

**STUDENT EXPERIENCES WITH HIGH SCHOOL REDESIGN:
INVESTIGATING THE PERSPECTIVES OF DIVERSE STUDENTS IN A
PERSONALIZED LEARNING ENVIRONMENT**

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Bachelor of Education, University of Alberta, 2010

A Thesis
Submitted to the School of Graduate Studies
of the University of Lethbridge
in Partial Fulfilment of the
Requirements for the Degree

MASTER OF EDUCATION
EDUCATIONAL LEADERSHIP

Faculty of Education
University of Lethbridge
LETHBRIDGE, ALBERTA, CANADA

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Date of Defence: October 30, 2017

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Dedication

This work is dedicated to my father, Richard A. New. His lifelong passions for teaching and learning have always been an inspiration. Dad, without your mentorship and encouragement, I would not be who I am today. Thank you.

Abstract

Highly specialized workforces, technological advancements, and increased global competition have prompted 21st Century high school reform characterized by personalized learning environments. This reform has spurred the implementation of the High School Redesign Project across the province of Alberta. The Redesign Project is designed to increase student engagement, improve student achievement, and enhance teacher practice through the development of flexible and student-centered learning environments. This study explores how High School Redesign has impacted student learning within three Alberta high schools. Qualitative data was collected by interviewing school principals and conducting focus groups with students from three experienced High School Redesign schools. This data describes how Redesigned schools have impacted students academic success, relationships, and goals within and beyond high school. The findings of this research illustrate how flexible and personalized learning environments are providing students with improved relationships in school, which ultimately lead to improved student outcomes.

Acknowledgements

This thesis would not have reached its successful completion without the dedication and support of several important individuals. Firstly, I want to firstly thank my supervisors Dr. Pamela Adams and Dr. Carmen Mombourquette. Without their teaching, guidance, and mentorship this work would not have come to fruition. I want to thank them for the countless hours that were dedicated to my work and for the genuine care with which they acknowledged all facets of my life over these past few years. Thank you also to Dr. Danny Balderson and Dr. Chris Mattatall, my committee members, who encouraged and questioned my ideas in such a way that greatly improved my thesis work.

I would also like to thank my loving and supportive wife, Kaeli New. It was such a privilege to have the opportunity pursue our graduate degrees in education as partners. I will treasure our time spent in Lethbridge together, whether it be sharing lunch between classes or our passionate discussions about our new learnings. Kaeli spent a great deal of time discussing my research, sharing in my struggles, and reading then re-reading my writing. She was generous with her time and more generous with her gifts as an educator when it came to helping me throughout this work.

Finally, I want to thank my educational colleagues. So many of my colleagues from within my school, and throughout the province have graciously shared in discussing my research. I am privileged to have so many mentors to aspire to and to model my practice after. Among those mentors are the school leaders who were instrumental to the completion of this research. I am proud to be able to share just a piece of the narrative of High School Redesign in the province. Thank you for giving your time and your school's resources to make this work possible.

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Chapter One: Introduction

High school reform has been a focus of many school jurisdictions across North America (Alberta Education, 2009a). The challenges experienced by high school students—documented as disengagement, dissatisfaction with their schooling experience, and high drop out rates—have been linked to the learning environments of students (Alberta Education, 2009b). Specifically, some research indicates (Darling-Hammond, Aness, & Ort, 2002; McClure, Yonezawa, & Jones, 2010; Quint, 2006) that students experience improved academic and personal growth when learning environments accommodate their individuality. To realize these improvements, many high schools have been compelled to examine the *factory model* of schooling that characterized education throughout the majority of the 20th century, during which only a few students were educated with the goal of post-secondary admission while the large majority were prepared for jobs in manufacturing (Darling-Hammond et al., 2002).

The highly professionalized and specialized workforce, unforeseen technological advancements, and increased global competition of the 21st century are factors that make a high school level education more relevant than ever (Alberta Education, 2009b). Teachers and schools of today are expected to prepare all students for post-secondary or workplaces that have increasing levels of demand (Quint, 2006, 2008). In addition, society is currently exerting vastly different educational demands on high schools than those in the mid 20th century. As such, effective 21st Century high schools must support students' pursuit of the knowledge, skills, and attributes necessary to succeed in university, college, or the workplace, in which future success may look very different than present success (Alberta Education, 2009b).

It is increasingly expected that high school programming and instructional strategies will support students' pursuit of their life goals and preferred futures. In the most effective high schools, differentiated pathways to learning have become one way to achieve this (Alberta Education, 2014a). For the purposes of this study, the effective secondary schools alluded to by the Alberta Education document can most readily be described as those schools that implement reasoned pedagogical choices that align with the vision of teaching and learning at the school. Ancess (2008) described how schools must realize the nature of their learners and implement personalized learning structures to optimize the learning for the unique learners within the context of a specific school.

Effective schools realize that for students to pursue personally identified goals, their educational experience must assume "an individualized approach to supporting student achievement" (Wise, 2008, p. 9). Accordingly, the structures and relationships within schools must accommodate students' unique identities as goal-oriented learners. That is, when students are included in making reasoned decisions about their educational pathways, there can be a deeper integration of relationships, relevance, and rigour in instructional practice and organizational structure (Wallach, Ramsey, Copland, & Lowry, 2006). Leveraging students' individuality and meaningful relationships can provide teachers with the ability to develop instruction that serves all students as unique learners in experiencing success in and beyond high school.

