With its constructivist roots, student voice supports social justice and equity by valuing each child's right to speak and to be heard (Britzman, 1989; Fielding, 2006).

Catalyst for Change

Revitalized and realigned with the vision of earlier social justice theorists (Singh, 2009), the contemporary literature on student voice describes applications and potential of student voice that transcend beyond the sociocultural context of youth development research (Rogoff, 1990) in which a adults provided opportunities for children's voice primarily to support the development of the individual. More recently, according to Mitra (2004), a

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leading researcher in the topic, student voice has reemerged on the educational landscape in the United States, Canada, and the United Kingdom in the past decade. The focus on the potential benefits of student voice has broadened beyond rights and empowerment as it had been in the past, to include the notion that students who actively participate in shaping their educational experiences will enjoy improved academic outcomes and actively inform school improvement efforts (Mitra, 2004; Mitra, 2001; Sound Out, 2013). The existing research suggests that the contemporary resurgence of student voice may serve as a real catalyst for fundamental change in schools, including helping to improve teaching, curriculum, teacherstudent relationships and lead to changes in assessment and teacher training (Palmer, 2013; Fielding, 2001; Fielding, 2006; Mitra, 2008; Mitra, 2009; Oldfather, 1995; Rudduck & Flutter, 2000; Young & Sazama 2006).

Voice, Choice and Engagement

The instructional value of voice and choice, with respect to student engagement and measureable learning, also have roots in earlier theories of social and constructivist learning. According to Anctil, Hass and Parkay, (2006) constructivists trace their roots back to the Gestalt view that learners seek to organize new information into meaningful wholes. Vygotsky saw social language (akin to voice) as fundamental to learning and making meaning. Social learning theory proposed that children's understanding is shaped through interactions between people in relation to the world. Human knowledge and thought are fundamentally cultural, involving the social activities of language, discourse and other social contexts of communication (Edwards & Mercer, 1989). In the whole language reading methodology for example, the value of student interest was foundational: students chose what to read, made personal meaning of text, decided whom to share it with, and how to be

assessed (Short, Harste & Burke, 1996). Language and social engagement have long been understood as keys to understanding in the physical and cultural world.

Engagement can be defined as "psychological investment in and effort directed toward learning, understanding, or mastering the knowledge, skills, or crafts that academic work is intended to promote" (Newmann, Wehlage, & Lamborn, 1992, p. 12). Learning is an active process that can refer to both emotional and behavioral factors in which the learner uses sensory input to construct meaning. The foundational pedagogical perspective (Dewey, 1938) was grounded in active learner engagement with emphasis on the action of the learner who needs to *do something*; that learning is not the passive acceptance of knowledge that merely exists and is delivered to the learner.

Engaging a learner with appropriate challenge, support and opportunities for collaboration was what Vygotsky called the zone of proximal development described as "the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (1978, p. 33). According to Bea McGarvey, a Maine educator and national voice supporting mass-customized learning, "Learners are engaged when they are met at their individual learning level, when they are allowed to learn expected concepts or skills through one of their favored learning modes, and when they are allowed to learn expected concepts or skills using content that is of interest to them" (Williams, 2011). Personalized or learner-centered instruction requires development of an in-depth understanding of each learner. That knowledge allows teachers to create a psychologically safe environment, determine each student's readiness, identify multiple access points (choice) to increase engagement, and develop greater emotional intelligence (Powell, Kusuma-Powell ,2011; Moore, 1996). For authentic learning, there must be an opportunity to learn, problems must have a personal frame of reference and be open-ended (Chang, Mo & Singh, 2012: Rule, 2006). "This cannot happen without student choice in defining the problem and selecting the path of its solution" (Rule, 2006). "Keeping student voice central is essential to ensuring that the traditional system is not reproduced." (Postlewait in Sturgis, Patrick and Pittenger 2011, p. 21)

Summary

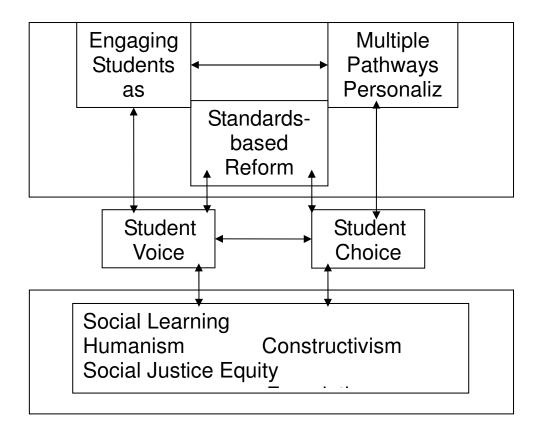
The importance of understanding the potential power of voice and choice has implications for enacting educational reform. Districts in California, New York City, Oregon, New Hampshire, Alabama, Alaska, Arizona, Maine and beyond have embarked on transformational learner-centered competency journeys (Sturgis, Patrick, Pittenger, 2011). This disruptive educational reform towards personalization requires us to engage students as "radical colleagues" (Fielding, 2006) who help drive the transformation. This transformed vision is a powerful movement towards equity (Miliband, 2004; Salinas & Garr, 2009) in which the school is a place that fosters student empowerment, where students become leaders of their learning, where individuals reach their own potential, support others in reaching their potential, and experience meaningful opportunities for personal growth through choice as well as supporting the development of civic efficacy.

These converging concepts, grounded in constructivism, social learning and social justice theories, frame the topic of this study. The literature review tells the story of a progression in American education from standards-referenced to standards-based towards more personalized, contemporary, competency reforms. The conceptual framework of this

study connects learner-centered instructional design including student voice and choice to its deep constructivist and social justice roots and supports the multidimensional value of actively engaging individuals in their own learning.

The significance of this research is bolstered by a compelling framework (shown in figure 1) that considers the role of voice and choice not only from the perspective of the individual learner but for its potential to include young learners as involved stakeholders in the important work of restructuring schools (Apple & Beane, 1995; Fielding, 2006; Mitra, 2001; Mitra & Serriere, 2012; Patrick, 2013). The findings of this study will help shed light on students' experience of learner-centered models that not only provide for student voice and choice as a key to instructional engagement but also support collaboration, communication, and shared decision-making as the critical foundations for creating just communities. The outcomes of this study will help to further the understanding of the role of voice and choice in the creation and sustainability of learner-centered instructional model as one school engages in the transformation towards the vision of this educational reform.

Figure 1 Conceptual framework



CHAPTER 3

METHODOLOGY

The purpose of this qualitative case study was to understand how fourth and fifth grade students and teachers in eleven classrooms experienced voice and choice and understood the role of the learner's voice and choice in the development of learner-centered instruction. Documenting and seeking to understand the student experience has potential value in contemporary educational reform as progressive learner-centered models place students in the center of their own learning. The qualitative method of a case study was appropriate for this study given the themes identified in the literature review of the topic and the proposed research questions. A case study of a bounded system, such as a school, provides opportunities for examination of multiple sources of rich data (Creswell, 2007; Feagin, Orum, & Sjoberg, 1991). This case study in particular allowed data to be gathered from a school site engaged in the process of transformation to a learner-centered educational approach. The scope of the case study also included consideration of both the ethnographic cultural aspects of student voice and choice and phenomenological insights into the transformation to learner-centeredness (Stake, 2005).

Given the topic, it was important to hear the voices of the learners. As reform towards learner-centered education has been in progress at the site of the proposed study for three years, it was important to explore the role of student voice and choice from both the learner and teacher perspective. The methodology of this study aligned with the topic from the perspective of valuing the young learners whose voices have largely been missing in the conversations about instruction. Attending to the ideas and considerations of students who have potential to contribute to and sustain change supports teacher learners who are learning new ways to engaging with students as stakeholders.

Perspective of the Researcher

With over twenty years working with educators and children in public education, my perspective is one of advocacy for children with sensitivity to equity and individual needs. I believe quality public education is a human right and actively engage in transformative leadership to affect that outcome. As a mature school leader and professional, I am also sensitive to the delicate nature of school culture, and the foundations of trust, professionalism and collegiality. This study was undertaken because of my professional and personal interests in specific aspects of incorporating student voice and choice within the context of competency reform. As a school leader and as a researcher I was interested in:

1) implementing learner-centered instruction

2) creating a democratic classroom that has a socially just foundation

3) documenting the perspective of a transformative school leader considering the potential for students to be change agents.

As an insider researcher active in both implementing and studying a transformation, it was important to be continually mindful of both the challenges and potential of supporting personally and professionally meaningful transition towards learner-centered instruction (Unluer, 2012; Merriam, 2009; Stake, 2005). I approached the study from the perspective of one who engages with the research of a personally relevant topic from within my school site. According to Stake (2005) this type of case study was intrinsic and instrumental. It was both personally relevant and designed to provide additional insights into the topic that were

practical, not theoretical or abstract (Stake, 2005: Merriam, 2009). In this case study the research setting was my own school where I had been a teacher and am currently an administrator. Being a member of a group as well as the researcher is considered the most important and challenging instrument in qualitative studies (Herrmann, 1989). Being a supervisor at the site was another important consideration throughout design, implementation and interpretation of the study. Dwyer and Buckle (2009) describe the experience of being both an insider and an outsider as a "space between" (p. 60). As a long-time educator and an administrator at the school I experienced the space between where not all experiences can be shared by everyone in any given population. The research designed to explore questions that could be explored in this case study addressed both the benefits and challenges of this perspective.

Research Questions

In this classroom based study of the role of voice and choice in learner-centered competency transformation, it was important to seek to understand the student perspective as well as the factors that influence participant teachers working to include of voice and choice in their classrooms. The following questions provided the framework for student focus groups, teacher interviews and other multiple sources of data in this case study:

- What is the role of voice and choice in a learner-centered classroom?
- How is voice and choice experienced in classrooms transforming from a traditional to a more learner-centered instructional model?
- How do students and teachers experience voice and choice in a learner-centered classroom?

• How do students and teachers describe the factors that support or suppress voice and choice in a learner-centered classroom?

Setting

Educational systems in Maine have momentum to create and implement learnercentered, competency school reform (Maine DOE, 2012; MCCL, 2014, Sturgis, Patrick & Pittenger, 2011, Great Schools Partnership, 2013). An upper elementary public school of approximately 400 fourth and fifth grade students in a district committed to strategic reform in southern Maine is the site of the research. The school, comprised of nine fourth grade and nine fifth grade classrooms has been actively engaged in instructional and cultural changes aligned with the vision of learner-centered, competency education for more than three years.

Professional development and professional learning time has been dedicated to implementing related curriculum, cultural and classroom-based instructional changes. The district provided initial professional development in the fall of 2012 and targeted professional development modules through the winter of 2013-2014 to support this transformation. Reinventing Schools Coalition (RISC) provided interactive seminars supporting the role of shared vision and transparency in a personal mastery system (RISC, 2014). Great Schools Partnership supported the development of a standards-aligned curriculum in competency system. The most recent related initiative at the site is the use of a technology platform to track individual student progress towards standards which is currently in its first year of implementation.

At this school, momentum toward learner-centered instructional practices can be found in both practical instructional and cultural changes that have been evolving since adoption of the school's strategic plan in 2011. A case study in this rich setting allowed for

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diverse perspectives, for participants' meanings and multiple authentic sources of data to be included in order to bring to light multiple aspects of the role of learner voice and choice (Creswell, 2007; Stake, 2005). Being an insider to the site as a school leader provided access to classrooms, teacher and student participants, district and school documents, classroom artifacts, instructional materials and observational data in classrooms of participant teachers, all valuable sources in this case study (Merriam, 2009; Yin, 1984).

Participants

Participants of the study included a heterogeneous group of students in fourth and fifth grades and eleven general education teachers. Thirty-three student participants were organized into five different grade level focus groups including two fourth-grade groups and three fifth-grade groups of between five and seven students. Teacher participants included general education teachers who are primarily responsible for all core academic subjects; reading, writing, math, social studies and science. Six fifth-grade and five fourth-grade teachers participated in semi-structured interviews. In addition to interviews and student focus groups, classroom observations and artifacts from teacher-participant classrooms provided for multiple sources of data to inform the research. For this classroom-based case study it was important to integrate insights of both learners and of educators in this study of the role of voice and choice in a learner-centered instructional model.

Participation was voluntary for both students and teachers. Outreach for students was conducted following the appropriate protocol for consult with and permission from parents (Coyne, 2010). Maximal variation criteria for selection of participants in student focus groups included: gender, academic performance, ethnic and socio-economic factors. A representative sample of thirty-three fourth and fifth-grade students was obtained (Creswell, 2012). Both fourth and fifth grade student focus groups included students with average academic skills, as well as those with significantly above and below expected grade level skills and students from diverse cultural and socio-economic backgrounds representative of the community.

Purposeful sampling of teacher participants was used to identify educators in different stages of implementation who were actively engaged in classroom transformations related to learner-centered competency instruction. This purposeful sampling strategy supported understanding of the research problem by seeking unique perspectives of practical experience that offered valuable phenomenological insights (Creswell, 2007). Maximum variation was also included in the sampling procedure as teacher participants varied between one and over twenty years of experience and included a gender-balance that matched that of the site. The number of years of teaching experience, number of years at the site, and degree level of participants are provided in table 1.

Table 1				
Teacher Participants				
Participant	Grade Level	Years Instructing	Years at Site	Degree Level
Teacher 1	4	7	7	Master *
Teacher 2	4	1	6	Master
Teacher 3	5	4	3	Master
Teacher 4	4	3	3	Master *
Teacher 5	4	10	10	Master *
Teacher 6	4	4	4	Master *
Teacher 7	5	11	6	Master
Teacher 8	5	10	7	Master
Teacher 9	5	12	5	Master
Teacher 10	5	23	22	Bachelor
Teacher 11	5	10	5	Master *
<i>Note.</i> * One fifth grade and four fourth grade participant teachers completed advanced degrees by the end of the 2014-2015 school year.				

Validity and Reliability Strategies to Strengthen Methodology

The school site, over the past six years, has established a professional learning community (PLC) model for teacher teams and each of the teams has a representative who also functions as a member of the collaborative leadership team (Dufour, Dufour, Eaker & Many, 2006). This collaborative leadership team (PLC facilitators) of six teachers and two administrators works together to maintain collegial communication, provides a forum for shared leadership, maintains a focus on data-driven decision-making to improve student outcomes, and plans profession development aligned with our school vision and school-wide data. This site-based representative team provided a forum throughout the study that strengthened the data-collection, included a broader perspective and maintained an active connection between the school's vision, goals and the research.

PLC facilitators were engaged in conversation to understanding the purpose of the study and the specific research questions. These facilitators provided focused feedback to help clarify and revise the proposed teacher survey questions, which had been drafted based on the literature review of voice and choice in the classroom as well as research on best practice in conducting qualitative interviews. The members of the team were also asked to consider if there were additional questions of importance to include in the teacher interviews. The facilitator team provided feedback on the student focus group questions as well. The synthesis of feedback garnered from this team provided for a variety of educator perspectives including special education, Title 1, school administration and both fourth and fifth grade instructional levels. Feedback was discussed to ensure clarity and considered in the context of the site and the research questions. Interview questions were adapted based on specific feedback.

Stakeholders in this study include the school's site-based leadership team, administrators, all professional and para-professional educators in the school, the students, parents, board members, same-district educators, and the broader community. Other schools, and local or national affinity networks, may also consider themselves stakeholders as they explore or commit to learner-centered competency reform.

Data Collection Methods

A robust case study includes multiple sources of data (Yin, 1993; Merriam, 2009; Stake, 1995). The data sources available at this site provided for multiple perspectives that

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supported the appreciation of the complexity of the research questions related to a progressive reform being undertaken at one elementary school. The data sources included teacher interviews, student focus groups, observational field notes, documents and artifacts.

Semi-structured interview for teachers. Questions for teacher participants were constructed around the concepts identified in literature review and also aligned with language common in the professional development language and activities provided by the district to support transformation to a learner-centered model during the past three years. The questions were revised with feedback from the leadership team and then piloted with one of the fifth grade PLC facilitators. The resulting questions (provided in Appendix E) were used to conduct semi-structured interviews with the eleven teachers. A sample of questions included:

- How/when do students in your classroom have opportunities to have a voice?
- How/when do students in your classroom have opportunities to have a choice?
- What are some of the things that facilitate the inclusion of voice in the learnercentered model? (what has worked...)
- What are some of the things that are challenges to the inclusion of voice in the learner-centered model? (what gets in the way ...)

Each participant teacher engaged in one interview session lasting between twenty and sixty minutes. Follow up sessions of approximately five minutes helped to clarify and add detail as needed. Technology was used to assist with collection, transcription, coding and security of data. An audio recording application was used to record interviews. Themes from the semi-structured interviews were identified after recording, transcription and coding. Member checks supporting validity and understanding included a variety of activities based

on participant preference including conversations to clarify meaning, add information, review transcripts and discuss themes identified (Creswell, 2012; Merriman 2005; Stake, 2005). The member checks with teacher participants occurred in multiple phases to support validity or what Yin (1993) refers to as trustworthiness. The first opportunity to clarify meaning of statements was provided by restating and asking follow-up questions making meaning during the semi-structured teacher interviews. Once interviews had been transcribed and coded participants were provided with an open-ended opportunity to provide feedback, clarify, and request information be deleted or added (Merriam, 2009; Yin, 1993). Given the site of this study and the highly personal nature of teaching and leadership in an evolving collaborative model, if a teacher participant had requested any data be deleted from the report, that request would have been honored. Member checks included in-person and written format depending on participant preference.

Focus group for students. Five approximately forty-five minute audio-recorded focus group sessions with students were conducted. Focus groups were facilitated by the researcher and also attended by a site-based teacher who serves across multiple classrooms to support comfort level of student participants by including a familiar teacher who is not a school administrator. Questions were constructed in age appropriate understandable terms (Archer, 1993) and aligned with the language of common classroom practices implemented during the prior two years with the goal of 'building a collaborative classroom culture'. A pilot of the student focus group to discuss both the topic in general and the questions was conducted. Student questions (provided in Appendix D) included:

- How have you helped to decide how things would be done in your classroom this year?
- During which learning activities can you make your own personal choices?
- Have you had opportunities beyond the classroom (bus, playground, café, schoolwide)?
- How do you feel when you have the opportunity to decide things about your learning? With the questions as a framework for focus groups, students provided insights and rich discussions that supported the emerging understanding of the research questions.

Individual student responses and group insights were combed for themes that informed observations as well as supported a richer understanding of the topic that included student voice as described in the detailed presentation of a case study (Merriam, 2009). Follow up conversations with students were conducted as appropriate. These follow-up conversations about focus group comments or classroom observations helped to clarify or add depth of understanding to the topic and the research questions in support of the case study presentation (Yin, 1993). Inclusion of student voices in the study provided additional context for the teacher interviews and provided valuable insights that supported an understanding of how students experienced voice and choice in participant classrooms. Including students in the study gave voice to important stakeholders and may serve as a model to continue to include students in a meaningful way.

Classroom observations. Observations in general education participant classrooms were conducted to identify artifacts, triangulate data as well to help clarify, classify and

describe emerging findings and contextualize interviews and focus group data (Merriman, 2009). Observational field notes included descriptions of the physical setting of the classrooms, tools used to support student voice (such as protocols, organizational tools, 'parking lots' or classroom charts), interactions (class meetings, students-teacher and student-student), and evidence of student choice in learning activities, modes of learning and student products. Observations across the participant classrooms were continued throughout the cycles of data collection and helped to clarify, synthesize and contextualize data provide in focus groups and interviews.

