A Phenomenological Exploration of Educators' Lived Experiences and Transitions from Teacher-Centered to Student-Centered Learning

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AUTHORIZATION TO SUBMIT

DISSERTATION

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DEDICATION

This dissertation is dedicated to the educators I worked with through the years who have served and devoted themselves to educating students. You have inspired me over the past 23 years of my career, and I dedicate this dissertation to you and the work you have unselfishly done. Thank you for inspiring me and challenging me as we have experienced the highs and lows of being involved in the noble profession of education. Whether we served together in private or public education, in Colorado, California, Oregon, or Idaho, I dedicate much of this dissertation to all of you.

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ABSTRACT

Although student-centered learning and the components it promotes are increasingly accepted and found extensively nationwide, there still exists minimal academic research that explores the perceptions and lived experiences of educators in transitioning to this educational philosophy. Therefore, the purpose of this study was to explore in specific detail the perceptions and lived experiences of secondary teachers and building principals in transitioning to student-centered learning and thereby assist in filling in the literature gaps surrounding this topic. The participants for this hermeneutical, qualitative phenomenological study consisted of six secondary teachers and four principals and used a constructivist theoretical framework to assist the researcher in identifying and conveying each participant's deep, rich experience. In-depth interviews were used to gather responses and the data was transcribed and eventually grouped into three major themes, with key words and terms from the participants supporting each theme. The three themes that emerged when identifying and describing the perceptions and lived experiences of the participants in transitioning to student-centered learning were a shift in philosophy of education, changes in methods and pedagogy, and the importance of relationships among teachers, principals, and students. Although teacher and principal participant responses demonstrated some differences in the categories or terms that were identified, each response was still supportive of the same three major themes. Key findings from the study suggest that in order to effectively transition from teacher-centered to student-centered education, cognitive changes in an educator's philosophy and mindset, along with social adjustments addressing relationships, connections, and experiences, must be recognized and even embraced.

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Introduction

Many educators today recognize that student-centered learning must take place in schools (Camacho & Legare, 2016; Deed et al., 2014; De Jesus, 2012; Gervais, 2016; Gurvitch & Metzler, 2013; Ryan & Cox, 2017). This approach to learning and education is a broad philosophical view that goes by many monikers: mastery-based learning, competency-based education (CBE), proficiency education, differentiated instruction, and blended learning. No matter the title, a belief that education should be student-centered is becoming more prevalent as education evolves to meet the needs of society and the workplace in the 21st century (Brown & Holt, 2014; Camacho & Legare, 2016; Cooper, 2016; De Jesus, 2012; Deed et al., 2014; Easley, 2017; Gervais, 2016; Luna, Rush, Gramer, & Stewart, 2014; Ryan & Cox, 2017). Much of the change in attitude toward education is due to push-back against traditional educational systems that have remained virtually unchanged since the late 19th century (Brown & Holt, 2014; Camacho & Legare, 2016; Cote, 2017; Evans, 2012; Galvan & Coronado, 2014; Gervais, 2016; Luna et al., 2014).

The early beginnings of student-centered learning can be traced to the Morrill Land-Acts of the 1860's, when educators were focused on programs that were non-academic and practical, and they were tasked with training students in agricultural skills and competencies (Gervais, 2016). Initially, the ultimate outcome for these students was the demonstration of the mastery of practical skills demanded during the Industrial Age, as opposed to a classical, liberal arts education (Galvan & Coronado, 2014; Gervais, 2016). This fundamental change in attitude toward education has also been observed internationally, with research documenting that large-scale assessments and traditional teacher-centered methods have not substantially increased test

scores or student proficiency (Chepko & Doan, 2015; Copp, 2017; Holmyard, 2016; Mitee & Obaitan, 2015).

In contrast to traditional education systems, student-centered learning is a unique way of blending instruction and learning together so that students are equipped to thrive in their future endeavors (Corry & Carlson-Bancroft, 2014; De Jesus, 2012; Galvan & Coronado, 2014). At present, in the United States there are numerous states adopting this approach to learning and education (Brodersen, Yanoski, Mason, Apthorp, & Piscatelli, 2017; Brown & Holt, 2014; Freeland, 2014; Phillips & Locket, 2017; Sullivan & Downey, 2015; Toland, 2017). States such as Vermont, Utah, and Idaho have committed to fundamental changes in their educational laws, policies, and resources in order to transition to a modern approach to learning (Barrett, 2017; Brodersen et al., 2017; Cross & Schroth, 2016; Freeland, 2014; Sullivan & Downey, 2015; Toland, 2017). Specifically, in Idaho, the Legislature and then Governor Otter crafted and signed legislation in 2015 that mandated that the state move to a mastery-based education system for K-12 education (Idaho State Department of Education [Idaho SDE], 2018; Phillips & Locket, 2017; Willits, 2014). The Idaho SDE (2018) defines this new learning theory as:

> Mastery-based education gives students the chance to use meaningful content in ways that encourage deeper levels of learning so they acquire the knowledge, skills, and dispositions essential for success in the 21st century. When students demonstrate that they are proficient under rigorous expectations, they take greater ownership and responsibility for learning. This helps educators and students eliminate false assumptions about learning that is associated with points, percentages, and grades. (Mastery Education Section, para.1)

As a result of these efforts by the Idaho Legislature, Governor's Office, and Idaho SDE, mastery-based learning in Idaho has embraced and consists of multiple versions or types of student-centered instruction. This has ensured that very different forms of student-centered learning are occurring across the state of Idaho.

Statement of the Problem

As student-centered learning becomes increasingly mainstream in public K-12 education, there is a need for better understanding of teacher and principal perceptions regarding this monumental change in education. More specifically, in this study the researcher attempted to capture how educators who have transitioned to a student-centered approach to education perceive or feel about the transition and subsequent new approach to instruction. Presently, there is minimal literature that explored the perspectives of teachers and principals in Idaho who are implementing student-centered instruction and education. Therefore, it was the intent of the researcher to qualitatively study the perceptions and lived experiences of these secondary educators regarding their transition to student-centered learning in their own unique, educational settings. As such, the perceptions and lived experiences of secondary classroom teachers and building administrators was shared and reported.

With the exponential growth of student-centered education programs in both the K-12 and postsecondary systems, there is a desperate need for additional research. More specifically, empirical research is needed to determine the impact of changing from conventional to student-centered education for students in mastery programs at the K-12 level (Kelly & Columbus, 2016). It is important to determine how different types of students fare academically when enrolled in different varieties of student-centered learning, especially when contrasted with similar students who are enrolled in traditional coursework or not enrolled at all (Kelly &

Columbus, 2016). It is also relevant to determine how student-centered learning can be externally validated.

As noted previously, there are many questions to be asked, and subsequently answered, in this relatively new field. Other questions include determining whether student-centered learning is more cost-effective than traditional models, both for students and institutions (Kelly & Columbus, 2016). Also, exploring how businesses and employers view potential employees trained within a student-centered system could be examined. As time progresses, these and other clarifying questions need to be answered in order to determine the future of student-centered learning, as well as education in general.

While the questions posed above are significant and need to be answered, the purpose of this study and the problem it attempted to answer was exploring the experiences and perceptions of secondary teachers and principals who were involved in transitioning from a teacher-centered to a student-centered learning experience. How did that transition impact and affect educators at the classroom and building level? This truly was the essence of the problem and lies at the heart of what the researcher attempted to explore and report on.

To date, there is an absence of literature regarding Idaho's efforts in transitioning to student-centered learning. Additionally, relatively little research has been conducted in measuring educator perceptions regarding the implementation of student-centered learning (Ryan & Cox, 2017). As a result of the lack of available academic literature and evidence, conflicting opinions are expressed about the efforts and effectiveness of educators in Idaho to integrate student-centered learning (Dillon, 2017; Kellerer et al., 2014; Luna et al., 2014; Willits, 2014). Numerous K-12 entities, consisting of districts and schools, are presently members of the Idaho

Mastery Education Network (IMEN) and range in description from rural to urban and small to large (Dillon, 2017; Idaho SDE, 2017; Phillips & Locket, 2017).

The IMEN was created by the Idaho Legislature in 2015 (Idaho SDE, 2018). House Bill 110 directed the Idaho SDE to move toward a system of mastery-based education and focus on student-centered learning. This resulted in three specific steps encompassing a statewide awareness campaign, forming an education committee that identified challenges and solutions to the transition, and creating and supporting an incubator process consisting of 19 local education agencies (LEAs) that comprise the IMEN (Idaho SDE, 2018). Still, the vast majority of K-12 educators in Idaho operate under the traditional philosophy and pedagogies of an education system established during the late 19th century (Schon, Eitel, Bingaman, Miller, & Rittenburg, 2014).

The purpose of this qualitative study was to explore the perceptions of select Idaho secondary educators in implementing student-centered learning methods and theory into Idaho school districts and schools. This study was framed from the position of a constructivist theoretical framework and a hermeneutic phenomenological methodology that explored the lived experiences and phenomena of those individuals who are intimately involved in a student-centered approach to learning and education. Research focused on experiences and perceptions from educators in schools and classrooms. Ultimately, it was the intention of the researcher to contribute to the emerging knowledge surrounding student-centered education at the 6-12 level and provide a snapshot of secondary educator perceptions regarding student-centered learning.

Background

In order to better understand the historical perspective of today's educational system and why there is a movement toward embracing student-centered learning, it is important to acknowledge where traditional and conventional philosophy regarding education, the workplace, and society originates. Modern day society accepts the tenets and assumptions of the concept of average (Evans, Leonard, Krier, & Ryan, 2013; Rose, 2015). This presupposition of embracing a notion that an average exists has become second nature to humans in the 21st century.

Further study, however, shows how the theory of average was invented and how historically, it has come to dominate and be pervasively present in almost every thought and opinion of the modern era. This influential and philosophical time period and movement, which resulted in a dominant belief in how society views individuals, can be identified and described as the rise of averagarians (Rose, 2015). Subsequently, these views and theories strongly influenced teacher preparation and certification programs at colleges and universities. For well over a century, teacher training programs and courses essentially prepared and equipped teacher candidates using these traditional and time-honored methods and techniques.

In contrast, student-centered learning focuses on the individual and their well-being. This description may be deemed too simplistic an approach to these philosophies of learning, but it serves the purpose of assisting the reader in diverging or clarifying the differences between teacher-centered and student-centered education. Relative to the preparation and education of future teachers, the student-centered philosophy advocates for differentiated instruction, proficiency-based academic progression, and a general worldview that it is the responsibility of the teacher to engage and involve the student as the center of the learning experience. Instead of adhering to the conventional form of teaching where knowledge and information derives from

the instructor, student-centered learning places the student as master of their learning experience. This necessitates that the teacher adopt a lesser role and the student a more engaged role that demands ownership and possession of their learning experience.

Research Questions

The intent of this study was to respond to the absence of literature regarding student-centered education and learning in Idaho. There is empirical evidence that educators today recognize that new approaches to learning must occur (Brown & Holt, 2014; Camacho & Legare, 2016; De Jesus, 2012; Deed et al., 2014; Evans et al., 2013; Gervais, 2016; Gurvitch & Metzler, 2013; Ryan & Cox, 2017). Also, the workplace and society continue to clamor for new learning approaches that will better equip students for the world of the 21st century (Brown & Holt, 2014; Camacho & Legare, 2016; Cooper, 2016; De Jesus, 2012; Deed et al., 2014; Easley, 2017; Gervais, 2016; Luna et al., 2014; Ryan & Cox, 2017). Specifically, the researcher attempted to identify, study, and report on explicit secondary educators' experiences in transitioning from a teacher-centered mode of instruction to one that incorporates student-centered learning. Thus, the research questions for this study consisted of:

1. What are middle school and high school teachers' perceptions and lived experiences regarding the transition from teacher-centered learning to student-centered learning?
2. What are middle school and high school principals' perceptions and lived experiences regarding the transition from teacher-centered learning to student-centered learning?

Description of Terms

Specific definitions of educational terms are identified and defined that provide a more comprehensive understanding of the concepts used in this study. Brief definitions of key terms are included below, and these terms will be introduced and discussed more fully in the literature review. It is important to understand how and why these terms are used in order to fully comprehend and understand the study.

Automaton. Generally defined as a mechanism that is self-operating and follows a predetermined sequence of operations or instructions, an automaton is a robotic, mechanical device. Within education, teacher-centered and conventional learning systems are frequently characterized as attempting to create automatons due to their reliance on time-constrained learning strategies and emphasis of standardized assessments (Bates, 2018). Within this system, time is constant and curriculum is variable, whereas the student-centered system advocates for curriculum being constant and time being variable.

Averagarianism. A belief espoused by many in society in which the "law of averages" is used to explain or make decisions (Rose, 2015). In education, averagarianism is seen in traditional or conventional practices in which teaching is geared to the middle or center of a class or group of students. This philosophy is opposite of other educational philosophies such as student-centered education, personalized learning, or differentiated instruction.

Blended learning pedagogy. An education process by which students learn, at least in part, through the delivery of content and instruction that is both digital/online and traditional, "brick-and-mortar" or face-to-face (Pandit, 2018).

Competency-based education (CBE). This is also referred to as standards-based learning, proficiency-based, mastery-based, outcome-based, or performance-based learning. This educational approach attempts to ensure students are acquiring knowledge and skills that are essential for academic and career success. CBE is an alternative to traditional or conventional forms of education and is student-based as opposed to time-based (Colby, 2019).

Constructivist learning theory/Constructivism. This is a meta-cognitive theory that posits that learning is the result of assimilating and accommodating information and knowledge into previously existing experiences (Lee & Hannafin, 2016). Constructivism is generally divided into two distinct types categorized as psychological and social models. Jean Piaget is credited as the founder of psychological constructivism and promotes that individuals produce knowledge and form meaning based upon their own unique experiences. Lev S. Vygotsky is attributed with creating the social development theory which maintains that an individual's culture and social activity are the principal determinants of the learner's cognitive development. Within the constructivist classroom, the learner or student is actively engaged in their learning and are ultimately responsible for their own learning. Conversely, the role of the teacher in a constructivist classroom is to facilitate and assist the learner in building and discovering their knowledge, as well as encouraging the student to learn collaboratively. In this study, teachers and principals are also recognized as being learners and proponents of constructivist thought.

Cooperative learning. A teaching method or strategy in which small teams, comprised of learners with different levels of ability, are exposed to a variety of learning activities that are intended to improve their understanding of a topic or subject. Each individual or member of the team is responsible for both their own learning and the learning of their teammates, thereby

promoting the concept of positive interdependence among individuals (Van Ryzin, Roseth & Biglan, 2020).

Differentiated instruction. This is also referred to as individualized or customized instruction. Differentiated instruction provides different avenues or methods of learning to individual students (Dack, 2017). The curriculum offers several different learning experiences within one lesson to meet students' varied needs or learning styles. This learning framework also uses formative assessment to assess student learning, groups students by their abilities, interests and topics, and advocates for designing lessons based on the students' learning styles. A form of student-centered learning, differentiated instruction is also linked to multiple-intelligence theory and uses a multiple learning pathways philosophy in its approach.

Formative and summative assessment. Formative assessment describes the process of gathering data for the purpose of improving student learning and modifying teaching. While formative assessment occurs throughout or during the course, summative assessment uses data to assess how much the learner knows or has retained and is conducted at the completion of the course (Dixson & Worrell, 2016).

Humanist. A humanist is generally defined as an individual who advocates for or supports a philosophy that embraces rational thought or reason and rejects supernatural phenomena. An emphasis on human values and interests is professed and education is viewed as a worthy endeavor in order for humanity to continue to evolve and improve. More specifically, within student-centered learning philosophy, a humanist perspective can be synthesized into one of three overlapping dimensions and advocates for the instructor to personally know their students and the humanity they demonstrate as human beings (Starkey, 2017).

Idaho Mastery Education Network (IMEN). This refers to a network of schools and districts within Idaho that supports and espouses student-centered or mastery learning concepts and practices. Originally created due to Idaho House Bill 110 in 2015, the network consisted of 19 teams and 32 schools across Idaho (Idaho SDE, 2019, para.1). During the 2019 Idaho Legislative session, the cap was removed from IMEN, resulting in unlimited numbers of districts and schools that could join as members.

Inductive & deductive methods. Encompassing two opposite or different approaches to thinking and interpreting data, inductive reasoning broadly generalizes data that results from specific observations. Conversely, deductive reasoning begins with a premise and over time moves from generalized principles to a specific conclusion. In general, it is widely accepted that deductive education is more teacher-centered, whereas inductive education is more learner or student-centered (Arifin, 2016).

Industrialist. An industrialist is defined as an individual who is engaged with or involved in the management of an industry or manufacturing. In regard to education, the modern public education system was created and developed to sort students and serve the managerial needs of industrialism and capitalism (Singer, 2020). This became the norm for schools in the last half of the 19th century and, until recently, has remained the overriding purpose of education in America. This is especially true at the secondary level of education, although some progressive change is now beginning to appear within the K-12 education system.

Jaggedness principle. A belief or theory that simple, one-dimensional thinking or explanation cannot merely describe complex issues or portrayals. A quality is jagged if it consists of multiple dimensions and if there is a weak correlation between the dimensions (Rose,

2015). Educationally speaking, the jaggedness principle challenges long-held and traditional views about how intelligence is measured or how academic talent can be defined. Instead, the jaggedness principle advocates for recognizing differentiation and creative ways to motivate or spur student understanding and comprehension.

Learning styles theories. Within education, learning styles are defined as an individual's preference for cognitively processing specific types of information in certain ways (Willingham, Hughes, & Dobolyi, 2015). Common examples of learning styles include visual, auditory, kinesthetic, verbal, interpersonal, and intrapersonal.

Local Education Association (LEA). A public authority or board of education that is legally recognized within a state and has administrative control and decision making powers (U.S. Department of Ed. Definitions, 2019, para. 12).

Metacognitive. Sometimes referred to as the process of thinking about thinking, metacognitive strategies attempt to help the student better understand the way in which they learn. While there are many metacognitive outcomes within education, some common ones are helping students identify what they already know, being able to communicate their abilities, skills, and knowledge to others, and succinctly articulating or reporting what they have learned (van Vliet, Winnips, & Brouwer, 2015). Examples of how mastery learning supports metacognitive pedagogies and activities can be found through active**,** student-centered strategies such as flipped classrooms or collaborative-learning.

Mastery-learning. This is also referred to as learning for mastery. This instructional strategy maintains that students are the center of the learning experience and must achieve a level of mastery before progressing on to subsequent content and curriculum (Holloway, 2017). In the

event that a student does not show mastery of the required information on an assessment, the student is given additional practice and instruction. An additional assessment is provided and the student may progress if mastery can be demonstrated. In contrast to traditional education, time is a variable and content is a constant. In mastery-learning, the central or key figure is the student, as the student is expected and encouraged to own and embrace their learning experience. In mastery-learning, students are grouped according to their ability or work independently at their own pace.

Noema & noesis. First introduced by Edmund Husserl, these phenomenological terms refer to the intentional experience of the participant. Specifically, the noema is representative of the objective experience of the object and the noesis represents the subjective experience (Eddles-Hirsch, 2015).

Scaffolding. A practice in education by which the instructor devises a variety of instructional techniques that assist the learner in progressing and developing comprehension and understanding of the subject. The teacher builds on students' prior knowledge and experiences to assist in developing new skills and knowledge, and then grants significant time and space to enable deep and meaningful student comprehension and contemplation (Bjønness & Kolstø, 2015).

Schema. A term that describes how cognitive activity, such as memory or knowledge, is perceived, interpreted, and remembered (Gilboa & Marlatte, 2017). Within education, schema may refer to the learning process and how students ascertain and develop knowledge or understanding of educational concepts and content.

Service learning: A form of experiential learning or education in which individuals engage in active learning that involves human and community needs in structured opportunities, designed to encourage and promote reflection, reciprocity, and development within the learner and the recipients (Jacoby, 1996).

Standardized testing. Sometimes referred to as accountability assessments, standardized tests have been used extensively during the early 21st century to determine multiple types of data (Popham, 2016). These range from deciding where students should be placed academically, to evaluating and compensating instructional and administrative staff, to comparing national and state educational rankings and status. Many standardized tests are used in a comprehensive manner and continue long-stranding traditions and uses of testing and assessment. Student-centered education practices such as mastery learning instead favor formative assessments and devalue the importance of academic progress, ranking, and peer comparison as measured by a summative test.

Standards-based curriculum. Curriculum standards help to provide benchmarks that identify basic or essential skills and knowledge that students should master before progressing to the next set of standards or grade level (Rao & Meo, 2016). By using standards-based curriculum strategies, instructors are able to identify and then assist learners through differentiation and various approaches such as project-based learning, cooperative learning, student interest or student-centered learning, and online learning to achieve mastery of standards-based lessons and curriculum. Standards-based curriculum is linked to the larger concept of standards-based learning which includes transparency in the whole teaching and learning process and encompasses curriculum, instruction, assessment, and reporting.

Student-centered learning. This is also referred to as personalized learning or learner-centered instruction. Student-centered learning includes a diverse variety of educational programs, learning experiences, and instructional approaches that are intended to address the distinct learning needs, interests, aspirations, or cultural backgrounds of individual students. Student-centered learning is viewed as an alternative to traditional or conventional approaches to a one-size-fits-all method of schooling where teachers provide all students in a given course with similar instruction, assignments, and assessments with little to no variation from student to student. Instead, student-centered learning is a philosophy of education that centers on the student as being an active participant in their own learning experience (Nair, 2019).

Traditional education. This is also referred to as conventional education or customary education. This form of education follows long-established customs and approaches that society traditionally endorses. The traditional approach also insists that all students be taught the same materials at the same point; students that do not learn quickly enough fail, rather than being allowed to succeed at their natural speeds. Traditional education corroborates that content is a variable and time is a constant. In a traditional education system, the central or key figure is the teacher, as all knowledge and information comes from the teacher and is dispersed to the student (Dole, Bloom, & Kowalske, 2016). Also, within a traditional education system, students are grouped in a class or room primarily by age.

Significance of Study

As referenced earlier, the intent or significance of this study was to explore the experiences and perceptions of educators who have participated in transitioning from teacher-centered to student-centered education. Individualized learning practices, such as mastery and

competency-based systems, place an emphasis on student or learner-centered learning. This is a radical change from the traditional or conventional approaches to education that have been outlined in the previous pages. Much of this change is being driven by the changing dynamics and demographics of the business world and workforce (Brown & Holt, 2014). Ultimately, it is the goal of the researcher to educate and inform relevant stakeholders, educational leaders, and policy makers in Idaho and beyond about the specific experiences of educators practicing individualized instruction.

It is also the intention of the researcher to demonstrate that this approach is significant for the students, parents, and families of Idaho. In addition, it is hoped that the educators and practitioners of education will find value in the research and results of the study. Also, the researcher desires that schools and districts, both statewide and nationally, will benefit from the perceptions and experiences revealed in the study. Finally, the researcher aims to provide information and expertise to the policy makers of Idaho, including those individuals who impact education decisions and budgets.

Ultimately, historical studies show that education is changing and evolving to meet the needs of society. The workplace of the 21st century is recognizing that traditional approaches to education are severely lacking and that students today need new and more effective approaches to education (Brown & Holt, 2014; Camacho & Legare, 2016; Cooper, 2016; De Jesus, 2012; Deed et al., 2014; Easley, 2017; Evans et al., 2013; Gervais, 2016; Luna et al., 2014; Ryan & Cox, 2017). Student-centered education can help satisfy these contemporary issues and challenges. Due to the relative newness of student-centered learning in Idaho, there is a significant literature gap regarding Idaho's efforts to incorporate student-centered learning in Idaho public schools. More explicitly, minimal study and literature exists regarding the

experiences and perceptions of those teachers and principals who have been involved in transitioning from teacher-centered to student-centered learning. Because of this gap, the researcher selected this topic to help fill the literature void and shed insight on efforts to implement educational change.

Overview of Research Methods

A qualitative design was selected for this study. Qualitative research is primarily exploratory research and includes data collection methods that are unstructured or semi-structured in their techniques. Common types or methods of qualitative research are observations, individual interviews, focus groups or group discussions, and collection of artifacts. This specific style of qualitative research is conducive to discovering and exploring the views and insights of secondary school administrators and teachers concerning student-centered education in several Idaho school districts.

In this study, a hermeneutical phenomenological approach was selected. This was due in part to the researcher's background and personal experiences involving student-centered learning in his own teaching and administrative experience. More importantly, hermeneutic phenomenology, as espoused by Martin Heidegger, encompasses a belief that researchers themselves should be immersed within the phenomenon. This allows for the researcher to have a better understanding of the experience of each participant.

To explain further, hermeneutic phenomenology uses data to emphasize the numerous meanings within the phenomenon and aims to draw the reader or listener into new considerations and understandings (Crowther, Ironside, Spence, & Smythe, 2017). Researchers within this

framework claim that there are multiple ways in which to collect and interpret data. As an example, hermeneutic phenomenological researchers advocate that acceptance of flexible methods and how meaning is interpreted is essential, as the phenomenon is shared, explored, heard, and read (Crowther et al., 2017; Moustakas, 1994). Additionally, many perceptions and related experiences are discovered and re-shared multiple times over.

A note of caution must be mentioned and identified for the phenomenological researcher, as full acknowledgement of pre-conceived bias and prejudgment or pre-understanding exist within every individual researcher (Crowther et al., 2017; Moustakas, 1994). Because of this, it is imperative that complete transparency be demonstrated by the researcher. Yet, it is the very bias and prejudgment of the researcher that sparks or creates the initial inquiry and question. While most qualitative methods demand and aim for strict verbatim depictions of the data or text, hermeneutic phenomenology attempts instead to draw from the participant the experience or phenomenon that resonates with the reader or listener (Crowther et al., 2017). However, noted scholars of hermeneutic phenomenological research posit that there is no fixed set of methods to conduct this type of research (van Manen, 1996).