Individualized learning goals linked to students' preferred futures in combination with individualized relationships and interactions results in *personalized learning*. Alberta Education (2009b) officials suggest personalized learning takes place when students are enabled to build upon their individual strengths and achievements, pursue

their passions and interests, and learn in ways that are consistent with their goals and learning styles. Effective schools are those that foster personalized learning conditions that empower students with the agency to take responsibility for their learning (Alberta Education, 2009a).

Personalized Learning in Alberta

Personalized learning has been a common thread throughout research on effective high school reform over the past decade (Ancess, 2008; Ancess, Barnett, & Allen, 2007; Darling-Hammond et al., 2002; Peters, 2011; Quint, 2006, 2008). This body of literature has contributed to a new understanding of the definition and the practice of personalized learning. Alberta Education has adopted personalized learning as a primary construct for schools. This construct is evidenced in the recently adopted Alberta *Education Act* (Government of Alberta, 2015) which states that all students should be empowered to discover and pursue their individual interests and passions through relevant learning opportunities “with flexible timing and pacing through a range of learning environments [that] meet diverse student needs and maximize student success” (p. 11).

Alberta Education as a government entity began its path towards personalized high school reform with the publication of results for the Alberta Commission on Learning (2003), a comprehensive review of Alberta’s education system. Key findings of the commission indicated that education systems must remain flexible amid a climate of perpetual societal change, and that a “strong and vibrant public education system [is] a system that values each and every individual” (Alberta's Commission on Learning, 2003, p. 4). In 2009, the Commission on Learning was revisited, culminating in the *Fifth Anniversary Retrospective of Alberta’s Commission on Learning* (Mackenzie, 2009).

This retrospective resulted in reformed educational legislation across the province that allowed for greater flexibility at the school and jurisdictional level; responding to the diverse learning needs of students (Alberta Education, 2009b). These legislative changes guided schools into embracing the vision outlined by the *Inspiring Education* document (Alberta Education, 2009b) “to inspire and engage students to achieve success and fulfillment as engaged thinkers and ethical citizens with an entrepreneurial spirit within an inclusive education system” (p. 7).

Following the publication of *Inspiring Education*, the discourse among educational stakeholders in Alberta began to shift and the *High School Flexibility Enhancement Pilot Project* took shape (Fijal, 2013). Fijal noted how “*Inspiring Education* redefine[s] the boundaries of what we must consider in the deliberations about the transformation of our education system” (p. 1). The High School Flexibility Enhancement Pilot Project involved one school in each of nine school jurisdictions and set out to “explore various research-based and educationally sound high school redesigns with the purpose to benefit students’ learning and success in high school” (Alberta Education, 2009a, p. 6). With successful participation in this pilot project, there was unanimous agreement from school principals that the redesign project should be scaled to many more high schools across the province (Fijal, 2013).

The personalized foundations of the *Inspiring Education* document, alongside consultations with educational stakeholders, have brought the *High School Redesign Project* into practice for over 200 high schools across the province today. To participate, schools across the province of Alberta are invited to submit a plan to the ministry that signals their readiness to begin the redesign process (Alberta Education, 2015b). The

primary goals for this High School Redesign Project are to increase student engagement in learning, improve student achievement, and enhance teacher practice by providing flexible learning environments characterized by student-centered approaches to 21st Century learning (Alberta Education, 2014b). To achieve this, participating schools are exempt from the required 25 hours of classroom instruction per unit of course credit (known as the Carnegie Unit). With this flexibility, participating high schools are tasked with making site-specific changes to the structure of their classrooms, schedules, and instructional approaches to best suit the needs of their learners (Alberta Education, 2014b). These structural changes are not only enabled by the freedom from credit hour restraints, but further guided by the Alberta Education (2014b) *Foundational Principles of High School Redesign*. The Principles of High School Redesign as per the Alberta Education (2014b) document are defined as:

- *Mastery Learning*—implementing instructional strategies that result in a comprehensive grasp of curriculum that is no longer tied to the barriers of time and singular assessment;
- *Rigorous and Relevant Curriculum*—valuing the development of stimulating and inspiring curricula that set appropriate learning objectives to create a meaningful and goal oriented experience for students;
- *Personalization*—seeking to understand every student’s unique developmental level, learning style, passions, skills, and foundational knowledge based on ongoing, differentiated assessment, and meaningful relationships between students and staff;

- *Flexible Learning Environments*—acknowledging that learning takes place beyond the scheduled classroom hours where students take personal accountability for their learning;
- *Educator Roles and Professional Development*—building the role of the teacher as guide, coach, and career mentor, and the role of the administrator as instructional leader through professional learning communities;
- *Meaningful Relationships*—eliminating the anonymity of students through regular student-teacher interactions where teachers are seen as committed mentors who support students in achieving their desired goals;
- *Home & Community Involvement*—fostering collaboration between schools and communities in order to provide students with learning experiences that prepare them for lives beyond high school;
- *Assessment*—providing a variety of assessment opportunities for students that emphasize the value of on-going formative assessment to promote student mastery and continuous improvement;
- *Welcoming, Caring, Respectful & Safe*—respecting students as individuals, valuing student voice, and setting high expectations for student and teacher interactions.