Artifacts. Valuable data included objects and artifacts that became apparent through the classroom observations, interviews and focus groups. In classrooms practicing learnercentered competency instruction, artifacts that supported a deeper understanding in this case study included student choice projects, student writing, differentiated curriculum materials, graphics/charts and other evidence of student voice and choice. These artifacts helped to describe and explaining the various opportunities, interpretations and roles of voice and choice found across the participant classroom (Creswell, 2007; Yin, 1984). Follow up conversations with teacher and student participants about artifacts identified through classroom observations also helped to ground the data from interviews and focus groups in the learning context.

Documents. District and school documents were analyzed to help contextualize the research at the site. The strategic plan, created with stakeholders in a collaborative 'future search' process that envisioned a learner-centered competency transformation, included community themes and beliefs about education as well as concrete action steps. These action steps were organized in a 'blueprint' that provided timelines, roles of responsible groups, and

associated professional development. From the school site, the strategic plan goals also provided the foundation for the yearly school goals. These documents were valuable in the initial case study site description by clarifying: how the strategic plan was developed and how it led directly to the district and site goals, and the transformative professional development related to the school's goal to increase capacity to provide voice and choice as an essential component of learner-centered transformation. Other documents from the Maine Department of Education's guidance and regulations regarding proficiency-based education and related case studies also provided an understanding of the transformation at this site as it relates to the broader context.

Data Collection Timeframe

The study was conducted during the 2014-2015 school year between early fall of and early spring. Between September and October, Institutional Review Board approval and site permission from the district were obtained and the research proposal was presented and approved. Throughout October, focus group and interview questions were piloted and revised based on feedback from pilot participants, site-based leadership team, and UNE cohort and instructors. After participant outreach was conducted for student and teacher participants and all appropriate permissions were obtained, focus groups and teacher interviews were conducted between November 2014 and January 2015. During the same time period, classroom observations were conducted and district as well as school documents and classroom artifact were collected. The process of transcribing, coding and analyzing the data continued from November through March. The process of synthesizing the data into the written dissertation and presentations to stakeholders continued from January through May of 2015. The time period of the study, which was the majority of the school year, provided a body of data from the multiple sources at the site that informed the research questions. In addition to the time related to gathering data, taking ample time supported ethical considerations for student and teacher participants that were so important in this school-based study.

Limitations

Possible limitations of this study include its small sample size from eleven classrooms within a single school and findings that are not designed for generalizability to other school settings. The position as an administrator and researcher at the site itself is another limitation. Possible bias, as one who both studies and supports the transformation to learner-centered instruction and who believes there is value in student voice and choice was an ongoing consideration in data collection, analysis and presentation. Ethical and honest data collection, sharing, interpretation and reporting of both supportive and disparate insights were important throughout the study.

Ethical Considerations

As a school leader who was conducting research about this professionally relevant topic while participating in leading the transformation to learner-centered competency instruction at the school, it was a priority to make clear from the beginning the purpose of the study, the use of the data, and the ongoing voluntary nature. Ethical considerations included confidentiality, security of data, and the participants' ability to revoke consent and withdraw from participation at any time. While this study was aligned with school's vision and permission had been given by the district to proceed with the case study, the challenge of being a school administrator and an imbalance of power dynamic, or at least that perception, remained a critical consideration. Teachers are not directly employed by the principal researcher but are supervised by the researcher in the fulfillment of the role of assistant principal at the site. The researcher in this case plays a role in hiring and evaluating staff, scheduling, budget, student discipline, professional development and the strategic plan enactment (which is related to the topic of the study). It was important to be sensitive to and address these possible dilemmas in the research design (Merriam, 2009; Unluer, 2012). The primary ethical concern was for the participants in the study.

Participant Protections

The understanding that participation in the study was voluntary and confidential was supported by transparency about the topic, clarity of purpose of the study, and an unhurried consent process with all participants. Institutional review board protocols and rules for research with human subjects, including focus groups for children, were strictly followed (Penn State University, 2007; University of New England, 2014). Informed consent forms were clearly written and all participants' questions were addressed. Interview and focus group information was not connected to individual participants. Access to participant information and data is maintained on a secure network and strictly protected. Artifacts collected were anonymous (names and classroom redacted) to protect participants. Provisions were made (although not utilized) such that any participant who felt uncomfortable given discomfort in a focus group or interview or potential situations that have may presented in the school such as confidential personnel or performance matters would be withdrawn from the study.

During the teacher participant outreach, the clarity of purpose of the study, the ongoing voluntary nature of participation and confidentiality of data were discussed. Ample opportunities in small groups or for individuals to discuss questions were provided. To

address possible confusion between data collection observations in classrooms and supervisory observations of teachers, adjustments were made (by swapping with the Principal) to the supervision and evaluation assignments for school-year 2014-2015 so that the researcher was not evaluating teachers who participated in the study.

It was important to be mindful as a variety of positional and site-based challenges may have emerged during outreach, data collection and analysis. Individuals, including students and teachers who chose not to participate, were assured of good standing with no loss of benefit, standing or regard. This was communicated in child-friendly language for students. Perceptions of others related to positional power were an ongoing consideration throughout the case study. Teaching is very human and deeply personal. During member checks any participant requests for data to be interpreted in a different way, would be given serious weight. In a case study the making of meaning comes from the interaction with participants therefore modeling reciprocity, respect, clarifying ideas, and allowing for differing perspectives support participants and strengthen the validity of the data (Ruben & Ruben, 1995). In addition, maintaining field notes strengthened and supported all data collection activities including personal reactions, feelings, questions and attitudes and provided an ongoing forum for reflexivity (Merriam, 2009; Miles, Huberman & Saldana, 2014). Monthly consultations with site-based teacher leader team and advisors also supported an ongoing reflective approach to data collection, perceptions of participants and analysis of data (Coughlan & Brannick, 2009). While stakeholders across the school were involved in both formal and informal conversations about the study, care was taken to ensure confidentiality of participant teachers and any data they provided.

Pilot Study

Pilots of study instruments were conducted to assist with focus group format and reworking interview questions based on feedback. The group for the pilot study included three familiar fifth grade students from the past school year to ensure comfort of the students and facilitate honest sharing of opinions. Giving student voice holds a central place in this study, the pilot interview for teacher participants was revised after focus group pilot informed the wording of the questions by providing options for more informal language. This pilot also provided insights about focus group introduction, effective focus group size and practical insights about time management during the process. Teacher interview questions were piloted with a teacher at the site and adjusted based on feedback. Data related to the research questions from both pilots were included in the study.

Analysis

Meaning in this qualitative classroom-based case study of the role of student voice and choice was facilitated by several coding and analysis procedures to identify patterns and themes and review for consistency. This active school site and its participants provided for a better understanding of the research questions about student voice and choice, the phenomenon of learner-centered competency instruction and transformational change. Throughout the process of data collection and analysis, significant meanings and themes were identified as comments and ideas reappeared during the coding process (Stake, 1995). Focus groups provided a social context to gain understanding of the topic from the point of view of students that informed ongoing data collection such as follow up conversations or things (data, artifacts) to look for in classroom observations. Teacher interviews further broadened the context of voice and choice as embedded in the instructional model. Both the focus groups and interviews were audio recorded using technology applications and thoroughly explored for information that supported understanding of the case. Artifacts and observations, as previously described, enhanced understanding of themes.

Including both teachers' and students' voices (quotations and themes) in this work were important and provided the most powerful data. Coding was a grounded, inductive process wherein bits of meaning related to the research questions were named beginning after the first interview (Glaser, 1998; Creswell, 2007; Merriam, 2009) and continuing throughout the entire data collection process. Data from interviews and focus groups, after verbatim transcription, were coded line by line in order to identify, first general and then layered, themes (Creswell, 2012; Sikes & Gale, 2006). Strauss and Corbin (1990) and Miles, Huberman and Saldana (2014) support this grounded process of coding beginning with inductive or open codes which are developed into axial codes, and then evolve into selective codes or themes. With each subsequent interview and focus group, the process was repeated using a constant comparison method (Glaser, 1998; Lincoln & Guba, 1985) to identify patterns in the data. Observational data helped to clarify participant comments, classroom activities related to voice and choice, and grounded evolving themes that emerged throughout the data collection period. The codes were grouped and regrouped in an ongoing process of categorizing and reorganizing codes to uncover themes that aligned with the research questions (Miles, Huberman & Saldana, 2014; Creswell, 2012).

All collection, coding and analysis of data was done by the researcher. Given the amount of data in this case study, technology was a valuable tool used to assist with organization and security of the multiple data sources (Denzin & Lincoln, 2011; Miles,

Huberman, & Saldana, 2014). A web-based audio recording to transcription application provided accurate and timely data collection from interviews and focus groups. Spreadsheets and advanced word processing programs were used first to identify words and phrases in the transcribed texts and then to capture data in open codes. As these open codes began to cluster around potential themes and concepts, axial codes were identified and the spreadsheet was organized into categories in the literature review and by research questions (Merriam, 2009). The flexible and efficient sorting features of the spreadsheet program were used to consider and reconsider themes in relationship to a variety of factors: concepts in the literature review, research questions, and other triangulating data such as observations and number of times data recurred. In addition to improving efficiency, technology was used to maintain a data trail and provided data security that supports ongoing participant protection.

Validity, in addition to the cyclical process of inductive coding, was supported through triangulation from the many data sources, observation, ample time collecting and analyzing the data, and peer and advisor review (Stake, 1995; Creswell, 2007). As an insiderresearcher, member checks and field note reflections addressed researcher bias specifically. Across the data set, checking for representativeness, following up on surprises and an ongoing openness to feedback from participants were additional methods for improving validity (Miles, Huberman, & Saldana, 2014; Lincoln & Guba, 1985).

The data were responsive to the research questions and were therefore organized into categories that furthered the understanding of the research questions and aligned with foundational themes in the literature (Merriam, 2009). From within those related categories, multiple supportive themes emerged that provided the basis for the narrative presentation of the findings of the study in Chapter 4 (Creswell, 2012). Insights, conclusions and

implications from this study and the relationship to the literature review of the topic were developed and are presented in Chapter 5.

Usefulness of Findings to Stakeholders

This qualitative case study of voice and choice provides findings that are a valuable addition to the growing understanding of the role of voice and choice as aspects of the transformation towards learner-centered instruction and related competency reforms gaining momentum across the country. This classroom-based case study included students and teachers who may have found value in insights shared through the discussions or reflections about voice and choice and its role in their own lives and classrooms. Teacher participants may have benefited from personal and professional insights which could inform their classroom practice. Child participants may have benefited from the experience of having their individual voices valued as important and worthy of attention of adults, teachers and school leaders. It is possible that the student participants may be empowered to exercise their voices and to understand individual and group power to affect change. The school leadership team and administration may benefit from specific insights gained from this case study that could support the vision at the site school and at the district level. Insights from the study also have potential benefit to the school board, local business partners, community members, parents, partner colleges and universities as we are engaged in and will likely continue to be affected by this transformation as it evolves.

CHAPTER 4

FINDINGS

This qualitative case study employed at an elementary school site involved in a progressive transformation from a traditional to a more learner-centered instructional model was designed to support understanding how students and teachers describe the role of student voice and choice as it relates to 1) implementing learner-centered instruction, 2) creating a democratic classroom that has a socially just foundation, and 3) documenting the perspective of a transformative school leader considering the potential for students to be change agents. The research questions that guided this study included:

- What is the role of voice and choice in a learner-centered classroom?
- How is voice and choice experienced in classrooms transforming from a traditional to a more learner-centered instructional model?
- How do students and teachers experience voice and choice in a learner-centered classroom?
- How do students and teachers describe the factors that support or suppress voice and choice in a learner-centered classroom?

Data in this case study were gathered through teacher interviews, observations, documents review, artifact review, and student focus groups. These multiple data sources helped to create a rich perspective and understanding of the role of voice and choice within the transformation to a learner-centered competency instructional model. Data review included strategic plan documents, professional development history, school and district mission, vision and goals. These data helped to establish a foundation for understanding the context of the transformation. Teacher interviews and student focus groups provided a rich and deep understanding of how the transformation at the school site was being experienced and understood by educators and by students. Observational and artifact data provided additional evidence of the information collected through interviews and focus groups. All data sources when woven together provided insights that supported a better understanding of the research focus.

The Context of the Study

When reviewing the findings of the study, the insider perspective of the researcher and context of the site are important factors to consider as this study is limited to one school site. Descriptions of the community, the transitions impacting the school, the participants, and relevant Maine Law all provided valuable additional context for understanding the data.

Insider Perspective

As an inside researcher and educator at this elementary school for over eighteen years, I bring history and perspectives that both inform and challenge my view of the site of this case study. Having been a special education teacher at this elementary school for twelve years before becoming a school-leader for the past seven years, provided one insider's view of the school's strengths and challenges. Professional and personal experiences at the site and a belief in the transformed vision of school that is more learner-centered all contribute to, as well as challenge, the interpretation of data. This case study is grounded in a rich understanding of the context at the school while the challenge of insider bias is addressed in the ethical and analytic approach described in the methodology section. The following description of the school supports a better understanding of the purpose, context and data in this case study.

Community

The site school selected for this case study was an upper elementary school of approximately 400 students set within a community of approximately 17,000 residents living in an area of suburban and rural settings with a broad diversity of income levels. In the past twenty years, the town has experienced significant business growth while the school-aged population remained relatively stable. Median household income within the district was 58,600 dollars annually and average home value was 216,000 dollars. The percentage of families eligible for free or reduced lunch had recently increased to 37 percent. The racial composition was 94 percent Caucasian (City-data, 2015). The community has been generally supportive of the local schools as evidenced by active participation in: the yearly budget forums, passage of school budgets, school volunteerism, and participation in the strategic plan development.

A School in Transition

A school is more than a building, like a family, it has a rich history and complex dynamics. It was important to understand the underlying factors related to the implications of this transformational initiative. When gathering, considering and analyzing the data in this study it was also important to consider the past and present conditions of the school site. The context of a progressive history, leadership and culture challenges, professional demographic changes, renewed collaborative model and curricular focus were all important factors in this study.

Progressive perspective. The school setting has a rich historical context. From its initial creation in 1974 as an open school (with no internal walls until the 1999 renovation),

dedicated to developing personal education plans, the site quickly developed a positive reputation as an innovative school and so became the yearly host for the 'Maine Event', a progressive regional professional development activity. Teachers formed teams, embraced collegiality and successfully negotiated for additional prep time to collaborate with each other to create engaging units for their students. This educationally progressive school has also faced some significant challenges.

Leadership and culture challenges. Two related challenges have been a significant factor at the school. A major disruption occurred in 1987 when the teachers' association, in response to a conflict with leadership about additional requirements to supervise children during lunch transition, began what became a district-wide and eventually court resolved dispute. In the legal sense the district leadership prevailed, however, the culture of conflict between district/principal leadership and the teachers' association leadership was firmly established. In the years since 1987, conflictual teacher-leadership relationships and resulting principal turnover has been a frequent and at times turbulent and highly disruptive occurrence. In the past twenty years there have been four principals with additional insertions of three interim-principals put in place during turbulent times when teacher-administrator conflicts led to untimely (some mid-year) principal resignations. The resulting culture was factionalized and characterized by a lack of trust. Cycles of professional development to build trust, open communication, support a transparent decision-making model, and positively resolve conflict were provided across the past two decades.

Changing leadership profile. In recent years, however, the school has experienced increased personnel stability and a renewed focus on collaboration. A dramatic transition from more veteran teaching staff to a newer teaching staff due primarily to retirements has

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brought energy and helped to dissipate the memory of past conflict. The leadership team and PLC model have been significantly more stable. The school's leadership team includes a veteran principal, who has been in the position for ten years (the longest tenure since the 1970's) and me; I am currently serving my seventh year as assistant principal. Of the eighteen general education teachers, nine teachers have been brought into the school in the past six years. This shifting demographic also had implications for professional development.

Data Sources

The primary source of data in this case study was obtained by talking with stakeholders; specifically students and teachers. Participants were children and educators experiencing the transformation towards learner-centered proficiency-based instruction firsthand. Their insights built the body of the data in the study.

Teachers

Teacher participants, selected for both operational construct and maximum variation considerations (Patton, 1990), included eleven teachers; five fourth grade general education teachers and six fifth grade general education teachers. Participant teachers, as detailed in Table 1, have between one and over twenty years' teaching experience at the site. Participants included both female and male teachers in a ratio that represented the gender of school staff (many fewer males). The sample purposefully included those who were perceived by the researcher as more fully enacting the transformations as well as those who were perceived as not yet as fully enacting changes described within a more learner-centered instructional model. Semi-structured interviews were conducted at mutually convenient times and places during a period of six weeks. Interview settings and times were designed to protect the confidentiality of participants. Member checks of coded data transcripts were conducted with all participants either in person or in writing according to individual preference.

Students

Student focus groups included thirty-three nine and ten year old students randomly selected from the eleven participating fourth and fifth grade classrooms. Five different focus groups of between five and seven students, balanced by gender, inclusive of a diverse population, and facilitated by the researcher, also contributed to the themes and an understanding of how voice and choice is perceived and experienced by the students at the school site. The data is presented as broad themes derived from the multiple data sources, and then further described by categories from within those themes.

Teacher Interviews

Semi-structured interviews with teachers elicited themes that provided a practical understanding of how teachers provided students with opportunities for voice and choice, the resulting learning environment, and increased student engagement. Teachers also provided insights about what challenged and sustained them as they developed their professional capacity to provide their students with a more learner-centered experience. Student focus groups provided parallel and additional themes from the perspective of the learner.

Student Focus Groups

The student focus groups for the most part provided data that closely aligned with the themes of teacher interviews. From the perspective of the learner, students described how voice and choice was experienced in their own classrooms through routines, collaborative structures and projects. Students described the experience of being engaged and motivated to progress through proficiency standards. In addition, students described personal insights about their individual learning needs and preferences as well as how having voice and choice made them feel.

Observations and Artifacts

Artifacts and observations from participant classrooms helped to clarify and support themes that emerged from interviews and focus groups. Throughout the process of data collection, the incorporation of classroom-based data provided a grounding context for and exemplars of themes and strategies referenced in the teacher interviews and student focus groups.

A schedule of bi-weekly observations of each participant classroom provided data from different periods of the day including academic subjects as well as transitions, interactions, class meetings and routines. Observational field notes provided descriptions of the instructional environment across participant classrooms including: structures, learning activities, student interactions, student-teacher interactions, teacher-teacher collaboration, classroom processes, use of tools that supported voice and choice as well identified valuable classroom and student artifacts. Data collected throughout the course of the study was included in the analysis process to support the themes that emerged from participant interviews and focus groups. In addition to the bi-weekly observations, an informal process of additional ongoing walkthroughs provided many opportunities to follow-up on processes and strategies shared by participants. Targeted observations of student voice activities, in addition to the general classroom observations, provided data from classroom meetings related to reflecting on the codes of collaboration, collaborative problem-solving, and goal reflection meetings provided additional contextual understanding. Findings supported themes from teachers and students and provided a much clearer understanding of tools, procedures, instructional strategies, and social learning opportunities, as well as a general sense of the depth of learner-centeredness and voice and choice opportunities provided in each classroom. The interplay between interviews, focus groups, observations and artifacts was important in identifying and synthesizing themes.

District artifact documents, as previously described, provided the foundational context for the vision of a more progressive learner-centered educational experience for students. These included: future search documents, strategic plan 'blueprint', task group assignments, visual presentation to staff-stakeholders, Superintendent's letter to parents, school-level goals and leadership report for each year since adopting the strategic plan all showed the important connections between the community stakeholders, the district work and the efforts at the school to operationalize the vision.