As the reader may ascertain, the researcher is and has been explicitly immersed in the phenomenon due to his current employment position at the SDE, as well as his exposure to student-centered learning concepts as a teacher and administrator in various classrooms, schools, and district level settings. It was the intention of the researcher, through his research questions and hermeneutic phenomenological approach, to capture and ultimately understand the unique experiences of each participant within the study.

The most efficient and effective way to discover and explore the experiences and thoughts of educational administrators and teachers is through discussion and semi-structured

interviews. These strategies allow the researcher the best opportunity to compile data or responses and give voice to the participants of the study (Creswell, 2015). The researcher met in-person with district administrators to gain permission to conduct the research, as well as to inquire about which secondary principals and teachers would be most germane to interview. Once identified, each participant received an electronic letter from the researcher that explained the purpose and rationale for the study. The notice also allowed the researcher to make contact with each participant and gauge their interest and qualifications for being involved in the research. The primary criteria for participation was that the individual's employing organization be a part of the IMEN in some capacity.

After each participant was selected and agreed to participate, a schedule was created in order to establish dates and times for the interviews. The interviews were conducted in-person, consisted of two secondary teachers or one secondary principal at each appointment, and lasted between 50-75 minutes. In addition, all participants agreed to potential follow-up interviews, if needed, and also consented to the interview being audio recorded, transcribed, and coded for themes. All participant names and any other identifying information was changed or scrubbed to ensure confidentiality.

The theoretical framework for the study was based in constructivist epistemology and related psychological learner-centered pedagogical and social development theories. Constructivism is both a scientific and meta-theory which helps to define daily life theories in the formation of humanity (Ultanir, 2012). The core tenets of this theory are that learners are

only able to make sense of new information, knowledge, or situations in relation to their prior or existing understanding. Multiple authors have stated that constructivist theory in the 21st century classroom demands even more emphasis on student learning, as opposed to traditional roles of the teacher (Freeman et al., 2014; Kalpana, 2014; Saeed & Zyngier, 2012; Sahin & Top, 2015).

Within the constructivist framework, two different forms exist, encompassing psychological and social models respectively. The psychological version of constructivism is derived from Jean Piaget and is sometimes referred to as cognitive constructivism (Kalpana, 2014). This form of constructivism focuses on individual beliefs, knowledge, self-concepts and identity, and views learning as interaction between assimilation and accommodation (Kalpana, 2014). The second form of constructivism is the social constructivist theory and is attributed to Lev Vygotsky. This model emphasizes social contexts of learning and proposes that knowledge is mutually built and constructed (Kalpana, 2014).

In this constructivist approach to education, learners are empowered to be leaders in their own learning process and pursue learning activities that meet their own interests (Freeman et al., 2014; Saeed & Zyngier, 2012; Sahin & Top, 2015; Ultanir, 2012). Subsequently, the role of the teacher in this environment is to facilitate and ensure that the learner is at the center of knowledge acquisition. In effect, this results in a decentralizing of education and creates an environment conducive to self-directed learning and progressive skill development (Freeman et al., 2014; Saeed & Zyngier, 2012; Sahin & Top, 2015; Subasi & Tas, 2016; Ultanir, 2012). To add to this philosophical view, the researcher also advocates that educators may be influenced by

constructivist thought and be categorized as learners who are constructing new knowledge themselves.

As has been documented above, Idaho is transitioning its K-12 educational system to a student-centered approach, encompassing learning strategies such as mastery and CBE. Teacher perceptions regarding these new educational philosophies and methods will be important to identify and explore. Chapter 2 will further explore the literature surrounding student-centered education.

Chapter II

Review of Literature

Introduction

The literature review will provide a comprehensive overview of student-centered learning, explore the perceptions of educators regarding their experience in transitioning from traditional forms of education to student-centered learning in Idaho K-12 education, and discuss how these efforts are being implemented. This review of student-centered learning will focus on the following specifics: an exploration of how constructivism influences and impacts educators and their philosophy; a comparison of student-centered and traditional instructional pedagogies; the description and definition of student-centered education pedagogies, student-centered learning and its impact on special student populations, legislation and student-centered learning, and student-centered learning as unique to Idaho. It is important to note that terms such as mastery learning, competency-based, personalized learning, and differentiated instruction are all derivatives of student-centered learning and incorporate multiple constructivist theory tenets in learning and education.

While other similar constructivist terms and methods are also identified in the document, the terms referenced above are the most commonly identified in the review of literature. In addition, the reader should note that constructivist theory can advance the idea that educators learn through specific cognitive and social experiences. While conventional constructivist thought focuses on student learning, it can also support and explain the impact and influence of a new approach to education for both teachers and administrators. Ultimately, the focus and extent of this review will provide an understanding and background of the current research available,

including identifying any gaps in the research, and will thereby attempt to validate the need for this study.

Constructivism as a Theoretical Framework

In order for research to be effective and have direction, it must be guided by theory to better understand the relationship among phenomena (Imenda, 2014). Thus, in every academic study, the researcher is expected to identify and present a framework which is based on a chosen theory. In essence, a theory consists of a set or series of interrelated concepts which arrange or organize a series of phenomena for the purpose of explanation or prediction. There are different types of theories within the world of research and these are generally organized into theoretical or conceptual frameworks.

Both types of frameworks serve a comparable purpose and these similarities include an ability to help the researcher clearly identify and understand the variables and concepts within a study, help provide the researcher with a broad approach to their study (methodology), and assist the researcher in specific areas such as data collection, interpretation, and explanation (Imenda, 2014). In effect, the researcher's theoretical or conceptual framework serves as a light, illuminating what the researcher "views" during the data collection or event. Conversely, the framework can also serve to blind the researcher, in that the individual may not notice data or events that occur outside of the framework.

The core beliefs of constructivist theory are that the learner actively constructs their own knowledge and meaning from experiences that they are exposed to or have participated in.

Within this experience, the learner must adapt new information to their prior knowledge and continue to build upon what they have previously formulated. Constructivist theory in the 21st century school demands even more emphasis on educators as learners, as opposed to traditional teacher roles (Evans et al., 2013; Freeman et al., 2014; Kalpana, 2014; Saeed & Zyngier, 2012). Therefore, the role of the educator must be active rather than passive in order for the learner to construct meaning from new ideas (Freeman et al., 2014; Saeed & Zyngier, 2012; Ultanir, 2012). Because of these views, proponents of constructivism believe that learners do not find or discover knowledge, but rather construct it. Consequently, as educators also construct their own knowledge, the terms educators and learners are used interchangeably within this study.

Within the constructivist framework, two different forms exist, encompassing psychological and social models respectively. The psychological version of constructivism is derived from Jean Piaget and is sometimes referred to as cognitive constructivism (Kalpana, 2014). Kalpana also recorded that this form of constructivism focuses on individual beliefs, knowledge, self-concepts and identity, and views learning as interaction between assimilation and accommodation. The learner achieves cognitive equilibrium through the cooperation of assimilation and accommodation when exposed or introduced to new information or experiences. Ultimately, the central idea of psychological constructivism is a belief that individuals learn by mentally organizing and reorganizing new information or experiences and by relating it to prior knowledge that is already organized and understood (Kalpana, 2014).

The second form of constructivism is the social constructivist theory, attributed to Lev Vygotsky. This model emphasizes social contexts of learning and proposes that knowledge is

mutually built and constructed (Kalpana, 2014). In Vygotsky's theory, specific factors such as culture, language, beliefs, and skills important to the culture are what influence the learning process. More specifically, social constructivists advocate for situational cognition, which asserts that knowledge is tied to the situation in which it is learned, and, therefore, learning situations should mimic real life as closely as possible. Also, the belief in the zone of proximal development is a core theory, which maintains that the learner can attain mastery of knowledge or learning if assisted or guided by an expert, who may be an instructor or knowledgeable peer (Kalpana, 2014).

As has been demonstrated above, constructivist theory can powerfully and intensely impact educators and their educational philosophy. In this study, the author would suggest that secondary principals and teachers who have transitioned from a teacher-centered approach to learning to one that is student-centered have been strongly influenced by their own constructivist framework and experiences. This can be reflected in establishing and recognizing key guiding principles for the educator in creating a student-centered learning environment. These may include strategies or practices such as allowing the individual to participate in their own learning process, personalizing instruction, and, perhaps most importantly, relating new content to prior experiences (Conti, 1990, as cited in Zygmont & Schaefer, 2005).

By enabling the educator to be an active learner and dynamically participate in their own learning process, as well as relate new content to their previous experiences, the educator is able to build and strengthen their own educational know-how. This also results in the educator recognizing the transition and change that occurs, and further assists them in identifying the

influence and impact on their own views of educational philosophy and practice (Zeki & Sonyel, 2014). Educators themselves are or have been long-time students and learners. In observing and witnessing the benefits that students receive from active participation and personalized learning, the educational leader is impacted and knowledge is added or constructed to their own educational philosophy and experiences (Pedersen & Liu, 2003; Zeki & Sonyel, 2014). An additional benefit to both the instructor and student experiencing a shared learning experience or phenomena is the building and strengthening of a trusting relationship between the two parties (Conti; Videbeck, as cited in Zygmont & Schaefer, 2005).

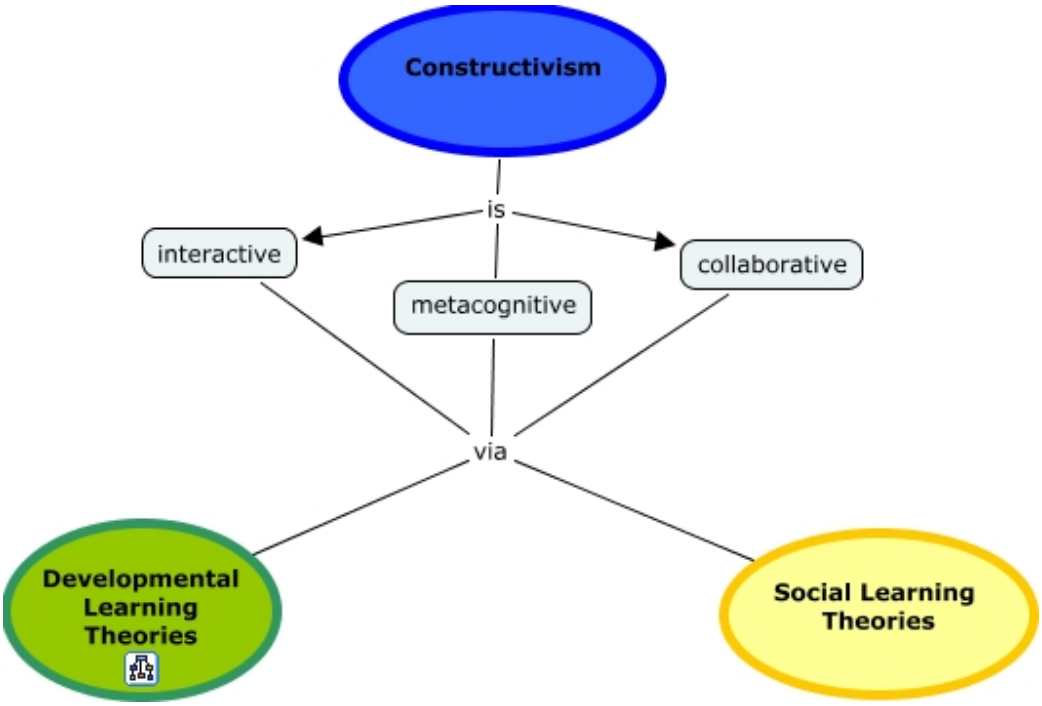
As learning is a process, so is a transition to an environment that encourages student-centered learning. A student-centered approach to learning requires both instructor and student as equal partners in the cooperation of creating and developing alternative forms of knowledge (Zygmont & Schaefer, 2005). This requires effort and commitment on the part of both instructor and student. The examination of teacher and administrator philosophies and practices on a regular basis is imperative to this process and should be done continuously (Zeki & Sonyel, 2014). One of the ways in which this can be fulfilled is through reflecting on one's prior knowledge and philosophy.

Reflection is the ability to study and examine an experience, an action, or a decision that has occurred (Mezirow, as cited in Zygmont & Schaefer, 2005). Reflection assists in helping to conceptualize information and evaluate it in light of previous knowledge. It also can be applied in later, similar situations. For the instructor, the student-centered principle of "relating to experience" and the process of reflection can be connected in a powerful manner (Smith &

Johnstone, as cited in Zygmont & Schaefer, 2005). The constructivist approach to learning and education would posit that the instructor, much like the student, is constantly adding and altering their knowledge and experiences due to the interactions and phenomena they experience daily in the classroom and school building (Zeki & Sonyel, 2014). However, both the teacher and administrator's philosophy regarding education and constructivism must be in sync for true advances to occur. Simply put, as the educator transitions from a traditional, teacher-centered approach to one that is student-centered, they often will use a constructivist learning process to assist in adjusting their own beliefs and worldviews.

The significance of this research is supported by a framework (Figure 1) that demonstrates the tenets of constructivism and its characteristics. Constructivism is metacognitive, it is interactive, and it is collaborative. These traits are supported and espoused in both developmental learning theories and social learning theories that support constructivist concepts and thought. As has been discussed previously, constructivism supports the theory that both educator and student can be heavily influenced by its tenets in a student-centered learning environment (Pedersen & Liu, 2003). Figure 1 visually demonstrates the theories that influence constructivism.

Figure 1. *Constructivism Flow Chart*



Note. From "Developmental Learning Theories, Constructivism is metacognitive, collaborative via Social Learning Theories, interactive via Developmental Learning Theories." http://cmapspublic.ihmc.us/servlet/SBReadResourceServlet?rid=1227127655044_1620579627_18980&partName=htmltext

While it has been called or labeled many different names, learner-centered education or student-centered learning has existed and developed for thousands of years. Many of the beliefs or dispositions regarding the role and responsibility of the teacher have continued to evolve. Several of these views are constructivist in nature and have been espoused by influential giants such as Confucius, Socrates, Locke, Parker, Vygotsky, Piaget, and Dewey (Henson, 2003). More specifically, these same individuals believed that within student-centered learning, teachers should be focused or centered on aiding and assisting the student.

John Dewey espoused that real education was achieved via the student's experience and that self-directed learning practiced by the student, was essential for true learning to occur. Dewey defined self-direction learning as a process in which the student takes the lead in determining their learning needs, framing their learning goals, choosing and implementing learning strategies, and assessing learning outcomes (Ultanir, 2012). As the 21st century progresses, self-direction also supports the more modern and commonly expressed beliefs of learner or student-centered education, as opposed to teacher dominated education (Evans et al., 2013; Freeman et al., 2014; Saeed & Zyngier, 2012). This is represented in strategies such as mastery or CBE.

Jean Piaget also contributed to the constructivist theory and its philosophical characteristics. More specifically, Piaget focused his research questions on attempting to determine the nature of knowledge and understanding how knowledge grows and develops (Ultanir, 2012). Mainly, Piaget believed that an individual's intelligence developed through adaptation and organization. Adaptation was the process of assimilating and accommodating new information or knowledge (Ultanir, 2012). Piaget also opined that every individual learned at a different rate, thereby supporting arguments of differentiation and time variance in student-centered learning. Therefore, the researcher in this study extrapolates from Piaget's theories that educators assimilate and accommodate new information and knowledge regarding their own lived experience in transitioning from a teacher-centered approach to education to one that is focused on the needs of the learner.

Maria Montessori believed best practices in education were those which embraced self-direction by the learner. In this constructivist approach to learning, students are empowered to be leaders in their own learning process and pursue learning activities that meet their own interests (Freeman et al., 2014; Ultanir, 2012). Subsequently, the role of the teacher in this environment is to facilitate and ensure that the student is at the center of learning. In effect, this results in a decentralizing of education and creates an environment conducive to self-directed learning by the student and progressive skill development (Freeman et al., 2014; Saeed & Zyngier, 2012; Ultanir, 2012). Additional information regarding student-centered learning posits:

> A point stressed in the constructivist paradigm is that the learner occupies the top position rather than the teacher. The learner gains by interaction with his or her own environment, and in doing so understands his/her own characteristics and perspectives. The learner constructs his own designs and finds his own solutions to problems and behaves autonomous and independent. According to constructivists, learning is a result of individual meta- construction.
>
> For constructivists, learners are not passive receptors of knowledge. Instead, learners construct meanings for concepts. As a result, learning is best undertaken in 'real world' contexts in which learners may acquire and test concepts. (Ultanir, 2012, p.205)

This is supported by the belief or concept that the lived experience of the learner, or, in this study, the educator, is one that is active rather than passive. For many educators who are moving to student-centered learning, no manual or step-by-step guidebook exists. Rather, each educator

has been tasked with finding their own constructivist path forward and discovering their own unique route to a successful transition.

Locke stated that teachers should observe their students and the behavior that the student demonstrates in order to better learn about them and personalize the content and curriculum to meet the needs of the learner (Henson, 2003). He believed this would enable the instructor to view education through the eyes of the learner and understand the perceptions and curiosity of each individual student. Dewey believed it was the duty of the teacher to encourage and cultivate the student's desire to learn and gain wisdom, both for the present and for the future. He advocated, as did Maslow, that emotional or intrinsic learning would combine the cognitive and emotional memories and result in knowledge attainment that would never be forgotten (Henson, 2003).

Ultimately, the focus or goal of student-centered education should rest on doing what is best for the student or learner. Additionally, it should serve as a philosophical guide for the educator, which will invariably steer and direct the teacher's behavior (Henson, 2003). However, because the acquisition of knowledge and the pursuit of a philosophy or worldview is fluid, it is imperative that the instructor rededicate and recommit their pledge to improving and perfecting their craft and trade. In order to accomplish this, the educator must continually evaluate their own perceptions and dispositions, constantly adding or constructing additional information and learning.

Student-Centered Learning Compared to Traditional Pedagogy

Both historically and at present, student-centered learning is concerned with specific outcomes that the student has mastered and can demonstrate (Camacho & Legare, 2016; Gallardo & Gonzalez, 2014; Gervais, 2016). In contrast with traditional forms of education that

emphasize whole-classroom or group learning, student-centered education is student based or focused, and time is viewed as a variable as opposed to a constant (Camacho & Legare, 2016; Cote, 2017; Gervais, 2016; Prewitt et al., 2015). The guiding theories and components of this form of education emphasize that mastery and demonstration of competency are core characteristics of this student-based learning (Brown & Holt, 2014; Camacho & Legare, 2016; Chepko & Doan, 2015; Gallardo & Gonzalez, 2014; Gervais, 2016; Prewitt et al., 2015; Sahin & Top, 2015). Multiple examples exist that may be used to demonstrate the contrast between student-centered and traditional learning pedagogies (Brown & Holt, 2014; Cote, 2017; De Jesus, 2012; Evans et al., 2013; Franklin & Lytle, 2015; Galvan & Coronado, 2014; Gervais, 2016; Prewitt et al., 2015; Toland, 2017). These examples include differences in educational areas such as school culture, the progression of learning, the pace of learning, instruction methods, systems of assessment, and grading policies (Brown & Holt, 2014; Camacho & Legare, 2016; Copp, 2017; Daghan & Akkoyunlu, 2014; De Jesus, 2012; Evans et al., 2013; Gallardo & Gonzalez, 2014; Gervais, 2016; Holmyard, 2016; McGoldrick & Schuhmann, 2016; Prewitt et al., 2015; Toland, 2017; Wilder & Berry, 2016). Significant discrepancies exist between traditional educational approaches and student-centered outcomes (Brown & Holt, 2014; Daghan & Akkoyunlu, 2014; Camacho & Legare, 2016; Copp, 2017; Cote, 2017; De Jesus, 2012; Evans et al., 2013; Gallardo & Gonzalez, 2014; Galvan & Coronado, 2014; Gervais, 2016; McGoldrick & Schuhmann, 2016; Prewitt et al., 2015; Toland, 2017; Wilder & Berry, 2016).

It is becoming more transparent that the role of the educator within a student-centered approach to learning must be different from their role in a traditional instructional system. Key differences in these two methodologies include but are not limited to, goals, motivation, roles of student and instructor, student interactions, and assessments (Pedersen & Liu, 2003; Weimer,

2002; Wright, 2011). Within student-centered learning, the teacher attempts to create an environment of independence for the student. This attempt to foster student ownership of learning and content is in sharp contrast to traditional learning where the student attempts to meet objectives as defined by the instructor.

Closely related to this is the student-centered approach to student motivation and the responsibilities of the teacher. Whereas in teacher-centered education the instructor is responsible for motivating students through external or extrinsic rewards, the student-centered teacher attempts to present information or questions that interest and intrigue the student to encourage student response and ownership (Pedersen & Liu, 2003; Weimer, 2002; Wright, 2011). In student-centered learning, the instructor presents a question or problem and then serves as a resource or guide to allow the student the freedom to choose an appropriate response and plan of action to answer or solve the issue. While the teacher may assist the student in working through challenges and difficulties that arise, they refrain from resolving the problem for the student. This again is in direct contrast to the teacher-centered classroom where it is the responsibility of the instructor to direct and control the student's actions and learning (Wright, 2011).

While teacher-directed instruction has included activities that support student interactions in the form of cooperative learning and group membership or responsibilities, much of these interactions continue to occur under the supervision and oversight of the instructor. This is often due to the active role that teachers take in determining student roles in the groups or even which groups or partnerships the student is placed in. In contrast, student-centered approaches to interaction more closely embrace collaborative learning than cooperative learning (Pedersen & Liu, 2003). Collaborative learning within student-centered education emphasizes student autonomy and ownership of their relationships and emphasizes constructivist actions such as

negotiating relationships with classmates or peers, articulating and communicating their own ideas, and engaging in personalized inquiry in the context of a social order (Brufee, as cited in Pedersen & Liu, 2003).

Research reveals that, ultimately, traditional educational approaches are in danger of being obsolete and outdated (Brown & Holt, 2014; Cote, 2017; De Jesus, 2012; Evans et al., 2013; Franklin & Lytle, 2015; Galvan & Coronado, 2014; Gervais, 2016). This is in part due to the advancement of technology, the increasing belief in the value of each person (personalized learning), and the blurring of lines between the workplace, personal time, and education (Brown & Holt, 2014; Camacho & Legare, 2016; Corry & Carlson-Bancroft, 2014; Evans, 2012; Franklin & Lytle, 2015; Gallardo & Gonzalez, 2014; Gervais, 2016; Holmyard, 2016; Ryan & Cox, 2017; Wilder & Berry, 2016). As the needs of the 21st century learner continue to evolve, education must continue to be dynamic and open to change to remain relevant (Brown & Holt, 2014; Cote, 2017; De Jesus, 2012; Evans et al., 2013; Franklin & Lytle, 2015; Galvan & Coronado, 2014; Gervais, 2016; Gurvitch & Metzler, 2013; Holmyard, 2016; Ryan & Cox, 2017; Toland, 2017; Wilder & Berry, 2016).

Table 1 summarizes many of the major differences between student-centered learning and traditional educational approaches, including areas such as school culture, learning pace, instruction, and grading policies. Within the chart, the reader may observe substantial differences between traditional and student-centered characteristics in education and learning. Of particular significance are the differences and changing views of the role of the educator within the classroom and instructional setting.

Table 1. *Competency Education Continuum*

	Traditional	Emerging	Competency-based
School culture	Learning happens inside a traditional classroom with little to no accommodation of student interests and learning styles	Educators make limited accommodation for student interests and learning styles by incorporating real-world experiences and partners into the classroom	Students choose from a wide range of learning experiences at school, online, and in their community. Educators work with diverse partners and students to piece together individual learning pathways that accommodate student interests and learning styles
Learning progression	Students are expected to master grade level college and career ready standards	Students are expected to master grade level college and career ready standards and transferable skills	Students are expected to master competencies aligned to college and career ready standards. Each competency has clear, transferable learning objectives
Learning pace	Students advance at the instructor's pace regardless of whether they mastered the learning objectives or need additional time	Students may take accelerated courses if they demonstrate readiness. Students receive specialized support when they fall behind peers. Educators continually group students to encourage peer learning and maximize learning gains for all	Students receive customized supports and accelerated opportunity both in-school and out-of-school to ensure they stay on pace to graduate college and career ready
Instruction	Every classroom has one teacher who designs and delivers an instructional program with very little differentiation for individual students	Educators engage in some collaboration across teams and content areas to align and differentiate instruction based on real-time feedback on student performance	Educators work collaboratively with each other, community partners, and students to develop a unique learning plan for every student based on student interests, learning styles, and real-time data
Assessment system	Assessment instruments are used at set times to evaluate and classify students, not to guide instruction. Students have one opportunity to take the summative assessment at the end of the year	Educators use formative assessment instruments when they believe students are ready to demonstrate mastery. These assessments help educators tailor instruction so that more students are ready to master the summative assessment at the end of the year	A comprehensive assessment system is an essential part of the learning system. Formative assessments guide daily instruction and student selection of customized learning opportunities. Summative assessments show mastery of competencies. Students take these assessments when they are ready and have multiple opportunities to demonstrate mastery
Grading policies	Grades are norm-referenced, reflect mastery of course standards, and are typically based on weighted quarters and a final exam	Grades reflect mastery of course standards and skills and are typically based on weighted quarters and a final exam or project. Students have multiple opportunities to demonstrate mastery of required coursework	Grades reflect the degree of mastery of competencies ranging from advanced to not yet competent. When students do not earn course credit their record indicates competencies that need to be re-learned instead of the entire course

Note. From "The Operational Definition of Competency-Based Education" by J. Gervais, 2016, *The Journal of Competency-Based Education, 1*(2), p.102.

Specific instructional approaches that incorporate constructivism within today's modern classroom include student-centered learning strategies such as mastery and competency-based learning, cooperative learning, inquiry-based learning, problem-based learning, course redesign,

modularization, and cognitive apprenticeships. While all have slight variances in their methods or pedagogy, most essential is the commonality of constructivist theory found within each. In a constructivist classroom, students are vigorously involved, the environment is democratic, the activities are student focused and interactive, and the teacher fosters an environment in which the instructor facilitates and the student is responsible for their own learning (Ariovich & Walker, 2014; Freeman et al., 2014; Kalpana, 2014; Saeed & Zyngier, 2012).