These foundational principles are diverse in their areas of focus, yet unique in their school implementations and subsequent reforms. Participating schools are encouraged to implement these principles in as many forms as possible that meet the unique context of the school, and to report annually on how these structures are at work (Alberta Education, 2015b). Therefore, putting these principles into practice requires careful consideration of

how it is that these school environments are personalized to the students at each school site.

Because the foundational research into the relationships between personalized learning and reforms such as High School Redesign is relatively new; questions remain as to the impact of personalization for learners. Alberta Education (2015a) officials state that schools have a responsibility to ensure *all* students meet the “high school completion requirements and are prepared for entry into the work place or post-secondary studies” (p. 13). What previous research into high school reform and personalization has lacked, is an assessment of how students perceive personalized reforms—like the Foundational Principles of High School Redesign—to impact them as diverse learners.

If the 21st Century high school plays host to a variety of learners, then the personalized structures associated with high school reform should ensure *all* learners experience some degree of benefit. Further, if projects such as High School Redesign are to be successful and measured, careful consideration is required about how flexible learning and personalization is or is not improving teaching and learning. Accordingly, further inquiry is necessary into the practices and policies that are contributing to successful academic outcomes in high schools under reforms of this nature. The progression of personalized learning in Alberta (see above) provides a great deal of evidence for the important work occurring between educational stakeholders at the provincial and school level over the past two decades.

The Purpose of the Study

This study explored the conditions and characteristics of the personalized reform initiative, High School Redesign. This was accomplished through examining the

personalized learning experiences of diverse learners attending schools participating in the Alberta Education (2014b) High School Redesign project. More specifically, this study delved into students' understandings of how these reformed school environments positively or negatively impacted their perceptions of success.

Throughout the research process careful consideration was made to the contributions of personalized learning environments towards (1) student relationships with adults and peers in the various Redesign contexts, (2) student engagement with their studies, and (3) the initiatives implemented at schools that served to effectively enable students to pursue their preferred goals beyond high school. In doing so, this research study aligned with the axioms of A. Hargreaves and Fullan (2012) in collecting evidence that inquired into effective practices, identified reasons for difficulties and successes, and analyzed how this evidence informs future practices.

Like with most educational decisions, careful reflection and assessment of the effectiveness of a reform at the school, local, and governing level is an important part of determining success (Corbett & Wilson, 1995). The qualitative data gained from interviews with students attending these schools was utilized to inform that nature of the student experience in personalized High School Redesign schools. Examining the data of diverse students and their experiences with High School Redesign served to identify the positive and negative attributes of personalized Redesign, and how they can be further leveraged to the benefit of other high schools.

The process of structuring high schools to suit the needs of all students continues to present challenges. Therefore, considering how and why these types of personalized reforms are implemented, and how they benefit diverse high school learners is crucial to

sustaining successes and scaling learnings to other high school contexts. The results and analysis of this study serve the students, teachers, community, and jurisdictions within which the research has taken place by illuminating explanations for the strengths and challenges for future cycles of Redesign.

Context

Over the past three years, I served as a lead teacher in a high school taking part in the Alberta Education High School Redesign Project. This school, like many schools across the province, elected to implement flexible timetabling and scheduling as an introductory step toward personalizing the learning environment for students. To implement the flexible aims of High School Redesign, a block of time was inserted into the daily timetable during which students were able to expand their learner portfolios, develop career and academic planning, work on unique cross curricular projects, and/or participate in extra-curricular opportunities.

During this flexible time, each heterogeneous group of students is placed with a teacher they are accountable to for their use of this time. Over the past two years at my school, I have come to understand the substantial impacts that flexible and personalized learning structures are capable of having on students' successes, both in and beyond the classroom context. I have experienced how providing students with increased agency over their academic needs—through flexible scheduling or flexible learning time—can lead to improved relationships and increased academic engagement. Therefore, I agree with Fijal's (2013) assertion that High School Redesign is personalizing the school environment by empowering students to take ownership for their learning.

To further my understanding surrounding the implementation and success of personalized learning environments, I began by collecting and analyzing some informal qualitative and quantitative data from students and parents in the local school community. I collected this data through anonymous and optional online surveys that were emailed to all school parents and students. These surveys had a series of questions that focused on student and parent opinions about the flexible timetable. Subsequent survey results were used to determine whether stakeholders believed the newly structured timetable had positive or negative effects on student-student relationships, student-teacher relationships, student workload, student academic performance, and student efficacy. As described by A. Hargreaves and Fullan (2012), the purpose of this data was to develop a sufficient body of internally collected evidence in order to assess the successes and difficulties associated with personalized learning and through analysis come up with interventions and conclusions as a result.

The results of the data indicated a clear message from students of the school. Students espoused their sense of empowerment when they were provided ownership of their academic pursuits. Furthermore, teachers, parents, and other educational stakeholders in the community conveyed the importance of providing students with personalized learning time so each student could make conscious choices for his or her learning needs. The data also indicated positive responses surrounding improved relationships between students and their peers, as well as between students and their teachers. In addition, students communicated that they felt greater ownership of their preferred futures and a reduced level of anxiety regarding their academic achievement. Although there is still a lack of evidence as to whether the implementation of this

particular personalized environment has provided increased academic success for a full cycle of graduates from the school, I believe the data from this one school may inform how personalized learning environments of this nature can provide students with the ability to effectively pursue their preferred future goals.