In addition to district and school-level artifacts, classroom artifacts identified in observations were valuable sources of data. These included copies of student work, PLC team goals and weekly reflections, capacity matrices, and individual or group projects. Electronic photos of student work spaces, efficiency tools (SOPs and procedure posters), classroom organization structures that supported learner-centered competency progression (material crates, self-correction binder, goal charts, etc.), provided concrete evidence that supported emerging themes. The ongoing cyclical process of data collection also allowed follow up conversations with teachers and students to clarify information gathered from observations and artifacts. The multiple forms of data helped to clarify how the elements connected to better inform the findings of this study.

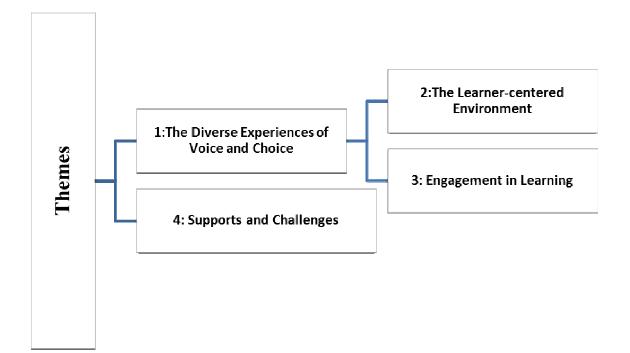


Figure 1 Organization of Themes

The categories of interconnected themes provided by this qualitative case study of the role of student voice and choice in learner-centered competency reform (shown above in Figure 2) include: Diverse Experiences of Voice and Choice, the Learner-centered Environment, Engagement in Learning, as well as Challenges and Supportive Factors.

Theme 1: Diverse Experiences of Voice and Choice

Practical details and learning aspects describing the ways in which students experienced choice and voice through the perspectives of teachers and students were garnered through the interviews, focus groups, observations, and artifact analyses. The findings described below, provide some important insights for understanding the transformation to learner-centered practices in participant classrooms. The resulting themes and patterns associated with both voice and choice were gleaned from the perspectives of teachers and from students in eleven classrooms in one upper elementary school. Observations and artifacts provided additional detail and examples to support understanding of both concepts as they developed across the eleven participant classrooms.

Learner-centered proficiency-based transformation is not based on the adoption of a program, it develops and it is interpreted differently in each classroom. Students and teachers in the eleven classrooms working to develop a more learner-centered competency model experienced differences in how their classrooms were structured and the opportunities supporting voice and choice. Despite these differences, there were aspects of choice in the learning experiences that were common across many of the participant classrooms.

While throughout the literature the phrasing of 'voice and choice' is dominant, the presentation of choice precedes voice to more clearly reflect the data and the relationship between the two factors. The following section describes how students in this case study were provided opportunities for and how they experienced choice in learning. Choice was typically experienced in learning through choices in: practice activities, partners, places, learning topics and projects. The degree to which students had choices, and details about how choice was experienced, differed in participant classrooms. However, between student and teacher participants, the aspects of the learning environment most typically related to choice were consistent. With respect to the theme of choice, both teacher and student perspectives were aligned and are presented as a cohesive theme supported by relevant quotes. The following descriptions progress from more superficial structural choices to more advanced learning aspects of choice in this classroom-based case study.

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Choice in Practice Activities and Pace

Student and teachers most commonly reported the aspect over which choice was most readily available or implemented was in how students would practice a skill related to a specific learning target. Math was the subject that was reported to provide the most choice for the learners. Observations and artifacts from all participant classrooms further supported that students were provided with more choices in math than other subject areas. The choices were typically structured in advance by teachers in the form of a tool referred to as a 'capacity matrix' (Appendix A) which will be discussed in more detail as a supportive element. The activities allowed for a choice among practice options aligned with the progression of learning under a standard.

Practice activities typically included: worksheet choice, order of completing practice activities, technology program activities, and games. Two students explained practice choice, "I don't want to do a paper like the same thing that everybody else is doing because sometimes it might be too easy for you and I want to have fun and I want to have a little bit of choice when I want to do it, like what time and where I have to do it" and "I like it because we can do IXL, or do a worksheet and it's just really fun because I just get really far into it." Not all students were working on the same activities at the same time.

In more than half of the participant classrooms, it was reported that students had significant pacing choice. In most classrooms students decided how to manage assignments across the week which led to some choice in which assignments to complete in class and which they should complete for homework. Student described how they experienced pacing choice: "We can pick how many pages we want to do on certain nights...and if you decide how many pages you want to get done in a night, if you want to skip a night, or if you can't

that night, or whatever...you just have to get it done by the end of the week." This aspect of choice was supported by Teacher 1 who described, "for Math and Language Arts on Tuesdays and Thursdays, they get their choice for what they do for homework...and the kids really enjoy that, it makes them feel like they have some ownership." Teacher 11 also described homework choice, "They usually come up and say, 'I worked really hard in this test all class.' That's great-no homework. Or some people say, 'I want to bring this home and finish it up tonight.' Absolutely, go ahead. I think they like the ability to choose whether or not they have homework."

In addition, because it was common for teachers to provide for flexible pacing and practice, this naturally had an impact on the approach to assessment and assessment timing in more than half of the classrooms. Students shared, "Oh that's totally free, whatever- you don't even have to finish the matrix in our class before you take the assessment" and teachers agreed, "I have one girl who already took fourth grade math last year. So I've' really sped her along and all she wants to do is get onto fifth grade work." In addition to choice in practice activities, students were often able to choose where and with whom they would complete the work.

Choice of Partners and Places

To varying degrees, students in each classroom were able to make some choices about how they would complete practice activities. This included: where in the classroom they would work such as at their desk, on the floor, on a physio-ball, outside in the hallway or at a computer. Individuals could also commonly choose with whom they would work. Some chose to work alone, others in pairs and some in small groups. In focus groups students shared details about how they made different choices in partners and places depending on how they felt on a given day and how effective they found prior partner work. The choice of partners and experiences led to some of the most commonly reported insights later described as experiences for students. Teachers and students also discussed the relationship between effective, productive partner choices and behavior while in partner groups and the ongoing ability to make such choices. One student said, "You can pick where you want to sit, you can sit anywhere you want to, because there's no desk or anything like that, you can just go sit wherever you want." Another student said, "on certain days we read the Reading Street story to ourselves, or groups or two or three or all together...we take a vote."

Classroom (and hallway) observations strongly supported the many options students had for choosing their working area, groupings and partners. At this school it was not typical for students in a classroom to be seated at their own desks working individually throughout the day. Observations, artifacts and participant information also supported an element of choice in learning topics.

Choice-based Topics and Projects

Within all participant classrooms there were opportunities to choose which topic to learn about. These choice topics were most frequently sub-topics offered under a broad learning target or standard. Artifacts that showed choice included a variety of topics, research reports, and projects. Observations of student conversations about project topics further supported choices in some aspects of learning.

Students in each focus group also specifically mentioned free independent reading as an aspect of learning over which they typically had choice. This is not atypical in more traditional classrooms but given the number of times it was mentioned and the personal reasons presented as to why it mattered to students, it was clearly an important choice. Many students in focus groups reported how they "liked" choice in reading: "I like independent reading - on my own", "I like to read because of all the books I choose, they're fun to read and they're like fairy tale ones so it's fun!", "I like entertaining books, and some people like information books. There's different types of readers, and if you don't like the book that you're reading, and you can't switch, then it's kind of hard to concentrate on that." Teacher 11 supported this finding stating, "I found that they are more engaged in reading it. Instead of just handing them a book and saying, 'Here, read this one.'

In addition to daily practice and reading choices, project choices of more depth were described as one of the most engaging aspects of the learner-centered model. These advanced levels of choice were described and observed in more than half of the subject classrooms. It was somewhat less frequent in occurrence (because of the amount of time required) that students would choose to self-develop more authentic application projects related to a learning target. Choice projects would generally be an option for students during personal learning time (PLT) or at the end of a unit of learning as described by Teacher 7:

In terms of our learning targets, in our matrices, I don't want them to do everything on it, they know it, they can move on, they can do a project. A lot of times they come up with the idea, they're like, 'Well, can I do this instead?', and as long as it's relating to the learning target, and they're tying it in and I can assess it, I honestly don't mind how they do it.

In the most common example, students could decide which aspect of a broader topic they would like to learn more about. For example under the general science topic body systems, students could decide which system to study and how to demonstrate their learning by choosing different products that demonstrated the learning. Other artifacts included:

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student-created math games, social studies posters, body system projects, dioramas of books, topical power points, and free-writing pieces. Teachers described the challenge of managing off-base choices of students several times throughout interviews but teachers also described feeling, "amazed" and "surprised" about the resultant student engagement and reported deeper learning during choice projects.

The perspectives about how students experienced and were provided with choice from teacher interviews and student focus group were aligned. Details from classrooms led to an understanding of the practical ways that choice was provided and experienced. All participant classrooms and focus groups described degrees of choice in practice activities, partners, places, topics and projects. As students progressed from the basic to more advanced concepts related to choice they also described emotional, social and learning impacts described further under the theme of the *learner experience*. The exploration of choice also led to the understanding of the fundamental relationship between the two related concepts in the study. Choice meant students had some 'say' and the interrelationship between the two elements, voice and choice, became increasingly clear throughout the study.

Fewer Opportunities for Voice

Voice was more challenging to isolate, describe or ascribe value to according to the data in this study. Participants presented voice from diverse perspectives. Some teachers saw it as critical, some as not realistic and some as valuable but elusive. Students, however, agreed across focus groups that voice was important. These multiple perspectives provided valuable insights about student voice.

Diverse teacher perspectives. Having a voice and making choices went hand-in-hand in the discussions about developing learner-centered classrooms. Discussions of one led to

the other and at times participants used them interchangeably. According to participants, voice played a role in creating collaborative classroom environments, structures, recognition systems and supported differentiated pacing and progression through learning targets. Interestingly, in eight of eleven classrooms, it was noted that teachers were able to provide many more examples of choice than voice. Representing the differences in perspectives and experiences across classrooms, two classrooms reported little focus on seeking or providing opportunities for student voice, and generally equated voice to student behavior. In contrast, two classrooms described voice as *the most important* foundational element in the learning environment wherein choice was perceived as an embedded aspect of voice. Students also talked about the value and opportunities for voice from their different classroom-based perspectives.

Voice was described and understood, for the purpose of students in focus groups, as 'having a say'. It included verbal, written and non-verbal communication. From a practical perspective the most obvious connection participants made between choice and voice (which contributed to the overlapping interpretations) was that students employed voice when selecting their choices. In addition to voice related to choice-making, voice was closely associated with creating a classroom culture and set of expectations. With respect to learning, voice also related to reciprocity, engagement and personalization of learning. On a deeper level, voice appeared to connect with core values such as: equity, respect, freedom, safety and joy. The levels and impacts of voice are discussed below as a progression from most basic to more evolved.

A noted difference in perspective about the value of voice was evident not only from the perspective of teacher participants, but there was also a notable difference between how

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students felt about voice. Six of eleven teachers approached voice as a valuable aspect in developing their capacity to provide a more learner-centered instructional model. However, for five participant teachers, whether they wanted to include more opportunities for student voice or did not aspire to increase those opportunities, student voice played a limited role in their classrooms. Interestingly, despite the amount of voice provided for across the eleven classrooms, students in all five focus groups valued the voice they had, or wished for more of a say in their educational experience. While teachers saw voice from different perspectives, students consistently valued having a say in their learning.

Voice in Collaborative Classroom Structure

The most frequently reported opportunity for student input was provided at the start of the school year. In ten of eleven classrooms as one of the foundational activities, students were invited to engage in the process of developing a student-created set of expectations for the classroom. This approach to inviting student voice was employed at the start of the year to develop expectations in a code of collaboration (also referred to as code of conduct or class constitution). During the first days of the year, students with teachers as facilitators, engaged in a collaborative process whereby an agreement about the classroom culture was created. All but one of the teachers of participant classrooms elicited ideas from students through a variety if processes that typically involved brainstorming, voting, synthesizing and consolidating ideas around themes or principles.

In each participant classroom artifacts included a poster that listed the expectations. Most classes referred to the expectations as the code of cooperation. Others were called class constitution or code of conduct. Students in focus groups described a variety of voiceeliciting processes utilized to create classroom codes. A student described the process in one classroom: "She tells us to raise our hands if we have any ideas. A lot of us raised our hands and we tell her our ideas, and then she types them and prints it up on a piece of paper and puts it on the wall." In another classroom the student said, "We got questions on a paper and we wrote down what we thought...he chose the most common ones to pop up." Another student from the same class continued, "Yeah and then it would be a constant vote on those and then we wrote it down. Students in many classrooms described a similar affinity process in student language, "In our class we wrote down stuff that we thought for our code of cooperation on a sticky note and passed them in then it goes from there." The variety of artifacts showing student voice in classroom codes were found in the majority of classrooms and included posters stated in student language, written by students and included some posters with original sticky notes.

In some classrooms the principles in the classroom codes were aligned with the PBIS school-wide "3Bs" (be safe, be responsible, be respectful) and in other classes a different acronym was developed to represent the individual classroom culture. Supporting the code were routines or standard operating procedures (SOPs) created with input from students (see Appendix B). The co-created SOPs and classroom code were posted visually around the participant classrooms. Unlike the familiar teacher-purchased posters, these codes and SOPs were hand written on large cuts of basic craft/chart paper. Despite the informal appearance, the visual posters were evidence of authentic student voice. In addition to being an important vehicle for voice and ownership of classroom culture, both codes and SOPs will be further discussed as valuable tools that supported a learner-centered instructional model.

Data from teacher interviews attributed varied levels of connection between student created codes and student ownership of classroom culture. Two responses to questions about

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student-created codes and student ownership illustrate the divergent perspectives of teachers: Teacher 5 found little value stating, "No and they did it. That (gestured to code poster) is strictly their voice, absolutely the way you should do it, and I think they're too young. They don't understand it." While Teacher 11 represents the divergence in perspective about the value of voice, "Yes, when we set up the classroom and they come up with the rules. What does our code look like, what are the things that are important to you...they have that voice. Then we trouble shoot. We sit down every couple weeks and I'll say, 'How is this working? How is math working? Do we need to tweak anything? Is it too loud?' We talk about that."

Students in focus groups clearly described the connections they felt between themselves and the classroom code. The student participants (except for those from one classroom that was teacher-created) felt they helped to create it, understood it, and that the code remained relevant in their classrooms. Two students talked about how the code was important to them and others. The first student explained, "It's called the code of cooperation. You get to figure out what rules you have to follow and how things work in the classroom. It's good having some rules that you need to follow because those might be rules important to you. Then you can share those ideas." The second student added, "any new kids, they will know, feel welcome, they won't feel behind, they'll see how our class works…they'll get things that are going on." For many students the voice influenced classroom codes were important.

The frequency with which classes reflected upon the code was not consistent across the sample. It appeared that teachers who elicited voice from students more often also expressed a more positive value of student voice. Three teachers also shared the impression that students feel entitled to voice. Two of those teachers expressed it as a challenge and one

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described it neutrally as a matter-of-fact. All teachers discussed the issue of balancing when to provide students with voice and choice which will be further described within the discussion of *challenges*. The influence of student voice on the creation of a learner-centered instructional environment is also further represented as either a *challenging* or *supportive element* depending upon the perspective of the teacher.

Class plans and recognition. To varying degrees students in each participant class had voice in classroom structures, classroom recognition/incentive plans and daily decisions. Posters showing the menu of student-generated incentive options were artifacts from more than half of the classrooms and observations showed students talking about, saving up for, and redeeming their feathers for earned incentives. At the start of the year each class developed, in support of their codes, a system for recognizing and encouraging adherence to the standards they had agreed upon. Each participant classroom used the Eagle Feathers (school-wide positive behavior token) as a part of that system. A majority of classrooms used a token economy approach in which students could either individually or as a group earn/purchase incentives from a menu. One student talked about his class' process for creating the recognition system, "At the beginning of the year, we were doing a chart of rewards that we got. We got to do eagle feathers, pick from a prize box, and an extra recess. We got to raise our hands and say which one we wanted. That was pretty neat...and we'd get rewards...most of our ideas got on the chart unless they were really crazy."

As students described these recognition systems during focus groups and as shown in classroom observations, it was evident that the systems were understood by and valued by students. Students could explain why someone would get or not get a token in relationship to the classroom code and general behavior. On occasion, or in two classrooms that held weekly structured meetings, students could give feathers to each other and explain why the feather was being given. A student in one class said, "I liked how the idea was because if like, someone helps you it is kind of nice to give a reward to them like if someone else saw it." A student from another class described, "well we made a jar that we try to fill in our cubelets and growls and at the end of every day if we have more cubelets...so at the end of the day if cubelets have more points then we get to put in our jar. And usually once we fill it she lets us pick like what we are going to do for it" (incentive activity). In a third class a student said, "In class on Fridays we have this eagle feather thing. It's for what people do to help someone else. Or if you see someone doing something good you would give an eagle feather to them. One you could share in front of the class and another one if you didn't want to say, you could pass it to the person." To varying degrees across participant classrooms, as described by participants and supported by artifacts, voice was a thread connecting the co-created code with the receiving and giving of feedback on performance and classroom culture. For the more learner-centered classrooms, the effective classroom environment was more than cultural; it was the foundation for differentiated learning experiences including pacing and progression through learning activities.

Voice in Learning Target Progression

Building upon classroom culture, structure and expectations, voice also had a role in learning. This possibility was described and supported mostly in math because of the more established learner-centered structure (typically organized by a capacity matrix) that allowed for differentiated activities and pacing through the learning targets and during personal learning time (PLT). The way that students and teachers talked about voice in learning overlapped with examples of choice again showing the close relationship between the two aspects of a learner-centered classroom. Students talked in the process of making- meaning during group learning activities, they also had say in multiple aspects of learning, and talked to each other about progress towards targets.

The degree of voice in pacing and progression was not consistent across participant classrooms although it was observed, to a degree, in each of the eleven classrooms during math. In language arts students were not typically provided with opportunity for differentiated pacing, aside from the opportunity to self-select more or less challenging independent free reading books. The perspectives and data from both teachers and students were aligned in some aspects and divergent in others. Students described being limited, "not allowed to go too far ahead" while teachers described the related challenges of management. However, both students and teachers described having a say and opportunities for advancement through learning standards to be a highly motivating aspect of voice.

Transparency of standards. The transparency of learning standards connected with the learner-centered competency model enabled increased ownership and communications about progress towards learning targets. Students and teachers described how voice meant having a say during the learning progression. If an individual felt they needed assistance with a target they could work longer, pace slower or ask for help. In each of the eleven classrooms, students could and were expected (as described in SOPs) to ask for learning support from peers. The transparency about who was working on which learning target made this possible. Artifacts supporting this finding included student-friendly classroom visual tools: charts with clothespins, names on whiteboard, goal posters with student names, to communicate who was working on which standard. Observations also showed how partner work naturally facilitated this transparency. Several teachers and students reported that learners were taking a more active role in asking for specific interventions. Or, if a student had mastered some target previously, they could ask to assess and then move ahead. In the majority of classrooms students could skip practice activities once they could voice readiness and demonstrate competency through informal formative or formal summative assessments. This transparency and ability to communicate about progress or needs was a pervasive theme again primarily expressed in examples about mathematics. One student stated, "I feel good, because say I might want to get ahead on something, like I wanted to finish a matrix early, I could do some of that work, and then I could take the test earlier." A student in a different focus group explained, "It makes me feel good because if you finish everything else and there's that one thing you really want to do, then you can do that instead of working on things you've already done."