The role of the instructor or teacher in a constructivist environment is extremely important. Constructivist instruction is derived from the constructivist learning theory and proponents of this concept include Piaget, Dewey, and Vygotsky (Murei & Rutto, 2015). While constructivist instruction focuses on the role of the teacher, it incorporates most of the same philosophies regarding student-centered instruction and experiential, active learning by the student. Constructivist instruction is generally characterized by traits such as an active involvement from the learner in knowledge construction, learning that is built upon schema, interactive learning activities such as discussion and collaboration, instructors serving as facilitators and guides, and dynamic, fluid knowledge that changes with each learner's experiences (Ariovich & Walker, 2014; Freeman et al., 2014; Murei & Rutto, 2015; Saeed & Zyngier, 2012).

Within constructivist instruction are three major approaches. The process approach is geared toward developing the learner's process skills and postulates that the teacher only assists the learner when necessary (Murei & Rutto, 2015). The discovery approach encourages teachers to give learners their own opportunities to construct knowledge and understanding. An example

of this approach is the heuristic instructional method and supports the belief that learners should find answers to problems on their own (Murei & Rutto, 2015). The third form of constructivist instruction is the inquiry/problem-solving approach, and this approach accentuates real life problem solving. The instructor presents learners with real problems, and the learner is then given the opportunity and freedom to solve these problems primarily through inductive or deductive methods (Murei & Rutto, 2015; Subasi & Tas, 2016). While these latter two methods are opposite of each other, both can be used by the learner to problem solve and acquire knowledge.

To further explore the role of the instructor in constructivist instruction theory, specific and essential roles of the teacher have been identified. The first trait of the instructor is to model appropriate conduct for the learner, and this can be separated into behavioral modeling and cognitive modeling (Murei & Rutto, 2015). Behavioral modeling involves demonstrations of the instructional activities, while cognitive modeling comprises the thinking and reasoning processes of the learner. Another role of the instructor entails coaching and includes analyzing the learner's performance, providing feedback and counsel, and giving encouragement for motivation (Murei & Rutto, 2015; Saeed & Zyngier, 2012).

Scaffolding comprises a third role of the constructivist instructor and includes supporting the learner by providing a framework to support the learner's performance, especially in tasks that appear to be beyond the learner's capacity (Murei & Rutto, 2015). Overall, the highest priority of the instructor within a constructivist environment is to facilitate and guide learners during the educational process (Saeed & Zyngier, 2012). Several key practices have been

recognized for effectiveness in ensuring constructivist instruction by the teacher. These include, encouraging and accepting the learner's autonomy and initiative, emphasizing communication, conducting follow-up questions and responses from the learner, drawing upon the learner's prior knowledge and comprehension, using open-ended questions to encourage critical thinking from the learner, challenging the learner, and providing adequate time for the learner to construct knowledge (Ariovich & Walker, 2014; McGoldrick & Schuhmann, 2016; Murei & Rutto, 2015).

Currently, teaching pedagogies are undergoing substantial changes when compared with the teaching methods of the not-so-distant past (Brown & Holt, 2014; Camacho & Legare, 2016; Chepko & Doan; 2015; Cote, 2017; Deed et al., 2014; De Jesus, 2012; Evans et al., 2013; Franklin & Lytle, 2015; Galvan & Coronado, 2014; Gervais, 2016; Gurvitch & Metzler, 2013; Holmyard, 2016; Prewitt et al., 2015; Toland, 2017; Wilder & Berry, 2016). Differentiated instruction, a type of student-centered learning, has become more widely accepted as educators are increasingly acknowledging the benefits of allowing students the opportunity to learn and digest information in ways that are personalized and individualized (Brown & Holt, 2014; Camacho & Legare, 2016; Cote, 2017; Deed et al., 2014; De Jesus, 2012; Franklin & Lytle, 2015; Holmyard, 2016; Prewitt et al., 2015; Ryan & Cox, 2017; Subasi & Tas, 2016; Toland, 2017; Wilder & Berry, 2016). In examining differentiated instruction and the practices that it best incorporates, research demonstrates that students become masters of their own learning process, and by connecting curriculum and learning styles, the student demonstrably performs at superior academic levels (Brown & Holt, 2014; Daghan & Akkoyunlu, 2014; Cote, 2017; De Jesus, 2012; Holmyard, 2016; Prewitt et al., 2015; Ryan & Cox, 2017; Sahin & Top, 2015; Subasi &Tas, 2016; Wilder & Berry, 2016). Differentiated instructional strategies may be found in practices such as cooperative learning, project based learning, and multiple intelligences (Galvan &

Coronado, 2014; De Jesus, 2012; Holmyard, 2016; Prewitt et al., 2015; Toland, 2017). Specific learning styles that demonstrate differentiated instruction can be defined in categories such as visual-spatial learners, kinesthetic learners, musical learners, interpersonal or intrapersonal learners, linguistic learners, and logical and mathematical learners (De Jesus, 2012).

A comparison of differentiated instruction versus traditional or conventional instruction reveals very different philosophies (Brown & Holt, 2014; Camacho & Legare, 2016; Chepko & Doan, 2015; Copp, 2017; Cote, 2017; De Jesus, 2012; Evans et al., 2013; Galvan & Coronado, 2014; Gervais, 2016; Prewitt et al., 2015; Toland, 2017; Wilder & Berry, 2016). While certain strengths of traditional instruction exist, including uniformity, consistency of curriculum presentation, firmness of sequential pedagogy, and academic success for typically half of all students, noticeable weaknesses are also apparent (Copp, 2017; De Jesus, 2012). These include a lack of emphasis toward higher level thinking skills, omission of emerging trends and curriculum, and a failure to engage students who are diverse or disabled (Corry & Carlson-Bancroft, 2014; De Jesus, 2012; Galvan & Coronado, 2014; Gervais, 2016; Toland, 2017). In contrast to traditional instruction, differentiated instruction allows for high stimulation, creativity, and comprehension among diverse students (De Jesus, 2012; Holmyard, 2016; Prewitt et al., 2015; Ryan & Cox, 2017; Toland, 2017). Differentiated instruction allows for variety, both in how the student learns and also the way in which the teacher instructs (Brown & Holt, 2014; Camacho & Legare, 2016; Chepko & Doan, 2015; Deed et al., 2014; De Jesus, 2012; Evans et al., 2013; Franklin & Lytle, 2015; Gurvitch & Metzler, 2013; Holmyard, 2016; Prewitt et al., 2015; Ryan & Cox, 2017; Subasi & Tas, 2016; Toland, 2017; Wilder & Berry, 2016). Most importantly, this style of learning casts the student as the driver in their educational experience and positively impacts the motivation and ownership of their learning experience (Brown &

Holt, 2014; Camacho & Legare, 2016; Chepko & Doan, 2015; De Jesus, 2012; Galvan & Coronado, 2014; Holmyard, 2016; Prewitt et al., 2015; Sahin & Top, 2015; Subasi & Tas, 2016).

Recent research studies focused on how other forms of student-centered learning such as CBE and personalized learning (PL) are becoming more prevalent throughout the nation (Brown & Holt, 2014; Camacho and Legare, 2016; Galvan & Coronado, 2014; Franklin & Lytle, 2015; Gurvitch & Metzler, 2013; Ryan & Cox, 2017; Toland, 2017). While some of the literature that is referenced is dedicated to the post-secondary level, many of the concepts and definitions of CBE and PL are germane to secondary education as well as elementary learning pedagogies. The research demonstrates that implementation of student-centered learning techniques such as CBE and PL require a change in the way that education is viewed or thought about (Brown & Holt, 2014; Galvan & Coronado, 2014; Evans et al., 2013; Franklin & Lytle, 2015; Gurvitch & Metzler, 2013; Holmyard, 2016; Prewitt et al., 2015; Toland, 2017; Wilder & Berry, 2016). In essence, this variation involves the transition of thinking about learning from a paradigm based on time to one that is dependent on the learner and free from the constraints of time (Camacho & Legare, 2016; Corry & Carlson-Bancroft, 2014; Franklin & Lytle, 2015; Holmyard, 2016; Prewitt et al., 2015).

The research results identified some of the unique characteristics of competency-based and personalized learning such as the learner demonstrating mastery of all competency requirements and the displaying of the student's knowledge of real-world mastery of the subject (Camacho & Legare, 2016; Franklin & Lytle, 2015; Gallardo & Gonzalez, 2014; Holmyard, 2016; Prewitt et al., 2015; Ryan & Cox, 2017). Most importantly, CBE and PL allow for the student to experience and demonstrate self-directed learning, or student-based learning (Brown & Holt, 2014; Chepko & Doan, 2015; Deed et al., 2014; De Jesus, 2012; Galvan & Coronado,

2014; Gurvitch & Metzler, 2013; Holmyard, 2016; Prewitt et al., 2015; Ryan & Cox, 2017; Sahin & Top, 2015). This type of learning enables the student to identify individual goals and then reach those goals using personalized strategies and time schedules, all while still meeting the requirements of a standards-based curriculum (Brown & Holt, 2014; Camacho & Legare, 2016; Corry & Carlson-Bancroft, 2014; Holmyard, 2016; Prewitt et al., 2015; Ryan & Cox, 2017). The research also established a growing relationship between CBE and PL strategies and the corporate/business world, which is increasingly less interested in traditional, theoretical or academic-based education, and is instead more attentive to demonstrable mastery and competency-based skills (Brown & Holt, 2014; Camacho & Legare, 2016; Franklin & Lytle, 2015; Gallardo & Gonzalez, 2014; Gervais, 2016; Holmyard, 2016; Ryan & Cox, 2017; Sahin & Top, 2015).

In regard to assessment, the teacher role in student-centered learning is substantially different than that of an instructor in traditional education. The use of open-ended questions or techniques that attempt to engage students in their own learning and acquisition of knowledge, as opposed to extrinsic grades, is emphasized (Shepard, 2000; Weimer, 2002; Wright, 2011). This is in contrast to teacher-directed instruction in which assessments are used to determine grades, thereby attempting to motivate the student and provide feedback to parents regarding the progress of their child (Pedersen & Liu, 2003). Not only is this approach non-constructivist, it more closely resembles behaviorist theory and reinforces traditional, teacher-centered education practices.

As an example, a look at conventional teaching and standardized testing revealed results that determined what effect large scale assessments (LSA) in Canadian schools have on teacher pedagogy and instructional practices (Copp, 2017). The rationale for conducting these

assessments was to improve academic results and to assist in raising the quality of teaching in provincial public schools; large scale assessments, however, have not proven to substantially impact instructional strategies in a positive manner (Copp, 2017). Research was then done to describe variables that definitively impacted LSA's including incentives, high stakes results, and public/community peer pressure (Copp, 2017). Overall, studies established that large scale assessment or standardized tests do not measurably improve teacher pedagogy and quality of instruction (Daghan & Akkoyunlu, 2014; De Jesus, 2012; Gallardo & Gonzalez, 2014; McGoldrick & Schuhmann, 2016).

Ultimately, the implementation and resulting data from high-stakes standardized tests in both the United States and Canadian education systems were conspicuously absent regarding improved teacher instruction strategies (Copp, 2017; Deed et al., 2014; De Jesus, 2012; Gallardo & Gonzalez, 2014; McGoldrick & Schuhmann, 2016). While tactics such as teaching to the test and promising certain incentives to teachers slightly improved student academic scores, the overall improvements were nominal (Copp, 2017). Studies concluded that outdated approaches to improving teacher instruction, such as high stakes testing, traditional teacher pedagogy, and rote memorization, have not noticeably improved student academic scores in the 21st century (Camacho & Legare, 2016; Copp, 2017; Cote, 2017; Daghan & Akkoyunlu, 2014; Deed et al., 2014; De Jesus, 2012; Franklin & Lytle, 2015; Gallardo & Gonzalez, 2014; Galvan & Coronado, 2014; Gervais, 2016; Prewitt et al., 2015; McGoldrick & Schuhmann, 2016; Toland, 2017).

More insight on the distinct contrasts between student-centered learning and traditional forms of instruction are also found internationally (Daghan & Akkoyunlu, 2014; Deed et al., 2014; Frost & Connolly, 2015; Mitee & Obaitan, 2015). Historically, Nigerian students have

performed very poorly in secondary-level chemistry courses. Reasons for these results ranged from students demonstrating poor math skills to ineffective instruction by teachers (Mitee & Obaitan, 2015). One study proposed to research whether students who were exposed to student-centered learning techniques would perform better on a chemistry achievement test than students who were taught using conventional educational methods (Mitee & Obaitan, 2015). The hypotheses supporting the study were based on mastery or personalized-learning theories which theorize that students can learn anything if given the necessary time and conditions that each student desires (Camacho & Legare, 2016). Specific conditions and characteristics that enable students to be successful can be identified and thereby help to demonstrate proficiency or mastery of the subject material (Brown & Holt, 2014; Camacho & Legare, 2016; Galvan & Coronado, 2014; Gurvitch & Metzler, 2013; Holmyard, 2016; Mitee & Obaitan, 2015; Subasi & Tas, 2016; Wilder & Berry, 2016). In this case, the results of the achievement test, as well as the results of a post-test administered two weeks later, overwhelmingly revealed that the group of students exposed to the mastery experimental group scored significantly higher than those in the traditional control group (Mitee & Obaitan, 2015). Specifically, nearly 70% of the experimental group scored 80% or higher on the test, compared with only 17.5% of students in the control group who attained 80% or better (Mitee & Obaitan, 2015). The researchers surmised that student-centered education pedagogies were significant, and quantitatively demonstrated a substantial difference in the way in which students learn when contrasted with conventional methods (Mitee & Obaitain, 2015).

A rapidly changing international labor market and increasing demands on the labor force of the 21st century are factors driving education to adopt student-centered practices and methods. These changes are evident not only in 1st world economies such as the United States, Canada,

and Western Europe, but they are also found in nations that only recently discarded communism and socialistic methodologies. As a case study, the nation of Kazakhstan and its educational system are now actively embracing student-centered learning, particularly in the higher education system (Makulova et al., 2015). Ultimately, a nation is dependent on its human capital, and it falls on the educational system of a country to develop and advance its workforce. Kazakhstan, like all other nations, is attempting to improve and develop a competitive citizenry and economy. Makulova et al. suggest that an adoption of student-centered education is one strategic part of a coordinated plan for necessary advancement and progression.

In conclusion, different beliefs and opinions about the role of the teacher in student-centered learning exist. Table 2 may help the reader in better understanding the wide variances regarding the responsibilities and philosophical views of what the student-centered instructor should be. The responses below not only demonstrate these differences, they also exist to show how many student-centered instructors evolve in their philosophical journey from traditional, teacher-centered approaches in education to one that is truly student-centered.

Table 2. *Teacher Beliefs about Implementing Student-Centered Learning*

Definition	In student-centered learning. . .
1	The teacher considers the interests and needs of the students in the class, and then provides instruction based on them. The teacher tries to make sure that students acquire the information and understand the concepts presented before moving on to more difficult material. The teacher takes into account individual differences and makes adjustments to accommodate individual students.
2	The teacher prepares an activity that requires students to be actively engaged. These activities are often "hands-on" and collaborative, but they do not need to be. The teacher explains the steps students need to go through in the activity, and helps to redirect students if they have trouble following the steps.
3	The teacher presents students with a complicated activity but does not tell students how to complete it. Students must figure out what to do, which means that they sometimes try things that don't work. Teachers question students about their thinking, but do not solve their problems for them or tell them what to do. When students encounter difficulties, they turn to their peers for support; therefore, collaboration grows naturally out of student-centered learning.
4	The teacher presents a topic students are supposed to learn about, and then allows each student to investigate whatever aspect of that topic interests him or her. This means that students are often working on widely different projects that they themselves have developed. If students have difficulty choosing what to investigate or finding materials, the teacher helps them by asking questions, but does not tell them what to do or provide a model or detailed expectations for a product. The teacher questions students about their work and students present what they learn to their classmates.

Note. From Pedersen, S., & Liu, M. (2003). Teachers' beliefs about issues in the implementation of a student-centered learning environment. *Educational Technology Research and Development*, *51*(2), 57.

Student-Centered Pedagogy

Numerous research studies establish that professional educators need to be specific about what constitutes effective pedagogical practices and desired outcomes (Brown & Holt, 2014; Cooper, 2016; Galvan & Coronado, 2014; Gurvitch & Metzler, 2013; Subasi & Tas, 2016; Toland, 2017). Educators have traditionally been vague in explaining expectations to students when striving for evidence of active learning and critical thinking. Even today, educational experts have not reached a consensus on what the term critical thinking means, nor do they agree on how it is to be demonstrated or evaluated (Cooper, 2016; Toland, 2017). One solution offered is for educators to embrace the scientific practices approach to effective pedagogy (Cooper, 2016).

These practices include strategies found in the National Research Council document *Framework for Science Education* and describes eight scientific and engineering practices that are considered modules of what scientists do (Cooper, 2016). Examples include developing and using models, analyzing and interpreting data, and evaluating information (Cooper, 2016). In essence, these strategies require that the student performs or demonstrates proficiency. Research validates that educators must first identify specific language and goals that are universally understood and agreed upon in order to improve pedagogical practices and teaching techniques (Cooper, 2016). If active learning, critical thinking, and other strategies related to constructivism are to be implemented and perfected, common goals and targets must be established.

Specific subject areas, such as physical education, provide further examples of how student-centered learning can be understood. Several academic studies in this area focused on establishing a mastery climate where all students could find success and develop a lifetime appreciation for physical literacy (Chepko & Doan, 2015; Gurvitch & Metzler, 2013). In

examining how student-centered learning can be implemented within the discipline of physical education, a five-step approach was identified as being the key to student engagement. These steps include creating a mastery environment, designing deliberate practice tasks, maximizing the number of repetitions, integrating tactics and strategies, and providing specific corrective feedback and assessment (Chepko & Doan, 2015). Traditional approaches to physical education courses emphasize competition and peer comparisons as opposed to student-oriented learning that strives for personal growth and improvement (Chepko & Doan, 2015; Gurvitch & Metzler, 2013; Prewitt et al., 2015). In order to fully engage the physical education student in reaching their full potential, differentiated instruction and student choice should be the emphasis of the new approach to teacher instruction (Chepko & Doan, 2015; Gurvitch & Metzler, 2013; Prewitt et al., 2015).

Student-centered education and self-directed learning are as effective in physical education as in any educational discipline. Research efforts identified clear and explicit steps for how mastery-oriented instruction and learning could be effectively implemented within a physical education course (Archambault & Larson, 2015; Chepko & Doan, 2015; Gurvitch & Metzler, 2013; Prewitt et al., 2015). Studies supported other recent research that connects evolving teacher pedagogies to student constructivist strategies (Camacho & Legare, 2016; Doering, Koseoglu, Scharber, Henrickson, & Lanegran, 2014; Galvan & Coronado, 2014; Saeed & Zyngier, 2012; Sahin & Top, 2015; Subasi & Tas, 2016; Toland, 2017). Ultimately, all students can be motivated and successful if the physical education instructor is willing to follow strategies that result in positive student engagement and motivation (Chepko & Doan, 2015; Galvan & Coronado, 2014; Gurvitch & Metzler, 2013; Prewitt et al., 2015).

When combined, student-centered learning techniques such as problem-based and project-based learning strategies can meet the challenges of preparing students for the 21st century (Cote, 2017; Galvan & Coronado, 2014; Gervais, 2016; Sahin & Top, 2015). Evidence demonstrates how the implementation of problem-based and project-based learning enables students to surpass traditional educational systems (Camacho & Legare, 2016; Cote, 2017; De Jesus, 2012; Galvan & Coronado, 2014; Gervais, 2016; Holmyard, 2016; Sahin & Top, 2015; Toland, 2017). These learning strategies can be traced back to the beginning of the 20th century and have their origins in educational philosophies such as progressivism and constructivism (Camacho & Legare, 2016). Today, society demands that students be educated as active learners and that differentiation be a readily demonstrated skill (Brown & Holt, 2014; Camacho & Legare, 2016; Chepko & Doan, 2015; De Jesus, 2012; Evans, 2012; Galvan & Coronado, 2014; Gervais, 2016; Holmyard, 2016; Ryan & Cox, 2017; Saeed & Zyngier, 2012; Sahin & Top, 2015).

While specific characteristics are identified that are positive or negative for each of these strategies, studies purport that the most effective approach is a combination of problem-based and project-based learning (Galvan & Coronado, 2014). This blending ensures that skills such as analyzing information, self-discovery, and awareness of cognitive skills, along with cooperative learning, and deductive and inductive reasoning, are synthesized by the student (De Jesus, 2012; Galvan & Coronado, 2014; Holmyard, 2016). Also documented are challenges faced by teachers when transitioning from traditional educational pedagogy to problem-based and project-based learning. These include the student's lack of content knowledge, inability to identify roles, and teacher difficulty in measuring and evaluating student work (Daghan & Akkoyunlu, 2014; Cooper, 2016; Galvan & Coronado, 2014; Toland, 2017). Intentional structure and modeling

procedures are necessary, along with deliberate and comprehensive teacher professional development, to overcome many of these challenges (Daghan & Akkoyunlu, 2014; Evans et al., 2013; Galvan & Coronado, 2014; Toland, 2017).

Researchers also effectively demonstrated, both quantitatively and qualitatively, the powerful impact that problem-based and project-based learning strategies can make. These modern-day, student-centered pedagogies can be traced to historical educational movements and demonstrate that problem-based and project-based approaches to learning will continue to be relevant for years to come (Camacho & Legare, 2016; Cote, 2017; Galvan & Coronado, 2014; Gervais, 2016; Holmyard, 2016; Sahin & Top, 2015). As an example, a new type of K-8 school, Khan Lab School, has recently begun educating students in ways that emphasize student-centered learning and mastery-based education (Holmyard, 2016).

Khan Lab School students learn curriculum through customized learning and personalized learning techniques, and student ownership and personal inquiry is emphasized as well (Holmyard, 2016). The school administrators and instructors have intentionally set goals to help students of the 21st century prepare for the transition of society from industrial era jobs to an era dominated by information and concepts. This preparation is reflected in teaching pedagogies and curriculum that group students by their ability to self-direct instead of traditional criteria that use age or academic abilities. Curriculum for students in the school consists of traditional skills, such as reading and writing, but also emphasizes concepts such as relationships, culture, identity, and workforce skills (Holmyard, 2016).

Sal Khan's ultimate goal is to make student-centered schools and curriculum available for any student in the world (Holmyard, 2016). While Khan may initially be known for his technology innovations, prototypes of the Khan Lab School would potentially be located in

multiple locations around the globe and transform how education is forever implemented (Holmyard, 2016). The real change however, would be in shaping and influencing how school personnel, education, and learning are viewed and conducted globally. By emphasizing student-centered learning and differentiated academic instruction for every student, Khan's true impact would revolutionize education and better prepare students for the workplace of the new century.

Another example of student-centered learning was found in a Vermont high school where three teachers have documented their perspectives and understanding of emergent education trends (Toland, 2017). Toland (2017) shares that in order to capture innovative tools, strategies, and instructional approaches, these teachers have embraced and implemented proficiency-based learning pedagogies. The teachers provide detailed descriptions of the process of incorporating student-centered learning practices and focused on the implementation of transitioning to a proficiency-based learning environment. In addition, the teachers shared their opinions regarding how to successfully convert from a traditional approach in teaching high school social studies to one based on proficiency and mastery. Factors for the successful implementation of student-centered learning included a need for targeted professional development, restructuring of school and class schedules to accommodate collaboration, cooperative vertical mapping strategies, and redesigned preservice training for new teachers. Toland (2017) states that interviewed teachers all expressed belief and support in Vermont's efforts to transition to a student-centered learning system, but also insisted that thorough professional development and training prior to conversion was necessary. In this example, successful implementation of these new teaching pedagogies can be documented in the high school social studies classroom. However, as noted above, deliberate training and fundamental changes to traditional school organization and procedures

must be done prior to the transition (Deed et al., 2014; Doering et al., 2014; Evans et al., 2013; Toland, 2017).

Yet another study attempted to determine whether a different version of student-centered learning known as a personalized system of instruction (PSI) was more effective for student learning than a traditional, direct instruction delivery (Gervais, 2016; Prewitt et al., 2015). This specific study was conducted over a 6-week period in a private, urban high school in the mountain west region of the USA. The participants in the study included two separate high school physical education classes with 24 and 29 students in each class, respectively. Students were required to complete assessments as they progressed through modules. Each module required students to score 80% or higher on a quiz and to achieve 100% on individual assignments. If students did not reach these benchmarks, they were permitted to retake the quiz or re-complete the task until they demonstrated mastery of the subject. This emphasis on student-centered learning practices such as mastering skills and content has been shown to improve student feelings toward the topic and increase retention of the knowledge learned (Daghan & Akkoyunlu, 2014; Prewitt et al., 2015).

Another unique characteristic of student-centered learning like PSI is self-pacing (Corry & Carlson-Bancroft, 2014; Prewitt et al., 2015). Students who have experience or background in the content are able to move at a quicker rate than those who are unfamiliar with the curriculum and, subsequently, may need more time to learn and practice (Brown & Holt, 2014; Camacho & Legare, 2016). This approach, along with increased practice times, pairs with student-centered learning to ensure students are confident and able to perform skills or retain content knowledge (Brown & Holt, 2014; Camacho & Legare, 2016; De Jesus, 2012; Gurvitch & Metzler, 2013; Holmyard, 2016; Prewitt et al., 2015; Sahin & Top, 2015). In a traditional instructional approach,

the teacher determines the pacing of the course, thereby not allowing all students the opportunity to learn fully (Cote, 2017; De Jesus, 2012; Gervais, 2016; Prewitt et al., 2015; Toland, 2017). By contrast, a rise in perceived competence through increased practice and feedback are characteristics of student-centered learning, and students are more inclined to engage and participate in academic activities (Brown & Holt, 2014; Cooper, 2016; Galvan & Coronado, 2014; Gurvitch & Metzler, 2013; Holmyard, 2016; Prewitt et al., 2015; Sahin & Top, 2015).