My experiences as an educator within an Alberta High School Redesign school have led me to understand that embracing the notion of personalized learning means seeking to aid students in preparing for these futures. However, my experience with flexible timetabling is but one of many adaptations of High School Redesign across the province, and only one of the many possible personalized learning environments that high school students could be a part of. Regardless of the personalized structures in place, it is necessary to provide students with learning environments that meet diverse student needs as the role of high schools becomes increasingly centered around preparing students for their futures (Government of Alberta, 2015). Therefore, I undertook my next stage of research, seeking to investigate the fundamental benefits and/or drawbacks of personalization and its associated reform initiatives. As the researcher, I hoped to not only examine whether these successes are beneficial to diverse learners, but to reveal deeper qualitative data conveying the *ways* in which students' have experienced personalized learning environments. It was my hope that the results of this study provided readers with information that enables reasoned conclusions surrounding the factors that influence the effects of personalized learning environments.

Key Terms and Constructs

A key term that was used in this study, *personalization*, also has associated notions of personalized learning, personalized learning structures, and personalized

learning environments. Alberta Education documents (2009a) referred to personalization in a variety of ways, including “differentiated instruction, personalized instruction, personalized education, and adaptive pedagogy” (Alberta Education, 2009a, p. 38). Alberta Education (2014b) further described personalized learning as implementing conscious instructional design based on every student’s unique developmental level, learning style, passions, skills, and foundational knowledge based on ongoing, differentiated assessment, and meaningful relationships between students and staff. Similarly, Keefe and Jenkins (2000) defined personalized education as a “systematic effort by a school to take into account individual student characteristics as effective instructional practices in organizing the learning environment” (p. 35). The environments described throughout the literature as being personalized, both past and present (Keefe & Jenkins, 2000), are common with a *student-centered* view of teaching and learning. When the concept of student-centered ideals of personalization is integrated with instructional design, it is described as a *personalized learning structure*. In general, these personalized learning structures referred to throughout the literature (Alberta Education, 2009a) and subsequent study can best be described as conscious choices of instructional design by schools or groups of schools to foster the desired outcomes of personalized learning. These choices may be structural, such as those regarding the nature of student-groups, descriptions of teacher roles, and changes to timetables. They may also be instructional choices, such as cross-curricular projects, dual-credit opportunities in conjunction with future career pathways, or other individualized accommodations that personalize the nature of daily learning for students.

The concept of personalized learning and its associated structures is also closely linked with the Alberta Education (2014b) description of *Flexible Learning Environments*, in which the learning environment adapts to student requirements and choices regarding time and structure of learning. A high school that chooses to participate in the Alberta High School Redesign Project must commit to creating flexible learning environments that can be used to support student engagement in learning, improved student achievement, and enhance teaching.

There are also important links between students as individual learners and the concept of *experiential learning*. Experiential learning implies that students learn best through actively applying their learning and when those learning experiences are aligned with their individuality (Dewey, 1938). Therefore, this study moved forward with a framework for personalization that described each learner as having diverse learning needs and diverse learning preferences that are important factors in their experience of learning.

Chapter Two: Literature Review

Rhetoric around the notion of *personalized learning* as a hallmark of 21st century school reform is becoming increasingly common in educational discourse throughout many regions of Canada. Yet, the notion that schools, schooling, and pedagogy should attend equally to the learner and the content has been explored and practiced since the infancy of formalized education in Canada. Since the early 20th century, multiple iterations of personalized learning have been implemented in schools and, although such movements have been variously referred to as experiential learning or differentiated learning, these student-centered structures have been well documented. Yet, in several provinces, the idea of differentiation and individualization is viewed as novel, and the re-design of curricula is being undertaken as a dramatic shift.

In fact, personalized learning originated prior to the formalized school movement in the early 20th century, and residual structures and approaches remain from those applied in the early 1900s. This chapter outlines a chronology of some key societal factors, authors, and iterations of the personalized learning movement. As an historical retrospective, it provides context for the contemporary view of personalized learning and, in doing so, situates the personalized learning movement as one of many longstanding ideas and approaches that have presented themselves throughout educational history.

The Development of Modern High Schools: A Chronology

Since the development of modern education—from Comenius to Rousseau through Pestalozzi and Frobel—there have been consistent attempts to understand knowledge as dynamic, and education as personal growth where learners are partners in the learning process (Keefe & Jenkins, 2000). The dialogue surrounding *personalized*

learning and school reform has presented itself in theory and practice since the beginnings of formalized education. From the early 20th century onward there have been multiple iterations of personalized learning structures. Although these movements have often taken on different names, such as experiential learning or differentiated learning, these student-centered learning structures have been explored and documented for over a century. Keefe and Jenkins (2000) connected “child-centered, humanistic, individualized, or personalized approaches to instruction” with the placement of student learning at the center of educational purpose and design. The successes and failures of student-centered education both historically and in modern day, have shaped what we believe effective education is today.

Foundations of Personalized Learning: The Early 20th Century

A seminal author in the area of personalized learning was John Dewey (1897, 1938). Dewey is best known for his contributions to the philosophy of pragmatism, which contended that knowledge should be viewed and understood primarily in terms of its application to practical use and experience. Dewey’s (1897) pragmatic understandings regarding knowledge are what led him to suggest that education should be conceived as a continuing reconstruction of experience where the education of a student “means to give him command of himself; it means to train him that he will have the full and ready use of all his capacities” (p. 78). Dewey’s (1897, 1938) educational beliefs can also be attributed to the combination of Dewey’s pragmatistic nature with his reading of the early educational writings of Rousseau.