In addition to the basic and transformational aspects of voice described above, fundamental core values were also evident in the themes that arose from the data. Social learning concepts related to collegiality and community were apparent throughout the student discussions about voice. In addition, values aligned with principles of equity and social justice were reported in the words, feelings and experiences of the learners. Those affective and deeply personal feelings attributed to voice included: safety, respect, happiness, pride and freedom, are further described as *learner experiences*.

While teacher and student data, observations and artifacts were clearly aligned as they described in which subjects and how voice supported individualized progression and pacing, there was some difference in perspectives. Specifically, several students in focus groups who were not allowed say in advanced pacing opportunities reported a desire for more say in

advancing through targets. Among classrooms that allowed students to have a say leading to advanced or delayed progression, student and teacher participants reported it was motivating and satisfying.

In this case study of the role of voice and choice in learner-centered competency-based instruction, choice in practice activities, projects, partners and places was a common finding, to varying degrees across eleven participant classrooms. However, voice, or students having a say, was not consistently provided for students by their teachers who had different perspectives about the value of student voice. Voice was more difficult to provide than choice, according to more than half of the teachers. While most teachers found student voice to be valuable and aspired to provide opportunities, a few did not find it particularly important. Students however, consistently found value in choices and in having a say in their own learning. Students and teachers who employed and experienced voice, helped to provide an understanding of how student voice played a role in creating collaborative classroom environments, learner-centered structures, recognition systems and supported differentiated pacing and progression through learning targets.

Theme Two: The Learner-Centered Environment

Data collected and analyzed throughout this classroom-based case study described and supported a better understanding of an instructional environment that provided students with opportunities for voice and choice. As noted previously, not all classrooms have developed learner-centered environments in the same way or to the same degree, however, despite these differences, findings from both teacher and students' perspectives about the instructional environment were aligned.

As discussed in the literature review, the transformation towards learner-centered instruction is a progression and it is not simply adopted. It is not a program to be bought or one singular model to be replicated. Individual teachers in this case study approached the transformation in different ways and at different times (parallel to how students progress in different ways and different times in this model). In the data were many variations in degrees of voice and choice provided and varying or divergent opinions about their effect. However, some common themes emerged about what the learner was likely to experience in a more learner-centered classroom. The learning environment described by classroom participants was structured to support a structured, more social, personalized and competency-focused learning experience.

All participant classrooms provided a learner-centered approach to mathematics. This evolved as the most developed learner-centered curriculum area because teachers from the site borrowed tools and processes from the schools they visited which also had more fully developed learner-centered math programs. Approximately a third of participant classrooms were exploring ways to provide language arts in a more learner-centered manner while maintaining use of the comprehensive reading program. Each classroom also had a designated time, thirty minutes four times per week that was used as *personal learning time* (PLT). This time was generally used for any combination of targeted intervention, enrichment and/or personal learning projects that support student competency and interest.

A Structured Environment

A consistent finding across this study was the role of structure. Contradicting any parent concerns about a less-traditional learner-centered environment that is free of form, chaotic or unstructured, all student groups and teacher participants described in detail the structures they have put in place and rely upon to support this model. This was such a strong theme that it is more fully described later as a supportive element to the transformation on the whole. Clearly from the perspectives of the children, they had an active part in maintaining, discussing and managing the structure, and voiced why structure was important to them as learners. Students described the role of structure in each focus group. One student stated, "If you had some of the kids that were in our class with those rules…you can sit wherever you want and whatever, like if they extended it too much, they wouldn't learn anything, they'd just be talking basically the entire year." Another student described structured transitions, "Yeah, like code of conduct. Our class has one and at the beginning of the year we had it up on the wall, but then we moved it to outside the doorway, because in transitions, we noticed that our class was not that good." A third student said, "If some of my friends see me doing something wrong, they make a goal for me" and another added, "Well, for me, it's like whenever I'm done writing something or whatever, I'll just scan my eyes up to the SOPs and whatever, and look around the room and see if everybody's following them."

Over half of the teacher participants and students in three focus groups provided details about how students provided support to each other in order to help maintain behavior expectations in accordance with the classroom code of collaboration. Teacher 2 explained, "I think it's definitely helped with the community. They kind of hold each other accountable for certain things on the code of conduct. They've said it on the parking lot about math or talking too much...saying we really need to make sure kids are working, so they kind of call each other out."

Similarly from the point of view of the teachers, having a clearly structured environment with understood procedures, learning progressions and behavioral expectations all supported the management and efficiency of a learner-centered model. The structures supported the differentiated pacing, practice activities and social learning. Notably, the most frequently mentioned benefit of structure from the teacher perspective, was the ability to meet with small groups and individual students when they needed the support of direct instruction. As a most practical competency-based realization: when not all the students are working on the same activity at the same time, individuals need instruction on different skills and concepts at different times. As shown in observations, artifacts and conversations with students and teachers, having clearly defined structures that provided for choice activities and personalized learning support were foundations of the transformation learner-centered instructional model.

Social Learning Environment

Observations supported the finding that learning in all participant classrooms, in varying degrees, was a social environment that provided for more movement, alternate activities happening at the same time, and ongoing talking. Students like to work together. Throughout the study, students experienced learning as a more social activity than typically supported in a traditional classroom. That is not to say it was social all the time but in general students were often working with partners or groups and working together involves talking. Interestingly, it was both strongly reported by teachers and students, as well as observed, that much or most of the talk was specifically related to the learning. As individuals talked about their learning, it was also reported by students and teachers that learners benefitted from hearing the creative ideas and insights of others. Teacher 11 described the benefit stating, "I had a student who was in the middle and yet the way that the two higher girls were working and the way they talk about books I thought would be super beneficial for her to, even if she

wasn't able to do the work that they were doing, she benefited so much from the conversation that happened from the book." Teacher 7 explained the value of social learning stating, "Other kids can hear them...Oh, they're doing a PowerPoint over that? Maybe I should do that...Oh, they're doing a brochure? Maybe I should do that...Oh, I learned how to figure out the percentage of a number... and I say that's awesome!" A student described it from her perspective stating, "Yeah because I do brainstorming with a lot of people and it helps me bounce off ideas with them, some are good and then one of us will come out with a really good one, and then a different one will not be, and then I just think I do better with partners so we can work together."

The social learning experience of asking for help and providing help to others as well as group and partner work were all described as a normal reciprocal experience (to varying degrees) in participant classrooms. Observations strongly supported the reports of students actively engaging with each other in learning activities. Most commonly this included one student helping another with a concept or skill. Occurring less frequently because of time limits was the reciprocal learning of two or more students working together on a more substantive project. It was also frequently observed (but not reported by participants) that students asked and offered to help each other with computer issues such as network connections, login difficulty and web-based learning programs. Supporting this social learning focus in classrooms, a standard operating procedure (SOP) was developed in six participant classrooms to assist students when they needed help. In each of these SOPs, one of the steps was to ask a peer for support. One student described the experience:

I've helped my friend on something. I've gone over it, because one time I actually did something good. We were working on long division, and me myself, I didn't know it until my teacher taught me and then a friend next to our class she needed help with long division so I taught her. And she knew another way of division, but I didn't know that way yet and after, the teacher gave me a kindness chain" (school-wide token promoting acts of kindness).

Having voice in creating the codes and procedures and assisting each other with academic tasks and projects appeared to provide the groundwork for an effective social learning environment including opportunities for more advanced social application of voice wherein students would take an active role by reminding each other about the expectations.

Opportunities for Personalized Learning

Aspects typically described in models of personalized learning were found by varying degrees in all participant classrooms. Observations during math classes showed this to be the content in which teachers provided the most regularly embedded personalized options for students. The personal learning time (PLT), thirty minutes four times weekly, was another period when students experienced personalized learning. Artifacts such as posters, games, stories, research projects, and technology-created presentations showed the variety of ways students expressed their own preferences. The personalization began with some of the basic practice choices previously described. Preference in terms of partners or individual work, technology-based or paper and pencil activities were the most common examples. In addition, the ability to work faster or slower through competency standards, as described in more than half of the classrooms was important to students. There appeared to be a fundamental connection between voice and personalization; students who had a say (as supported through student and teacher-created opportunities and structures) and who had choices, could help design for themselves a more personalized learning experience. While

teachers provided differing levels of opportunities for personalization ranging from very little to significant opportunities, students in focus groups all shared positive feelings about and experiences of personalized learning.

Students typically described personalization in terms of what they *liked*. One student explained, "I like the matrices when you get to work at your own pace", another shared, "I like working in the hallway, it's quiet" and a third student liked, "doing IXL (computer program) for math instead of the worksheet" One girl explained, "I go in the morning, for language arts, and I like how we really all work together on certain things, and then we work alone on different things. I like that we don't work on only one thing for one really, really big period of time. We do different things, in a whole ELA class." "I like working on your own pace and alone but I like working in groups a lot, because we can learn stuff about the people at the same time", said a fifth grade boy. While one boy simply stated, "I work better alone." Personalization of aspects of the learning and the learning environment shown throughout the data, was associated with positive experiences and outcomes related to individual students meeting their learning goals.

Focus on Competency

The learning experience in all participant classrooms engaged in the learner-centered competency transformation clearly revolved around progression through learning targets. Artifacts of targets (learning goals) were often found posted on classroom walls. Many teachers used a visual list, menu or capacity matrix to clearly organize the progression of learning activities for students. Students in all focus groups and in classroom observations were aware of the targets and what they needed to do to demonstrate they had met the target. A student simply stated, "I would study one thing until I really have it, and then do the other

thing." Another explained, "If you don't think you can do something, and you try it, you kind of learn that you know that you can do it now. Then if you know how to do something, then you can move on and do the next thing." Classroom observations of student conversations and learning activities showed the most clarity around competency standards in math and language arts. Curriculum documents that were more fully developed for math and language arts further explained this finding.

On the whole, learners did not progress until they were proficient in a skill or concept. That foundational principle of a competency system was understood by the students. Many individuals during focus groups shared their excitement and feelings of accomplishment when they advanced through targets showing a connection with both motivation and engagement. One student said, "I feel good, because say I might want to get ahead on something, like I want to finish a matrix early, I could do some of that work, and then I could take the test earlier." Another student described his forward momentum through learning targets by stating, "Well I knew that I wasn't going to be able to do all of math stuff fast, but being able to do one thing fast just helps your brain go a lot easier. Yeah and it's easier because then you get a head start on the next stuff so you don't have to rush through that even if you don't get it. But if I can do it that fast why wouldn't I?"

Teachers also reported a focus on students demonstrating competency and meeting goals in a clear learning progression. Two teachers discussed the challenge of how to provide adequate support when students did not progress at an expected pace. It was also observed in many of the weekly PLC meetings during the study that a focus of the team was to discuss and create supports, beyond the previously provided extension of time or peer and teacher support, for those who did not meet a target. With respect to personalized pacing, no students reported any negative feelings associated with working at standards that were behind those of their peers. In the last focus group fourth grade students were specifically asked about this, and showed insight about individual strengths and challenges:

If you know the people in your class, they have certain weaknesses, you can help them if they're stuck and if you didn't, you just focus on your work and they would be sitting there stuck. It's good because if you didn't know someone was bad at something, you know when to push the limit and when not to ... like the comments, say you didn't know that they were not good at something...you couldn't help them in any way and you might say something that hurt their feelings but you didn't know it hurt their feeling because you didn't know that they couldn't do it. If you said, 'Wow, this is so easy. Everybody could do this,' and they were struggling to do it - that would probably not make you feel good after it because you'd feel really bad. If you know the people who need help, you can help them. You can help them like, 'You can do it!' You can show them your ways of how you learned it and maybe that'll help them learn it.

With enthusiasm, students in focus groups also talked about different ways individuals or groups during project-based activities could show competency in fun, creative and engaging ways building upon their own designs, collaborations and decisions. The connections between voice, personalization and competency were apparent, as were the connections to engagement and ownership that will be discussed in detail as *learner experiences*. Data provided from classroom teachers and student participants, through observations and collection of artifacts all helped build a richer understanding of an instructional environment structured to support a more social, personalized and competency experience for the learner.

The learning environment in this case study seeking to understand the role of voice and choice in competency education, provided insights into the role of student-involved classroom structures that supported social and reciprocal learning. The social learning environment supported both academic and behavioral outcomes for students. In more learner-centered classrooms students had choices, voice, and opportunities for personalized learning as they progressed through competency standards. Throughout the study, the structured social learning environment was reported to be a critical support for teachers who provided the targeted instruction necessary for individual learners to progress through competency standards at different rates and in different ways.

Theme Three: Engagement in Learning

In both interviews and focus groups, descriptive details helped build an understanding of how voice and choice were provided and experienced. Once the *how and what* of voice and choice were discussed, the questions focused more deeply on *if or why* voice and choice mattered. The engagement of learners, experiencing voice and choice in a variety of ways, in this case study of eleven classrooms where learner-centered proficiency-based practices were being developed. Students, teachers and classroom observations provided powerful examples that illustrated the sense of engagement including personal insights and feelings experienced in a learning community that provided for student voice and choice.

The strongest connection between the learner-centered environment and learner experience that was most frequently represented across the data was the increase engagement in learning. The level of engagement (or motivation) was detailed in examples provided by students in each focus group. One student recalled, "Last year, I remember we did this rainforest project. At first, none of us really wanted to do it, and it didn't sound fun. Then, we got to do whatever animal we wanted in the rainforest, and it started to get a lot more fun, because we got to choose." In a fourth grade focus group a student described his engagement stating, "There's something in our classroom that we do called math matrix. I like it because we can do IXL or a worksheet and it's just really fun because I just get really far into it. When it's time to move on to something else I just don't want to move on. I just want to keep doing my math matrix."

The alignment between the teacher and student perspective with respect to engagement was clear. Each participant teacher commented about student engagement in learning activities that allowed for voice and choice. Teacher 6 described her students' engagement stating, "They want to keep going. They take it home. I feel like it becomes theirs... they're talking about it and it becomes a little bit more their own more so than me giving it to them." "Teacher 1 described student choice and engagement in math, "I think they're pretty engaged. And, and they do a great job of choosing what they want to work on." With respect to engagement during personal learning time, Teacher 4 said, "It's the best block of the day every time that we do it. They're just quiet, they're engaged, they're into it." Finally, Teacher 3 reflected, "I think it was much needed. I think that this definitely had its bumps but I think overall when you look at the kids and how much more engaged they are in their learning, it's made a huge difference."

The impact of increased student engagement in this case study is also discussed further as an important factor from the teacher perspective that helped to sustain a learner-centered instructional model in the participant classrooms. In addition, it is notable that two teachers in the study made the connection between choice, engagement, and their students attaining deeper levels of learning and higher order thinking skills. While not reported as a common observation, this potential value at the site was important as increasing higher order thinking skills is required to demonstrate competency on the more challenging Common Core State Standards.

While none of the student participants used the word 'engagement', in each focus group learners shared feelings and examples that clearly supported the teachers' reports and observations about high levels of engagement. Students talked about feeling motivated to make progress through learning targets as well as engagement during the process of active learning. The examples students provided most frequently were about project work, personal learning time (PLT) and math. These three learning activities certainly coincide with the subject and structures that provided for more voice and choice as previously described.

One student explained, "At PLT, I think I like making choice of what I want to do. Either you can do a PowerPoint or you could do a poster..." Another added, "Yeah, and if you're really behind you make sure if you can do that. I'm going to do a series of dog PowerPoints. I've already done a Doberman. I'm doing a Great Dane one right now." A third said, "I also like PLT, because you get to choose whatever you want, what you're most behind on, or if you really want to work on a specific thing..." A fifth grade student described stating, "I feel good, because in PLT you can choose what you want to work on. You can work on your Wordly Wise, you can work on your math, you can work on IXL. I also like this thing, it's a (student choice) project and you really want to work on it, but it's not anything like science, and it's not science time."

In addition to seeing the value in personal learning, student comments also conveyed the understanding that structure was provided in order to support the learning environment. Rather than any descriptions resisting structures, students like teachers, talked about how the structured environment made their own learning possible. They described engagement in a goal-oriented manner. Both students and teachers reported individual goal setting, increased momentum related to meeting goals, and choice projects (with student involved topics and outputs) as important factors related to engagement. Observations across classrooms supported the level of engagement as evidenced by time on task, conversations among students, and obvious energy and excitement about PLT projects.

Personal Insights of the Learner

Other emergent outcomes for students were an increased awareness of self. Practical insights about personal learning styles, organizational supports that were effective, sensible partner choices, and what engaged or 'worked for' individual learners were threaded throughout the comments of learners and teachers across the case study. During analysis and in observations, a picture emerged of young students who when given choices, began to be more aware of what they needed to make progress and show mastery of their individual learning targets. To varying degrees, participant teachers similarly explained how students in their classrooms demonstrated increased ownership, responsibility for their own learning and the learning of their peers. Students were able to experience poor choices and then on their own or with varying amounts of teacher facilitation, reflect and make reasonable adjustments. Students certainly corroborated this outcome of learning about themselves as learners and many cited examples of insights not typically attributed to nine and ten year-olds. As an examples one fifth grade girl explained;

I've learned...once I was in Ms. B.'s class for social studies, since we switched, and I was sitting in a whole group table with a whole bunch of girls and boys, and they were talking, and we were talking so much that she moved me to a table by myself,

and I learned that I work much better when I'm sitting alone and it's quiet, and I got the whole paper done before pretty much anybody. It made me feel happy that I work better when it's quiet and I'm alone, and I can focus on the paper instead of everybody talking about different things, and mind-boggling ...

Student participants described, more frequently and clearly than teachers, how experiencing voice and making choices had led them to learning about themselves as learners and as individuals. This benefit emerged in each focus group as students described their preferences, how they worked with others and their individual learning strengths and challenges. "I learned that I work better with a partner," said one girl, "A small group," said another. One learned, "What my expertises were, what I was better at and what I was less better at." A fifth grade girl pointed to her classmate stating, "Me and her, when we got to choose who to work with, we used to choose each other, but we used to talk a lot, so she (teacher) used to send us to another partner or something, but now we've actually gotten some work done when we were together."

Teachers reported a related, emerging trend: students were beginning to take a more ownership by deciding how to approach learning targets that were personally challenging. Typically student interventions were determined by adults in the school. This practice remains the norm, however, this may be an area where voice and choice is starting to have an impact. Building upon increased student insight and ownership, several comments of teachers described an increasing awareness, and initiative by students to take additional responsibility in this area. Teacher 10 shared with some amazement:

They're even choosing what they need to do when they go to Title One. This one boy said, 'Can I do the Y1 (math standard) and finish it there?' We were working on it in

class and he needed some help with it. Another boy said, 'Can I take my homework to get some support?' They're choosing these things that they really know they need help with. That's incredible too. They're getting help and then I think it's great...one boy said 'I'm just going to wait to the end of the day and work with you'. He's staying in from recess. He says, 'I don't want to do recess. Can you work with my math with me?' I'm like, 'Bye. I need a breath.' (smiling) I have seen *that* motivation.

Both student and teacher participants provided, from their different perspectives, contextual examples that supported an understanding of how having more voice and choice supported an engaged learning experience and some reported significant insights about personal learning needs.