Although research results were initially positive, generalizations should not be blatantly made toward other curricula. Personalized systems of instruction are effective for teaching skills in other educational fields, but the researchers only examined content knowledge compared to a non-PSI class. More PSI research is needed to examine differences between PSI and other models in all academic subjects. In general, however, the research demonstrated that personalized learning and student-centered education can positively impact what students learn and for how long they retain knowledge (Camacho & Legare, 2016; Chepko & Doan, 2015; Corry & Carlson-Bancroft, 2014; De Jesus, 2012; Galvan & Coronado, Holmyard, 2016; Prewitt et al., 2015; Ryan & Cox, 2017; Saeed & Zyngier, 2012; Sahin & Top, 2015; Subasi & Tas, 2016).

Educational experts in the 21st century are becoming increasingly more aware of how learning and the processing of information occurs (Cooper, 2016; De Jesus, 2012; Galvan & Coronado, 2014; Gervais, 2016; Gurvitch & Metzler, 2013; Holmyard, 2016; Ryan & Cox, 2017; Toland, 2017; Wilder & Berry, 2016). In the discipline of physical education, a different form of student-centered learning labeled as model-based instruction uses eight specific strategies that are increasingly applied today (Gurvitch & Metzler, 2013). These instructional models were identified as direct instruction, personalized instruction, cooperative learning, sport education,

peer teaching, inquiry, tactical games, and teaching for personal and social responsibility (Gurvitch & Metzler, 2013). Each of the aforementioned instructional models were specifically developed for students and were presented to help them learn either for cognitive intelligence or psychomotor proficiency.

Specific learning activities can be identified that are commonly observed in student-centered learning and model-based instruction. Examples of these activities include learning centers, drills, situated learning tasks, modified or lead-up games, games, partner teaching, videotaping, cooperative tasks, critical thinking, discussion strategies, inquiry-guided learning, and didactic strategies (Gurvitch & Metzler, 2013). Prior to students participating in a learning activity, knowledge and understanding must be presented and then followed-up to ensure that the instructional models and learning activities are harmonious. Once the instructional models and learning activities are aligned, student learning will occur and mastery or proficiency of the skill and content will be demonstrated (Cooper, 2016; Gurvitch & Metzler, 2013; Prewitt et al., 2015; Toland, 2017). Model-based instruction is a systematic, organized teaching strategy that supports student-centered learning and ensures that personalized learning and differentiated learning occurs in a structured, thematic manner. With proper preparation and awareness by the instructor, learning outcomes can be established, measured, and ultimately reached in order for students to succeed (Brown & Holt, 2014; Cooper, 2016; Daghan & Akkoyunlu, 2014; Galvan & Coronado, 2014; Gurvitch & Metzler, 2013; McGoldrick & Schuhmann, 2016; Prewitt et al., 2015; Saeed & Zyngier, 2012; Sahin & Top, 2015; Toland, 2017).

Examples of student-centered pedagogy are now also commonly found in the post-secondary world (Camacho & Legare, 2016; Cote, 2017; Evans et al., 2013; Sinner, 2015). A recent study was conducted over the length of a semester in a public university in Connecticut.

The participants in the study were undergraduate university students who were taking a history class to satisfy their general electives requirements. The author shared that for the majority of her career, she had taught from a traditional, higher education pedagogical approach (Cote, 2017). However, she became convinced that a new approach which emphasized student-centric outcomes and mastery of the subject material was needed. Subsequently, the author radically changed her instructional tactics and implemented a different way of teaching an undergraduate history class (Cote, 2017).

The outcome of this research provides evidence that student-centered learning and an emphasis on a constructivist type of class can be implemented at the post-secondary level (Camacho & Legare, 2016; Cote, 2017; Sinner, 2015). While students may initially be reluctant to embrace such drastic changes and may be unsettled by a non-traditional approach to college-level subjects, the study demonstrated overwhelmingly that university students can benefit from such a change (Camacho & Legare, 2016; Cote, 2017; Sinner, 2015). The study also identified primary problems with traditional ways of teaching college history courses and explained the rationale for why a change to student-centered learning and its supporting pedagogies is preferable (Cote, 2017).

Easley (2017) found that effective school library programs can model and advance student-centered learning such as personalized learning strategies and teaching pedagogies. Evidence was shared that established how essential school libraries can be in helping the student-learner implement personalized learning strategies, such as choice for demonstrating learning and just-in-time direct instruction (Easley, 2017). Other personalized learning approaches that are easily implemented in school libraries include varied or differentiated strategies, mastery-based assessment, flexible pacing, and co-planning learning (Easley, 2017). The library serves as

the academic heartbeat of the school and with intentional preparation, librarians can powerfully impact every student in their educational journey through student-centered learning strategies like personalized learning practices.

Research by Easley (2017) also supports that school libraries are critical for helping to establish a holistic educational environment, based on student-centered learning that potentially impacts all students, not just select students in certain classrooms. School librarians are uniquely equipped to impact both student and teacher, as well as help in facilitating personalized learning strategies and outcomes (Easley, 2017). The research also addressed specific steps for ensuring the school library is conducive to student-centered learning. School libraries and their staff should be considered leaders in the 21st century movement for personalized and lifelong learning strategies.

Mastery Learning and Special Student Populations

Another study surveyed and analyzed the effects of student-centered education practices like personalized learning within three alternative high schools in the western U.S (Barrett, 2017). Specifically, the researcher looked at the impact that personalized learning pedagogy had on the behavior and academic achievement of at-risk high school students (Barrett, 2017). In addition, the study measured the perceptions of the students regarding personalized instruction through the delivery system of blended learning (Barrett, 2017). The at-risk students included in the study overwhelmingly demonstrated that student-centered and personalized learning, when paired with blended learning, decreased inappropriate behavioral incidents, raised student academic achievement results, and strengthened relationships between students and teachers (Barrett, 2017). The study indicated that student-centered learning can be as equally positive for at-risk students as it is for general education students in a high school setting.

Other research examples concluded that students who were enrolled in alternative high school programs and instructed in student-centered methods of learning, successfully demonstrated increased proficiency in their academic knowledge (Sullivan & Downey, 2015). Additionally, administration and teaching staff responded positively to the implementation of student-centered learning within alternative high schools (Barrett, 2017; Sullivan & Downey, 2015). Specifically, noticeable changes in increased teacher engagement, increased student engagement, and increased academic rigor were communicated in staff interviews (Barrett, 2017; Sullivan & Downey, 2015). Ultimately, administration and teaching staff were excited and reinvigorated by the change from a traditional approach to a student-centered education system. However, several challenges to the transition became readily apparent. These challenges included ensuring effective communication amongst all stakeholders, the significant amount of time it took to develop and implement an alternative educational approach, and the difficulties encountered with alignment between two systems of accountability (Sullivan & Downey, 2015). Administrators and teachers alike acknowledged there was much work to be done in order to ensure complete implementation of a student-centered educational program.

Notwithstanding the challenges outlined above, research identified multiple key factors in helping set the stage for positive changes necessary in a successful alternative high school program. These factors include federal, state, and local mandates, a catalyst leader, and a common moral purpose (Sullivan & Downey, 2015). Each of these factors is essential in helping to create the necessary changes to transition from a traditional educational system to a student-centered learning environment.

Also important is the examination of data that demonstrates how student-centered learning positively impacts those students who are considered gifted and may reside in general

education classrooms (Cross & Schroth, 2016). In order for student-centered programs to be successful in assisting gifted students, specific strategies must be implemented. These best practices include differentiation for each student, accurate assessments that measure objective subject material, dedicated teacher interaction and guidance, and continued services for those students who progress through K-12 (Cross & Schroth, 2016).

Research studies concluded that gifted students who are participating in student-centered learning strategies should not be limited to traditional school settings or strategies, but rather should be allowed to advance and accelerate in non-school environments or sequences, such as advanced opportunities, internships, or mentoring programs (Cross & Schroth, 2016). Student-centered learning is a viable and significant educational approach to effectively reaching gifted students. Additionally, it is imperative to determine what impact strategies such as these have on educators who are intricately involved in these programs.

Mastery Learning and Government Legislation

A *Guide to Personalizing Learning Report: Suggestions for the Race to the Top – District Competition* provides a glimpse into the early efforts of the federal government to introduce and encourage schools and districts to implement student-centered learning for students (Evans, 2012). At the heart of this effort was the federal government's creation of a competition among LEAs to fundamentally change how education was being conducted and to motivate LEA's to adopt strategies that would better prepare students for the 21st century. Specific strategies were outlined in the report to meet the needs of diverse groups of students and focus was given to implementing individual learning outcomes and goals (Evans, 2012).

Additional research in this report advocating for educational changes identified fundamental distinctions in teaching methods and strategies, such as applying blended learning

pedagogy, transforming the role of teachers, personalizing learning goals for every student, measuring success through demonstration of competency as opposed to seat-time requirements, providing numerous occasions for formative feedback evidence instead of traditional summative assessments, and the necessity of engaging community stakeholders (Corry & Carlson-Bancroft, 2014; Deed et al., 2014; Evans, 2012; Freeland, 2014; Phillips & Locket, 2017; Ryan & Cox, 2017; Toland, 2017). Also discussed is the change in mindset that must occur at both the macro-levels and micro-levels to ensure successful implementation of a personalized learning system. Evans (2012) further detailed that, in order for student-centered strategies to work effectively, technology must be properly equipped and those who use it must be well trained.

Much of the impetus for the U.S. Department of Education to begin considering learning approaches such as mastery and CBE was due to the criticism that business and higher education expressed regarding the preparedness of students graduating from K-12 education (Evans, 2012; Ryan & Cox, 2017). Federal legislation and programs such as the No Child Left Behind Act (NCLB) strongly urged states and school districts to increase academic standards and compare student achievement through additional testing (Malow & Austin, 2016). With the adoption of the Common Core standards, many states in the past decade have focused their educational efforts on reaching and surpassing national and international test scores. However, researchers are beginning to study how the effects of such a strong emphasis on standardization and testing is impacting students and their perceptions of school (Malow & Austin, 2016). Partially as a response to a changing perspective, education leaders at the federal level began to recognize that new approaches to teaching students and meeting their individual needs were necessary (Camacho & Legare, 2016; Evans, 2012; Ryan & Cox, 2017).

The Clayton Christensen Institute for Disruptive Innovation Report, *From Policy to Practice: How Competency-Based Education is Evolving in New Hampshire,* observed how 13 schools in the state of New Hampshire were undergoing the transition from conventional education to student-centered education (Freeland, 2014). As a leader of the state-wide movement in CBE, New Hampshire is considered to be at the forefront of national efforts to embrace a new type of K-12 educational system. Because of the long history and tradition of local control in the state, the methods and strategies for conducting such a change have not been integrated, and progress has been irregular and uneven among the LEAs (Freeland, 2014). The 13 schools and their faculty were interviewed and asked to summarize the progress they had made both in terms of successes and challenges.

In 2005, New Hampshire abolished the Carnegie unit and instead, implemented a new method for granting academic credit based on mastery of content, as opposed to seat-time or classroom time (Freeland, 2014). By moving toward and adopting a student-centered educational system based on concepts like mastery learning and CBE, the state embraced a revolutionary and new way of educating students. Many students have flourished and embraced these new pedagogies, as scholars are allowed to work at their own pace, learn through differentiated methods, and demonstrate mastery of knowledge by displaying proficiency on formative and summative assessments (Brodersen et al., 2017; Freeland, 2014). Still, challenges remain in implementing student-centered learning as the lack of uniformity is prevalent (Brodersen et al., 2017; Freeland, 2014).

Some of these challenges include an absence of local and state-wide policies that allow for successful student-centered curriculum, infrastructure, and alignment (Brodersen et al., 2017; Freeland, 2014; Phillips & Locket, 2017; Ryan & Cox, 2017). Other problems arise when

educators do not receive adequate professional training regarding the transition from traditional education to student-centered education (Brodersen et al., 2017; Freeland, 2014; Phillips & Locket, 2017; Toland, 2017). This specifically includes challenges involving a lack of knowledge and training for educators in the classroom and at the building level who have not been exposed to student-centered learning or been given adequate transition time. Perhaps most significant, shifting to student-centered learning requires a fundamental and philosophical change in the way individuals view teaching and learning (Brodersen et al., 2017; Camacho & Legare; Deed et al., 2014; Freeland, 2014; Gervais, 2016; Phillips & Locket, 2017; Ryan & Cox, 2017; Toland, 2017).

Researchers can now identify the primary states that are embracing and adopting educational policies and the regulations that are endorsing student-centered learning in K-12 education (Brodersen et al., 2017; Toland, 2017). Twelve states are considered the leaders of the nation in changing their educational approach to student-centered education. In these states, three broad categories of state law or state regulations emerged which influenced the transition from traditional education to student-centered education: credit flexibility, progression flexibility, and individualized learning option (Brodersen et al., 2017).

Additionally, it was determined that the states varied in both their interpretation and regulation of how students earned academic credit and how graduation requirements were established (Brodersen et al., 2017). One commonality found among the twelve states was specific policy that allowed for individual learning options or differentiated learning styles (Brodersen et al., 2017; Toland, 2017). Observable differences were noted within the twelve states, including various levels of support for student-centered learning. These differences were further identified in areas such as information and technical assistance, student-centered

education collaboratives, and implementing pilot strategies and funding for special programs (Brodersen et al., 2017). Ultimately, data should assist the researcher in demonstrating the numerous ways in which state laws, regulations, and the allocation of resources guide and shape the sanctioning of student-centered education (Phillips & Locket, 2017; Ryan & Cox, 2017; Toland, 2017).

Excel-in-Ed's report titled *Policy, Pilots and the Path to Competency-Based Education: A Tale of Three States* provides an update on three states that have recently implemented student-centered learning within their K-12 educational systems. Idaho, Utah, and Florida are identified and reported on as each state is now several years into a transformational change in their respective K-12 education systems. The report tracks the next phase of implementation for each of the state's pilot programs (Phillips & Locket, 2017). Specific details include how the pilot sites were selected, what strategies and communication tools were used to build support for the change to student-centered education, the identification of barriers and strategies experienced to overcome these challenges, and a summary of what important lessons have been discovered and learned (Phillips & Locket, 2017). The report succinctly summarizes the efforts of pilot states like Idaho, Utah, and Florida to transition from a traditional approach to education to student-centered learning such as competency-based or mastery-based education. In addition, the report lists several takeaways and lessons that can be learned from the experience of the three states (Phillips & Locket, 2017).

Mastery Learning in Idaho

In 2012, Idaho adopted the Common Core State Standards (CCSS) in mathematics and English language arts (Luna et al., 2014; Willits, 2014). Subsequently, Idaho schools and districts were given two years to prepare and train for the implementation of the CCSS. In Figure 2, a visual

timeline is displayed that outlines Idaho's adoption of student-centered learning implementation and timeframe.

Figure 2: *Idaho's Timeline for Mastery Learning Implementation*

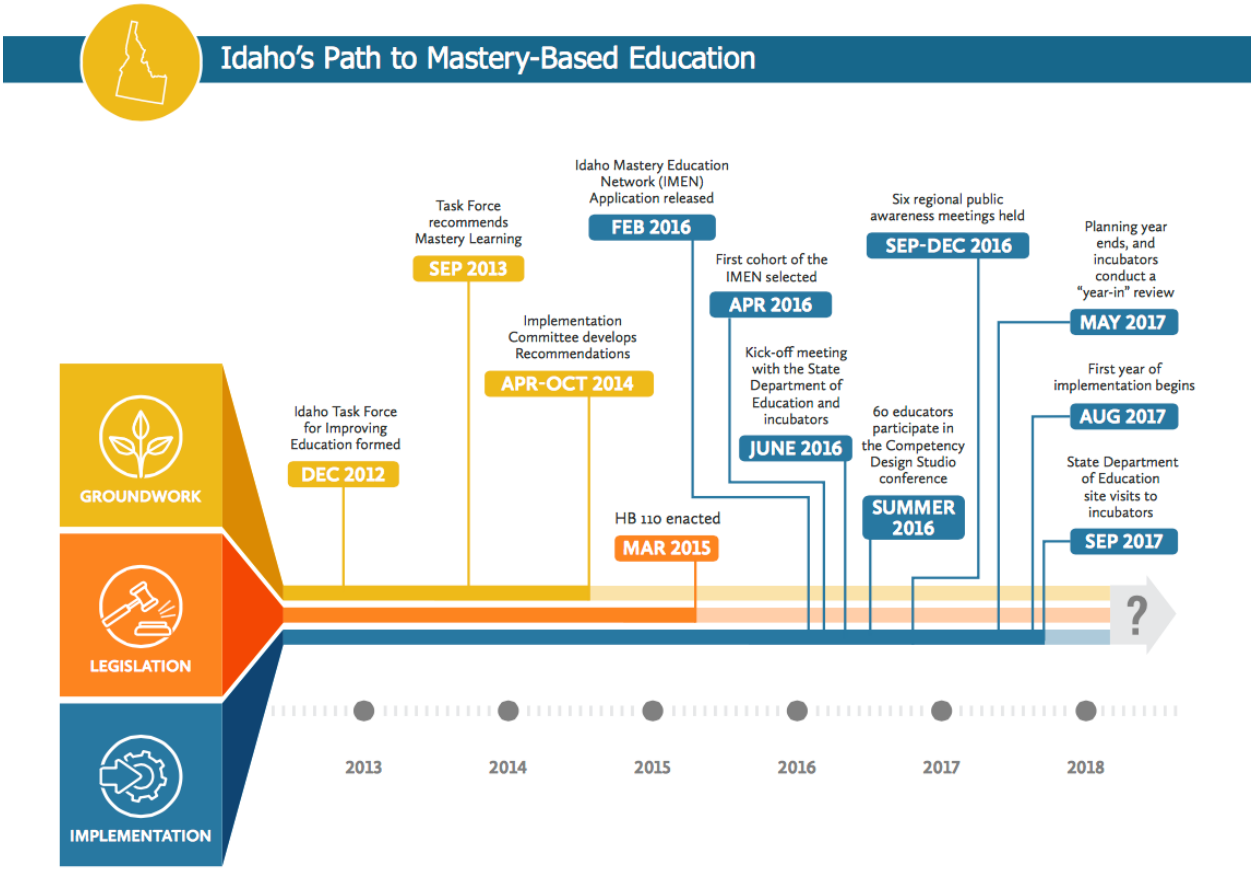


Figure 2. From: The Path to Personalized Learning: "The Next Chapter in the Tale of Three States," by K. Phillips and E. Locket, (2017). By Excel*in*Ed, p. 06. https://www.excelined.org /wp-content/uploads/2017/11/ExcelinEd.ThePathToPersonalizedLearningTheNextChapterInTheTaleofThreeStates.Oct2017.pdf

The adoption of the new standards was due in-part to the low percentage of high school graduates who continued their education journey into post-secondary education (Luna et al., 2014; Willits, 2014). This disturbing trend, combined with other studies indicating that 60% of future jobs and careers in Idaho would require some post-secondary education, led state and

educational leaders to push for and ultimately support the adoption of the CCSS. Specific and tangible targets in the subject areas of mathematics and English Language Arts were identified and written into the new standards to help ensure students in Idaho K-12 schools were prepared for higher education and the workplace.

The outcomes to be emphasized and demonstrated in English Language Arts included student proficiency in reading, analyzing, writing at a high level, supporting arguments and decisions with evidence instead of opinion, and learning skills to develop a better understanding and usage of vocabulary (Willits, 2014). Mathematics standards encompassed demonstrable skills such as mastery of mathematical concepts and theories, the learning of problem-solving skills and foundational concepts, and the application and understanding of real-world situations and critical-thinking skills (Willits, 2014). The CCSS were adopted to help reach the State Board of Education's goal of 60% of Idaho citizens ages 25 to 34 attaining a minimum of one-year postsecondary credential by 2020 (Willits, 2014).

Luna et al. (2014) documented the conflict over the CCSS and their subsequent implementation in the state of Idaho. The business community of Idaho, along with state government (including the Governor and state Legislature) and the institutions of higher education, all worked together to ensure the adoption of CCSS for Idaho's K-12 education system. The result of their efforts was the approval and enactment of the CCSS (known as the Idaho Core Standards) and a commitment to ensuring the new standards would receive the support it required.

The report also details the reasons for why these diverse groups believed adoption of the CCSS were necessary, even in the face of significant opposition and criticism. In essence, due to

Idaho's traditionally low "go on" rates of students attending post-secondary educational institutions and lack of college graduates, state educational, business, and governmental leaders believed a change in what students were required to learn in math and language arts was desperately needed (Luna et al. 2014; Willits, 2014). The "Go On" campaign referenced efforts by Idaho educational and government leaders to inspire and encourage Idaho high school seniors to enroll in and attend Idaho universities and colleges. Also documented is the fact that for the first time in the history of education in Idaho, higher education and K-12 educators worked cooperatively to meet the goal of increasing student attendance at Idaho's post-secondary institutions (Luna et al., 2014).

A qualitative study in the autumn of 2013 was conducted in which rural, Idaho teachers were asked for their perspective regarding a student-centered educational practice known as blended learning (Kellerer et al., 2014). Eight out of nineteen teachers agreed to be interviewed and responded to queries such as, what is the definition of blended learning, how has blended learning impacted their teaching pedagogy, and what effect has blended learning had on their students (Kellerer et al., 2014)? Eight major traits emerged from the teacher responses, with the most significant being that students exhibited more engagement and ownership of their own learning experiences when exposed to blended learning methods (Kellerer et al., 2014).

Other themes from the teacher respondents were similar to an earlier study and identified noticeable changes in students' ability to be self-directed, work at their own pace, and demonstrate increased motivation (Kellerer et al., 2014). Additionally, the teachers interviewed emphasized the need for professional development and the essential training that must be provided for blended learning strategies to be effective. The interviewees further elaborated that

in addition to benefiting students, blended learning also positively impacted the teacher and their own self-efficacy (Kellerer et al., 2014).

The Idaho SDE serves as the founder of the IMEN following the passage of House Bill 110 by the Idaho Legislature in 2015. The law called for the SDE and IMEN to create and establish a model in Idaho K-12 public schools that was mastery-based and focused on differentiated and personalized learning for students (Idaho SDE, 2018). In order to comply with Idaho law, the SDE and IMEN piloted a plan consisting of three steps to assist in moving Idaho K-12 education to student-centered education. These steps included conducting a public awareness campaign to promote interest and understanding of mastery education, identifying roadblocks and challenges to implementing mastery education in Idaho, and selecting and choosing twenty school districts and schools to pilot mastery education in Idaho (SDE, 2018).

The IMEN was initially comprised of 19 LEAs that were located in Regions 1, 2, 3, 4, and 6. These regions are organized by geography and serve to better organize and divide the state into more efficient areas that have common interests and populations (i.e. Region 1 is North Idaho's Panhandle, Region 3 is Southwest Idaho comprised mainly of the Treasure Valley). The school districts and schools that encompassed the IMEN consisted of entire school districts as well as small individual schools (SDE, 2018). Also, the IMEN members were a mix of urban LEAs and rural, remote educational entities. The IMEN provides specific examples of how student-centered learning works, how it compares with traditional education systems, and how student assessments are conducted (SDE, 2018). Information is also posted on the IMEN website about other states that have transitioned or are in the process of moving to student-centered learning and provides links to the websites of those states and their efforts (SDE, 2018).

Today, the Idaho SDE and IMEN have provided a succinct summary and overview of student-centered education and how it is being introduced in the state of Idaho. Figure 3 visually contrasts the differences between traditional education and student-centered education.

Figure 3: *Traditional Education vs. Competency-Based Education*

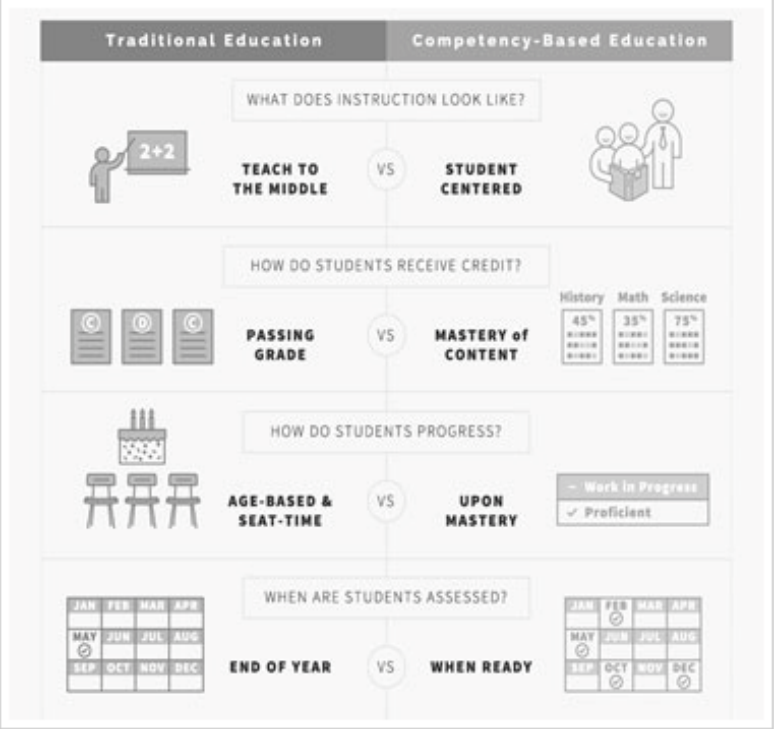


Figure 3. From Mastery Education/SDE, found under FAQ's (2018). Retrieved from http://www.sde.idaho.gov/mastery-ed/

A further example of efforts in Idaho involve a service-learning project for fifth-grade elementary students in a small Idaho town. This project has resulted in students being introduced to student-centered learning such as problem-based learning and differentiated instruction methods. Students partnered with graduate students from the University of Idaho McCall Outdoor Science School (MOSS), along with local agencies such as the United States Forest Service (USFS), the Idaho Department of Environmental Quality (IDEQ) and the Idaho

Department of Fish & Game (IDFG), to study and ultimately rehabilitate Boulder Creek (Schon et al., 2014). This cooperative effort has led to the restoration of a local waterway and resulted in increased student awareness and educational knowledge. In addition, it has exposed students to a new way of learning and education.