While Dewey does not explicitly describe his beliefs as personalized education, two very important characteristics about his educational philosophies carry weighted

links to personalized learning. Dewey and Dewey (1915) believed wholeheartedly that “each child has a strong individuality. Every pupil must have a chance to show what he truly is, so that the teacher can find out what he needs” (p. 101). It is when school structures embrace the notion of learner individuality, that students’ “have the necessary knowledge and intelligence to make the right choices and to direct their efforts towards getting the required skills to accommodate that choice” (Dewey & Dewey, 1915, p. 224). Dewey’s beliefs in the value of experience to the learning process, in conjunction with his frequent descriptions of pupils as individuals, seem to come together to inform modern day definitions of personalized learning. As such, Dewey (1938) asserted that educational institutions were responsible for “understanding the needs and capacities of the individuals who are learning at a given time. There must be a reason for thinking that materials and methods will function in generating an experience that has educative quality with particular individuals” (pp. 45-46).

Building upon his philosophies of education, Dewey began putting into practice his conceptions of effective learning environments. In 1896, John Dewey and University of Chicago President William R. Harper opened the doors of the *Dewey School*, with twelve students and one teacher (Knoll, 2014). Keefe and Jenkins (2000) described this experimental school as one that developed students’ minds through project-oriented instruction that was not segmented into units of time. It was at this time that Dewey expected these experimental schools to lay the “foundation for a reform which would revolutionize the educational system and, over time, transform society” (Knoll, 2014, p. 455).

Based on Dewey's philosophies, a variety of innovative schools were established that have implications for what might be deemed to be a personalized learning structure. Knoll (2014) described these early iterations of Dewey's schools as among the most creative and progressive of the time. He explained how the "Dewey School contributed considerably to the liberalization of education, the humanization of schooling, and the vitalization of teaching" (p. 457). Finkelstein (1983) also heralded these schools' contributions to personalized learning, describing them as bastions of freethinking and instruments of liberation. They were places where students were empowered to take responsibility for their own educational experience and encouraged to "express themselves communally and individually, to cultivate as well as absorb aesthetic pleasure, to sustain moral commitments, harmonize tradition, and engage the world critically" (Finkelstein, 1983, p. 105).

Another of the most documented personalized learning schools of the time was the Summerhill School in Suffolk England, which was founded by Alexander Sutherland Neill in 1921. The school was characterized as a democratic community, where students had equal say in their educational setting, pathways, assessment, and overall governance (Neill, 1973). Neill's writing frequently echoed Dewey's student-centric values of learning, with the belief that students' individuality should be mirrored in their educational structures. He viewed children as "innately wise and realistic" (p. 7). In this school, children had a voice equal in authority to that of teachers and other adults. Neill contended that although children are less knowledgeable than teachers and other adults by virtue of their levels of experience, their individuality is no less valuable (Neill, 1973).

In the years following the founding of Summerhill, the school and its practices came under criticism for its policy of non-compulsory lessons and lack of academic rigour. In the forward to the Neill (1973) text, *Summerhill: A Radical Approach to Child Rearing*, educational psychologist Erich Fromm synthesized the most common criticism of Summerhill, that it “underestimates the importance and authenticity of intellect” (p. 8). Rafferty, an opinion essay author as part of the Neill (1973) Summerhill text, believed that Summerhill degraded the true purpose of schooling and that it was simply a caricature of education. Likewise, Hobson (2001) suggested that Neill’s belief that learning should have immediate pragmatic relevance to children led to Neill’s misunderstanding that books and other knowledge were of little importance to learning and development. In another essay in the 1973 Summerhill text that summarized the challenging interplay between the formal and informal pedagogy of education, Goodman (in Neill, 1973) referred to the distinction between the incidental learning that children glean from experiencing life, and the learning that is obtained through direct pedagogy. Goodman contended there needed to be a place for both, and that formal teaching was necessary to convey the abstract, intangible, and the mysterious aspects of education (Neill, 1973).

Reaction to the lack of formal learning emphasized at Summerhill and other similar schools created public pressure to deliver what many call the *fundamental basic skills* in education—reading, writing, and arithmetic. These societal pressures dampened some of the more liberal ideals of innovators such as Dewey and Neill, further changing the nature of many personalized and experiential institutions of the time. Knoll (2014) described that, in Dewey’s case, after the “chaotic beginnings and fruitless experiments,

the teachers returned to more conventional patterns and procedures so that ultimately the Laboratory School differed – in practice, not in theory – surprisingly little from other emerging schools” (p. 456).

Although these liberal approaches to education may have been controversial at the time, their links to the personalized learning movement of today are still recognizable. After a visit to Summerhill in March of 2003, Cassebaum (2003) pointed out that the use of rigid educational structures are often used to control the learning of students, and if so, we are “working against the building of a community of independent learners” (p. 578). She posited that Summerhill and schools of its type illustrate how, to truly value students as individuals, educational structures must seek to develop a learning community where students have increased voice in their educational needs, increased control of how that learning will take place, and a reduced focus on common assessment as a measurement for success (Cassebaum, 2003).