Engagement in a Social Learning Community

As students and teachers described how students chose to work and learn, it was clear that children in this site often chose to work with partners and groups. Students relied upon peers for multiple aspects of reciprocal learning. They would collaborate, provide feedback related to learning targets, as well as feedback related to the learning environment, and have an increased awareness of the progress and interests of others. In both teacher and student reports and observations, the classrooms to varying degrees were structured around reciprocal learning. Significant outcomes reported included an increased ability to communicate effectively with each other and a sense of community. Teacher 4 reflected upon the social learning benefits stating, "I think the students really do, and then you hear them talking to each other. They're really understanding how to communicate. On different levels too, not just what are you having for snack, but, 'Oh, what learning target are you working on?' Teacher 10 provided a similar comment connecting motivation and ownership to social learning stating, "More motivation, more ownership in the classroom, I think they get to know each other better. Sometimes they're choosing things because they hear what other people are choosing. Or when those kids are sharing, they get to see, 'Wow, he's really interested in that person', which is really cool and 'I'm interested in that person'. They get to do a lot of sharing within it and learn about each other." Teacher 10 shared, "It's great motivation. Again, they learn to work together - cooperation. Sometimes we're realizing how do we work together? We're doing a lot of the guidance counselor stuff, like teaching how do you work together."

Throughout the data, in responses, artifacts and observations, this sense of shared responsibility was evident. In some rooms teachers had made posters or interactive visuals so that students would know who was working on which standard. This transparency was modeled in professional development and in the classrooms that used this method, it was reported by students and teacher to be an effective way to know from whom to ask for help. In observations and throughout the months of the study, helping each other appeared to be as embedded a practice in these classrooms as spelling tests on Fridays are in a traditional classroom.

Reflection and teacher cultivation and modeling of a "growth mindset" (Dweck, 2006) appeared to be an important tool/approach used to improve individual student learning as well as the overall functioning of the classroom community. Students explained how they made adjustments to improve their learning and also shared how they helped others to make adjustments, typically with verbal prompts, to enact the classroom code of collaboration. Students discussed in many examples how they learned to manage the opportunities and challenges of social learning. As previously discussed, some teachers were stifled by prior perceived failures and limited opportunities for voice and choice as a result, however, other students in rooms that allowed for more social and flexible groupings, shared examples of how they learned to work effectively with peers. The result was a sense of ownership over personal learning as well as a sense of ownership as a classroom collective. Simply stated by one fifth grade boy, "It makes me feel good like that other people agree with you and you're not alone on it." Positive student feelings and reflections about their own learning and their experiences were evident in many of the focus group conversations.

Personal Engagement

The experience of voice and choice in the developing learner-centered proficiencybased classrooms went beyond learning. Students and teachers reported how students felt when they had opportunities for voice and choice in learning. Additionally, many students reported feelings and beliefs about the value of having a say, with some representing it as more than a learning tool but more as a core value or personal right.

Feelings. An engaging finding in this case study was how both student and teacher participants spoke about the affective impacts of experiencing voice and choice in a learner-centered classroom. The reports about feelings were holistic in relationship to the entire classroom experience as well as linked to specific types of learning activities. These positive experiences in the learner-centered classrooms that provided voice and choice can be generally described as feelings of happiness, respect and safety.

Students' comments reflected pride and respect when students were provided with voice and choice, "It would feel good if you had a say in something because it makes you feel like you can be part of the decision so you don't like be forced. It's like your decision what you need to do," stated one fourth grade boy. For another student "when we're making

these kind of things (codes and SOPs) we have more say in it than years before, when most of the time the teachers just decide what are the rules, and I feel comfortable that she trusted us to actually make responsible rules that actually had to do with school." "Well, thinking back to the SOP stuff, it makes me feel good that my teacher trusted us to all be able to pick the SOPs, and that they didn't just say, 'Okay, this is going to be on the SOP.' shared one student. "I feel proud, like what the other kids said" commented a boy in a different group. Another agreed, "It makes me feel good."

One boy simply added, "freedom", which was a recurrent feeling shared by students who also associated voice and choice with respect; Another explained, "When you have a choice, or get a say on something, then it makes you feel better that people are actually knowing that you're there." One student clarified, "Not that I feel like they're like were mistreating us, but I'm just saying it makes us feel more respected." Another parallel student comment from a different focus group stated, "This is just more freedom, respected." "I was going to say it makes you feel happy when people ask you what your opinion is, shared one quiet boy. Another added, "If I get to choose what I do for PLT or whatever, I feel like, 'Okay, today I'm feeling like this, so I want to do this,' and I feel like it just gives me more options. I think it would feel good if you had a say in something because it makes you feel like you can be part of the decision so you don't like be forced. It's like your decision what you need to do."

Similarly, the four teachers who reported and appeared to provide, in both observations and artifacts, a more developed learner-centered model also reported that the students were "happy." Two of these teachers further reported that parents of students over the past two years had made specific comments about their children being happier than in prior learning

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environments. Teachers attributed this to the development of a more learner-centered instructional model. Teacher 10 shared, "I just feel like my students are happy. The parents said they're happy to be here." Teacher 11 commented, "They're happy. The parents, that's the best thing. They feel great. Some of them say, 'I don't even need to come see you. I know it's great what's going on.' Similarly, Teacher 4 shared, "A lot of the kids and parents say, 'Oh my gosh, we love this. It's perfect.' He or she feels more comfortable coming to school." Supporting the teacher observations about student happiness were the students' own reports of learning experiences that were fun. These enjoyable learning experiences were typically collaborative partner or group project-based activities in which students had some say in topic, partners and/or output. Teachers also reported an enjoyable, positive learning environment during these collaborative projects.

While teachers observed engagement and reported happy learners, student participants described deeper impacts. Two other apparently related positive experiences reported by many students were the feelings related to respect and pride. Individual students in each focus group as well as the pilot focus group, described feeling respected by teachers when they were given a voice or allowed to decide something for themselves. One student described it as a "satisfied" feeling and others talked about feeling "proud." The reasons given for these feelings included practical pride in terms of being allowed to move through learning targets at an advanced pace as well as more personal pride and respect that resulting from teachers treating them as capable of managing voice and choice. Teacher's examples also supported this finding. Teacher 9 explained, "We have 'Wednesday Workdays' and they know what to do and we practice it first then they can manage the whole day and do a great job." A student from the same class said, "We have 'Wednesday Workday' It's exactly like that, except I think ... say you don't want to do language arts, you're not really putting it off because you know you'll come back to it, but those days are really, really fun because you do it at your own pace, do whatever ... you're still learning, but you don't notice ... I think you're having fun and you don't notice that you're learning."

Similar to feelings describes as happiness, were the recurrent comments that can be described as students feeling emotionally safe. Three teachers described this safe learning environment. All three attributed it to a combination of building personal relationships with members of the class and a respectful equitable learning environment wherein each person is valued for their unique contributions. Students, including individuals with learning disabilities, gifted-talented, and those who had Title One interventions to support reading and/or math, described feeling a sense of security in their own learning.

From different perspectives, students explained how being able to work on their own targets at their own learning-appropriate pace affected their feelings. One student who worked quickly in math reported, "I don't feel like I'm being slowed down." A student who has Title 1 reading intervention shared, "Well, I like it because ... like what you said, because they (other students) have a different pace." While a student in the Gifted program added, "When you don't feel special, you self-doubt yourself and you don't have confidence, like you'll think, 'Oh wow, I can't do this,' and you'll think that you're not special. You think everybody else is better than you and you doubt yourself and you don't do as good when you doubt yourself; self-confidence. Self-confidence is everything to getting a good score and saying you can do it and pushing yourself." A female student who receives Title One support for math and reading shared, "During PLT, I feel relaxed sometimes, because I can do...my work." A student in Special Education further commented, "You're not rushed." "Yeah", said

another girl, I'm not rushed to do anything. I can catch up on things. I can get ahead on things. I can do my homework early, so I don't have to do homework when I get home, and I have more free time." The findings about positive feelings experienced by students were expressed by several teachers who had more developed learner-centered classrooms, as well and by students in all focus groups.

Beliefs about voice and choice. Beliefs about the 'rightness' or value of voice and choice were not consistent with teachers or students, however, three distinct perspectives were: some wanted more, some wanted balance, and some (teachers) wanted less. Observations clearly showed a spectrum of varying amounts of voice and choice across participant classrooms. Some classrooms engaged in daily choice-involved learning and provided significant ongoing opportunities for student voice. Other classrooms provided significant choice but lacked ongoing structures or processes for student input or voice. A minority of classrooms dismissed student voice. This variability, finding balance, and for some participants the lack of perceived value, are further described as challenges. However, the beliefs about the rightness of student voice and choice for student and teachers participants who reported the value were strong. Five of eleven teachers described their belief that creating a more learner-centered proficiency-based instructional environment for their students was the 'right" thing to do. Teacher 2 stated, "Well, I definitely believe that it's the right thing to do for kids, for sure." Teacher 3 explained her initial reaction to the district vision recalling, "He (Superintendent) did this big long announcement of where the district was going, and I was still in school, and I thought, 'Yes!' That's exactly what we should be doing."

In addition to beliefs about the rightness of giving voice and choice in learnercentered competency-based classrooms, another emotion was mentioned only by students. Several students in focus groups described the feeling of freedom or lack thereof. Many students were able to identify other aspects of learning in which they wished for more choice and/or more voice. Several students in multiple focus groups wished for more freedom and flexible use of time. They described being actively engaged in some learning activity and wanting to continue working when they had to switch to another subject. The desire to decide, or have the freedom to, either shorten or extend the typical subject-based block schedule was dominant in two focus groups. These students expressed voice and choice, or the lack of voice and choice, as factors in the learning environment that affected them deeply. A student explained, "I feel respected and freedom, kind of." Another added, "Not that I feel like they (teachers) were like mistreating us, but I'm just saying it makes us feel more respected, and kind of -" "Yeah," interjected another boy, "not that it was horrible before. This is just more freedom, respected."

In addition to flexibility of scheduling, several students wanted to have more voice and choice with respect to in-depth learning opportunities, typically described as project-based activities. Two focus groups, as an example of a desire for deeper learning, discussed a prior experience they had in which they spent an entire day working on a personal choice learning project. It was notable that several students described a relationship between feeling pride when they engaged in deep learning, challenging projects, or advanced learning. Individuals also told of the value of being able to express themselves more creatively or be more fully

recognized by others. "When you have a choice, or get a say on something, then it makes you ... Yeah, it would probably make you feel better that people are actually knowing that you're there." shared one fifth grade student.

Positive personal experiences related to feelings and beliefs captured the potential of learning that is more learner-centered and provides for more freedom and personal satisfaction. While teacher perspectives varied, some clearly believed providing voice and choice as well as the larger transformation to learner-centered competency education was the right thing to do. Students found deep connections between having voice and choice to feelings of respect, pride and freedom. Regardless to the level of engagement in or commitment to this instructional transformation, challenges to developing and sustaining this comprehensive instructional shift were also identified throughout the study.

Theme Four: Challenges and Supports

The magnitude of the disruptive change that involves rethinking long established instructional delivery models, time and grading structures, as well as changing roles for teachers and students is a fundamental transformation in education. Valuable insights into factors that challenged and supported voice and choice as well as the instructional transformation on the whole were provided by students and teachers in this study.

Challenges to Transformation

While many positive factors were reported in a more learner-centered instructional experience that provides for voice and choice and includes students in meaningful ways, significant challenges were identified. In general terms the challenges can be attributed to practical implementation issues, stressors on teachers, and student-attributed variables. Not all of the identified challenges were strong themes across the data, but are reported as they

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identified important differences in perspectives and challenges to be aware of. Other challenges were more consistent: some similarly reported by both students and teachers.

The transformation to a more learner-centered instructional model goes against the traditional models and experiences of most (all but one) of the teachers at the site. Typical with any deep change to an established model, structures and individuals can be resistant to change. Individual teachers at the school have been provided with a significant degree of freedom to develop and interpret the model in their own classrooms. In this case study, data supported somewhat polarized perspectives about the learner-centered transformation in general as much as it revealed themes related to either voice or choice. Practical challenges included student factors, lack of processes for voice, managing the classroom environment, and the amount of preparation work required were identified as the most common challenges. Teacher stress in response to the practical challenges of developing a more learner-centered competency-based instructional model in addition to other school-based initiatives was also a significant challenge.

Student attributed challenges. As previously described, there was a discrepancy in views about the role of, and readiness for, voice and choice. Three teachers attributed student readiness issues to their lesser-developed opportunities and structures for voice and choice. This minority of teachers reported a general feeling that most children at this age (nine to eleven years) were not developmentally ready for choice, therefore were not provided for as much opportunity for choice as in some classrooms.

While there was a general recognition that each class had its own unique make-up and 'personality', teachers at the site responded to these differences in different ways. In more than half of the teacher interviews, student factors were mentioned as a challenge. Teachers

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described this student-centered challenge in two different ways: the first was whole class related and the second was based on individual student issues. Two teachers, (who had also shared concerns about developmental readiness), identified this year's class as not being an appropriate match for a learner-centered experience. Teacher 5 reported, "I think they're too young, they don't understand it. I think there are a couple of kids that might maybe towards the end of the year... I think they're too young, they don't understand it...maybe towards the end of the year." Teacher 6 commented, "This group can't handle it. They just aren't motivated."

Many teachers who supported the transformation on the whole discussed challenges of providing voice and choice for certain students. The student-based issues that were reported as problematic can generally be described as poor behavioral regulation, lack of motivation and low academic competence. Two teachers talked about the challenge of some students who did not want choice. Both reported one or two students who wanted simply be told what to do. Teacher 4 noted, "Some of them just didn't really seem to care. They're like, I don't know. Just tell me." Interestingly, one student in a focus group said that was true for himself. More commonly expressed, however, was the challenge of students who made poor choices due to lack of behavioral regulation, lack of understanding of the learning objective, or lack of personal insight. Teacher 8 described the challenge explaining, "... It was the dynamic last year. I think this year, not as problematic, other than that sometimes the grouping that they choose isn't their best ... for the way that they learn. They're going to go more towards friends instead of...this person would probably be a better choice." From the student perspective a girl explained the challenge of student self-regulation stating, "...people today when she (teacher) said you can work with a partner, everybody was just like looking around the room

and like, when she was trying to say directions nobody listened to her." Previously mentioned as a learner experience, however, students talked about learning from the opportunity to make their own off-base choices. Students, who have limited choice, cannot benefit from making poor choices.

As the final student-centered challenge, teachers discussed the small number of students who had significant behavioral, social, learning, and/or impulse-control challenges. For some of these students, teachers found group and partner work to be difficult to manage. They also reported that the choice systems in place for most of their students were not always effective for these specifically challenged children. For some students, teachers saw a pattern of poor choices. These off-target choices were typically described as either accidental because of lack of understanding on the part of the child or to a lesser degree, poor social-partner choices. Students reported this challenge too. One reflected, "It doesn't cross their mind because they're having fun. I think that just kind of takes over sometimes, *too much.*"

The challenges of providing voice. As with any school change initiative, there are variable levels of adoption and pace of implementation. While no teacher participants voiced major objections to learner-centered transformation on the whole, there was significant variability in the opportunities developed for students across classrooms. Artifacts in classrooms that provided evidence of voice were typically interactive posters like parking lots or reflection and feedback tools such as exit slips. In classrooms without significant opportunities for ongoing student voice, the only artifact of voice was the class code that was created in the first days of school. This variability could be described approximately in thirds across teacher participant classrooms: one-third providing some voice and choice, one-third providing some voice and choice and one-third providing some choice and little voice

for students. In contrast to two teachers who had more fully developed processes for voice, nine of eleven classrooms had significantly more developed opportunities for student choice than for voice.

In teacher interviews, the concept and practical examples of voice were more divergent and in many ways difficult to separate from choice. During interviews and focus groups the conversations flowed between the two very freely. It became clear that although the two were often used interchangeably, voice was more elusive to identify. In response, a decision was made to share that challenge and bring participants actively into the discussion of why voice appeared to be more challenging. Teachers who had not developed ongoing procedures for student voice explained that they relied upon observation and perception to make judgments about what students needed, wanted or thought. Two teachers did not report seeking additional opportunities for voice while the others either did not realize it was lacking or were hoping to develop more student voice in the future.

As a keystone of a learner-centered instructional model, the variability of voice in terms of perception of value and opportunities for students is a significant challenge at the site. The lack of embedded process for eliciting voice (as opposed to intuiting what students wanted or needed as some teachers described), was a common challenge. Students clearly described the challenge of wanting to have a say or share an idea with their teacher but not having a pathway to do so.

Students talked about feelings of uncertainty about voicing their ideas. Practical problems for students included not knowing when to talk to the teacher, questions about how the teacher would respond, and worries about negative responses by teachers or peers. When students in one fourth grade focus group began to give suggestions for increased choice and

wished for more say in decisions, they were asked what holds them back from asking or sharing their ideas? The students further explained the experience of wanting to share but not having structures in place to do so. "Yeah, like you're afraid to ask something, but your gut tells you, just do it," said one boy. Another boy said, "You're kind of like scared that the teacher's going to say no, and then it bums you out, and then you have to do something that you really don't want to do." A third girl added, "You don't want to be embarrassed with everybody." A boy clarified stating, "Yeah, like you might be embarrassed to ask, or afraid to ask somebody. If you were ... If the teacher was teaching a lesson, and you wanted to go up and ask for something, then you'd be embarrassed to ask her in front of the class." Another described social concerns stating, "If your friends think it's not a good idea, you feel like you're not really part of them anymore." Finally one student described looking for an opportunity to share an idea noting, "It's kind of easier, to just go up to her or him, when she's not doing something, like if she's just typing an e-mail or something, and nobody's really paying attention. You just go up and ask." Another agreed, "Yeah, it's more like, less humiliating and stuff." The doubt and frustration associated with wanting to share ideas with teachers but not knowing when or how was a valuable perspective offered by student participants.

With respect to student perception about voice there was also variability in perspectives about the rightness of and readiness for voice. Mirroring several teacher comments about students feeling entitled to voice and choice, there were one or two students in each focus group that expressed how some students feel they should have more voice and choice in their learning. A fourth grade girl described, "Sometimes some kids get very angry at the teacher because if one of the kids wants to really do like work with a partner they don't really like it. And one kid came up to me and was like, 'Hey can I tell you something... sometimes I feel like I am locked in a cage because we can't do any choices sometimes.' and well that's like life. So sometimes we are going to have choices or not." Another student added, "Yeah. They just...well some kids are not very good at handling not

having their choice."

Teachers in several interviews described the challenge of managing choice and voice. "I think they're so use to having a voice in choice with everything, like with their iPod, just everything in the world, so if I were to say, 'Nope.'... sometimes I do say, 'Nope.' Observations in classrooms captured many instances of teachers deciding moment-bymoment how to respond to student requests to diverge from the directions or activity provided. The challenge of balancing and managing choice and voice was also described as a real life lesson. Several teachers commented that they wanted their students to understand that in *real life* there are some things that do not include opportunities for voice and choice. Students in two focus groups made comments similar to the teachers who talked about the challenge of some students who made poor choices, however, the majority of students found value in having a say. Data from students and teachers described parallel and divergent findings related to the challenge of providing voice and its value in the learning experience.

Management challenges. Each teacher participant shared management challenges when developing and implementing a more learner-centered model. While each teacher reported insights and solutions derived from trial and practice, some significant themes about management remained. Balancing when to provide choice for students was mentioned by approximately half of the participants. Providing appropriate structure and support to students exploring targets in a variety of ways was another key management challenge. In addition, ensuring an effective learning environment for all students as they worked with partners and in different arrangements around the room was an ongoing focus. Related to balance and management challenges, the importance of developing and improving classroom organizational tools and structures was also discussed. While the challenge of management was described more frequently by teachers, it was important for students to have supportive and effective structures in place." A student commented about the need for balance stating, "I think a little more, not too much, because some kids will be kind of overwhelmed, but I think a bit more freedom, a little bit more, would be actually a bit better, because I think kids would actually enjoy it a lot ... well, they'd just enjoy school more."