Schon et al. (2014) demonstrate in their research that the involvement of the students has also led to an increased cooperative environment among the various stakeholders of the local community. Whereas before, private landowners were reluctant to partner with government agencies, the fifth-graders' student-centered learning has helped to eliminate barriers and increase cooperation among the various entities (Schon et al., 2014). Equally as important, students are being exposed to real-world experiences in the science discipline and have experienced interdisciplinary knowledge and information that mirrors student-centered education practices. The problem-based learning project that the report describes should serve as a model for other schools and students in Idaho and beyond who are embracing student-centered education.

Conclusion

Student-centered learning has become more wide-spread in K-12 education in America (Brown & Holt, 2014; Camacho & Legare, 2016; De Jesus, 2012; Galvan & Coronado, 2014; Gervais, 2016; Holmyard, 2016; Ryan & Cox, 2017; Toland, 2017). As more comparisons are made with traditional forms of education and instruction, educators are increasingly turning to student-centered education to reach learners of the 21st century (Brown & Holt, 2014; Camacho & Legare, 2016; Chepko & Doan, 2015; Corry & Carlson-Bancroft, 2014; Cote, 2017; De Jesus, 2012; Freeman et al., 2014; Galvan & Coronado, 2014; Gervais, 2016; Gurvitch & Metzler, 2013; Holmyard, 2016; Prewitt et al., 2015; Ryan & Cox, 2017; Toland, 2017). Studies

demonstrate that specific student-centered learning pedagogies and methods are effectively differentiating and individualizing education for the modern learner, regardless of the subject or grade level (Ariovich & Walker, 2014; Brown & Holt, 2014; Camacho & Legare, 2016; Chepko & Doan, 2015; Corry & Carlson-Bancroft, 2014; Cote, 2017; De Jesus, 2012; Freeman et al., 2014; Galvan & Coronado, 2014; Gurvitch & Metzler, 2013; Holmyard, 2016; Prewitt et al., 2015; Toland, 2017). Student-centered learning is also proving to be suitable when educating the special student populations. Research shows that students who require special assistance or demonstrate gifted and talented skills both benefit from student-centered learning strategies.

A detailed review of literature reveals that limited information exists regarding the role of the instructor and administrator in transitioning from traditional, teacher-centered education to student-centered learning. What little literature exists on this topic includes several studies that compare teacher-centered and student-centered practices and pedagogies for educators. Still, it is becoming more apparent that the role of the educator within a student-centered approach to learning must be different from their role in a traditional instructional system. Key differences in these two methodologies include, but are not limited to, goals, motivation, roles of student and instructor, student interactions, and assessments (Pedersen & Liu, 2003).

Within student-centered learning, the teacher attempts to create an environment of independence for the student. This attempt to foster student ownership of learning and content is in sharp contrast to traditional learning where the student attempts to meet objectives as defined by the instructor (Wright, 2011). One study shared that in order to move to innovative instructional approaches and strategies, teachers have embraced and implemented proficiency-based learning pedagogies (Toland, 2017). Factors for the successful implementation of student-centered learning included a need for targeted professional development, restructuring of school

and class schedules to accommodate collaboration, cooperative vertical mapping strategies, and redesigned preservice training for new teachers (Toland, 2017).

Additional reports demonstrate that more states are adopting student-centered learning philosophies and implementing these systems to meet the needs of their students (De Jesus, 2012; Ryan & Cox, 2017; Toland, 2017). However, relatively little research has been conducted in measuring educator perceptions regarding the implementation of student-centered learning (Ryan & Cox, 2017). To date, there is an absence of literature regarding Idaho's efforts in transitioning to student-centered learning. As a result of the lack of available academic literature and evidence, conflicting opinions are expressed about the efforts and effectiveness of educators in Idaho to integrate student-centered learning (Kellerer et al., 2014). Despite the absence of research findings on this subject, the state of Idaho has implemented a plan to transition public K-12 education from a traditional learning system to student-centered learning (Luna et al., 2014; SDE, 2018; Willits, 2014).

Chapter III

Research Design & Methods

Introduction

The purpose of this study was to capture, identify, and understand the perceptions and experiences of specific secondary principals and teachers regarding their transition from traditional, teacher-centered approaches to learning to student-centered approaches to learning. Recognizing and sharing the results of these perspectives has the potential to provide value to current educational reforms, both statewide and nationally. As student-centered learning becomes more prevalent in education in the 21st century, capturing the viewpoints of those individuals involved in specific strategies like mastery and competency-based learning will be increasingly relevant and important. The theoretical framework of this study aligned with the topic, in that a constructivist approach to education was specifically identified and demonstrated by the researcher and participants alike.

When conducting research, several key steps must be followed and implemented. These include determining the design and methodology of the research, identifying the participants in the study, developing an appropriate data collection system, explaining the most effective analytical methods to be used, and identifying and defining the limitations of the study (Creswell, 2015). This chapter discusses the research design utilized for this study. It also provides specific detail regarding the methods used to both collect and analyze the responses related to the perceptions of educators concerning the implementation of student-centered learning in certain public school districts. Also described are the participants and the limitations of the study.

In this dissertation study, research questions were developed and subsequently used in order to provide structure and guidance in understanding the perceptions of those educators who transitioned to and implemented student-centered learning in specific Idaho middle and high schools. The research questions in this study were:

1. What are middle school and high school teachers' perceptions and lived experiences regarding the transition from teacher-centered learning to student-centered learning?

2. What are middle school and high school principals' perceptions and lived experiences regarding the transition from teacher-centered learning to student-centered learning?

Research Design

This qualitative study, in which a phenomenological method of research was used, explored the experiences of implementing student-centered learning methods and pedagogies in select middle and high schools in certain Idaho school districts. A qualitative research design is "best suited to address a research problem in which you do not know the variables and need to explore" (Creswell, 2015, p. 16). Creswell posits that qualitative research allows the researcher to collect data in order to learn from the participants of the study and to develop forms for recording data as the study progresses. Because this study focused on specific individuals and their experiences, a qualitative research approach was chosen as the research questions were best answered through this method.

The qualitative style of research utilized for this study was phenomenology. A phenomenological method is "seeking to understand the personal or social experiences of an individual or individuals" (Creswell, 2015, p. 516). In order to study the theory or phenomenon surrounding the implementation of student-centered learning in select Idaho educators, specific responses were collected through interviews and focus groups comprised of teachers and

administrators. These strategies focused on educator perceptions and opinions regarding student-centered education and the transition to and implementation of this educational philosophy.

Traditional or conventional education demands that learners experience education as a series of problems to be solved, that students are to be viewed as products, and that learning is to be an outcomes-based activity (Magrini, 2013). This is manifested in the term "achievement" and encompasses terminology such as standards, aims, objectives, and goals. These versions of education include standardized, high-stakes assessments and continue the tradition of scientific management as demonstrated in the No Child Left Behind Act and Every Student Succeeds Act. To the phenomenological advocate, there is error and danger in this educational approach as learning is categorized as only occurring when demonstrable and observable change occurs in the student's behavior (Magrini, 2013).

In contrast to the traditional/conventional approaches to education, the phenomenological approach posits that the meaning and significance for our life that emerges from our own situations and environment is more important than the knowledge of our situations or surroundings (Magrini, 2013; Sloan & Bowe, 2014). A focus on a first-person phenomenon of everyday, immersed activity in which we as humans find ourselves engaged, is an apt description of phenomenological thought (Magrini, 2013; Padilla-Díaz, 2015). In many cases, this experience occurs even though we are not aware of the engagement or interaction itself.

As an example, we daily demonstrate mastery of many physical and mental skills (i.e. driving a car, typing on a keyboard, riding a bicycle) even though we do not consciously give thought to the specific procedures of these tasks. Instead, we only become cognitively or physiologically aware of them when necessary. In effect, this is a demonstration of a phenomenological philosophy identified as absorbed activity.

According to the Dutch psychiatrist Jan Hendrik van den Berg, educational theory cannot and should not be defined or justified by other disciplines such as sociology, empirical science, and cognitive psychology (Magrini, 2013). Rather, educational theory should be distinctly separate and autonomous from any other disciplines, thereby supporting the phenomenological theory of education being the lived experience of the participant. Phenomenology is a form of seeing that allows the learner to look behind or beyond what is directly ahead and ultimately give meaning to the lived experience (Magrini, 2013).

Historically, phenomenological research has espoused a general philosophy of attempting to capture the life experience and meaning of the individual. However, specific schools of phenomenological thought have emerged over time and posit substantial differences in their approach to what and how phenomenological philosophy and research should be demonstrated. In an attempt to clarify many of the questions and issues surrounding this debate, several questions have been crafted to help distinguish and define some of the major qualities of phenomenology. The following paragraphs will help the reader better understand the specifics of phenomenological research and how it demonstrates a qualitative study approach.

Within phenomenological research, four key characteristics are identified: descriptive, uses reductions, explores the intentional relationship between person and situation, and discloses the essences of human meaning in their human experience (Eddles-Hirsch, 2015; Finlay, 2012). Other experts have opined that phenomenological research must contain traits such as phenomenological reduction, description, and the search for essences (Eddles-Hirsch, 2015; Finlay, 2012). No matter the difference in scholars' opinions regarding the specific features of phenomenological research, there is uniformity among all that true phenomenology espouses the description of things and how they appear. By focusing on the experience as lived by the

participant, the researcher is thereby able to exhibit a phenomenological approach that all variants within the field are able to agree with.

Other, perhaps lesser discrepancies and questions in phenomenological research include a general or normative description rather than a single, idiographic view of the phenomenon (Finlay, 2012). Is phenomenology more emblematic of science or art and how does it fit within the context of modernist and postmodernist worldviews (Finlay, 2012)? Finally, most controversial is the role of the researcher regarding interpretation and subjectivity. This last issue speaks to the very heart of the historical divide between Husserlian and Heidegger phenomenology.

In the research world, the methodological framework known as phenomenology has caused considerable confusion and misunderstanding for researchers due to its dual role as a research method and a philosophy (Eddles-Hirsch, 2015). Also confusing is the fact that phenomenology consists of three related but distinct philosophies. While phenomenology as a whole is concerned with the analytical and descriptive experience of phenomena by individuals in the everyday world, three different philosophical approaches exist (Eddles-Hirsch, 2015; Padilla-Díaz, 2015). Still, all phenomenological philosophies contain fundamental concepts that are description, reduction, imaginative variation, and essences (Eddles-Hirsch, 2015).

To provide a real-world example of phenomenological philosophy, the researcher provides a real-world study in which phenomenological research methods are practiced and applied. Additionally, key characteristics and methods of phenomenology are described including how the data of the study was collected, organized, analyzed, and synthesized. The design can be identified as being more interested in "the views, values, beliefs, feelings, assumptions, and ideologies of individuals than in gathering facts and describing acts" (Creswell, 2015, p. 432).

Also, it should be emphasized that in phenomenology, the research method and process is more often cyclical than linear (Laverty, 2003).

In this study, a hermeneutical phenomenological approach was selected. This was due in part to the researcher's background and personal experiences involving student-centered learning in his own teaching and administrative experience. More importantly, the hermeneutic phenomenology, as espoused by Martin Heidegger, encompasses a belief that the researcher should himself be immersed within the phenomenon. This allows for the researcher to have a better understanding of the experience of each participant.

To explain further, hermeneutic phenomenology uses participant responses and perceptions to emphasize the numerous meanings within the phenomenon and aims to draw the reader or listener into new considerations and understandings (Crowther et al., 2017). Researchers within this framework claim that there are multiple ways in which to collect and interpret participant responses. As an example, hermeneutic phenomenological researchers advocate that acceptance of flexible methods and how meaning is interpreted is essential, as the phenomenon is shared, explored, heard, and read (Crowther et al., 2017; Moustakas, 1994). Additionally, many phenomena and related experiences are discovered and re-shared multiple times over.

Van Manen recommends the researcher be guided by a dynamic interplay among six research activities that can be identified or summarized below. Table 3 assists the reader in understanding the six stages of phenomenological research.

Table 3. *The Stages of Phenomenological Research*

Steps	Definition
1. Turning to the nature of lived experience	Formulating a research question.
2. Investigating experience as we live it	The phenomenon is captured through methods of investigation (e.g., interviews, focus groups).
3. Reflecting on the essential themes which characterize the phenomenon	The overall meaning of an informant's experience is sought when reflecting on the themes.
4. Describing the phenomenon in the art of writing and rewriting	Through the process of writing, the intention is to make visible the feelings, thoughts, and attitudes of the informants.
5. Maintaining a strong and orientated relation to the phenomenon	The researcher must strive to remain focused on the research question.
6. Balancing the research context by considering the parts and the whole	The researcher is asked to "constantly measure the overall design of the study.

Note. From "Patient Experience in Health Professions Curriculum Development," by S. Molley et al., 2018, *Journal of Patient Experience, 5*, p. 305. CC-BY-NC

A note of caution must be mentioned and identified for the phenomenological researcher as full acknowledgement of pre-conceived bias and prejudgment or pre-understandings exist within every individual researcher (Crowther et al., 2017; Moustakas, 1994). Because of this, it is imperative that complete transparency be demonstrated by the researcher. Yet, it is the very bias and prejudgment of the researcher that sparks or creates the initial inquiry and question. While most qualitative methods demand and aim for strict verbatim of the data or text, hermeneutic phenomenology attempts instead to draw from the participant the experience or phenomenon that resonates with the reader or listener (Crowther et al., 2017). However, noted

scholars of hermeneutic phenomenological research theorize that there is no fixed set of methods to conduct this type of research (van Manen, 1996).

As the reader may ascertain, the researcher is and has been explicitly immersed in the phenomenon due to his current employment position at the Idaho SDE, as well as his exposure to student-centered learning concepts as a teacher and administrator in various classrooms, schools, and district level settings. It is the intention of the researcher, through his research questions and a hermeneutic phenomenological approach, to capture and ultimately understand the unique experiences of each participant within the study. When hermeneutic phenomenology is selected as the method of choice for research, the researcher must first begin a process of self-reflection (Laverty, 2003). Unlike the transcendental phenomenologist, the hermeneutical approach tasks the researcher with identifying and contemplating their own experience and interpretations. Though not a requirement, researchers will also often keep a reflective journal that will aide them in their own interpretations and reflections.

Participants

The participants in a hermeneutical phenomenological research project are generally selected due to their lived experience of the phenomenon, are willing to share their experience, and can enhance or add to the rich and meaningful experience of the phenomenon (Laverty, 2003). The information that is shared by the participants may include the researcher's own personal reflections of the topic, information and experiences gathered from the participants, and even portrayals of the participant's experiences that fall outside of the context of the research project (L. Bohecker, personal communication, October 7, 2019; Laverty, 2003). Participants in this study were selected due to their transition to and implementation of student-centered education. Select individuals from two Southwest Idaho school districts, whose organizations

were members of IMEN, were asked to take part in the research project. This included secondary-level administrative and instructional personnel within the district who were actively involved in the transition from teacher-centered to student-centered learning. The school districts were selected from the IMEN, which is composed of 19 LEAs that are located in Idaho in Regions 1, 2, 3, 4, and 6 (Appendix B).

The school districts and schools that encompass the IMEN comprise a wide range of demographics and locations and range from entire school districts to individual schools to select teachers and their classrooms (SDE, 2018). Also, the IMEN members are a mix of urban LEAs and rural, remote educational entities. The IMEN provides specific examples of how student-centered education can be conducted, how it compares with traditional education systems, and how student assessments are implemented. For this study, the school districts selected were suburban and were chosen for their geographical proximity to the researcher in Southwest Idaho. Table 4 illustrates the demographics of the secondary schools where the participants were employed.

The selected IMEN member school administrators and teachers were contacted through email, phone calls, and in-person visits. This was done after the researcher initially communicated with appropriate district-level administrative personnel and permission was granted for the study to be conducted (Appendix C). A requirement for participants included their active participation in transitioning to and implementing student-centered learning within the school and/or district. The participants for this dissertation study consisted of secondary building-level administrative and instructional personnel, and each participant was identified and selected based upon verbal recommendations from district and building administration.

Table 4: *School Demographic*

LEA	School	Total School Attendance*	Hispanic or Latino #s and %**	White #s and %**	Multiracial #s and %	Low-Income #s and %*	Free-Reduced Lunch Program Eligibility %***
Sagebrush SD	Sagebrush High School	1216	401 students; 34.2% of student population	707 students; 60.3 % of student population	38 students; 3.2% of student population	568 students; 46.71% of student population	46.71%
Sagebrush SD	Open Range High School	47	14 students; 32.6% of student population	27 students; 62.8% of student population	2 students; 4.7% of student population	30 students; or 63.83% of student population	63.83%
Stagecoach SD	Stagecoach Middle School	402	32 students; 8% of student population	348 students; 87% of student population	12 students; 3% of student population	143 students; 35.57% of student population	35.57%

Note. Idaho State Department of Education. (2020). *2019-2020 Consolidated Federal and State Grant Application (CFSGA). **2019-2020 SDE Report Card. ***CNP Eligibility Participation Report 2018-2019 (March 2019 data).

For the interviews and focus groups, purposeful sampling was used due to the focus on student-centered education. In this study, purposeful sampling was heavily dependent on characteristics or traits that each participant shared or had in common, encompassing multiple factors. The first was that each participant was employed at a secondary school that was a current member of the IMEN and was located in Southwest Idaho. The proximity to the researcher was important as this allowed the researcher to visit the schools and participants in an efficient and timely manner. The researcher initially interviewed the principal participants and then returned at

a later date to the same schools in order to conduct focus groups with the teacher participants. However, the most influential factor in the purposeful sampling process was the identification of participants who had recently transitioned from teacher-centered learning to one that embraced student-centered concepts.

After the researcher contacted and formally requested permission from the superintendent to conduct research within their district, each superintendent crafted and submitted a letter granting permission to participate. Subsequently, several appropriate LEA personnel were interviewed individually or participated in focus group interviews. Stagecoach Middle School (pseudonym) within the Stagecoach School District (pseudonym) was selected due to its participation in incorporating student-centered learning. More specifically, the school co-principals and two middle-school teachers were contacted by email and interviewed for the purpose of collecting responses for the study (Appendix D & E).

A second school district, Sagebrush School District (pseudonym), was also identified and research was conducted using focus groups and interviews. These consisted of two separate secondary schools within this district and included a total of two principals and four high school teachers at Sagebrush High School (pseudonym) and Open Range High School (pseudonym) (Appendix D & E).

For the interviews and focus groups, purposeful sampling was used and resulted in the researcher intentionally selecting middle and high school teachers and building administrators who were all involved in student-centered learning. Each signed a participant consent form (Appendix F) prior to being interviewed. Table 5 shows the composition of the secondary teacher participants.

Table 5. *Composition of Secondary Teacher Participants*

Participants	Gender	Years of Experience	Teacher Prep Program (Traditional vs. Non-Traditional)
Teacher 1	F	24	Traditional
Teacher 2	F	12	Non-Traditional
Teacher 3	F	8	Non-Traditional
Teacher 4	F	20	Traditional
Teacher 5	F	6	Traditional
Teacher 6	F	11	Traditional

Table 6 shows the composition of the secondary principal participants.

Table 6. *Composition of Secondary Principal Participants*

Participants	Gender	Years of Experience (Classroom)	Years of Experience (Administration)
Principal A	M	12	4
Principal B	F	3	23
Principal C	M	9	17
Principal D	M	6	13

Data Collection

A total of six secondary teachers and four secondary administrators were interviewed, and each interview was recorded and ultimately transcribed. Building and school-level personnel all agreed to participate in the interviews (Appendix F). The research study participants consisted of individuals that shared similar transitional, educational experiences and journeys. It should be noted, however, that two of the participants received their teaching credentials through alternative certification pathways. Most importantly, all of the participants were actively

involved in the process of progressing from teacher-centered learning to implementing student-centered learning methods and pedagogies.

Participants were asked to describe, in detail, their experience with the phenomenon being investigated. Six interview questions were developed in advance of the field interviews to serve as starter questions, but the remainder of the interview questions were free-flowing in nature and dependent upon the participant's responses (Appendix G). The questions were open-ended, and follow-up discussions were led by the participants as much as possible. This was done in order to keep the interview process as close to the lived experience as possible (Laverty, 2003). However, in true phenomenological practice, the researcher attempted to steer the participant's responses and recollections continuously back to the phenomena that had occurred (L. Bohecker, personal communication, October 7, 2019).

The researcher attempted to not only capture what was being said verbally, but to also understand and record what was implicitly communicated by inference and through the participant's body language. This also included effective use of silence or the absence of speaking (Laverty, 2003). Initial interviews were conducted in locations selected by the participants and lasted between 50 and 75 minutes. In addition to audio taping the participant's responses, the researcher also took analytical notes that attempted to capture the key words and phrases that each participant shared.

Once transcription was completed, coding was used to organize and classify data into common themes. Particular attention was given to the coding process in order to preserve the participant's responses and allow the researcher to dive deeply into the responses and perspectives that were shared. This was done in order to satisfy and mesh with key components and traits of hermeneutic phenomenological research which advocate that the researcher attempt

to fully understand the phenomenon and perspective of the participant (Kafle, 2011; Laverty, 2003). Conceptual ordering, consisting of making sense of the data, was done to determine categories, themes, and patterns.

A validation strategy consisting of triangulation was utilized (Creswell, 2015). For triangulation, multiple sources of data were used, as multiple participants from the schools were interviewed. This was done by the researcher to reach conclusions regarding the responses. Also, this allowed for data to be collected from multiple perspectives, thereby ensuring triangulation was occurring.

Beyond this, a literature review was conducted to the point of saturation, the phenomenological research method with emphasis on the constructivist theory was adhered to, and extensive analytical memos/notes were compiled and kept (Saldaña, 2016). The research questions consisted of teacher and administrator descriptions of their transition to student-centered learning. Specifically, these questions were used to identify teacher and administrator perceptions regarding the experience of moving from teacher-centered approaches to education to embracing student-centered learning concepts. The participants were asked to provide feedback and insight on whether their experience and perception of transitioning to student-centered learning had been successful and what the perceptions of the participants were regarding this experience. In addition, participants were asked to contrast and differentiate between traditional or conventional forms of teaching and student-centered educational pedagogies. Finally, each participant was asked whether their teacher-preparation programs or undergraduate degrees had adequately prepared them for a student-centered approach to education.

Focus groups and interviews were used to compile participant responses and attempts were made to ask each participant about their experiences regarding student-centered education within their own classroom or school building. Included in this question was an attempt by the researcher to get each participant to self-reflect and express their opinion, be it positive or negative, regarding their perceptions in the transition to and implementation of student-centered learning.

Analytical Methods

Hermeneutic phenomenology does not employ a step-by-step method or embrace analytic requirements. The only guidelines are approval of a dynamic interchange among research activities such as a commitment to a resolute concern, an oriented position regarding the essential question, investigation of the lived experience, description of the phenomenon in both writing and rewriting, and contemplation of both parts and the whole (Kafle, 2011). Figure 4 demonstrates one of the ways the data analysis process in hermeneutic phenomenology can be visualized.

Figure 4: *Hermeneutic Cycle*

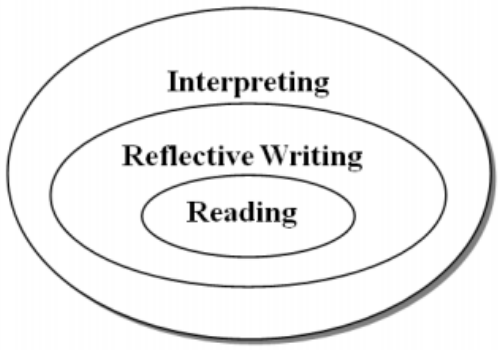


Figure 4. *Hermeneutic Cycle.* From Kafle, N. P. (2011). Hermeneutic phenomenological research method simplified. *Bodhi: An interdisciplinary journal*, *5*(1), 181-200.

Appropriate analytical approaches to finding patterns in the data were used when compiling results from the interviews and observations. Data from these instruments were coded using an inductive coding method (Creswell, 2015). The results of this process led to multiple codes**.** Because this was a hermeneutic phenomenological study, information was coded as it related to the experiences of the participants.

Once the initial coding was completed and patterns were identified, codes were grouped into categories and the most common themes or categories were identified (Saldaña, 2016). This method, known as theming the data, closely aligns with van Manen's theories. His belief in capturing and understanding the phenomenon, and thereby creating a theme, is the basis for the phenomenological researcher to theme the data (van Manen, 1990). Butler-Kisber (2010) further addresses specific strategies or practices for theming the phenomenological data including extracting significant statements as closely as possible from the responses, assigning or formulating meaning to these responses based on the researcher's perceptions, clustering or gathering those meanings into themes, and elaborating on the compiled themes in a deep, written description.

Saldaña (2016) also supports these concepts of phenomenological theming, stating that theming the data is a type of phenomenological approach to coding and that, within this method, themes are not obvious and explicit, but rather emerge from the researcher's interpretation of the participant's experience. In the end, this process of grouping or accumulating codes by the researcher led to the formulation and identification of broad themes (Creswell, 2015; Kafle, 2011; Saldaña, 2016). The next step involved using the data to produce a narrative discussion which summarized the findings from the data analysis process (Saldana, 2016). All procedures, participant responses, and data were protected in password sensitive electronic files in

conjunction with policy as approved by the Institutional Review Board for Northwest Nazarene University (Appendix F).

Role of Researcher

Since 1996, the researcher has been an educator in various educational settings. Early experiences as a beginning teacher exposed the researcher to the contrast between traditional/conventional teacher-centered educational practices and those that are student-centered. Because of these experiences and the perspective that time has brought over the course of the researcher's career, the author is a strong supporter of student-centered education and the philosophical tenets it supports. As a classroom teacher, building administrator, district superintendent, and state department of education official, the researcher has both practiced and encouraged student-centered education and its methods. Practicing and advocating for this approach to learning and education has influenced and ultimately convinced the researcher that K-12 education should embrace and transition to a student-centered form of schooling.