Despite the multitude of movements towards personalized learning by Dewey and his followers, the nature and purpose of education began to shift in the following years, amid a drastically rising student enrollment. Entering the 1930s the pragmatism subscribed to by educators such as Dewey and Neill ironically became a driving factor for a movement away from personalized and experiential instruction. To explain this shift, Goodlad (1997) provided a historically-informed perspective on how schools struggle between the private ambitions of societies and schools by “mirror[ing] society... not drive[ing] it” (p. 17). This reality offers further understanding of how schools in the mid 20th Century began to be “torn apart by the interaction of a multiplicity of private expectations” (Goodlad, 1997, p. 113).

The Factory Model of Schooling: The Mid 20th Century

Following World War I, there was a shift in the demographics of education in Western countries. Between the 1880s and 1940s, generations of children in English Canada encountered a school system where principles and practices, customary assumptions, and institutional structures were profoundly different than they are today (Gidney & Millar, 2012). Schools transitioned from being an option for some, to becoming a requirement for all (Wotherspoon, 2014). The development of formalized education amid a population boom also increased the complexity of schools. The Canadian population nearly doubled from 5,371,000 in 1901 to 10,367,000 by 1931 (Gidney & Millar, 2012). This translated to what Gidney and Millar (2012) described as “startling growth rates... between 1916 and 1936 in secondary education, while Alberta’s total enrolments increased by 66%, high school enrolments grew by 410%, from 5,700 to 29,300 students” (p. 30). This was mirrored in the United States, where “secondary school enrollments grew from 630,048 in 1900 to 4,740,580 in 1930, an increase of 652 percent, or more than ten times the rate of growth in population” (Newman, 1995, p. 6). These strong commonalities are what lead the OECD (2011) to claim that the “thumbnail history of Canadian educational reform in the post-war period shares much in common with the United States and the rest of the industrialized world” (p. 67).

The requirement of educating previously unseen numbers of students meant that experiential and student-centered methods of teaching and learning were challenging to implement. By the early 1930s, many parents and teachers were disillusioned with progressive education and the ideals of mass produced education began to gain favor (Petrina, 2004). Toffler (1970) described how the “mass public educational institutions”

of the time, along with the exponentially growing workforce, resulted in the development of larger scale “standardized educational packages” (p. 140). These standard packages exemplified the factory model schools of this era that served the need to quickly educate a skilled and increasingly specialized workforce for the later half of the 20th Century (Darling-Hammond & Friedlaender, 2008). Thus, large and mass-produced secondary schools were a standard fixture among most cities in North America.

Some historians (Galbraith, 1967; Sizer, 1984) suggested that the key drivers for any educational movement are societal needs of the time. This often means that education is required to resolve the tensions between economic factors and the future of student learning (Goodlad, 1997). For example, the 21st Century educational structures of today are attempting to adapt to a highly professionalized and specialized workforce, unforeseen technological advancements, and increased global competition (Alberta Education, 2009b). In the World War and Post World War eras, educational structures served a vastly different societal purpose. Gatto (2009) described the schools of 1950s as a “servant of corporate America—where schools became one of the largest corporations of them all” (p. 53). This shift may be attributed to the economic boom across the Western World, which demanded a great number of skilled workers (Toffler, 1970). In Canada, Wotherspoon (2014) asserted that “while the historical evidence indicates that schools were not established simply to meet employers’ demands of a compliant industrial workforce, industry doubtless affected the rise of public schooling in significant ways” (p. 71). As educational structures attempted to respond to these societal mandates the nature of schools changed. Pragmatism took hold of educational structures,

which rationalized conformity of schooling. This brought about “dumbed down curriculum” and standardized testing as a norm (Gatto, 2009, p. 199).

From the post WWII era up to the late 20th Century, schools in most regions of Canada were centrally organized as bureaucratic structures within larger school units (Wotherspoon, 2014). Gatto (2009) suggested ‘mass education’ in Western Civilization aimed to increase equality of educational access. However, he contended that the post-war educational era accomplished just the opposite by “sharply dividing students from one another in rigid class divisions justified by standardized testing” (Gatto, 2009, p. 200). Galbraith (1967) similarly characterized education at the same time in the United States as “the difference which divides” (p. 246). Toffler’s (1970) description of the education born of the industrial era effectively summarized these factory schools of the 1950s and 1960s:

The inner life of the school thus became an anticipatory mirror, a perfect introduction to industrial society. The most criticized features of education today—the regimentation, lack of individualization, the rigid systems of seating, grouping, grading and marking, the authoritarian role of the teacher—are precisely those that made mass public education so effective an instrument of adaptation for its place and time. (p. 204)

The Open Education Movement: The 1970s

Although the factory model of schooling characterized a majority of schools in the 20th Century, a few individualized school reforms emerged in the late 1960s and 1970s. Globalization and the arrival of the knowledge economy increased the importance of school as an instrument of economic competitiveness (OECD, 2011). Wotherspoon

(2014) described how “three interrelated developments—the Cold War, scientific and technical advancement, and the growth of the welfare state—had a profound impact on schooling in Canada” (p. 79). These factors increased focus on the effectiveness of high school education in North America, bringing public scrutiny to the initiatives, results, and reforms in place (Connant, 1959).