Teacher 10 described the challenges from the planning perspective explaining, "Organization, getting everything planned ahead of time, clearly defining the goals and the kids understand them. If they think it's a free-for-all, everything goes haywire." Teacher 7 simply stated, "It's definitely more, a lot more to manage" and Teacher 9 agreed, "...It is a lot of work, much harder to do it, not sure what things to give choice on and which not to." Several teachers also expressed the management challenge of assessing and providing feedback to students who have made off-base choices in terms of either the learning activity or partner/grouping choices. From a most practical classroom level, despite many positive developments across the participant classrooms, which will be further described as *supports*, ongoing management challenges were significant.

Preparation work. Given the challenge of all new curriculum standards during the case study in combination with a implementing a relatively revolutionary instructional model, the amount of preparation work to be done was a pervasively reported challenge. All teachers discussed the amount of work to be done. Specifics included: creating new options

for projects and units that align with new targets, developing rubrics that enable students to align projects to the targets, and revising formative/pre-assessments so students can make good decisions about their learning goals and activities. Teacher 5 explained, "It takes an awful lot of work to make matrices, to adjust matrices, to make sure that, you know what worked before doesn't necessarily work." Teacher 11 reflected, "I think it's been very ... It's been difficult in just the prep work that is involved in setting it up." Teacher 8 described feeling overwhelmed with the curriculum work commenting, "I don't feel like we even talk about the materials and what we need to change and how we're going to tweak them and do we even need those anymore? Are we just going toward common assessments, and however we get there? It's definitely not ... I don't have the rubrics and I haven't created all of those for them to do that on their own." Teacher 1 shared a similar challenge noting, "Needing more end of unit projects...coming up with different projects...a wide variety that would give the same kind of skills to do the project or to present the learning. Or just coming up with different ideas to give them..."

Further adding to the challenges in terms of prep-work was the practical challenge of providing appropriate materials (lessons, worksheets, capacity matrices, technology applications, games and activities) to students who were working on a variety of targets at the same time. Teacher interviews described and observations also clearly showed these challenges. This variety of learning targets and individualized pacing also contributed to the significant challenge for teachers to develop and provide multiple interventions and supports at the same time. Teacher 10 worried about how to ensure all students would get adequate time and support to meet standards commenting, "So you get a two, a partially meets, but hopefully we'll be able to do small groups to get you back to it. That's the hard part,

scheduling and making sure we get back to it." Logically, the preparation challenges were identified and described from the teacher perspective but students had some insight into these challenges from the learner perspective.

Several students identified, and observations supported, the use of some lower quality learning activities such as: off-target computer games, excessive practice work on a technology program and "a million pages on the matrix." Interestingly, some students who explained these weaknesses also had suggestions for improved materials and practice activities. A student in Focus Group 4 explained, "Some of the games we play on the certain stuff we're working on, like, some of the games, they don't even make sense, all you're doing is pushing a button and you see what's happening, but it all goes by so fast and doesn't even say what it's about, it just has us pushing buttons..." Two others agreed, "Yeah, that didn't make any sense." While a third student discussed how students could help with this challenge noting, "I think most of the technology (problems) has to do with where a lot of kids know technology a lot more than adults ...we could just show her a good program we found.

Teacher stress. A final important practical theme can be generally described as teacher stress. Given the challenges listed previously, in combination with the number of initiatives at the school, feelings of loss of control and of being overwhelmed were reported in degrees by all teachers. Six teachers expressed the stressors as significant but typical of the challenges in teaching. However, four teachers expressed the stress level as so significant as to cause a loss of momentum in learner-centered competency transformation, personal feelings of fear and loss of control and potential professional burn-out.

Teachers were reflective and shared these personal and professional challenges. Teacher 9 reflected on the transformation to student-involved classroom structures stating, "I didn't really like it at first to be honest... I was pretty good about managing the environment and setting up expectations that were clear." Teacher 8 described loss of momentum rooted in past challenges commenting, "It backfired miserably. I think this year I'm not as free with it so I want them to take my lead, because I felt like last year it bombed a few times." Teacher 4 shared, "I it's a personal barrier for me. I like control (laughing) so when they're all doing their own thing I'm thinking, oh my gosh! I don't have any control. But this year I feel like I've really come together with it now because we do the goals, so I know what they're all working on." Teacher 1 described feelings recalling, "When we first started it was like *we have to give them Voice and Choice*? We have to give them any kind of free will. And that is a very scary thing at the fourth grade level."

Teachers who could be described as more fully exploring and providing voice and choice, as well as those who have less developed learner-centered proficiency-based models, discussed the feelings of loss of control in their classrooms. One teacher described a prior perceived failure as the reason for loss of momentum. Another described high control needs and fear of loss of control as a challenge to including more opportunities for voice. Several teachers discussed not wanting to give up on things that had worked for them in the past. Examples included whole group, same-paced instructional practices, projects that were favorites of the teacher but that did not offer choice and teacher-directed structures that did not provide for student input or flexibility. Students described challenges of teacher-directed experiences and barriers in their own terms.

Several students respectfully described feelings of frustration with some teacherdirected activities and structures that limited choice and voice. One student talked about limited pacing stating, "(fifth-grade teacher) has a date when we are allowed to take the test

...(the teacher) warns us." Another added, "Yeah, and then when we have to finish our test our teacher says when we do it. We don't really get...you can't really go fast." A student with two teachers explained, "(math teacher) doesn't really like the matrix. I think the reason is that because I just think she doesn't like the way that you go and do it by yourself. I think she'd rather have a lesson where she's more into it with the child, like say, they didn't get this part, she helps them with it and I think that she knows everybody's kind of almost doing the same thing so she can see where we're at and see if we need help." One student shared frustration with being denied sating, "like sometimes, if it's too loud in the classroom, I ask to go outside, but sometimes they say 'no'. Then, I have to go through all the noise for the rest ... while I'm trying to do something... I think it's kind of like ... I can't really explain it, but ... Aggravating?" One fourth grade student felt that teacher limits affected the learning explaining, "I think we learn better when we have a choice. Our teacher doesn't give us a choice on going in order on the matrix. And I think that people would of already been done with the geometry stuff because they could of gone ahead and finished that box and then went back so you could study it more."

With respect to the momentum of instructional transformation, three teachers reported doing less in terms of voice and /or choice this year than last year. Two of those teachers specifically voiced a feeling of disappointment with the district and the school for losing focus on the learner-centered transformation as other initiatives such as Smarter Balanced Assessment, new curriculum development process and targets and the implementation of the newly adopted web-based reporting system. While four of the participant teachers saw the initiatives as supportive elements of the broader goal of learner-centered competency instruction, those same initiatives were seen by others as detracting from the work of learnercentered transformation.

Teacher comments provided valuable insights into the divergent perspectives about and challenges of multiple initiatives. Teacher 5 said, "Right now, there's a lot being asked of everyone. And so I'd say that pretty soon everything's going to be stalled, there's going to be some burn-out issues. That's all. It'll come back to it, everything's been a cycle but, the focus can only be on so many things at a time." Teacher 8 described feeling a loss of focus sharing, "I think I'd like to see us kind of get back on track with that (RISC learner-centered model) and, maybe within our PLCs or however, come back to it, because I feel like it's gotten a little lost this year. But I think in the years past it's been very driven and we've been provided the time and the support to take it off, but this year it felt like just a little bit at a halt." From a divergent perspective, Teacher 10 talked about the new technology-based student reporting program stating, "I loved it. I thought it was great. Again, I really feel that Jump Rope (reporting program) really shows where they are for the first time - validly...I think it played right into it (learner-centered competency transformation)." Across the case study, teachers perceived the variety of initiatives generally in one of two ways: complementing or competing with learner-centered competency transformation.

Identified across divergent participant perspectives, the overall challenges of teacher stress, combined with lack of voice structures, management issues, and amount of additional preparation required were all significant challenges illuminated through the data in this case study. These challenges were associated with lack of developed learner-centered experiences through voice and choice, however, several key factors that sustained the instructional transformation and supported teachers were also identified.

Supports for Voice and Choice

Understanding how students experience and teachers provide voice and choice at this upper elementary school provided rich insights into the learning environment and experiences. Factors that had a positive impact on supporting or sustaining the transformation to a learner-centered competency-based instructional environment that provides students with voice and choice were identified through teacher interviews, observations and student focus groups. These supportive factors are described in terms of relationship to roles of the teachers and students, increasing teacher capacity, and experience with the transformed model.

Eleven elementary school teachers talked about what has been helpful as each moved, either incrementally or more fully, towards providing learner-centered instructional experiences in their classrooms. Teacher beliefs about the role of voice and choice and the learner-centered competency model as a whole, as well as the related implementation skills were both important.

Teacher Beliefs

Some of the factors described by teachers provided the foundation for them to commit to providing a more learner-centered instructional experience for their students. These foundations can be described as beliefs that were associated with prior connections to teaching philosophy and the perspective that creating a more personalized learner-centered competency-based experience for students was the right thing to do. **Prior positive connections**. From the sample, six teachers specifically discussed how they had previously aligned beliefs from their teacher training and experience that made the attachment to the learner-centered model a natural fit. One teacher spoke clearly about prior advanced training and experience in an experiential outdoor education model. The most salient connection for this teacher was that the process of learning was actually more important than the outcomes. One teacher saw a clear connection to the responsive classroom model that included regular classroom meetings as a foundation for the developing model. Two teachers had experience and belief in a standards-based educational model. For these teachers standards-based and competency education was a natural match.

For one teacher, the prior experience in another Maine district that had begun to make the transformation to learner-centered education and who had belief in as well as practice with the model for two years before moving to the site school made for a smooth transition. As a support at the site of the study, once on staff at the site this teacher was one of a core group who provided support to other teachers. Similarly for two newer teachers, with one to three years of experience, prior connections with the learner-centered model solidified their belief in the model. Both teachers had been exposed to professional development (RISC and Maine Cohort for Customized Learning) early in their careers that specifically targeted creating a collaborative classroom culture that included student voice and choice.

Teacher beliefs were important because in a learner-centered competency model the role of the teacher is different and depends upon development of a variety of skills. In general the teacher is a facilitator of learning rather than the traditionally portrayed source of the learning. As previously discussed, four teachers shared how their own personal needs for control were challenged by the learner-centered philosophy and discussed the different skills

required of them as teachers. However, for some teachers, their prior experiences grounded and sustained them. Teacher 7 attested to the critical role of voice stating, "It's the whole culture and respect...knowing they are heard...respected, that process is more important than anything else," (training in outdoor education in college). Teacher 2 described, "I definitely feel like it's the right thing to do for kids. I definitely feel like working at their own pace and having a say in what, how they learn certain things ..." (prior personal connection with RISC training). Teacher 10 talked about how valuing and providing student voice was rooted in prior professional practice explaining, "The classroom meetings, I used to do those with Responsive Classroom." For more than half of the teacher participants, prior professional beliefs and experiences were factors that grounded and sustained teachers as they worked to transform classroom practice.

The rightness of the model. Despite the significant challenges and required acquisition of new teaching skills, the belief in the model as the 'right thing to do' was sustaining for some teachers. Six teachers, all of whom had prior supportive experience or beliefs, discussed their commitment. Teacher 3 reflected, "I can't believe we did it any other way. Looking back on my schooling...that makes no sense almost," (graduate training in standards-based practice). Four teachers spoke of the rightness of the learner-centered model that includes voice and choice in terms of their wishes or hopes.

Two teachers wished they had the opportunity as a student themselves, two wished it for their own children who were not in learner-centered competency-based settings, and about half of the teachers specifically expressed hopes that their young students would benefit in the future from learning to responsibly manage choice. One teacher talked about a family member whose late homework grades are affecting the grade in her AP English class, stating, "I'm thinking '*Really*? You're getting a markdown for homework?' You know...if she doesn't understand something *she gets upset*, so it's just this whole, huge process that we all (educators) should be doing in my eyes that we all need to really be focusing on." Another teacher talked about her own high school-aged child explaining, "...was sitting at the table and he started pounding his fist on the table and just yelling. 'What's wrong? Do you need my help?' He goes, 'No. I'm so sick and tired of doing the same thing over and over again- I know how to do it!" Clearly some teachers saw themselves as part of a larger educational system that needs to change to support students.

Teacher Skills

In addition to beliefs, other specific teacher skills that were supportive of a learnercentered environment supported voice, choice and competency practices played a role in creating the learning environment. These included teaching additional learning and behavior concepts related to choice-making, providing clearly aligned learning topics and activities, and an ability to make constant adjustments. Each teacher in this case study discussed the need to teach children how to manage choice. This created in effect a new foundational learning target for both students and teachers.

For the learner-centered experience to be sustained, fostering student competency in the model itself was foundational work. Teacher 1 reported, "Teaching them to make those choices to practice the things that they're not good at....is something that they need to work on. I just think having a voice and having choices at the fourth grade level....It's great to teach them how...to do that and to give them options and to set them up for success." Teachers described the skills needed to teach students how to consider and contribute to the learning environment. In conjunction with teachers' ability to teach choice-making was the teachers' ability to develop learning activities, materials and units clearly aligned with learning targets. This capacity was multi-faceted, related examples included: material organization, efficient systems that students could understand, and the skill as well as flexibility or willingness to make ongoing adjustments. Teacher 2 described it as, "...figuring out what works. I know it's the right thing to do and I'd like to get more to where they can have more of a choice." Teacher 5 added, "It's their voice...so flexible planning - absolutely." Teacher 1 described the need to be flexible and to capture learning opportunities explaining:

...being flexible in how we do things. You know we've got our schedules, we've got our routines. But all right, if we're changing up language arts because we feel like this is important we take a break and we want to learn about... ranches. I mean that was in *Scholastic News*, there was a great story this year. They were all about learning about cowboys, ranches... all sorts of things. So what do we do? All right, if you guys show a lot of interest, let's explore.

Teachers' management and curriculum alignment skills as well as the ability to be flexible and adjust were factors that sustained momentum in the transformation towards an educational experience that provided students with significant ongoing opportunities for voice and choice.

Increased professional capacity. In addition to teachers' skills, there were other supportive factors identified that increased teachers' capacity. Professional development, collaboration and the use of tools were identified as sustaining and supporting element for teachers. Professional development at the district and the school site were generally described as influential and effective. While two teachers expressed disappointment with the lack of ongoing training as other initiatives were rolled-out this school year, several others described how professional development increased their capacity. Professional reading of anchor texts and RISC workshops were most commonly mentioned external sources. Internal school-based resources, specifically colleagues, were also important.

Collegiality was a key feature of in-house professional development over the prior three years. In the data, collaboration and visiting other teachers were reported to be most valuable as teachers increased their capacity. In the regularly provided PLC meetings (similar to students' collaborative social learning experiences) teachers benefitted from and appreciated the experience and insights of their peers. Sharing with and observing others teachers increased confidence, management skills, and shared the significant workload of creating units, assessments and projects that helped to reduce stress. Teacher 8 explained, "Definitely collaborating, with the hallway and our PLC. I think PLC facilitators meetings also have been super supportive, and working with facilitators and hearing how they're running it within their teams. I would say probably though, working closely with my own PLC has really helped the most." Teacher 8 described collaborative conversations sharing, "How we're going to deliver it...or, if they've already done it, is also super helpful. I think just talking it out with someone before you try with the kids, or just try it with the kids...or you can scratch that." Teacher 4 recalled, "Probably the most beneficial thing was when we did the peer observation, just going into different people's classrooms and seeing what they did." While student data did not contribute to the understanding of the factors that sustained teachers in this evolving transformation, it was a notable parallel that students also found the collaborative experience to be most valuable in their learning experiences.

Effective use of tools and processes. Profession development provided teachers with models of classroom tools that could be used to elicit voice, structure collaborative classrooms, and provide transparency in learning targets. Teachers reported the use of tools that support voice and community building as important in creating and maintaining the learning environment. Most commonly associated with voice, as previously described observations and artifacts, was the code of collaboration and the dedicated amount of time taken at the start of the school year to develop the code with students.

Three teachers also engaged with students in regular class meetings to reflect upon the week, review goals and provide feedback to peers. Teacher 11 shared, "We have class meetings...in the beginning I do it every day because they get to know each other and we have all had time. It's just such great time for them to bond...then really the scheduling, it's Wednesdays we do it because we don't have a special. I do it in our special time so that no one is gone. I don't want to miss anyone." In one room the parking lot tool was effective and provided for ongoing student voice. Observations throughout the data collection period consistently showed students and teacher in that class actively used the parking lot as an ongoing feedback and voice tool. Several classrooms found voting, often done privately, as an efficient and effective voice tool. A student reported, "We voted to decide...yeah, but we do put our heads down for different things, you don't want to copy off your friends and stuff. It was just which ones do you think are the most important." In some rooms the process was less structured and more conversational. Teacher 11 explained,

We sit down and every couple of weeks...how is this, how is the end of the day, is it working, is it not working? Do we need to tweak anything? How is math working? Is it too loud? Is it too structured? I mean what things are working? We talk about

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that...I also have the kids, especially for math where they are all working on their own learning targets, they fill out a daily goal sheet for me so that they can tell me what it is they wanted to work on today, what it is they accomplished.

In addition to classroom culture and reflection tools, learning progression tools that supported an effective learner-centered instructional environment and progression through the competency system were also important for teachers and students. Artifacts and observations showed capacity matrices, individualized goal-setting and goal review meetings, visual posters of schedules and targets to be most commonly used tools. Efficiency was also supported by previously described artifacts such as standard operating procedures (SOPs) and capacity matrices. In additional to tools and structures, choice was also supported by project rubrics. One student stated, "Yeah, I like it, because when we do the projects, then we can do anything we want. The teachers, they just ... They just do it on how they think you did. I'd really like that a lot...yeah, our teacher usually writes us a rubric, to build our project around that." Teacher 11 described the role of rubrics in choice stating, "It's just the general rubrics you have to incorporate. I'll say you have to incorporate plot, character, setting, the elements within the story but the way you show it is completely up to you."

Technology was also mentioned by both teacher and student participants as an important tool. One teacher and several students talked about technology as a challenge in terms of overreliance or off-target practice/game activities. However in observations, teacher and student comments, technology played a role in supporting differentiated practice, exploration of student-developed projects, project output options and earned free-time incentives. Overall the use of tools, meetings and protocols as a sustaining element was a strong theme from both the teacher and student perspective. **Reflection and adjustment**. Adjustment was threaded throughout teacher interviews as a required skill and capacity of teachers. Given the context at the site, including: new curriculum, new reporting system and a transformed model that is not highly prescriptive, more than half of the teachers discussed the value of learning with the students in a cycle of trial, reflection and adjustment. Students also found value in working collaboratively with peers and teachers to make needed adjustments. Students in Focus Group 2 described a cycle of reflection and adjustment recounting, "Some kids in our class fool around in the bathroom bad. We made a bathroom code of collaboration…we just took pictures of each other and put it on the wall and…bubbles (word bubbles with expectations) were coming out of it today saying the rules and stuff." While students were important partners in reflection, teachers led the process.

Teachers described the need to reflect with students and adjust on an ongoing basic as they worked to create and maintain a more effective learner-centered competency-based classroom. Teacher 3 explained, "All the time. All the time. A lot, and I also find that the small groups, I'm constantly at a table, pulling kids over, and checking in, one on one." Students and teachers in all participant classrooms reported that students had some degree of say and responsibility for working with the teacher to create and maintain an effective learning experience. The changing role for the students in a learner-centered classroom was evident.