In a phenomenological study, the researcher is often considered the "expert" and can and/or will assist and help the participants in unlocking and detailing the phenomenon that they experienced (L. Bohecker, personal communication, October 7, 2019). To this point, the researcher has previously outlined his experiences and credentials and received feedback that these meshed well with the type of study that was conducted. This also helps explain the researcher's attempt to move the participant responses and interview process in a direction that matched the researcher's intent (L. Bohecker, personal communication, October 7, 2019).

While the researcher acknowledges his influence and promotion for student-centered education at the state, district, building, and classroom levels, the researcher's role in this study was also one of observer, interviewer, and interpreter of participant's experiences. The researcher

concentrated on querying and seeking information from those experts and authorities in Idaho K-12 education who have endorsed and are practicing student-centered practices. At present, the researcher serves as Chief Deputy Superintendent at the Idaho SDE and indirectly supervises the director and employees of the Division of Content and Curriculum, which encompasses and oversees the IMEN. Due to the researcher's personal and professional experience with student-centered education, interpretation and explanation of the experiences and perceptions of the participants were both necessary and appropriate. As such, the participant responses were viewed through the perception and discernment of the researcher, who is a noted proponent and practitioner of student-centered learning. However, it should be reiterated that meticulous attention and effort were adhered to in order to record and accurately share the voice and experience of each participant in the findings.

Limitations

One of the most significant limitations of qualitative research methods is the large amount of data that is required (Creswell, 2015). Related to this challenge are the immense time requirements that are needed for conducting the interviews, as well as the analysis and coding that is essential for compiling and organizing the data. Also potentially limiting is interview fatigue, as respondents may experience lethargy with the use of various interview questions and instruments.

Delimitations

Because this study only involved two suburban school districts and three secondary schools in one region of the state, the demographics may not be representative of other schools and districts. As a result of this relatively small sample, additional studies exploring the perceptions and experiences of teachers and principals in transitioning to student-centered

learning are necessary. Results could also differ when studying urban or rural schools, or when reviewing elementary educators. Because the perspectives regarding implementation of student-centered learning were limited in this study, it is difficult to generalize the specific findings of this study. A study that has a small sample or *n* size does not equate to generalities for a larger group, and therefore it is unclear how the experiences and perceptions of participants in other studies would be either similar or different.

Finally, as mentioned previously, there is potential for bias from the researcher regarding this topic. The researcher is a known advocate of student-centered learning, and, due to his career experiences and responsibilities, the researcher could possess a bias in developing and attempting to answer the research questions. Also, the researcher's intrinsic bias could have skewed the question and answer portions of the study. Due to the researcher's current position, responses by the participants may be impacted or slanted owing to the relationship between school districts and the Idaho SDE. This, then, leads to the limitation of hermeneutic phenomenology and those beliefs as espoused by Martin Heidegger.

As a proponent of ontological thought, Heidegger believed that discovering one's sense of being was key in identifying and describing the phenomenon that had occurred (Crowther et al., 2017). Because the researcher in this study selected hermeneutic phenomenology as the best method to capture and understand the perceptions and lived experiences that had occurred, the researcher struggled to remain objective and unbiased when considering the phenomenon. In effect, the very being or professional identity of the researcher could be linked to his educational career and beliefs regarding student-centered learning. This, then, placed the researcher in a very precarious position as the experiences and perceptions he advocated proved to be difficult to separate from the phenomenological results.

Chapter IV

Results

Introduction

This chapter presents the research findings that resulted from the author's interviews of six secondary teachers and four secondary principals at multiple public schools in Idaho. The researcher used a hermeneutical, phenomenological qualitative design to discover the lived experiences of these educators in making the transition from a traditional, teacher-centered approach to education to one that is student-centered. The selected methodology was determined to be best suited or equipped to answer the research questions and allowed the researcher to discover the participant's lived experiences (Creswell, 2015). The capacity of these educators to successfully transition from a teacher-centered approach to a student-centered approach was the true essence of this study.

Throughout the study, it was the intention of the researcher to identify and determine the assimilation and accommodation that was occurring for these educators. This was an attempt to discover their unique phenomenon by exploring and delving deeply into the lived experiences of the educator participants. By questioning and drawing out responses from the administrators and teachers, the researcher endeavored to capture the key, transitory moment that each educator experienced cognitive equilibrium or belief in a new approach to education. As a result, several significant themes emerged from the participant responses.

Emergent Themes

The goal of the researcher in this study was to give voice to the lived experiences of six secondary teachers and four secondary principals who transitioned to an acceptance and endorsement of student-centered learning. As in all research studies, the research questions served as the foundation for each of the interviews. Face-to-face interviews, usually done in a setting with two participants at the same interview time, were conducted. All participants in the study were educators who had transitioned from a teacher-centered approach to education to educators who were actively participating in student-centered learning. The findings are in agreement to the research questions which are as follows:

1. What are middle school and high school teachers' perceptions and lived experiences regarding the transition from teacher-centered learning to student-centered learning?
2. What are middle school and high school principals' perceptions and lived experiences regarding the transition from teacher-centered learning to student-centered learning?

Constructivist theory, as espoused by noted experts such as Piaget and Vygotsky, provided the theoretical framework for the study. The use of a semi-structured interview protocol was used to capture and understand the lived experiences of the participants. The interviews were free-flowing and the researcher allowed for significant latitude among the participant responses. It should be noted that in keeping with hermeneutical, phenomenological practice, the researcher occasionally interjected his own experiences and helped steer the interview in a direction that focused on the transition from teacher-centered to student-centered education.

The zone of proximal development was especially relevant to the researcher as he attempted to explore the relationships and the impact of mentors and experts on those administrators and teachers who were endeavoring to transition to student-centered learning. As Vygotsky theorized that knowledge is acquired and constructed through social interaction, so the researcher in this study focused intently on capturing the lived experiences and interactions among educators who were making a monumental change to their educational philosophy. Each educator interviewed talked at length about how essential a social support network was. This allowed them to more easily learn and progress in their transition. Further supporting Vygotsky's model were educators' comments about the importance of culture or climate within the school and community when fundamentally changing perceptions regarding the role of educators within the school setting.

The participants' responses and results from the interviews were organized in accordance with the research questions and subsequently identified three themes from the study. Van Manen (1990) stated that a theme is, "the form of capturing the phenomenon one tries to understand" (p. 87). While undergoing the process of coding and consolidating the themes, the researcher was persistent in determining and recognizing the participants' voices and identified the lived experiences and transitions that occurred. Table 7 demonstrates the three emergent themes and categories that resulted from the participant responses.

Table 7. *List of Three Themes and Categories*

Themes	Codes
Philosophy	Mindset, Student-centered, Teacher support, Recruiting, Technology
Change	Transition, Traditional, Choice, Construct
Relational	Relationship, Mentor, Experience

Research Participants' Profile

Six middle and high school teachers and four middle and high school principals participated in the study. Teacher participants were assigned random, arbitrary numbers (#1-6), and principals were assigned random, arbitrary letters (A – D). Also, the participants in the study were selected based on specific criteria, the most important was being employed at a public middle or high school that adopted and endorsed student-centered educational practices. Schools were given the pseudonyms of random western terminology (i.e. Sagebrush High School, Stagecoach Middle School). The participants were knowledgeable, engaged, and openly gave examples and stories to support their lived experiences. The personal and vulnerable manner in which each participant shared their personal journey and transition served as a powerful characteristic of this study.

While the discovery and use of themes to help explain the lived experience of the participants was helpful, the participants' specific responses and answers indicated that the emergent themes significantly influenced each individual in their educational journey. The result was that the lived experience of each participant served as an important factor in shaping and changing the educational philosophy of those educators in transitioning to student-centered learning. In a hermeneutical, phenomenological study, it is expected that the participant will give descriptions of their feelings and thoughts, and that they may even use examples or metaphors to help describe their lived experiences (Moustakas, 1994). Therefore, the research questions were answered in an expressive, vivid, manner by using narrative passaged and direct quotes from the participants.

Results for Research Question One: Perceptions and Lived Experiences of Teachers

In order to answer the first research question, each secondary teacher participant was asked to identify and describe factors that influenced their transition from a teacher-centered philosophy of education to one that embraced student-centered education. Even though this transition was difficult and time-intensive, the six secondary teacher participants shared their tenacious efforts and identified key factors that assisted them in their lived experience. Table 7 demonstrates the frequency of response codes and helps to identify several themes that emerged from the frequency codes.

Philosophy

Under the theme of philosophy of education, categories such as "student-centered," "mindset," and "teacher support" were all identified as essential in transitioning to a learner-centered approach to education. After the completion of the interviews, the audio recordings were transcribed and, subsequently, themes and codes were developed from the transcriptions of the interviews. Each code word or category was tracked and counted throughout the coding process. These were tallied due to how many times the teacher participant used the word. As the reader can observe, the numbers shown in Table 8 demonstrate these results.

Table 8. *Teacher Frequency of Response Codes: Philosophy*

Code	Frequency
Student-Centered	117
Mindset	62
Teacher Support	21

The theme of philosophy or educational philosophy was used by both researcher and participants. This is due in part to the researcher's personal lived experience in transitioning to a student-centered approach to educational instruction as a teacher. In addition, during the course of the interview, every teacher participant was asked about their philosophy of education and how it had changed or not changed during the participant's transitional journey. Without exception, each participant described significant modifications to their educational philosophy as

a result of their embracing student-centered learning concepts. Subsequently, the researcher recognized “philosophy” as a major theme to be identified and discussed.

The following paragraphs further describe those coded words or categories that were frequently mentioned by the participants and helped to support the idea and importance of the theme of educational philosophy.

Student-centered

Each of the six secondary teacher participants mentioned how the educational phrase “student-centered” had become a philosophical way of thinking and instructing. More specifically, the participants described how their lived experience in transitioning to a student-centered approach to education required a fundamental change in their own philosophy of education. Participant #1 described the fundamental, philosophical shift that she experienced when attempting to transition to a student-centered approach as “an experiment with student-centered strategies.” Participant #2 illustrated her philosophical shift to student-centered learning by detailing an injury accident that occurred while employed as a teacher and having to give up control of the classroom. This participant went on to share that the experience of giving students ownership over their own learning experience helped her “to crystalize” her educational philosophy.

While all teacher participants referenced how student-centered approaches impacted their philosophy of education, participant #4 succinctly stated it this way: “I fundamentally changed my philosophical approach and went from telling others I teach content, to telling people I teach

kids." This position was further supported by participant #5 who shared how, upon being exposed to student-centered education, her philosophy of education changed, convincing her to make the transition to student-centered learning over a holiday break during the school year. Another participant, #6, went on to state that after multiple years the instructor was more and more comfortable with allowing the student to increasingly own their learning.

Mindset

The philosophical change that occurred in each of the teacher participants involved selecting and developing a different mindset. Participant #6 described the philosophical change as moving from "a fixed mindset to one that is based on growth." Continuing to conduct school or run a classroom using conventional, traditional methods is not a fit for this approach to education. The teacher participants within this study changed their mindset, and thereby altered and even transformed their philosophical opinions and attitudes about learning, instruction, and education. The importance of their mindset, mentioned sixty-two times throughout the teacher interviews, demonstrates this point.

Participant #5 shared how being exposed to a different approach to education "blew my mind." In fact, this participant used the phrase of mind-blowing numerous times throughout the interview when describing the change that occurred within her mental status. Another participant, participant #4, described the change in her thinking or mindset as "being more dependent on student engagement." Participant #3 explained the shift in mindset and philosophy as "going

from being a dictator to a leader" and "I stopped telling them as opposed to leading them to different places."

Collectively, a change in thinking and a different mindset made a significant difference in the lived experience of all teacher participants. Participant #1 illustrates this point by describing the change that occurred in her thinking and mindset when transitioning to "a student-led approach where kids lead out and self-direct." This participant also summed up the change by describing a shift in the classroom to "they are learning, not me teaching." Another participant, #2, changed her mindset to allow her students to be the center of their own learning and emphasized a team approach to learning.

Teacher Support

Support for the teacher participants throughout the transition to student-centered learning was another frequently cited theme throughout the interviews. This term encompassed both support in teacher-to-teacher relationships and support from school administration. The latter incorporated support for teachers from a variety of sources including, principals, superintendents, the district, and even the community. Participant #1 described joining an innovative school and experiencing clear expectations from administration. This also entailed a classroom and school system that embraced and supported student-centered learning through established, specific routines and procedures. Participants #3 and #4 echoed similar thoughts as participant #1, and talked extensively about how school and classroom practices such as block-scheduling, standards-based grading, and overall acceptance of student-centered learning was essential in

feeling supported. Participant #5 received support from leadership by being sponsored to travel to meet with an out-of-state consultant and received training in student-centered techniques such as proficiency and mastery-based learning. This participant went on to share that this training assisted in "providing the rationale for why students learn what they should learn" and provided support for her transition and journey in adopting student-centered learning. Participant #5 further shared that "administration is key to allowing you to transition to student-centered learning."

A strong majority of teacher participants referenced the importance of support from colleagues when transitioning to student-centered learning. This is consistent with findings from literature in which social learning is strongly connected to constructivist theory (Kalpana, 2014; Pedersen & Liu, 2003). As an example, participant #6 specifically mentioned and thanked participant #5 for "heavily influencing me" in the transition to student-centered learning. In addition, this participant confessed that being able to observe and study other teachers who had transitioned previously was tremendously helpful. Participant #6 was now at a comfort level within her career where she would like to influence other teachers and is embracing "the challenge of bringing new teammates aboard." This participant has subsequently been assigned numerous student teachers and is delighted to introduce them to the concepts of student-centered instruction.

Participant #5 mentioned the importance of mentors and how those individuals "influenced the path to competency and assessment" within student-centered learning. In

addition, this participant emphasized the importance of a community approach among faculty and staff when transitioning to student-centered education. Similar to previous experiences, participant #4 had a mentor who heavily influenced their transition and lived experience of moving to student-centered learning. Participant #2 gave credit to being able to observe others who had completed the transition earlier. Participant #1 used "peer editing and review" in the classroom and believed that this was beneficial to the transition that occurred. By sharing pedagogical practices and seeking feedback from colleagues, this specific teacher participant was not afraid to make mistakes and felt support and affirmation from her coworkers. As the reader may surmise, participant #1 strongly emphasized the value that learning partners can provide in a successful transition process.

Change

Under the theme of change, "traditional" and "transition" were codes or words that were frequently mentioned. Both of these words were identified as essential in shaping and transitioning to a learner-centered approach to education. As mentioned previously, each code word or category was tracked and counted throughout the coding process. After the teacher interviews were completed, the number of times the code word/category were mentioned was tallied. As the reader can observe, the numbers in Table 9 demonstrate these. While the frequency or number of times mentioned were less than some of the previous words or categories discussed earlier, the fact that they were referenced or used numerous times led them to be coded as important categories or key words.

Table 9. *Teacher Frequency of Response Codes: Change*

Codes	Frequency
Traditional	46
Transition	31

The theme of change was used by both researcher and participant. This is due in part to the researcher's personal lived experience in changing or transitioning to a student-centered approach to educational instruction. In addition, every teacher participant was asked in the course of the interview about their lived experience and how it had changed or not changed during their transitional journey. Without exception, each participant described significant modifications and changes after embracing student-centered learning concepts. As a result, the researcher identified "change" as a major theme to be recognized and discussed in chapter four.

The following paragraphs further describe those coded words or categories that were frequently mentioned by the participants and helped to support the idea and importance of the theme of change.

Traditional

All of the secondary teacher participants referenced change in their respective interviews. In many cases, the change they denoted was the transition from a conventional or traditional way of instruction to one that embraced student-centered concepts. Participant #1 shared that she had obtained a master's degree but truly had not grasped how to teach kids. In another portion of the

interview, this participant stated that “standardized or traditional teaching is a major challenge and/or problem” in education today. With that said, participant #1 relented that “a blend of traditional and student-centered could work well” and could be used in the transition phase of moving to student-centered instruction.

Participant #2 discussed how different student-centered learning was from traditional approaches to education. One example she shared was how she had moved from a lecture format in the classroom to one that implemented the use of case studies. This technique allowed her to better engage her students and make the learning more real. Participant #3 echoed many of these same thoughts and talked about “scripted teaching” or teaching that was very traditional by nature. In her opinion, “a traditional style of teaching exhausted the students” and she felt as if she was “talking at the students.” Additionally, this participant believed that a traditional grading system “is not fair” to the student.

Participant #4 stated that her traditional training left her “ill-equipped to teach students” and that she was forced to “stop focusing on procedures and management.” Student-centered instruction also helped to guide this teacher away from driving the instruction. Much of the change that took place was due to a mentor and their influence, particularly in the practice of adopting standards-based grading. Similarly, participant #5 stated that her traditional views were confronted “after reading a book about the fallacy of traditional grading systems.” Ultimately, this teacher shared that she was extremely frustrated with the traditional approach to school and

education and wished that she had been exposed to student-centered learning at a much earlier stage in her career.

Participant #6 was trained to use traditional pedagogical techniques such as lecture and the completion of worksheets. In her opinion, student-centered learning allowed for "a much deeper level of teaching and instruction than does traditional teaching." Ultimately, this participant stated that she "would never go back to a teacher-centered approach to education."

Transition

In exploring the word transition, the researcher attempted to capture or focus on the specific moment or activity that best described when the teacher participant shifted to a student-centered approach to instruction. Participant #6 made the transition in her own mind and classroom during Christmas Break. While admittedly difficult and scary, she now knows it was worth the effort and she is "excited every day to see the students embrace their own learning." Likewise, participant #5 made the switch or transition to student-centered over the Thanksgiving holiday and credits her school administration as being a key player in making a successful change.

Participant #4 pointed to a moment when she realized that students learned in different ways. By offering a pre-test and post-test, she was able to differentiate among the various students. Participant #3's transitional moment came when she began teaching on the block schedule and she "attempted to make instruction 'real-world' as opposed to theory based." This led her to an inquiry-based approach to instruction and the embracing of mastery and standards-

based grading. This participant also shared that since childhood, she had believed in "rewarding student-efforts" as that was what she had appreciated as a young student. Therefore, it was natural for her to endorse a system that could benefit students no matter what level they were at.

The transitional moment or event for participant #2 was accepting employment at an innovation school where "the students were required to lead" on their own educational journey. This participant shared that, initially, the experience of allowing student ownership and governance in school "scared me to death." In the long run, however, this transformational event impacted both her students and herself and helped her understand the positives of "allowing students to be the center of their own learning." In a similar manner, participant #1 also was exposed to student-centered concepts upon accepting employment at an innovation school. By changing the physical space within her classroom and emphasizing "student self-direction and ownership of their education journey," this teacher cemented the transition to student-centered instruction in her own mind.

Relational

Under the theme of relational, "relationship", "mentor", and "experience" were categories or words that were frequently mentioned. All of these words were identified as essential in identifying and developing a learner-centered approach to education. As previously outlined, each code word or category was tracked and counted throughout the coding process. As the reader can observe, the numbers in Table 10 provide these counts. While the frequency or

number of times the words were mentioned varied, the fact that they were referenced and used numerous times led them to be coded as important categories or key words.

Table 10. *Teacher Frequency of Response Codes: Relational*

Codes	Frequency
Relationship	36
Mentor	32
Experience	10

The theme of relational was used by both researcher and participant. This is due in part to the researcher's own personal lived experience in changing or transitioning to a student-centered approach to educational instruction. In addition, every teacher participant was asked during the course of the interview about their lived experiences and how they had impacted them and those around them during their transitional journey. Without exception, each participant described significant differences and changes in their relationships with colleagues, administrators, and students as they transitioned to student-centered learning concepts. As a result, the researcher identified "relational" as a major theme to be recognized and discussed in chapter four.

The following paragraphs further describe those coded words or categories that were frequently mentioned by the participants and helped to support the idea and importance of the theme of relational.

Relationship

Each of the secondary teacher participants in the study acknowledged how impactful and essential personal relationships were in transitioning to a student-centered approach to education. The types of relationships that were specifically referenced were those between instructor and student. Other relationships, such as teacher-to-teacher or teacher to administrator, were identified as well, but these will be discussed in more detail under the category of mentor. Participant #1 described the importance of a strong relationship between teacher and student, saying, “Relationships are essential.” Participant #2 echoed these thoughts and gave examples of how she constantly attempted to bond with her students. She shared that she used language with them such as, “We are in this together” and that she used a team analogy or approach within her classroom to encourage collaboration and the fostering of strong relationships between the students and herself.

Further supporting this theme were comments from participant #3 who stated that during her transition to student-centered instruction, she placed increased emphasis on “better understanding her students and the challenges that each one brought to the classroom.” Participant #4 relayed that, as she has transitioned to student-centered learning, she has “placed an emphasis on liking kids.” This participant also referenced the significance of understanding and providing coping strategies for student’s social-emotional needs. Likewise, participant #5 stressed the importance of “checking-in on each student on a daily basis.” Furthermore, she passionately shared that “education and the classroom should truly be all about the kids!”

Participant #6 stated that her emphasis in the classroom has changed and is focused now on "providing support and resources for kids." Additionally, she added that this has led to a much deeper level of teaching and that currently, "I know each one of my students and where they are." In part, because of these relationships and the rich, meaningful experience this teacher has enjoyed, she emphatically stated "I would never go back to a teacher-centered approach to education."

Mentor

The vast majority of participant responses that referenced the word "mentor" dealt with the connection or rapport between educational colleagues. As mentioned previously, this could reference a meaningful bond between teachers or, in some cases, the participant was attempting to describe the strong support that a school or district administrator provided to the teacher. Participant #6 gave high praise to one of her colleagues who mentored her and allowed her to observe and model her student-centered practices and classroom. By being exposed to a mentor to emulate in her own building, participant #6 was able to make a more efficient and effective transition to student-centered learning. Also revealing were the questions and skepticism she received from fellow teachers regarding her switch to student-centered instruction. While difficult at the time, this participant stated that she now "looks forward to the challenge of educating her colleagues and even bringing new teacher teammates onboard."

Participant #5 gave credit to her administration, specifically her school principal, for allowing her to receive training and develop a mentor network while transitioning to student-

centered learning. In her opinion, “school administration is the key to allowing you to transition.” Because of these positive experiences, it has been her goal to “move from a silo approach to one of community among the faculty.” Similarly, participant #4 had a mentor teacher who strongly influenced her to embrace student-centered learning. Participant #2 shared the benefits of being able to observe teachers who were making similar transitions. Finally, participant #1 talked about “the powerful impact that mentor groups can have” when transitioning to student-centered education.

Experience

Every secondary teacher participant shared with the researcher powerful experiences and stories that influenced and impacted their lived experience and transition to student-centered learning. In each case, the researcher found these experiences to be incredibly powerful. This also allowed the researcher to better understand the rationale for and the reasons why each participant moved to a student-centered approach to education.

Participant #1 stated, “Every life experience I had, influenced my teaching journey.” However, early in her career, it was far from certain that she would become a proponent of student-centered teaching. After completing a non-traditional path to teacher certification, this participant was convinced she would never embrace teaching as a career. She recalled, “No way was I going to be a teacher.” However, an experience at the college level as a TA showed her that she could teach, and teach very well. Eventually, through trial and error, as well as personal preference, she “moved away from the stand-and-deliver” format or pedagogy. After

experimenting with student-centered strategies, including the rearrangement of her classroom's physical space, she has become an outspoken proponent of student-centered learning in which "the kids are leading out in their own learning."

Participant #2 claimed that she "fought against the urge to teach, even at a young age." After tutoring other students in college, she eventually agreed to a job as a substitute teacher, albeit reluctantly. Initially, she described her teaching style as "a dictatorship" and "taught to the book." However, after attending graduate school and being exposed to student-centered concepts, she recognized that she needed to change her instructional approach. Her "a-ha" moment came when she realized that "the process of learning is just as important as the content that is being learned." She has now become a spirited supporter of student-centered education.

The third participant embarked on a teaching career after serving multiple years as a substitute teacher. She gained her teaching credential through a non-traditional program and modeled her teaching style and pedagogy on "what she saw from others." In retrospect, she shared that this traditional style of teaching consisted of "talking at her students" and did not allow for students to take ownership of their learning. Eventually, she began transitioning to a student-centered approach and did her best "to make instruction real-world, as opposed to theory-based." She now shares that this style of instruction "feels natural" and that while it can be challenging, her students are much more engaged and on-task.

Next is participant #4, who stated that as a new, beginning teacher, she was "ill-equipped to teach students, but was very good at teaching the subject or content area." Her breakthrough

moment came when a mentor teacher told her to “stop emphasizing procedures, classroom management, and subject content.” Instead, it was recommended that she focus her efforts on “realizing that all kids learned differently and she should be meeting students at their own level.” Because of experiences within her own life, she has begun to feel that she can effectively relate to students who struggle in school and advocates for those with unique challenges.

Participant #5 remembers a saying she heard early on that stuck with her. It states, “Whoever is doing the work is doing the learning.” In her experience, “I was working hard but my students were not.” This provided the onus for her to seek out and eventually find tenets of student-centered learning and implement them. While she has successfully transitioned to this educational approach, she admits there were difficult adjustments. “Teachers are control freaks - can you give up some control in your classroom?” In her opinion, an educator’s philosophical approach will ultimately determine whether they succeed in transitioning in student-centered learning.

Lastly, participant #6 remembered her pivotal moments as several specific incidents. The first was when her own children were exposed to “a different educational experience compared to traditional school.” This sparked an interest in her own mind and made her question why her children’s education was “so impactful and memorable to each of them.” After serving as a long-term substitute teacher, she became convinced that high school was too structured and confining. In her mind, student-centered learning provides “more flexibility” and also allowed for students to “have a voice in their own learning experiences.” Presently, she shares that she is a strong

advocate for student-centered education. “I am hooked after experiencing it; every year I am learning and growing, with room still to grow.”