An increasingly urbanized population in Canada meant that schools in larger city centers became “lighthouses for everything up-to-date in Canadian education” (Gidney & Millar, 2012, p. 7). In addition, the strong economic growth in the 1950s and 1960s led to rapidly increased educational spending leading up to the 1970s (OECD, 2011). This resulted in an increased demand for teachers, increases in teacher wages, and increased professionalization of teaching (OECD, 2011). Teachers were given more autonomy over what and how to teach, while the inspection functions of provincial ministries were delimited or eliminated (OECD, 2011). In Alberta, some schools in the 1960s and early 1970s returned to progressive practices such as non-graded classrooms, individualized progress, and integrated programs of study that were outlined later in the *Worth Report* (Government of Alberta, 1972). The resulting spirit of change embodied in child-centered learning opportunities with flexible learning environments translated into a flurry of restructured Canadian schools (Wotherspoon, 2014).

One of the more documented reform initiatives of the 1970s was the development of flexible learning environments that were most often described as *open education* schools. Maling (1990) described the most fundamental characteristic of the open education movement as its view of students as active participants in the learning process.

She described open education schools as those that treat knowledge as interdisciplinary and where a “student can explore his or her world” (Maling, 1990, p. 19).

Langberg (1983) identified one of the more notable success stories of the open education movement at Jefferson County Open High School in Colorado. The Jefferson County program was carefully developed with clear expectations for students, but also provided students the freedom to learn in a variety of individualized ways. However, not all open education schools at the time were as successful, despite similar instructional goals and approaches. Doremus (1981) wrote about the issues that caused John Adams High School in Portland, Oregon to be closed. He outlined how the individualized learning values subscribed to by John Adams were not accompanied by the necessary structures and school leadership capacity throughout the change process. Parents of students at this school felt as though their students were being experimented on, and the academic rigour of the program was called into question (Doremus, 1981). Similar to the lack of accountability experienced by the early reforms of Dewey and Neill, these types of schools moved away from these progressive education structures towards a more conventional approach.

Another reform initiative of the time that was similar to the open education movement was the development of flexible modular scheduling, primarily introduced by Trump (1959). Trump called for schools to implement flexible instructional strategies for how the school day was used, based on the academic needs of individual students. Canaday and Rettig (1995) described flexible block scheduling as a way to vary the time allocation of subject study based on students’ individual needs and the requirements of the subject matter.

Ultimately, flexible educational movements of this nature were not influential enough to become transformational for education in the late 20th Century. In the case of open education, Maling (1990) asserted that a lack of clear defined goals and outcomes provided critics the opportunity to contend that such movements were purely a grouping of schools claiming they believed in the concept of open education. The flexible scheduling movements of the time were criticized for similar ambiguities. Canaday and Rettig (1995) outlined the issues associated with the amount of time that was not scheduled for students in flexible timetable schools, with upwards of 30% of the school day being “unscheduled student time to be used for independent study” (p. 14). The lack of academic success and discipline issues that resulted from those students who were not capable of managing this time effectively led to the substantial criticism of the flexible modular schedule (Canaday & Rettig, 1995).

Vague definitions and concerns about academic success of students within the more flexible models of education in the 1970s spurred a substantial amount of research into their effectiveness (Newport, 1980); the results of which were varied and inconclusive (Marshall, 1981). Wotherspoon (2014) described similar results among student-centered movements in Canada where “traditionalists pointed to the chaos, wasted time, and lack of tangible results as evidence that educational liberalization was a drastic failure, which provoked demands for a centralized curricula with a ‘back to basics’ emphasis” (p. 86). Likewise, Taylor (2001) outlined how a “similar shift occurred in Britain in the 1960s and 1970s as progressive ideas and methods were linked to problems with students achievement by conservative critics” (p. 22).

The lack of concrete results for student achievement meant that proponents of open education, flexible block scheduling, and other similar reforms were left without proof of their evidence of effectiveness, thus unable to support continuation of a majority of programs. Most schools returned to the standardized and conventional methods in the years to follow. This is evidenced in Alberta by the issuing of the *Harder Report* (Alberta Education, 1977) that ushered in a ‘back-to-basics’ movement which returned education to a homogeneously structured approach.

The Necessity of Reform: The Second Half of the 20th Century

Earlier rapid economic growth in the post-war era gave way to hard economic times in the 1970s, and the final three decades of the 20th century saw Canadian education systems seeking ways to cut costs while increasing educational outcomes (OECD, 2011). This resulted in secondary schools looking more like educational *factories* geared towards efficiency for the remainder of the 20th Century (Wotherspoon, 2014). Sizer (1984) described the large secondary schools of the time as “academic supermarkets” in which students picked up small bits of knowledge “in an organized and predictable way, the faster the better” (p. 80). He characterized schools of this period as valuing isolated subject work, accumulated credits toward graduation, rigid school days and hours, and passive student learning. In the United States, in particular, these “accumulated credits” became entrenched into federal data systems for the purpose of funding and accountability in the late 1960s and became known as Carnegie Units (Shedd, 2003).