The Role of Students

As teachers and students developed and experienced the more learner-centered instructional model, they learned together. As previously mentioned, teachers identified how individual and whole-class factors challenged the amount of voice and choice teachers

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provided. However, nine of eleven teachers commented to varying degrees about students positively affecting their skill and commitment to the transformed model. Teachers further described how students contributed to success of the model by demonstrating competence and providing inspiration. Teacher 3 explained, "Kids have done plays, I mean... some want to make something. Some just want to do a traditional book report. Some just want to get up and present something orally so they do... It's been really fun to see it over the years." Teacher 2 described how she relied upon ongoing student input to make adjustments stating, "the parking lot, for example...just taken off. They love it... it's filled up as much as I can go through it, they fill it up again. And a lot of the things that we've done in the classroom have come from things that they have put on the parking lot."

Students demonstrating competence. Strengthening teacher's belief in the model was the experience of students' increased competence. Students also described how they felt capable of managing choice, learning from mistakes and making progress through personalized learning targets. Teachers discussed this as well. The examples showed how students expanded the teacher's capacity by providing supportive insights and additional or more creative ideas. Teachers also discussed how student were capable partners in problemsolving. Contrary to the traditional model wherein the teacher alone must handle all challenges, both students and teachers provided examples of student-teacher collaboration that helped to improve the learning experience.

In some teacher examples, and observations, students were actually capable of problem solving without teacher facilitation. Students in a fifth grade focus group were asked about a student-led class meeting. Students explained, "It was we had bad self-control last week ... We had no self-control. We had to decide to help ourselves get self-control and get to how things were before we had no self-control." When asked if having that process helped. A student replied, "Yes. Definitely." Another added, "This week we've had selfcontrol and in our specials we've gotten nines and tens" (of ten possible points for positive participation during specials). Both teachers and students gave examples of times when students showed they were able to handle choices and use their voices to improve the learning experience. The competency of students was an important sustaining factor for teachers and for the development of effective learner-centered competency-based environments.

Students providing inspiration. Students also surprised and inspired teachers. Eight teachers described feeling motivated to continue developing opportunities for voice, choice or learner-centered instruction because of the positive impact they saw on their students. Students actively engaging in meaningful learning activities, experiencing happiness, collaborating positively and delving into deep learning projects were all important according to teachers. Teacher 11 stated, "… It's been difficult in just the prep work that is involved in setting it up, but it's *so worth it* once the kids get going and they know what they're doing." Teacher 3 shared, "It's…*a-ma-zing*."

Experience Sustains Transformation

In this authentic classroom transformation, practice led to successes. Countering the challenges of the amount of work required, student factors, other initiatives at the site, and teacher stress, were the successful experiences based on practice that helped to sustain and support the development of a more learner-centered competency experience that provided for student voice and choice. The combination of student capacity and inspiration with reflection, trial and adjustment all contributed to significant positive experiences. This factor

was noted from the perspective of both teachers and students as participants described how they learned from experience.

Teachers shared how their experience, trial and error, reflection and working with students contributed to creating and sustaining learner-centered competency transformations in classrooms. Teacher 1 reported, "I've had the standard list of different things that we've gone over for, I mean, six years...and in year seven, okay, you guys give me land forms. Look them up. Then so instead of doing the standard twelve or sixteen that I'd previously done we had like 24 options ... which was great because a lot of the kids chose different things that I previously hadn't gone over." Many teachers noted that their practice this year was different than it was during the first year of transformation. While two teachers reflected upon their own loss of momentum, most felt more capable and effective because of their experience and insights garnered through reflective practice. One student reflected a parallel growth mindset stating, "I've learned that there's some things that you can learn to do right away, and be real good at them, like some people are really good at drawing, since they started drawing. There's some things that take a lot of practice to get good at." Sustaining factors in this instructional transformation included teachers' beliefs and skills, with additional support of collegiality, focused professional development, use of tools and the ability to reflect and adjust. The role of the student was also an important sustaining factor in participant classrooms that saw students as competent, as problem-solvers and as a source of inspiration. Teachers and student views were aligned as they described how ongoing practice made for a more successful learner-centered competency learning environment.

Summary

Themes in this qualitative classroom-based case study of the role of student voice and choice in the transformation to a learner-centered competency instructional model provided for an understanding of how voice and choice were experienced by young learners and teachers in eleven classrooms. The first theme was an exploration of voice and choice in the classroom context. Choice was provided and experienced in practice activities, places, partners and projects. Teachers and student participants had closely aligned perspectives on choice. With respect to voice, students and teachers who valued voice had aligned perspectives on the role and value of voice, however, a minority of teachers did not provide for or find value in student voice. Students in two focus groups expressed frustration with lack of voice. Voice, when included in participant classrooms, was experienced and provided through collaborative creation of classroom codes, classroom structures, and recognition systems. The understanding of the role of voice and choice in classrooms was the foundation of other insights in this study.

The second theme explored the learner-centered environment in participant classrooms and provided valuable descriptions of common learning environment factors. These descriptions included a structured learning environment that provided for a more personalized experience in a competency progression through targets. Teacher and student data within this theme, described from different perspectives, were consistent. Once the classroom environment was more fully understood, factors related to the learner's experience were described from the learner and teacher perspective. The third theme provided a richer understanding of the learner's engagement in participant classrooms that provided students with meaningful opportunities for voice and choice. Factors related to engagement included learner insights, a sense of community, as well as personal feelings and beliefs. All participants described a more engaging learning environment. Divergence however, was found in teacher participant data; a minority of teachers did not report significant learner experiences in terms of insight nor did they report student feeling and belief factors as significant. For students and teacher participants who found value in the more learner-centered competency instructional model based in voice and choice, the data was well aligned.

The fourth theme was organized into two sub-themes that described factors that challenged or supported instructional transformation towards learner-centered competency education that provides voice and choice for learners as stakeholders. Practical challenges identified were teacher stress, combined with lack of voice structures, management issues, and amount of additional preparation required. Supportive factors included student competency that provided inspiration, as well as teacher beliefs, capacity to reflect, adjust, use tools and collaborate. While the majority of the data was provided by teacher participants, it was not necessarily divergent from student data. Examples from the student perspective provided a complementary view to teacher perspectives.

The multiple sources of data in this case study of an upper elementary school provided an understanding of voice and choice as aspects of the developing learner-centered instruction in a school engaged in competency reform. Themes described how voice and choice play a role in creating the classroom environment and how they are experienced by teachers and learners. This study also explored the complex factors that sustain and challenge

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conclusions and implications for future practice.

CHAPTER 5

CONCLUSIONS

This qualitative case study, set in one upper elementary school engaged in developing a learner-centered competency model of instruction, explored the role of student voice and choice in key aspects of learning within the context of an educational transformation. This chapter presents an overview of the study, discusses findings and considers the relationship between findings and concepts presented in the literature review. Implications of each theme are offered from a transformational educational perspective and recommendations for future study are suggested.

Review of the Research Study

Promising student-involved instructional models are being explored across the country, and may be a key to reshaping our schools. Foundational elements of contemporary progressive competency models include a reimagined role for the learner who has a voice and engages in making choices about their learning. Where other progressive reforms have failed to bloom and faded across the decades, could engaging students through voice and choice as true stakeholders in their learning be a sustaining element in this progressive transformation?

Purpose, Significance and Design of the Study

The purpose of this qualitative case study was to examine the role of student voice and choice within the larger context of a transformation towards learner-centered competency education. This research questions in this study explored how teachers incorporated and how students experienced voice and choice. It further explored factors that supported and challenged the incorporation of voice and choice, and considered the potential for student voice and choice to sustain a more learner-centered competency instructional model. This study added to the understanding of the role of student as stakeholders and how their insights, perceptions and experiences informed curriculum, instruction and the learning environment. It not only considered student voice and choice as a key to instructional engagement but also considered the roles for voice and choice in collaboration, communication, and shared decision-making as strong foundations for creating just and equitable learning communities.

Research Questions

- What is the role of voice and choice in a learner-centered classroom?
- How is voice and choice experienced in classrooms transforming from a traditional to a more learner-centered instructional model?
- How do students and teachers experience voice and choice in a learner-centered classroom?
- How do students and teachers describe the factors that support or suppress voice and choice in a learner-centered classroom?

The design of this qualitative case study provided for many rich sources of data gathered from teachers and students in a school engaged in learner-centered competency instructional reform. Teacher interviews and student focus groups were most valuable in helping to build an understanding of important themes. Additional supportive data was gathered through classroom observations, collection of district and school documents, as well as classroom artifacts. The connections to conceptual foundations of this topic are also important when considering the implications of the findings and recommendations.

Conceptual Framework

The conceptual framework informing this study included progressive pedagogical and social theories. These converging concepts, grounded in constructivism, social learning and social justice, framed the topic of this study. The literature review described a progression in American education from standards-referenced to standards-based towards more personalized, contemporary, competency reforms. The conceptual framework connected learner-centered instructional design including student voice and choice to its deep constructivist and social justice roots and supported further exploration of the value of engaging individuals in their own learning through this study.

In this qualitative case study of eleven classrooms engaged in learner-centered competency transformation, findings related to how students and teachers experienced student voice and choice, the learner-centered environment, engagement in learning, as well as challenges and supports are discussed. The perspectives of teachers and students are presented from aligned as well as divergent perspectives in relationship to the research themes identified in this study. Implications for educators and areas for future exploration and study are also suggested.

Discussion of Student Choice

The data in this study suggest that choice in learning is an important aspect of learnercentered education that is solidly grounded in constructivism and the humanistic perspective. Across the eleven classrooms in the study, choice was identified as the most consistently reported learner-centered instructional change. Data from the study described degrees of choice in practice activities, partners, places, topics and projects. As students progressed beyond the basic to more advanced concepts related to choice combined with voice, they also described emotional, social and personal learning experiences.

There were strong connections with how students experienced choice to constructivist epistemology and other related psychological learner-centric and social learning development theories of Vygotsky, Piaget, von Glasersfeld, Varela, Wittgenstein, Bateson and others (Ernest, 1995; Heylighten, 1993). Reflecting Dewey's beliefs that knowledge emerges only from situations in which learners draw from and engage in meaningful experiences (1938), choice in learning was clearly important to teachers and students in this study as a way to create and experience a more personalized pathway through learning targets.

The role of choice at this site also supported competency transformation that evolved from standards-based educational reform as described in the literature. Teaching, testing and activities were guided by standards to support clear learner outcomes (Great Schools Partnership, 2013; Marzano, 2003; Marzano, 2007, Marzano, Pickering & Pollock, 2001). While learners had choice, it was not wide-open; the choices were structured and aligned with learning targets so the focus, from the perspective of both students and teachers in this study, was on learning outcomes or competency.

Choice as described in the study, supported and engaged students as they progressed through learning activities that were aligned with standards of competency. With connections to principles of individualism and humanism (Maslow, 1962), customization, as described in the literature, was a powerful aspect of the emerging model of competency education. The shift allows for demonstrating learning in a variety of ways at an individualized pace that supports higher levels of academic performance (Delorenzo, Battino, Schreiber, & Carrio, 2009). Both teachers and students at the school in this case study recognized that learners each have unique learning style preferences and skills. These more contemporary learning environments employed choice as a strategy to move towards the vision in which each child would be taught and assessed in a way that is personalized for the learner (Gardner, 2010).

The divergence between teacher and student perspectives of the value of choice was related to the important finding that students benefitted from the experience of learning about themselves through choices they made. Some students clearly described how making good and not so good choices helped them to gain personal learning insights and explained that if they were not able to make choices they would have missed that opportunity. The assertions about higher levels of academic performance and personal insight were shared by several participant teachers as well as students in two focus groups, but this was not consistently reported by other teachers.

Providing choice in practice activities, partners, places, pathways and projects for students in this study of one school appeared to be a manageable and practical step that teachers took as they increased capacity to create more learner-centered competency instructional environments. Findings in the study were aligned with constructivist and humanistic psychological principles as well as contemporary literature supporting competency reform in which choice is a key to personalization as students play a role in creating for themselves a more meaningful educational experience.

Providing learners with meaningful opportunities for choice in their learning is important. Offering choice is a practical strategy for teachers to increase capacity to provide a more learner-centered competency-based instructional experience for learners. Choices are purposefully designed and structured to support students as they progress through learning standards and include aspects of both the learning environment and instruction. Creating a

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variety of high quality choice experiences aligned with competency standards will continue to support deeper opportunities for personalized learning. Even young learners value choice as they are provided with opportunities to take a more active role in designing their own educational experience and gaining personal insight. While managing choice in classrooms is challenging, the benefits related to personal and academic growth are worth the effort. Student choice may hold a critical place in the future of progressive American education.

Discussion of Student Voice

In the literature review, early social learning theory identified the connection between communication, social learning and voice (Britzman, 1989; Vygotsky, 1963). Fourth- and fifth-grade students in this study simply understood voice as 'having a say'. Throughout the study, data provided by both students and teachers showed the interrelationship between voice and choice as key aspects of learner-centered competency education. Having a choice inherently gave students a voice. In all focus groups, students expressed the personal importance of having a say in aspects of their learning experience.

In this classroom-based study, both teachers and students described a more social learning experience in which learners worked collaboratively, talked about their learning and their progress towards individual and shared goals. Students who worked collaboratively, talked about their learning much of the time. This finding was supported by early social learning theory that identified the role of communication and the social context of learning. Vygotsky saw social language as fundamental to learning and making meaning. Data from teachers, students and observations described a parallel view of learning that was shaped through interactions between learners. In each participant classroom students had significant opportunities to learn with partners and in groups. The majority of classrooms in this study provided students with significant voice in creating the classroom codes and structures for collaborative culture that supported learnercentered competency transformations. This finding supported research about the value of voice in creating a culture of shared leadership (Mitra, 2009; Delorenzo, Battino, Schreiber, & Carrio; Harper, 2000; Sound Out, 2013). Students and the majority of teachers found the co-created classroom codes to be important as foundations for collaboration that increased capacity to maintain an efficient, differentiated, social, learning environment.

Interpretations of the value of and opportunities for voice were not consistent for teachers in the study. A minority of teachers found voice to be a critical foundation for learning and classroom culture. Perspectives for those teachers aligned with expanded contemporary interpretations of student voice in the literature described how voice allows learners to express their opinions, be actively involved in planning, implementation, and evaluation of their personal learning plans and who express their feelings, share knowledge, beliefs, ideas and aspirations (Mitra, 2004; Quaglia & Corso, 2014; Sound Out, 2013). However, opportunities for student voice in the majority of participant classrooms were less developed than opportunities for choice. While data at the site related to voice did not contradict the literature, the potential for student voice had not been fully developed in over half of the classrooms.

Students shared insights about the role of voice that went beyond the perspective of teachers. In focus groups, students connected voiced with strong feelings about fairness and respect. The students' perspective about the role of voice aligned with constructivist roots that support providing student voice as a key to social justice and equity by valuing each child's right to speak and to be heard (Britzman, 1989; Fielding, 2006). This finding

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provided powerful insights about how these young students experienced voice and the lack of voice. They appreciated and were proud of opportunities to have a say and contribute. Some students also associated voice with being recognized as individuals: creative, funny, athletic, etc. Across eleven classrooms, teacher's perspectives and subsequent opportunities for student voice were not consistent, however, students found value in and hoped for additional opportunities to have a say in their learning experience.

Student voice is a foundation for social learning. Providing voice also enables learners to take a more active role in their learning experience as they co-create classroom cultures and structures. Educators who valued student voice saw the significant classroom benefits of providing it, but voice was more elusive for some and denied by others. School leaders, teachers, and students stakeholders should engage in a process to understand the role of student voice at the school. Giving students voice in this educational conversation is a fundamental shift that may be supported through targeted professional development opportunities to build teacher capacity through the use of tools and processes that provide for student voice. It is important to more actively and consistently develop and employ voice in classrooms. Student voice has potential value for individual learners, may be an untapped source of support in the transformation towards learner-centered competency education and has deeper connections to respect, self-determination and equity.

Discussion of the Learner-Centered Environment

Many Maine schools, including the site of the study, have made the commitment to learner-centered competency educational transformation (MCCL, 2014). This case study provided an understanding of how student voice and choice contributed to classroom learning environments that were designed to be more learner-centered with personalized options,

opportunities for social learning, and a clear focus on competency. The insights provided by teachers and students in this study helped to further understand the structures that were foundational supports to the evolving progressive instructional model.

The active role for student stakeholders as discussed in the literature review (Mitra 2006; Mitra 2008; Schwann & McGarvey, 2010) was reflected in the majority of participant classrooms that relied upon students to help create and sustain the learning environment. Voice and choice provided students with an opportunity to co-create the classroom structures so that they would be clearly understood, would facilitate differentiated opportunities for practice, and increase student ownership for maintaining the collaborative classroom culture. In this study, where learners took a more active role in creating and maintaining the learning environment, an important finding included the practical role of explicit classroom structures that relied upon students to help manage and support the more social and personalized learning experiences.

Having clear student created and maintained structures addressed the practical realities and organizational challenges inherent in classroom instruction that was more personalized and competency-based. When students were not all working on the same activity at the same time, when individuals needed instruction on different skills and concepts at different times, creating clearly defined structures including expectations and processes that provided for differentiated and personalized learning were key in the learner-centered instructional model. Teacher participants and students in focus groups talked about how students provided support to each other in order to help maintain behavior expectations in accordance with the classroom code of collaboration. Teachers across the study clearly described the value of collaborative and transparent structures that enabled them to provide

students with instructional support and direct skills instruction described by Weimer (2013) as a key feature of learner-centered teaching.

The learning experience in all participant classrooms engaged in the learner-centered competency transformation, clearly revolved around progression through learning targets. These targets (learning goals) were often posted on classroom walls and many teachers used a visual list, menu or capacity matrix to manage and organize the progression of learning activities for students. Students in all focus groups and in classroom observations were aware of the targets and what they needed to do to demonstrate they had met the target. Proponents of competency education as well as data from this study strongly support the importance of transparency and classroom structures associated with learner-centered instruction (Marzano, 2006; RISC, 2013).

Data provided from classroom teachers and student participants, through observations and collection of artifacts all helped build a richer understanding of an instructional environment structured to support a more social, personalized competency experience for the learner. The teachers within the school have begun to design curriculum in a way that provides flexible pathways for students. This shift in the educational approach is aligned with the literature that describes the transformed system of instruction as one in which students are no longer expected to progress through a uniform pathway (Delorenzo, Battino, Schreiber, & Carrio, 2009). This progression of learner-centered options was being developed in different ways and to different degrees across participant classrooms but clearly for all participant teachers and student groups, there was a recognition that each student learns differently.

The importance of individual perspective and diverse approaches in learner-centered instruction (McCombs, 2001; McCombs, 2004) was echoed by teachers and students across

the site. Markowitz, Ndon, Pizarro and Valdes (2005) described the value of learner-centered communities that embrace student differences, promote taking intellectual risks, and foster shared knowledge. Students discussed how some learn best alone, some with partners, some preferred practicing with paper and pencil and others with technology-based games. There was also clear recognition that many students benefit more from collaborative projects and real-life applications. While some classrooms have developed meaningful projects and activities designed to show competency, the opportunities for these experiences were limited and still in the process of being developed.