Results for Research Question Two: Perceptions and Lived Experiences of Principals

In order to answer the second research question, each secondary principal participant was asked to identify and describe factors that influenced their transition from a teacher-centered philosophy of education to one that embraced student-centered education. Even though this transition was difficult and time-intensive, the four principal participants shared their hard work and identified key factors that assisted them in their lived experience.

Philosophy

Under the theme of philosophy of education, categories such as “student-centered,” “teacher support,” “technology,” “mindset,” and “recruiting” were all identified as essential in influencing and transitioning to a learner-centered approach to education. Each code word or category was tracked and counted throughout the coding process, depending on how many times the principal participant used the word. After the principal interviews were completed, the number of times each code word/category was mentioned was tallied. Table 11 demonstrates the results.

Table 11. *Principal Frequency of Response Codes: Philosophy*

Codes	Frequency
Student-Centered	68
Teacher Support	32
Technology	16
Mindset	11
Recruiting	4

The theme of philosophy or educational philosophy was used by both researcher and participant. This is due in part to the researcher's own personal lived experience in transitioning to a student-centered approach to educational instruction as a high school principal. In addition, every principal participant was asked during the course of the interview about their philosophy of education and how it had changed or not changed during their transitional journey. Without exception, each participant described significant modifications to their educational philosophy as a result of embracing student-centered learning concepts. Subsequently, the researcher recognized "philosophy" as a major theme to be identified and discussed.

The following paragraphs further describe those coded words or categories that were frequently mentioned by the participants and helped to support the idea and importance of the theme of educational philosophy.

Student-centered

Each of the four secondary principal participants detailed how the educational approach known as student-centered learning impacted and changed their philosophy of education. Participant A described his transition and the transition of his faculty as "changing the philosophy to a personalized and individualized educational experience for kids." He also referred to student-centered education as an approach to "get optimal results" for students. "Being obsessed with helping students obtain 'Evergreen Skills' is one of the goals we have embraced here," stated participant A. By this, he meant those life skills that will help students succeed beyond school and are always important and valuable.

Participant B described student-centered learning as "experiential learning" and "constructivist in nature." In this, she referenced constructivist theory as a way for students to learn and progress. "My own philosophy didn't change all that much. I didn't necessarily have a conversion experience. I have always been a proponent of students embracing their own learning." However, this participant acknowledged there has been a decided shift or change in philosophy among educators and she believes "it feels right and has been for the good."

In contrast, participant C's philosophical journey was a bit different. His acceptance and belief of student-centered concepts have evolved to the point where today he philosophically views his teachers as "our students." In his mind, it is incumbent on administrators to "assist and support teachers so they can support students in their efforts." Additionally, this principal participant stated that his philosophy has significantly changed to "provide support for the

teachers." "Much of this is driven by a realization and an awareness," he said, "that today's students have more needs and require more assistance."

The last principal, participant D, relayed that his educational philosophy has changed dramatically in how he relates to both students and teachers. The student-centered concepts appeal to him on both a personal and professional level and, ultimately, he has "fallen in love with student-centered learning." Because of his philosophical views, he and his faculty have incorporated significant changes to core educational practices and tenets such as "school policies, master schedules, and even bell schedules." Overall, he supports student-centered learning as "it encourages and develops student agency, which is essential for student success."

Teacher-support

All principal participants mentioned the importance and value of supporting the teaching faculty and staff on their respective campuses. Participant A shared that he has intentionally created times to check in with the staff and has provided administrative support, especially during the transition to student-centered learning. He described the majority of his staff during this key time period as "initially positive" regarding the substantive changes that were occurring. However, he also reiterated that "support was needed to help educators make the transition," which is what his administrative team attempted to provide.

Similarly, participant B described creating an atmosphere of support and ensuring that the whole group was involved during the transition. This philosophy or concept of a team approach was revealed in participant B's answers and included phrases such as, "bring the whole group

along with you," and "don't let teachers do it alone or by themselves." The descriptions of a "gang-mentality" and "strength-in-numbers" were also used to define the support that was provided to the teaching faculty and staff during the transition process. This participant even encouraged cross-training among secondary and elementary staff to help support one another and guarantee cross-curriculum strategies and pedagogy.

Participant C echoed similar thoughts and described the change this way, "Culture matters! We worked hard to remove barriers to transitioning to student-centered learning." He also stated that in many cases, "teachers consistently learned from each other" and that after receiving feedback from teachers, the administration "worked hard to make specific changes in assessment, leadership style, and to provide support for teaching faculty." Along the same lines, participant D talked about changing the philosophical approach to supporting educators. He gave credit to his school district administration saying, "District leadership supported all of us during the transition." In addition, he identified other partnerships that include sister schools, like-minded schools and districts that were or had made a similar transition, and even professional organizations that provided guidance and support. "Most importantly," he shared, "You must get faculty and staff buy-in!"

Technology

The philosophical views of the principal participants involving technology primarily involved how technology assisted them and their teaching faculty and staff in transitioning to a student-centered approach to learning. Participant D referenced technology in relation to

promoting student agency, which he defined as “choice and options for students.” In his opinion, “technology is a necessary evil that allows for and promotes student agency.” To him, the question of how best to impact student agency was directly connected to technology and the use of it, especially in light of today’s 21st century technology-savvy students. Ultimately, the partnership between technology and student-centered learning led to the use of “one-to-one devices” and “learning platforms” that enabled both instructor and student to transition to student-centered learning.

In much the same vein, participant C stated that his faculty “used technology to supplement student-centered and personalized learning plans for students.” The use of “one-to-one technology” did “require different funding allocations” and also led him to “ensure that technology didn’t replace human instruction.” However, he espoused that technology has been a valuable tool in assisting in the transition to student-centered instruction for teachers. Likewise, participant B shared that she had “used technology to support student-centered learning.” In fact, this principal went so far as to say that “technology has made it possible at the present time to ensure a successful transition to student-centered education.” While this participant readily acknowledges the benefits of technology, she did offer a note of caution: “People, not technology, make the difference. You still need the human element of teaching.”

Finally, participant A detailed how technology has assisted his teachers in transitioning to student-centered learning. This has been done primarily through the use of technology to support specific professional development activities. “The use of a specific learning platform has assisted

our educators," he stated. Specific traits such as "practicality, functionality, and real-world" all helped in building internal professional development for the teaching faculty.

Mindset

The philosophical change that occurred in each of the principal participants also involved selecting and developing a different mindset regarding education. "Student-centered education and the transition it demands, is dependent on an educator's heart," stated participant D. "It also requires establishing a mindset of working hard." Participant C echoed similar thoughts regarding a change in thinking or mindset. "Due to today's large variances in students and how they learn, a student-centered approach, consisting of personalized learning for each kid, is necessary." This principal went on to say that "a shift in thinking is necessary for both instructor and student in order to effect change." Eventually this resulted in a philosophical change for his school that embraced a different mindset and retrained faculty and students to focus on ability, as opposed to grades or age.

"Little, incremental changes occur and are more common than large changes in students and faculty alike," is how participant B described the mindset shift that occurred. "Some of these changes are generational, but not always." Participant B believes that student-centered education meshes efficiently with Bloom's Taxonomy and that, ultimately, "today we are realizing that teachers and people are what fixes education & kids." Similarly, participant A said that "attitude and mindset are key for educators" when considering student-centered education. "This also requires thinking about students, as opposed to thinking about me," he explained. While this

participant values academic content, he also shared that “knowledge is important, but it is not everything.” Instead, he values a student-centered approach to learning as it has positively impacted both student and teacher alike.

Recruiting

The impact of recruiting teachers and staff on the participant’s educational philosophy was somewhat limited, but nonetheless interesting. Participant A flatly stated, “I actively, both then and now, recruited and searched for student-centered educators.” He went on to say that he seeks and recruits teachers who “attract and connect with students.” Participant B took this idea of recruitment a step further and simply stated how she prefers elementary education majors to those with secondary endorsements. “I usually hire elementary majors due to their undergraduate experience. There is normally a vast difference in secondary and elementary teacher candidates.” She went on to say that education majors need more cross-curriculum training and that, ultimately, “secondary education training needs to be more like elementary education.”

Participant D shared similar sentiments regarding the difference in grade level teacher preparation programs. He expressed, “When hiring and making employment decisions, I have discovered that elementary education candidates exhibit over preparation, while secondary education candidates demonstrate under preparation.” In his opinion, this is due to “content in the secondary world being king.” He went on to share that “this may be due to secondary’s emphasis on content and proximity to higher education.”

He also opined that, “secondary facilities and school structure dictate isolation.” This is in contrast to an emphasis on collaboration in elementary education. Because of this, he has experienced easier transitions to student-centered learning in those with elementary education backgrounds and training. Yet, by focusing on recruiting cooperative individuals, and even allowing the teaching faculty to select their own teaching partners and colleagues, he has successfully raised his faculty retention rate to the point now where it is higher than any other school within his district.

Change

Under the theme of change, “traditional” and “transition” were categories or frequent words that were mentioned. Both of these words were identified as essential in shaping and transitioning to a learner-centered approach to education. As before, each code word or category was tracked and counted throughout the coding process, depending on how many times the secondary principal participant used the word. As the reader can observe, the numbers in Table 12 demonstrate these results. While the frequency or amount of times mentioned were less than some of the previous words or codes discussed, the fact that they were referenced or used numerous times led them to be coded as important categories or key words.

The theme of change was used by both researcher and participant. This is due in part to the researcher’s own personal lived experience in changing or transitioning to a student-centered approach to educational instruction. In addition, every principal participant was asked during the course of the interview about their lived experience and how it had changed or not changed

during their transitional journey. Without exception, each participant described significant modifications and changes as a consequence of their embracing student-centered learning concepts. As a result, the researcher recognized “change” as a major theme to be identified and discussed in chapter four.

Table 12. *Principal Frequency of Response Codes: Change*

Codes	Frequency
Traditional	13
Transition	13
Choice	13

The following paragraphs further describe those coded words or categories that were frequently mentioned by the participants and helped to support the idea and importance of the theme of change.

Traditional

All of the secondary principal participants referenced change in their respective interviews. In many cases, the change they denoted was the transition from a conventional or traditional way of education to one that embraced student-centered concepts. Principal participant D describes the traditional way of instruction as “slower and louder” and expressed his frustration with the old system as one that “doesn’t work!” Additionally, he described observing conflict and struggles among educators and their differing philosophical viewpoints in

seeking how to best instruct students. In his view, “educators must do better than traditional approaches.” Yet, he also recognized that this is not an easy transition and that, if educators are not constantly vigilant, they will “slide back to traditional educational practices.”

Participant C flatly stated, “Education today should be less about silos and more about collaboration.” He believed that traditional approaches to instruction are “missing critical pieces or components” and that “educators need cross-curricular training.” Finally, he didn’t lay all the blame on teachers and administrators, stating that, “Educators today are only as good as how we were taught.” In contrast, participant B shared that “Mastery-based concepts are not necessarily new. We used to use similar approaches but there were many more limits to it then.” She did acknowledge, however, that today’s students require a different way of teaching and that educators must adapt and change to meet the needs of their students.

As a former teacher, participant A reported that he “taught very traditionally but now recognizes the whole student connection.” Now a secondary principal, he works diligently to share and spread his vision of what student-centered instruction can look like. He believes this is imperative for the sake of students as he said that “Student-centered learning reaches certain students who didn’t connect with traditional forms of school.” Moreover, he said that student-centered instruction “appeals to certain educators” and has helped lead educators to a different type of instruction.

Transition

In exploring the word transition, the researcher attempted to identify or focus on the specific moment or activity that best described when the principal participant shifted to a student-centered approach to education. In many cases, this transition was described by the secondary principal participants in terms of working hard to "win over" or convince their teachers to transition to student-centered learning. Participant A stated that faculty and staff must demonstrate a willingness to view instruction differently. He expressed that, "Learning to learn is the most important characteristic." He also encouraged his teachers to "embrace the bigger picture" and focus on the students and their future. As for the transition process, he told the staff, "Don't isolate yourself or live on your own island." For the most part, he believed his staff had embraced his advice and the transition to student-centered learning.

Participant B "observed change occurring at various degrees within her teaching faculty" when transitioning to student-centered education. "To be frank, they were all over the map," she said. In part, because of the difficulty in changing or transitioning, she has urged her teachers to "learn from others" and "observe what others are doing." She also viewed her role as an educational leader to "evaluate which training was most effective" in assisting those in transition. Participant C talked repeatedly about the transition that occurred in his faculty as they transitioned to student-centered learning. "Once they observed it, they were all in!" He described this "born-again renewal of instructional practices" as "rejuvenating the teacher" and stated that

"even older, experienced, veteran teachers became reenergized" when exposed to student-centered concepts.

The transitional experience or event for participant D was actually a process that took over five years to fully implement. As a result of his efforts, and with the help of others, he shared that "now everyone is on-board and knows what it looks like. The time spent and the partnerships that have been formed are essential" in making a successful transition. When describing the change or transition, he shared that a leader "must work to get practitioners to own it and that it must go beyond one individual or just leadership."

To further illustrate his point, he used an analogy of a school bus and a driver's education car.

> Traditional education is a lot like riding on the school bus. It is very effective in safely transporting students from one destination to another. The problem is, the adult is the one continually driving and the students are simply expected to passively ride along. In contrast, student-centered education more closely resembles a student-driver in a driver's education vehicle. While the instructor is present and can intervene when needed, ultimately the goal is to equip the student to learn to drive and reach their destination. Just as the driver's education student is expected to eventually master and display their proficiency or competency in driving, so are students asked to demonstrate their expertise and aptitude in academics.

Participant D conceded that "transitioning students to this type of system is tough, but in the long run it is worth the challenge." "It's our job," he stated "to prepare kids for college and for a career." This requires a commitment from faculty and staff to "move the needle." He viewed his job as principal as "modeling the behavior that I want my employees to model."

Choice

Most of the secondary principal participants referenced the concept of choice on multiple occasions. Participant D referred to choice in the context of students, teachers, and community. He used examples at the classroom, building, and district level to help in providing context about how choice was an important part of the transition to student-centered education. As a teacher, he allowed his students to have "a voice in their educational journey" and, because it worked so successfully, he eventually spoke on this practice at a national convention. After becoming a principal and transferring to a different school, the tenets of student-centered learning proved to be successful there as well, and this led to the school district asking him to implement it at one of its high schools. Participant D shared that parents and community stakeholders have been extremely supportive and have wholeheartedly embraced student-centered concepts. He attributed some of the success that he has observed to allowing people the opportunity to move at their own pace when transitioning and "giving individuals choice" regarding the switch to student-centered learning.

Participant C focused on choice in the context of "winning-over the teachers, students, and parents." He believed that "getting ownership from the students" goes a long way to

ensuring a smooth transition and adoption of student-centered learning. However, he also cautioned other educators that this process can't be forced or arbitrary. By allowing students, teachers, and the community a choice in the transition, he has seen great success. This approach "allows teachers to teach outside the box" and has worked effectively for both veteran and new teachers alike.

In a similar fashion, participant A talked about how the transition of a school to a student-centered approach required "a team effort from everyone" and that every instructor had to buy in to the process. In his view, "learning skills and attitude are what is key." By giving his faculty a voice, they have since owned the transition, which has led to "students being drawn to this system." When asked about advice he would give to other educators and institutions considering a similar change, he replied, "Get buy-in from the staff. Identify the key players and drill down on whether this transition is WE or YOU." By giving employees choice and the ability to make decisions, he believed the success rate for making a change was much higher.

Relational

Under the theme of relational, "experience," "mentor," and "relationship" were codes or frequent words that were mentioned. These words were identified as essential in shaping and transitioning participants to a learner-centered approach to education. As before, each code word or category was tracked and counted throughout the coding process, depending on how many times the principal participant used the word. As the reader can observe, the numbers in Table 13 demonstrate these results. While the frequency or amount of times each word was mentioned

differed from some of the previous words or categories discussed, the fact that they were referenced or used numerous times led them to be coded as important categories or key words.

Table 13. *Principal Frequency of Response Codes: Relational*

Codes	Frequency
Experience	32
Mentor	17
Relationship	8

The theme of relational was used by both researcher and participant. This is due in part to the researcher's own perceptions and personal lived experience in transitioning to a student-centered approach to educational instruction. In addition, every secondary principal participant was asked during the course of the interview about their lived experience and how impactful their relationships were during their transitional journey. Without exception, each participant described specific experiences and relationships as an essential part of embracing student-centered learning concepts. Additionally, the principal participants referenced the relational aspects of mentoring and guidance as an important aspect of successfully transitioning to student-centered learning. Because of this, the researcher recognized "relational" as a major theme to be identified and discussed in chapter four.

The following paragraphs further describe those coded words or categories that were frequently mentioned by the participants and helped to support the idea and importance of the theme of relational.

Experience

Each of the secondary principal participants was asked to reflect back on their unique educational journeys, and different stories and experiences that helped influence and shape their careers emerged. Participant A focused primarily on the transitory change that he had undertaken, both professionally and personally. He reflected on philosophical adjustments as well as procedural changes that had occurred. As an example, he relayed how as an administrator, he came to realize during the transition to student-centered learning that "knowledge is important but it is not everything" and that, in some regards, "content doesn't matter" when guiding teachers and students through a change process. However, he also acknowledged the fundamental "nuts-and-bolts" changes that were necessary for a successful transition such as "tweaking the academic and bell schedule to ensure increased opportunities for staff to meet with and mentor students." Ultimately, he continued to be driven by his next challenge, which he described as "being a lighthouse for change in the district and beyond."

Participant B stated that the transition to student-centered learning is "different for everyone. It is an individual experience." She went on to say that she would encourage anyone considering a similar transition to "talk to others. Take field trips and go observe what other people have done." In a similar vein, participant C stated that his exposure to student-centered learning didn't occur "until I left one district and transferred to another." He believed that "Idaho is beginning to move in the right direction" regarding student-centered learning. However, he expressed "concern regarding the preparation and training that post-secondary institutions are

giving future teachers." As a solution, he believed that "perspective and solutions could be gained from K-12 educators."

Finally, participant D summarized his educational journey as one that embraced student-centered concepts early in his career. He detailed how at every level (elementary, junior high, and high school) he could attest to the success of student-centered learning. As proof, he referenced external feedback such as "ISAT scores showing growth" and "significantly lower discipline issues" than similar schools within his district. While acknowledging that the first two years of the transition "were really rough, with lots of resistance from parents and the community," he believed it was worth it. "The transition is tough, but in the end, it is definitely worth the challenges." He responded that he now has "full support from the state, community, parents, and district."

Mentor

As in the teacher participant responses, the vast majority of principal participant responses that referenced the word mentor dealt with the connection or rapport between educational colleagues. More specifically, each principal participant spent time sharing and highlighting the significance of establishing a strong connection and rapport with staff. Participant D stated how essential it was that his staff "knew me on a personal level" and that this familiarity led to them trusting him throughout the transition process. Participant C commented on how camaraderie with the teachers led them to confide in him and share their fears and doubts. Subsequently, this participant referred to his faculty as "hero teachers" and has been committed to helping them succeed.

Participant B valued her relationship with teachers so strongly that she surveyed them to help her mentor and develop a strategic plan for them to reach kids in their transition to student-centered learning. She said that she has "evolved to care about teachers" at this stage in her career and has valued this part of her job immensely. Similarly, participant A stated that early in his career, "I didn't know how to make connections with my faculty." He said that after gaining a "different perspective," he now "relates much better to my faculty and staff. I have more appreciation for each of them, especially after having walked in their shoes." As a result, he has better relationships with his teachers and this "has definitely changed my perspective."

Relationship

All of the principal participants in the study acknowledged how impactful and essential personal relationships were in transitioning to a student-centered approach to education. The types of relationships that were most frequently referenced were those between staff and student. Throughout the interview, participant A referred to "staff making connections with students" and "developing relationships with kids." This emphasis on connecting with students is essential and is one that he has heavily emphasized within his school. Participant B echoed a similar sentiment when she stated, "Relationships are essential." She also stressed the powerful impact that students experience when "they know their teacher personally cares about each of them."

Participant C answered the interview question regarding relationships this way, "Society today demands educators recognize and meet the needs of students that are outside of academics. We have to now look at holistic education and especially focus on the social-emotional needs of students." In his answer, he referenced Maslow's hierarchy of needs and stated that he believed it

is the responsibility of educators to meet those needs in their students. Likewise, participant D described the personalization of instruction for students in student-centered learning. He opined that this goes far beyond academic needs but rather, it also encompasses "social development skills." He also attributed the number of behavioral incidents decreasing partly due to this emphasis on relationships and connections between staff and students.

Similarities and Differences Between Teacher and Principal Participants

Without question, both teacher and principal participants who were interviewed expressed a strong support and belief in the transition to student-centered learning. Each of the individuals who shared their responses affirmed and avowed their commitment to a philosophical shift in their thinking regarding how students should be taught and educated. Also noteworthy were the educational themes that both sets of participants identified as being significant when reviewing and analyzing the transition to student-centered learning. Key words such as "mindset," "relationship," "mentor" and "experience" were identified and referenced by teacher and principal participants alike. Lastly, both groups of participants shared personal, meaningful lived experiences with the researcher and each interviewee passionately relayed their hopes and aspirations for the students and staff they daily interacted with. Much of their optimism and ambition rested on a belief in transitioning to a student-centered approach to instruction and learning.

As for differences or contrasts between the two participant groups, the researcher was struck by the singular focus of the teacher participants on the students and their experience. It quickly became evident how fixated each participant was on ensuring a successful transition to a

student-centered learning experience for every student. In contrast, principal participants exhibited more of a two-fold or bifocal approach. This was comprised of wanting to guarantee a successful transition for students, but it also entailed a commitment to assisting each faculty and staff member with a smooth, effective shift in embracing student-centered learning concepts and tenets.

Also of note were the additional key words or categories that the principal participants identified in the course of the interviews when questioned about the transition to student-centered education. These were not mentioned by the teacher participants and included descriptive terms such as “recruiting,” “technology,” and “choice.” While this may not be surprising, as the roles of teacher and principal are decidedly different with diverse and varied responsibilities, it is noteworthy to highlight that the principal participants included these traits when describing a successful transition to student-centered education.

Finally, it should be recognized that the frequency or number of times each key word was mentioned by every participant and the group they represented, often varied significantly. As an example, the teacher participants, under the theme of relational, used or mentioned the key words “relationship,” (36) and “mentor,” (32) extensively, and only referenced “experience” (10) rarely. In contrast, the principal participants flipped these results for the theme of “relational”, as their responses were encompassed by key words this way: “experience” (32), “mentor” (17), and “relationship” (8). While the study divulges that the number of secondary teacher participants outnumbered the secondary principal participants by a six to four count, it is still important that each participant group decidedly disagreed in this specific theme. The researcher can only

surmise, based on these participant responses and results, that there are meaningful differences in how the teacher and principal participants viewed the transition from a teacher-centered approach to education to one that embraces student-centered concepts.

Summary of Results

Research of six secondary teacher participants and four secondary principal participants who had all experienced and lived through a transition from teacher-centered education to student-centered learning was conducted. The researcher utilized the method of hermeneutical, phenomenological interview and focus group techniques for the collection of responses. The subsequent analysis of the responses produced three major themes. These have been identified as "philosophy", "change," and "relational." Each of the teacher and principal participants described their lived experience and transition and provided key words or categories that assisted in explaining and understanding the themes that were identified. Through coding and thematic analysis, the researcher was then able to record and summarize the participants' responses.

Chapter V

Discussion

Introduction

Chapter five presents the reader with an overview of the current study, a summary of the results of the qualitative study, conclusions or reflections of the author, recommendations for professional practice, and implications for future research and studies. The themes that emerged in chapter four will be revisited and the research questions that formed the grounds or basis for this study will be summarized and discussed. The research for this study took place at multiple secondary school campuses where teachers and principals had transitioned to student-centered learning programs. The purpose of this study was to identify and understand the lived experience of each participant in transitioning to a student-centered approach to education. Contemporary research is needed for a more current body of literature that documents how a successful transition can occur in moving from teacher-centered to student-centered instruction and pedagogy. Subsequently, a qualitative, hermeneutical phenomenological approach or research design was used by the author to investigate the lived experiences of six teachers and four principals regarding their transition.

In order to identify and understand the experience of each participant, the study sought out and gave voice to every participant. All participants were given an opportunity to tell their story and provide explanations about their journey through face-to-face interviews. The responses that were provided allowed the researcher to capture the participants' journeys and experiences through this transition and lived experience. While each participant articulated different pathways and obstacles in their journey, all emphasized the value and reward that

awaited them in transitioning to student-centered learning practices. It was the goal of the researcher to document and share these rich, detailed narratives that described the transition for every participant interviewed.

As mentioned previously, an absence of scholarly literature exists regarding the lived experience of secondary educators transitioning to student-centered learning. This can be observed in the lack of academic publications that detail or focus on the experience and role of the 6-12 educator in making this transition. Much of the literature regarding student-centered learning focuses on the experience of the student. In contrast to this, the researcher in this paper fixated on advocating for the notion that educators are also learners, and, in the case of transitioning to student-centered instruction, they themselves must adapt and assimilate to new concepts and changes in philosophy. Finally, the researcher used the constructivist learning theory to help the reader better understand and recognize the successful transition that the teacher and principal participants made in moving from teacher-centered to student-centered approaches to education.

Summary of Results

Constructivist theory in the 21st century school demands even greater emphasis on educators as learners, as opposed to traditional teacher roles (Evans et al., 2013; Freeman et al., 2014; Kalpana, 2014; Saeed & Zyngier, 2012). In this study, the researcher used the constructivist learning theory to help the reader better understand and recognize the successful transition that the secondary teacher and principal participants made in moving from teacher-centered to student-centered approaches to education. The investigation was driven by the following research questions:

1. What are middle school and high school teachers' perceptions and lived experiences regarding the transition from teacher-centered learning to student-centered learning?
2. What are middle school and high school principals' perceptions and lived experiences regarding the transition from teacher-centered learning to student-centered learning?