The related potential for customization provided through transformational technologies used to individualize and personalize to meet the learning needs of every learner, the future vision of education (Mathieson, 2012; Miliband, 2004; Schwann & McGarvey, 2013) was also being developed across the site. All participant classrooms used adaptive technology programs to individualize practice activities. This was especially true for math. In addition, technology time was provided as an incentive for students, as a means to explore topics of choice, and as a vehicle for creating student projects. Perspectives and practices reflecting the expanding role for technology, at the site and throughout the literature, were clearly aligned. With the addition this year of the web-based individualized, standards-based reporting system, the connections between the learner-centered competency model and technology were more firmly established and will continue to evolve.

Creating a more learner-centered instructional environment is supported by clearly established structures created with, and actively supported by students. Giving students voice and choice in creating these structures increases ownership and actively engages the learners to sustain a collaborative classroom culture that is more social, differentiated, and personalized. In developing learner-centered competency classrooms, teachers can provide and co-create with students a variety of learning structures including independent, social, and directed instruction that support progression through established goals and clear learning targets. Multiple pathways beyond paper and pencil practice activities to include more authentic and real-life applications of learning as well as technology supported learning opportunities should continue to be developed as schools expand pathways for students to engage and demonstrate competency.

Discussion of Engagement in Learning

A richer understanding of student engagement in learning in participant classrooms that provided students with meaningful opportunities for voice and choice was an important benefit of this study. As educators strive to create more learner-centered competency-based experiences, insights about learning engagement, learner needs, sense of community, as well as personal feelings and beliefs inform and support transformation.

The most consistent finding about the learner experience, across participant classrooms, was that students who were engaging in learning activities supported through voice and choice were highly engaged. All teacher participants and focus groups described the benefit of an engaging learning experience when students were provided with choiceinvolved learning activities. Engagement as described by participants, aligned closely with descriptions in the literature review that included a focused effort directed toward mastery of the learning targets, standards and goals (Newmann, Wehlage, & Lamborn, 1992). Learning was an active process in terms of emotional commitment and behavioral practices through which the students constructed meaning. This finding was supports the constructivist perspective of learning (Dewey, 1938) that is grounded in active learner engagement with emphasis on the action of the learner rather than the passive act of accepting knowledge that is delivered by teachers. Students who explore choices and have a say as stakeholders in creating learning experiences are drawn into their own learning. Increased learner engagement was an important sustaining factor for teachers who are working hard to develop more learner-centered classroom experiences.

The role of teachers and students in more learner-centered classrooms were also different than those in traditional classrooms. Teachers across the study facilitated engagement by providing a variety of strategies to involve students. The data provided a contemporary understanding of the constructivist perspective (Ciot, 2009; Cannella & Reiff, 1994; Ismat, 1998; Ültanir, 2012) that encourages learners to question, solve problems, and formulate their own ideas, opinions and conclusions. In the majority of participant classrooms, students engaged with their teachers to create and maintain the classroom environment in order to support learning. Collaborative culture was the foundation for the social learning community found in varying degrees across the eleven classrooms.

The relationship between the culture of the collaboration and engagement in social learning were found both in the case study data and in the literature review. Students across the school chose to work with peers and in groups much of the time. Social learning theory supports that children's understanding is shaped through interactions between people in relation to the world. Knowledge and thought are rooted in culture, including the social activities of language and other social contexts of communication (Vygotsky, 1962; Edwards & Mercer, 1989). A minority of teachers did not report significant learner experiences in terms of insight developed through voice and choice opportunities. It was notable, however,

that despite some teachers' perspective about the value of student voice, all teachers found professional and personal value in collaborating with their own peers to develop (have a say) in transforming classroom practice.

For students and teachers who found value in the more learner-centered competency instructional model based in voice and choice, the data was well aligned between participant groups and the perspectives offered in the literature. Personalized or learner-centered instruction requires development of an in-depth understanding of each learner. Students throughout the study described insights about how they learned best, about their own preferences and learning styles. That knowledge allowed teachers and students to create a psychologically safe environment, determine each student's readiness, identify a variety of learning opportunities to increase engagement, and develop greater emotional intelligence (Powell, Kusuma-Powell, 2011). They also experienced the benefits of learning to problemsolve and learn with others, including peers and teachers. These communication and collaboration skills are associated with twenty-first century competencies, referred to a *Guiding Principles* in Maine, that will help prepare students develop essential habits of mind and of work (Maine DOE, 2014; Partnership for 21st Century Skills, 2011). In addition to the educational and practical personal skills supported by the learner-centered competency learning experiences, were findings that reflected a deeper, more personal experience.

Aligned with constructivist roots described in the literature, data in this study provided insights about how student voice supports social justice and equity by valuing each child's right to speak and to be heard (Britzman, 1989; Fielding, 2006). Student participants in this case study made connections between having a say and choices about their learning with core values and personal feelings. Connections between voice and the development of the individual and of a just and equitable community are found in the work of Dewey (1938) who promoted equitable educational opportunities, which broke down barriers of race, class and nations, as a foundation of a democratic community. The diverse group of students in this study clearly associated voice and choice with fairness. They further described feelings of respect, pride and freedom they experienced when teachers created an educational experience that included meaningful opportunities for voice and choice. The values of social justice, equity and respect are promoted in a learning community that provides for voice and choice, fosters social learning, communication, and problem-solving. Learning environments that support equity, responsibility, and the right to have a say, have potential to develop more capable democratic citizens (Markowitz, Ndon, Pizarro & Valdes, 2005; Morrison, 2008).

Providing students with meaningful opportunities for voice and choice is important as a strategy to increase engagement in learning and creates opportunities for social learning experiences that support academic competency and help to develop important collaborative and communication skills. Students provided with learner-centered competency instruction that includes voice and choice experience the benefits of a sense of belonging to a community and develop important insights about themselves and others. Providing voice and choice are not only foundational aspects of a transformed learning experience but for students, they have powerful connections to core values such as freedom and equity as well as personal feelings of pride and respect.

Discussion of Challenges and Supports of Voice and Choice

This progressive reform faces significant barriers associated with redefining well established structures in the traditional American education system. In this case study,

findings about the role of voice and choice in the development of a learner-centered competency instructional model, provided valuable insights about the factors that challenge as well as support the transformation.

Significant challenges were identified from a variety of perspectives. The overall challenges of teacher stress, combined with lack of voice structures, management issues, and amount of additional preparation required were all significant concerns shared by teacher participants in this case study. These challenges were associated with the lack of developed learner-centered experiences based in voice and choice noted in some participant classrooms. The vision at the site was developed five years ago and yet the significant challenges that hinder progress may derail this promising progressive reform, which according to the literature (Kohn, 1999; Tyack & Cuban, 1995) is a likely outcome as other progressive reforms historically have not been sustained.

The magnitude of this educational reform according to the literature and participant teachers requires fundamental and sometimes disruptive structural changes (Bartunek & Moch, 1987). The amount of additional teacher preparation required to create multiple pathways aligned with learning targets was a significant challenge. This was especially true for some teachers as other initiatives, specifically two new technology-based initiatives; the standards-based grading and reporting system and the assessment of Common Core State Standards, took precedence. Although some participants saw these initiatives as being related to competency reform, there was no doubt they required significant time and energy. Critics of this reform argue that the transition will require already overburdened teachers to engage in extra planning, preparation, and training (Great Schools Partnership, 2013). This concern was mirrored in the experience of teachers across the study.

In addition to school-wide factors, classroom-based challenges were also described. Some teachers had provided significant ongoing opportunities for voice and choice in an evolving learner-centered model, but for others a lack of depth was evident. This finding is supported by the literature that described the difficulties districts are finding associated with making the transformation to a student-centered model. Paralleling the research of Levin, Datnow, & Carrier (2012) learner-centered reform is complex and some classrooms at the site are still in the very early stages of reformation. Specific teacher control needs, classroom management, and student factors such as behavior and developmental issues were identified by some teachers as challenges to the development of meaningful opportunities for voice and choice in individual classrooms.

Findings that described the significant challenges of transforming classroom practice may support the essential value of engaging students as stakeholders. According to proponents of student voice (Mitra, 2009; Patrick, & Pittenger, 2011) employing strategies for providing voice and choice allows learners and educators to co-create an engaging instructional experience based on collaboration, understanding of student's perceptions, learning styles, and interests. In classrooms that did not develop opportunities for voice and choice that supported the collaborative classroom culture, students were not portrayed as stakeholders or partners who could provide support to teachers or to each other. In contrast, teachers who provided ongoing opportunities for student voice and choice found value in cocreating the learning environment with their students.

The research suggests that increasing student voice may serve as a real catalyst for fundamental change in schools, including helping to improve teaching, curriculum, and teacher-student relationships and leading to changes in assessment and teacher training (Palmer, 2013; Fielding, 2001; Fielding, 2006; Mitra, 2008; Mitra, 2009; Oldfather, 1995; Rudduck & Flutter, 2000; Young & Sazama, 2006). The apparent challenge of variability across individual classrooms is also reflected in the research. Learner-centered competency education is designed and evolves in different ways (Levin, Datnow, & Carrier, 2012; MCCL, 2014) across the school site as it is being interpreted by individual teachers. Lack of scalability and buy in were key factors identified through the research that limited progressive reform both historically and at the site of this case study (Kohn, 1999; Ravich, 2011; Tyack & Cuban, 1995).

The perceived and real challenges related to the magnitude of the instructional changes in the face of other change initiatives, lack of developed voice structures, significant curriculum preparation work to design pathways, combined with classroom management and student-attributed issues, all contributed to the amount of stress described by teachers. Fortunately, important supportive factors were also identified by teachers and students.

Factors that sustained the developing learner-centered competency model grounded in student voice and choice included teachers' beliefs and skills, with additional supports of collegiality, focused professional development, use of tools or processes, and the ability to reflect and adjust. The role of the student was also an important sustaining factor in participant classrooms that saw students as competent problem-solvers who provided a source of inspiration for teachers. Ongoing commitment and practice also logically made for a more successful learner-centered competency-based learning environment.

Teachers, who provided more opportunities for voice and choice in their developing learner-centered competency classroom environments, identified prior professional connections as sustaining factors. Foundational training that supported their belief in standards-based educational principles described in the literature (Great Schools Partnership, 2013; Marzano, 2003; Marzano, 2007; Marzano, Pickering & Pollock, 2001) was identified as a support. Prior training and positive experiences in constructivist experiential learning models also supported the belief in the value in student voice. Teachers who more fully embraced the transformed vision of education grounded this emerging reform in previously established beliefs and practices. An interesting related finding was that teachers who had foundational connections were less deterred by other initiatives and saw the connections between those initiatives (Common Core State Standards and the new reporting system) as a progression of the transformation.

Another consistently described supportive factor across the site was collaboration. The value of collaboration in the educational transformation was layered: not only did students find value in collaborating with peers as described in social learning theory, but teachers across the participant classrooms described the value of collaboration with their peers. Given the significant amount of work to be done, sharing units, materials and authentic applications were all important practical supports. The professional learning community (PLC) structure at the site (Dufour, Dufour, Eaker & Many, 2006) was the foundation for collegiality and ongoing collaboration. Again paralleling the student experience, the literature emphasized the role of positive feedback, the importance of an encouraging climate, and of learning both in and outside the classroom. The importance of individual perspective and diverse approaches in learner-centered instruction (McCombs, 2001; McCombs, 2004) were provided and supported through ongoing opportunities for teachers to work together.

The value of including students and the power of giving learners a voice in their own education as described in the literature describing learner-centered competency models

(Mitra, 2009; Delorenzo, Battino, Schreiber, & Carrio; Harper, 2000; Quaglia & Corso, 2014; Sound Out, 2006) was not consistently represented across the study. For the majority of teachers, voice was more challenging to provide than choice and for some it was less valued. However, several teachers saw student voice as a foundational element in their classrooms.

For teachers who highly valued voice, professional development and the use of tools and established processes that elicited voice were sustaining elements that provided meaningful ongoing opportunities for students. To varying degrees across participant classrooms, voice was the thread that connected the co-created code with the receiving and giving of feedback on performance and classroom culture. When provided, voice gave students the ability to participate in decisions about their educational experience and created a culture of shared leadership (Mitra, 2009; Delorenzo, Battino, Schreiber, & Carrio; Harper, 2000; RISC, 2014) with their teachers. In more learner-centered classrooms in the study, a collaborative classroom culture provided the foundation for learner-centered competency instruction.

The role of students as stakeholders was also described in the research as key supportive element of transformed educational experience (Mitra 2006; Mitra 2008; Schwann & McGarvey, 2010). Student participants expressed pride in their progression through learning targets and described how, when given the opportunity, they were effective, creative, and determined problem-solvers who helped to sustain a productive learning environment. Teachers who developed more learner-centered competency instructional models in this study similarly described how their students were competent in terms of learning and problem-solving. While not fully developed across participant classrooms in this study, the potential of the learner-centered model shown in some classrooms echoed a contemporary vision (Mitra, 2004; Mitra, 2001; Sound Out, 2013) for students to be active stakeholders who support the classroom culture of learning and actively inform school improvement.

Finally, more progressive teachers not only described students as capable of thriving in and contributing to the transformed learning environment, but further described students as a source of inspiration. Student success provided inspiration that sustained teachers who engaged in ongoing reflection and adjustment (Dweck, 2006) of their practice to establish more effective learner-centered competency instructional environments for and with their students.

Given the significant differences in teacher perspectives and opportunities for voice and choice described in this study, it is important to address challenges while building upon sustaining factors. Collaborative sharing of materials that support choice aligned with revised learning targets has potential to lift the work and can provide the foundation for important collegial discussions about the divergent approached and opportunities for student voice. Beyond the practical benefits of sharing the burden, collegial discussions about challenges and successes can sustain momentum, reduce stress and strengthen a collective vision.

From a leadership perspective, building upon strengths and removing barriers identified in the study are critical. Protecting collaborative time as well as limiting the pace and number of change initiatives will support sustained focus on transformation. In addition, cultivating a safe environment for teachers to celebrate successes, explore differentiated practices and divergent beliefs, and confront challenges related to learner-centered transformation should be priorities going forward. Increasing our engagement with learners as partners in this work has powerful potential. This potential should be actively developed by increasing teacher's capacity to provide for voice through targeted professional development including the use of tools, processes and forums that facilitate student voice. Additional school-wide opportunities to involve students as stakeholders would further demonstrate the commitment to the vision of learner-centered education and could provide some additional insights from stakeholders who have been largely missing in the conversations in schools.

Future Research

It will be important to explore whether students who actively participate in shaping their educational experiences will experience improved academic and personal outcomes while further assessing the practical value of actively engaging learners to inform and sustain school improvement efforts. Further exploration of school-wide supports for teachers such as peer observation, vertical teaming, and flexible grouping structures could provide additional insight into collegial and practical supports for educators engaged in transforming traditional structures. It would also be valuable to continue to describe evolving learner-centered competency models that provide students with voice and choice to increase authentic realworld learning, multiple pathways and emergent technologies as these may provide guidance and inspiration for educators committed to the challenge of sustaining this progressive transformation that places learners in the center of their own educational experience.

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APPENDIX A

Capacity Matrix Template

Name: Subject:		Date Started: Teacher:			Date Completed: Level:	
Standard: Insert Common Core Math standard here and unpack vocabulary with students	I Emerging I can show what I learned with help	2 Partially Proficient simple barts	T learned the simple and complex parts and can demonstrate them	I can use what I learned in a new P way. (e.g. Explain or go bevond)	<u>What is my</u> <u>evidence?</u> *Attach all work to Capacity Matrix	Teacher Sign off/Date

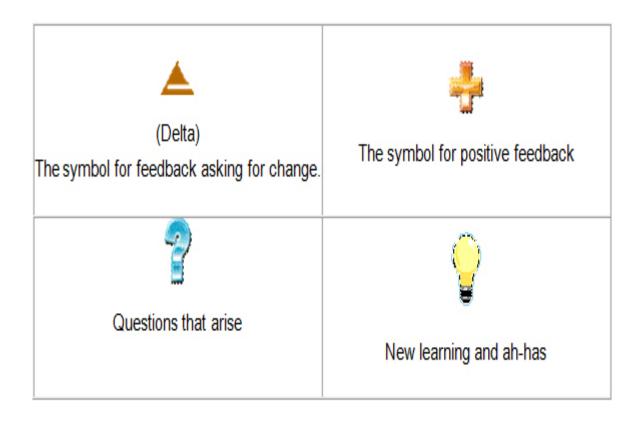
APPENDIX B

Sample SOP



APPENDIX C

Parking Lot Template



APPENDIX D

Focus Group for Students

Welcome Participants

- Introduce myself as the facilitator (not here as the Assistant Principal today: explain that I am a learner too and that I am working on a project, briefly explain and answer questions...)
- Thank them for their participation in the group
- Provide brief overview of the subject: We are learning how to help students have a more personalized education by having students (you all) help us be better at involving you in making decisions about your own learning. Provide examples:

Classroom code of collaboration, how you like to learn, what you want to learn about, what you want to decide, projects, groupings, activities, routines (SOPs)...

- Review confidentiality and voluntary nature of the group
- Discuss incentive (local gift certificate)
- Ask participants to complete name tents

Explain Focus Group Purpose

- Gather information about how students feel about their *voice* (ability to have personal input into decisions about learning, classroom functioning, culture etc.) in school
- Gather information about how students feel about *choice* in learning activities
- Develop a better understanding about how and when voice is used/heard
- Develop a better understanding of how and when students have choices in their learning experiences at our school.

Explain Focus Group Process

- Facilitator asks questions of the group, clarifies terms, and summarizes
- Recorder takes notes, but does not directly participate in the group
- Explain that the focus group will be recorded on an audiotape and that it will be erased after the information has been compiled

Establish Ground Rules

- Allow/encourage everyone to participate
- Remember that disagreement is OK
- Speak one at a time
- There are no right or wrong answers
- Please be respectful of the other participants
- Respect confidentiality of the group
- Free to leave at any time if needed

Questions-Introductory

- What is your favorite thing about school at?
- What is your favorite academic subject?

Questions-On General Topic

- Describe how you have helped to decide how things would be done in your classroom this year (SOPs or Codes of Collaboration)
- When (how) do you have the opportunity to tell if you feel the code/sops are working
- During which learning activities can you make your own personal choices (projects, books, groups...)
- Have you had opportunities beyond the classroom (bus, playgroud, café, school-wide)?

Questions-Depth and Details

- How do you feel when you have the opportunity to decide things about your learning (tell me about that, elicit examples and feelings)
- What could we (teachers) do to give you more opportunities to have control over your learning?
- What have you learned about yourself as a learner? (tell me more about that...)
- What do you wish teachers understood about your personal learning style and how you like to learn?
- Is there anything else the group would like to share on this subject? (follow up on ideas for clarity)

Thank the Participants and give out Certificates!

APPENDIX E

Semi-structured Interview for Educators

- How/when do students in your classroom have opportunities to have a voice? (as described in the RISC professional development and associated materials)
- How/when do students in your classroom have opportunities to have a choice? (as described in the RISC professional development and associated materials)
- What are some of the things that facilitate the inclusion of voice in the learnercentered model? (what has worked...)
- What are some of the things that are challenges to the inclusion of voice in the learner-centered model? (what gets in the way ...)
- What are factors that facilitate or suppress the inclusion of choice in the learnercentered model? (what has worked...)
- What are some of the things that facilitate the inclusion of student choice in the learner-centered model? (what has worked...)
- What are some of the things that are challenges to the inclusion of student choice in the learner-centered model? (what gets in the way ...)
- Can you give examples of how student <u>voice</u> has been valuable in developing and sustaining a learner-centered instructional model?
- Can you share examples of how student <u>choice</u> has been valuable in developing and sustaining a transformation to the learner-centered instructional model?
- What are other ideas or comments you'd like to share about student voice and choice in a learner-centered competency educational model?