In order to answer these questions, the researcher sought to understand the meaning, structure, and essence of the lived experiences of these teacher and principal participants. The use of a hermeneutical, qualitative phenomenological design allowed the researcher to gain a deeper understanding of the influences and factors that contributed to an effective transition for the participants. In order to obtain and collect narrative data from each of the participants, a semi-structured interview was implemented. Additionally, each of the ten participants was specifically selected due to their experience in transitioning to student-centered learning practices and pedagogies. The process of coding led the researcher to identify three emergent themes. These were identified as "philosophy," "change," and "relational." These three themes reflect the perceptions and lived experiences of those educators who transitioned to student-centered learning.

Philosophy

While many of the teacher and principal participants acknowledged that a change took place in their philosophical thinking when exposed to student-centered concepts, each of them referenced and spoke of how their mindset or viewpoint of education shaped their perceptions and lived experience. The participants gave specific examples of how their personal philosophy steered or guided them and how their educational philosophy transformed and has continued to change as they have moved further into student-centered concepts.

Change

In order to transition to a new way of doing things, one must be willing to change. This emergent theme truly was at the heart of what each participant shared in their responses. All of the participants expressively detailed and described the change process and what it entailed. The descriptions given also encompassed challenges and barriers to change, as well as reliving and documenting the triumphs and successes that resulted from change. Most significantly, every participant mentioned in their responses that embracing change was necessary in order to successfully transition to a student-centered approach to education.

Relational

There was an acknowledgement from each of the participants about the importance of intentionally cultivating a relational approach when transitioning from teacher-centered to student-centered education. Recognizing the value of positive relations between the various stakeholders and contributors was consistently expressed by both teacher and principal participants. In fact, many participants shared that their lived experiences and perceptions of transitioning to student-centered learning would have been impossible, or at least immensely more difficult, without the ability to build relationships. This theme encompassed both educator-to-student relationships as well as colleague-to-administrator relations.

Research Question #1: What are middle school and high school teachers' perceptions and lived experiences regarding the transition from teacher-centered learning to student-centered learning?

Throughout the secondary teacher interviews, the participants spoke of the journey or transition that occurred in each of them as a personal experience and one that had drastically

changed their perceptions and viewpoints. Additionally, the teacher participants connected or associated their own lived experience with that of their students. Put another way, each interviewed teacher explicitly referenced the impact that moving to a student-centered learning environment had on their classroom and students. In some instances, the participants also referenced the impact this change or transition had on their colleagues and peers.

To further illustrate these responses, the key words or concepts that comprised or shaped each of the themes reveal additional insight into the participants' answers. Within the theme of philosophy, descriptive terms such as "student-centered," "mindset," and "teacher support" were used. In the case of "student-centered," the participants shared how changing their emphasis from traditional, teacher-centered approaches to instruction to focusing on student-centered practices was momentous. The term "mindset" was an attempt by those interviewed to help the researcher understand how thinking differently and evolving one's educational philosophy was instrumental in transitioning to student-centered learning. Finally, the descriptive words "teacher support" helped the participants disclose how student-centered learning ideas encouraged each of them to realize they were not alone in the conversion process and that support or backing from peers and leadership alike were needed to successfully transition.

Under the theme of change, descriptive words including "traditional" and "transition" were shared by the teacher participants. "Traditional" was used numerous times to help identify and convey the substantial difference between teacher-centered and student-centered learning. As most educators have experienced conventional, teacher-centered approaches to instruction and pedagogy, the participants' responses attempted to demonstrate the outright differences that exist when comparing and evaluating student-centered versus teacher-centered education. The word "transition" was also referenced heavily during the interviews and was used in the context

of helping to describe the change process that occurred for each participant. Even though the transition process or lived experience and perceptions varied in detail, length, or extent, all teacher participants described a rich, meaningful narrative of transitioning to student-centered education.

The third and final theme of "relational" inspired the most responses and included words such as relationship, mentor, and experience. For the key word "relationship," the researcher also grouped the word "connection," as the teacher participants used these words interchangeably. As briefly mentioned previously, the concept of relationships weighed heavily and influentially on every teacher participant. This can be attributed to the views expressed by the participants in reflecting on their perceptions and lived experiences of the transition and how much of the successful experience was proportionally dependent on connecting to others. Related to this was the importance of mentors, both at the colleague and supervisor level. On numerous occasions within the interviews, each teacher reported how meaningful it was to have a mentor, or someone who they could ask questions of or seek reassurance from when transitioning to student-centered learning. The word "experience" was referenced numerous times and allowed the researcher to glimpse the journey that every participant reflected on and shared. This descriptive word also enabled each teacher interviewed to tell their story and share their perceptions and lived experiences as they thought back on their own constructivist experience.

Research Question #2: What are middle school and high school principals' perceptions and lived experiences regarding the transition from teacher-centered learning to student-centered learning?

All four secondary principal participants reflected on their own experiences and journeys when asked to think about and analyze their transition to student-centered learning concepts.

Much like the teacher participants, each principal focused many of their responses on the impact that this change had on the students within their respective schools. However, unlike their teacher counterparts, the principals spent significantly more time and effort in describing the impact that transitioning to student-centered education had on their faculty and staff. As principals are the leaders and tone-setters of a school, this makes sense. Still, it was noteworthy to observe and record the divergence in responses when comparing principal and teacher answers.

As with the teacher responses, it is helpful to further unpack the answers of the principals by focusing on the key words or terms that were used within each theme. The theme of philosophy was further supported by descriptive terms and words such as "student-centered," "mindset," "teacher support," "recruiting," and "technology." In some cases, the explanations given by the principal participants was very similar to those of the teacher respondents. "Student-centered" and "mindset" were used to help describe how the principal's educational philosophy now encompassed and incorporated a new way of thinking about educating students. These words were also used by the principals to describe the transition process that each attempted to facilitate with their own teaching faculty.

The term "teacher-support" took on a different meaning from the teacher participants among the principal participants as they viewed this as providing essential backing and assistance to their teachers in order to ensure a successful transition. Simply put, the principals conveyed that students would not prosper within a student-centered environment unless the teachers felt comfortable with the transition themselves. The key word of "recruiting" also helped to support the theme of philosophy as principal responses detailed how important it was to have the appropriate faculty and staff when transitioning to student-centered education.

Finally, the descriptive word “technology” was used in reference to the lived experience of each principal participant and was identified as a tool that assisted on many occasions in helping teacher and student alike in transitioning to student-centered learning.

The theme of change evoked three words from the principal participants: “traditional,” “transition,” and “choice.” Again, similar to the teacher participants, the references to “traditional” and “transition” comprised the contrasts or differences between conventional, teacher-centered and student-centered learning norms. However, as detailed in the previous paragraphs, the principals also viewed these terms through the lens of how they impacted faculty and staff in addition to the students. The word “choice” was also referenced by the principals and was used to describe buy-in or input from a multitude of individuals. In most cases, the principals referenced giving others the choice to transition to student-centered learning and described a holistic approach that included not just faculty, staff, and students but also, parents, the school district, and even the community. Principal participants viewed the word “choice” as a key component of the change process and believed it to be necessary in order for a smooth transition to ensue.

The last identifiable theme among the principal participants was relational. As before, many similarities existed between the principal and teacher responses. Also as mentioned previously, both principals and teachers alike referenced the importance of “relationships,” “connections,” and “mentors.” In addition, each principal gave their own story or experience when reflecting back on the lived experience of transitioning to student-centered learning. One possible distinction from the teacher responses was the principals’ reference to the change or impact that occurred corporately or within the organization. Whereas the teacher respondents focused their experience primarily on their own careers or the experience of their students, the

principals were much more likely to include the whole group or shared impact that this transition had on the school, district, and community.

Conclusion and Reflections

The theory of constructivism as supported by Piaget and Vygotsky provided a solid foundation for considering how secondary teachers and principals construct their own knowledge scaffolding and framework for transitioning to student-centered learning. Components of both Piaget's constructivist theory of cognitive constructivism and Vygotsky's support of social constructivist theory, including his advocacy for the zone of proximal development, lend credence to the assertion that instructors are also learners (Kalpana, 2014). Participant responses demonstrated that a combination of cognitive and social constructivist thought allowed or assisted each individual in transitioning from teacher-centered approaches of learning to those that supported student-centered education. As the researcher requested both teacher and principal participants to reflect on their perceptions and lived experiences during the transition, it became readily apparent that a combination of Piaget and Vygotsky schemas could help explain the phenomena that had occurred.

Also beneficial to the researcher was the use of a hermeneutical, phenomenological approach to identifying and understanding the participants and their lived experiences. This interpretation of the lived experience was first espoused by Martin Heidegger and was selected by the researcher due to his own experiences and perceptions regarding student-centered learning. Hermeneutical phenomenology advocates that the researcher should themselves be immersed within the phenomena and view the data through their own prism or views (van Manen, 1990). This allows for the researcher to have a better understanding of the experience of

each participant and to consider new meanings and interpretations when coding the participants' responses (Crowther et al., 2017).

Throughout the study, a recurring, unconventional theme emerged of the teacher and principal assuming the role of a learner. While the majority of documented research focused primarily on the effects of student-centered learning on traditional students, the intent of this study was to classify the educators as learners, dependent on their own constructivist beliefs and educational philosophies. What also became readily apparent were the common themes and factors that each participant, be they teacher or principal, shared when asked to describe or attribute their successful transitional experience. An acknowledgement of the importance of educational philosophy, the abruptness and challenges of the change process, and the crucial recognition and value of supportive relationships were all identified by the participants.

In addition to the themes identified above, the participant responses were also grouped into key terms or words. These included perceptions and thoughts encapsulated by terms such as "student-centered," "mindset," "teacher support," "recruiting," and "technology" when referencing the participants' philosophy of education and subsequent transitions. In support of the theme change, participant responses were categorized into words such as "traditional," "transition," and "choice." Lastly, the theme of relational was reinforced by participant responses such as "relationship," "connection," "mentor," and "experience." Overall, the study revealed that teacher and principal perceptions and lived experiences regarding their transition to student-centered learning were characterized as a worthwhile, successful journey. However, each participant warned or advocated for a note of caution or awareness to any future educators who are contemplating the philosophical angst, change consequences, and importance of relationships in making a similar transition.

Recommendations for Future Research

This qualitative, hermeneutical phenomenological study was an investigation of ten secondary educator participants who had recently transitioned from a teacher-centered approach of learning to one that embraced student-centered education. The research was intended to identify and document the recollections of the participants and ask them to reflect on and share their perceptions and lived experiences during this time. In addition, the researcher sought to recognize and describe those factors or conditions that the participants deemed essential for success during the conversion. The depiction and portrayal of educators transitioning to student-centered learning and instruction in professional educational literature is limited. Because of this, there is a genuine need for scholarly research to delve more deeply into this topic.

Due to the increase in states and schools across the nation that are transitioning or considering moving toward student-centered learning, the researcher believes that this topic will become steadily more relevant. A review of literature demonstrates that student-centered approaches to education and instruction are increasing exponentially. Therefore, the researcher in this study would urge future scholars to consider the impact of student-centered learning on teachers and principals, as well as other educational personnel. By conducting additional research, it is the hope of the author that further researchers will better understand and explain the effect that student-centered learning and pedagogical concepts have on educators.

According to the teacher and principal participants of this study, student-centered learning is an effective and powerful approach to instruction and learning. In terms of further study, the author acknowledges there is a need to obtain quantitative data that measures the academic impact and progress of students who are immersed in student-centered learning. Future research could also be done on the varying factors and influences that assist faculty and staff in

transitioning to student-centered pedagogies and methods. Finally, other research efforts could be made to compare and contrast specific or unique practices and strategies in transitioning classrooms, schools, districts, communities, and state-wide efforts to student-centered learning.

The author acknowledges the limitations with this phenomenological study as it was restricted to ten secondary teachers and principal participants who had recently transitioned to student-centered learning. Because of the narrowness of the study, the research results should not be generalized for all educators who are transitioning to student-centered education. Subsequently, a broader, wider examination of educational personnel who are transitioning to student-centered learning would possibly yield different outcomes and should be completed.

The possibilities for additional research regarding this topic are virtually limitless. As colleges and universities graduate future teachers and administrators, teacher preparation programs will continue to face challenges and obstacles in preparing educators for the 21st century classroom and school. Specifically, more study should be given to teacher preparation programs that are tasked with training and modeling teacher pedagogy and methods across all content areas. This could include various disciplines and expose subsequent teacher candidates to student-centered learning practices and instructional techniques in specific subject areas.

A final recommendation for future research is to task coming scholars with exploring and detailing the impact of student-centered learning on educational institutions or organizations beyond higher education. Examples of those entities who are influential in education include accrediting associations and professional organizations that deal with certification standards. In Idaho, the unique and special role of the Professional Standards Commission (PSC) and its relation to student-centered learning should be examined. As the PSC, in some ways, serves as a

conduit between K-12 education and higher education, it would be interesting to note how student-centered learning is evaluated and appraised as time progresses.

Implications for Professional Practice

The study's findings provide several important and relevant implications for teachers and principals in 6-12 education. The six teacher participants and four principal participants all referenced the importance of collaboration and teamwork in making a successful transition to student-centered learning. From a professional practice standpoint, the researcher would urge school boards, school districts, administrators, and teachers to support these efforts through increased resources, trainings, and professional development opportunities. Post-secondary institutions could also powerfully impact the way society views education by embracing and emphasizing a shift in educational philosophy to student-centered learning. Also, funding and backing could be sought from the legislature and patrons within the community to financially support transition efforts. The state department of education, as well as the state board of education, could also affirm and promote the change from teacher-centered to student-centered education.

As for schools such as Sagebrush High School and Stagecoach Middle School, a continued commitment to the transition to student-centered learning by the community, district leadership, and the teachers and administrators would be heavily supported by the participants in the study. In order for the long-term results of transitioning to student-centered concepts to be fully evaluated and understood, a pledge to continue these efforts should be honored. This would entail asking and even requiring training and support for administrators in the hiring practices and techniques that are used when considering potential faculty and staff at a student-centered school.

Because of the rapidly changing needs of students in society today, there remains a need to further explore and discover best practices for assisting the 21st century learner in comprehending academic knowledge and material. Institutions and individuals who are willing to explore these approaches to instruction and pedagogy will ultimately benefit and provide advantages to the students that they serve.

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Appendix A

National Institute for Health Certification

Certificate of Completion

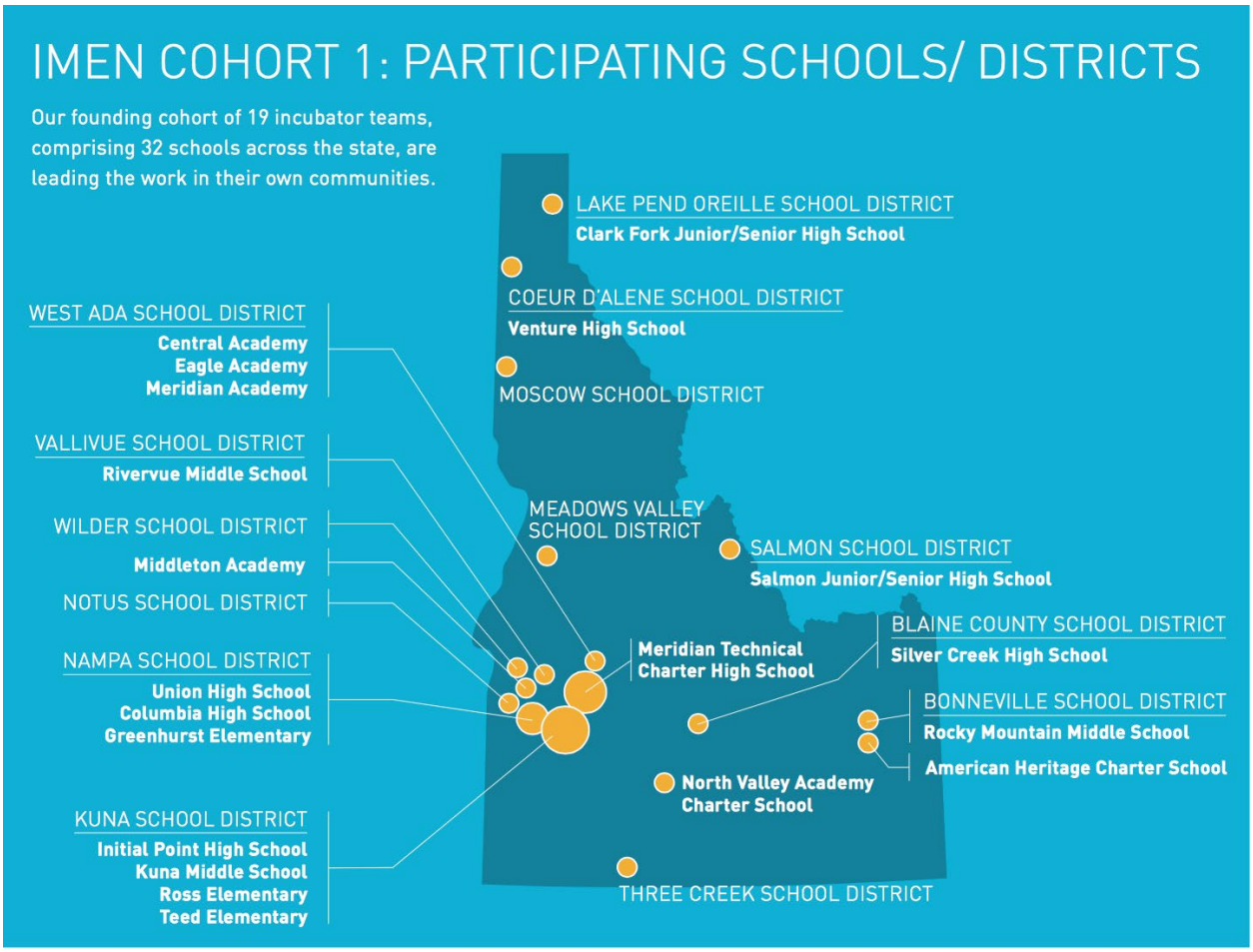
The National Institutes of Health (NIH) Office of Extramural Research certifies that **Peter J. McPherson** successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 01/15/2018

Certification Number: 2598943

Appendix B

Idaho Mastery Education Network



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Appendix C

[redacted] Joint School District #[redacted] Research Approval

February 17, 2019

Northwest Nazarene University

Attention: IRB Committee

Helstrom Business Center 1st floor

623 S. University Boulevard

Nampa, ID 83686

RE: Research Proposal Site Access for Mr. Peter J. McPherson

Dear IRB Members:

This letter is to inform the IRB that Administration at [redacted] Joint School District #[redacted] has reviewed the proposed dissertation research plan including subjects, intervention, assessment procedures, proposed data and collection procedures, data analysis, and purpose of the study. Mr. McPherson has permission to conduct his research at the district with administration, faculty and staff of [redacted] Joint School District #[redacted]. The authorization dates for this research are July 2019 to July 2020.

Respectfully,

[redacted]

Superintendent, [redacted] Joint School District #[redacted]

[redacted]

Appendix C (continued from previous page)

[redacted] School District #[redacted] Research Approval

February 17, 2019

Northwest Nazarene University

Attention: IRB Committee

Helstrom Business Center 1st floor

623 S. University Boulevard

Nampa, ID 83686

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Dear IRB Members:

This letter is to inform the IRB that Administration at [redacted] School District #[redacted] has reviewed the proposed dissertation research plan including subjects, intervention, assessment procedures, proposed data and collection procedures, data analysis, and purpose of the study. Mr. McPherson has permission to conduct his research at the district with administration, faculty and staff of [redacted] School District #[redacted]. The authorization dates for this research are July 2019 to July 2020.

Respectfully,

[redacted]

Superintendent, [redacted] School District #[redacted]

[redacted]

Appendix D

Email Recruitment

Date

Dear Participant

My name is Peter McPherson and I am a doctoral student from Northwest Nazarene University. I am conducting a research study for my dissertation titled "An Evaluation of the Implementation of Mastery-Based Learning in Idaho K-12 Education." The purpose of this email is to solicit your support and participation.

The study will allow me to share fundamental knowledge about mastery-based education in Idaho K-12 public schools and how it is being implemented. The study will capture the voices of ten to twelve Idaho educators who are involved in mastery learning in Idaho. I would like to interview you as it relates to the challenges and rewards that you encountered in your educational journey regarding mastery learning and how it is being implemented in your organization. Participation in the interviews will take approximately 50-75 minutes. Findings of the study will be shared with you upon completion of the study. Your participation in this research is voluntary. If you decide to participate in the study, you may withdraw your consent and stop participation at any time without penalty.

The information from the interviews will be audio recorded, but will remain completely anonymous and your answers will not connect to you in any way. The data will be analyzed by me (Peter J. McPherson). There will be no direct compensation for your time. Your input is extremely valuable and your participation would be greatly appreciated.

By participating in this study, there are no known risks. It is not possible to identify all potential risks in research procedures, but the researcher have taken reasonable safeguards to minimize any known and potential, but unknown, risks.

To participate in the research, please respond to the email at pmcpherson@nnu.edu and provide the best available time for the interview. Thank you for your consideration.

Sincerely,

Peter J. McPherson

Doctoral Student

Northwest Nazarene University

pmcpherson@nnu.edu

208.989.7136

Appendix E

Verbatim Instructions

Date

Dear _____,

A semi-structured, audio-recorded interview will be conducted with each participant. These procedures will be completed at a public location mutually decided upon by the participant and the interviewer and will take a total of 50-75 minutes.

I would like to conduct the interview within the next month. This process is completely voluntary and you can select to suspend your involvement at any time. You can select and answer questions that are of comfort to you and you are not obligated to answer all of the questions. You will find the attached interview questions below. If you have any questions, please do not hesitate to contact me. I look forward to our interview and learning about your experiences. Thank you for your willingness to participate in this study.

Peter J. McPherson

Doctoral Student

Northwest Nazarene University

pmcpherson@nnu.edu

208.989.7136

Appendix F

INFORMED CONSENT FORM

A. PURPOSE AND BACKGROUND

Peter J. McPherson, M.A.T.., and Ed.S.., a doctoral student in Educational Leadership at Northwest Nazarene University is conducting a research study exploring the perceptions and lived experiences of educators who have transitioned from a teacher-centered approach to instruction to one that embraces student-centered learning. You are being asked to participate in this study because you are a healthy volunteer and are over the age of 18.

B. PROCEDURES

If you agree to be in the study, the following will occur:

1. You will be asked to sign an Informed Consent Form, volunteering to participate in the study.

2. You will answer a set of interview questions and engage in a discussion with the interviewer. This discussion will be audio taped for accuracy purposes, and is expected to last approximately 50-75 minutes. Your response(s) will help to provide information and clarity regarding the perceptions and lived experience in transitioning to student-centered learning in select Idaho K-12 public schools and districts.

3. There are several questions prepared for this study. I may also ask additional questions for clarification such as, “can you expand on that issue?’ or “how did it make you feel?’ If you are uncomfortable with any questions I ask, please let me know immediately and I will move to the next question. You may choose to end the interview at any time.

4. These procedures will be completed at a location mutually decided upon by the participant and interviewer and will take a total of about 50-75 minutes.

C. RISKS/DISCOMFORTS

1. Some of the discussion questions may make you uncomfortable or upset, but you are free to decline to answer any questions you do not wish to answer or to stop participation at any time.

2. For this research project, the researchers are requesting demographic information. The researchers will make every effort to protect your confidentiality. However, if you are uncomfortable answering any of these questions, you may leave them blank.

3. Confidentiality: Participation in research may involve a loss of privacy; however, your records will be handled as confidentially as possible. No individual identities will be used in any reports or publications that may result from this study. All data from notes, audio tapes, and disks will be kept in a locked file cabinet in the Department and the key to the cabinet will be kept in a separate location. In compliance with the Federal wide Assurance Code, data from this study will be kept for three years, after which all data from the study will be destroyed (45 CFR 46.117).

4. Only the primary researcher and the research supervisor will be privy to data from this study. As researchers, both parties are bound to keep data as secure and confidential as possible.

D. BENEFITS

There will be no direct benefit to you from participating in this study. However, the information you provide may help educators and other individuals better understand mastery-based learning in Idaho and how it is being implemented.

E. PAYMENTS

There are no payments for participating in this study.

F. QUESTIONS

If you have questions or concerns about participating in this study, you should first talk with the researcher. Peter J. McPherson can be contacted via email at pmcpherson@nnu.edu, and via telephone at 208.989.7136. If for some reason you do not wish to do this, you may contact Dr. Dennis Cartwright, Doctoral Committee Chair at Northwest Nazarene University via email at dcartwright46@gmail.com or via telephone at 208-880-9781.

G. CONSENT

You will be given a copy of this consent form to keep. **PARTICIPATION IN RESEARCH IS VOLUNTARY.** You are free to decline to be in this study, or to withdraw from it at any

point. Your decision as to whether or not to participate in this study will have no personal repercussions.

I give my consent to participate in this study:

_____ _____

Signature of Study Participant **Date**

I give my consent for the interview and discussion to be audio taped in this study:

_____ _____

Signature of Study Participant **Date**

I give my consent for direct quotes to be used in this study:

_____ _____

Signature of Study Participant **Date**

_____ _____

Signature of Person Obtaining **Consent Date**

THE NORTHWEST NAZARENE UNIVERSITY INSTITUTIONAL REVIEW BOARD HAS REVIEWED THIS PROJECT FOR THE PROTECTION OF HUMAN PARTICIPANTS IN RESEARCH.

Appendix G

Interview Questions

1. What is your philosophy of education?
2. How long have you been involved in mastery-based learning pedagogy?
3. What mastery-based learning activities are you involved in?
4. Why did you decide to participate in mastery-based learning?
5. How has your involvement in mastery-based learning impacted your teaching?
6. How would you describe and evaluate your school's efforts in implementing mastery-based learning? The district? The state?