The *Carnegie Unit* credit hour was developed by the Carnegie Education Foundation in 1906 to support a growing view that schools needed a common structure

for instructional hours in order to provide adequate rigour in all subjects (Shedd, 2003). This unit is best described as a standardized amount of time required for each subject of study. For example, throughout the late 20th and early 21st century in Alberta, students were required to spend 25 instructional hours on a subject to obtain one *unit* of credit in that course (Alberta Education, 2009a). In Alberta, rather than Carnegie Units, these credits were referred to as *Credit Earned Units* (CEU's). This concept of a certain number of hours attached to student-accumulated credits was merely an adapted version of the Carnegie Unit (Alberta Education, 2009a). Therefore, the arguments both for and against these units of measurement can be extended to the Alberta context of CEU's as well.

Credits in the high school context became one of the measuring devices for the public to account for the efficiency of schools amid an explosion of enrollments and the desire to ensure that all students learned to a common standard (Shedd, 2003). However, credits quickly gained a reputation as an ineffective accountability measure for schools. Hamilton (1966) suggested that, while the Carnegie Unit may have served a purpose amid the rapid development of secondary schools in the early 20th Century, it described very little about the experience of students and was an ineffective predictor of past, present, of future learner success.

Conversations about the Carnegie Unit are also relevant to the Alberta Education (2014b) High School Redesign project. In fact, the driving motivation for implementing the redesign initiative was “in response to expressed interests by educational stakeholders to examine the time requirement attached to high school credits and instruction” (p. 6). Until the recent adoption of projects such as High School Redesign, criticisms of the

Carnegie Unit had been pushed aside in favor of the quantifiable measures that credits provided the educational stakeholders. For the vast majority of the remaining 20th century, factory model schooling described the nature of most high schools. There was a view that ‘good schools’ were those that graduated the most students with the most credits and the highest standardized testing data. Wotherspoon (2014) described how the modern industry of the mid-to-late 20th century provided models of classroom management oriented to educational efficiency in attaining these ‘good school’ characteristics. The attribution of these efficiency measures to effective schooling became what many scholars of today deemed the *Scientific Management* of education (Rees, 2001; Wotherspoon, 2014).

Scientific Management as a theory was developed by Frederick Taylor at the end of the Industrial Revolution to increase the output of American factories by thoughtfully organizing labour to increase productivity. After Taylor’s death in 1914, scientific management was applied to societal efficiency and spread throughout the world as a best practice (Rees, 2001). The focus on standardized testing and credit attainment in schools as a measure of efficiency is what Rees (2001) claimed to have led to the phenomenon of “teaching to the test—i.e. teaching students how to fill in the greatest number of correct bubbles, and precious little else—regardless of whether such a skill is applicable to situations outside the testing environment” (p. 2). This *Taylorization* of education had long lasting impacts on how schools structured their timetables, taught lessons, and accommodated for the individuality of learners (Rees, 2001). It follows that, if a school’s life or death depends on standardized testing data, the school will place increased focus

on the subjects that are tested and minimize the worth of subjects that are not (Rees, 2001).

Canada has long had provincial curriculum-based examinations at the end of high school (Levin, 1997). These exams serve as an accountability function in Canadian provinces (Taylor, 2001). With a continued emphasis on educational efficiency and accountability in the late 20th century, many Canadian provinces increased exam requirements, including more subjects, and giving them more weight in students' overall evaluations (Levin, 1997). In Alberta, standardized testing was and continues to be a focus of secondary schools across the province with the writing of grade 9 Provincial Achievement Tests (PATs) and grade 12 diploma examinations (Alberta Education, 2016). That said, the provincial autonomy over education and its associated funding has recently reduced the emphasis on standardized testing compared to the United States (OECD, 2011).

The Necessity of Reform: The End of the 20th Century

The focus on accountability measures of standardized testing, credit attainment, and graduation rates as a measuring stick for school success only seemed to illuminate the failings of already struggling schools, while celebrating high-functioning schools. In the 1980s, there was evidence to show that secondary schooling had “fallen into disrepair” (Gray, 2002, p. 564). Glasser (1998) described high schools of the 1980s as two very different systems. In the first, both teachers and students function well, filling post-secondary institutions with qualified applicants. In the second, many students drop out before grade 12 and struggle to move forward in a world placing increased emphasis on post-secondary education.

In response to these wide gaps in achievement, a large scale study in the United States was conducted by the National Commission on Excellence in Education (1983) entitled *A Nation at Risk*. The study found a trend in decreased test scores and low functional literacy rates across the country. It described how “the educational foundations of our society were being eroded by a rising tide of mediocrity that threatens our very future” (p. 3). These struggles were especially evident in large cities in the United States, where drop out rates often exceeded 40% (Lunenburg, 1992). Results revealed in *A Nation at Risk* became a turning point in educational perspectives of the time and also led to the publication of several books portraying the current state of the American high school (Goodlad, 1984; Sizer, 1984, 1992). As a consequence, a clarion call came about for numerous reforms primarily geared to high schools (Zepeda & Mayers, 2006).

As education in the late 20th Century came to a close, the *Factory Model* became exposed for its intrinsic issues of classism exacerbated through standardized testing (Gatto, 2009). This is evidenced by Wotherspoon’s (2014) description of the demand for reform in Canada coming from a general sense among educational stakeholders that the country was “receiving poor returns on its educational investments” as signified by its rankings on the international stage (p. 301). The progressive educational psychologist, Sidney Pressey, succinctly outlined the impending requirements of personalized education reform in 1932:

Education is a large-scale industry; it should use quantity production methods.

This does not mean, in any unfortunate sense, the mechanization of education. It does mean freeing [teachers] from the drudgeries of [their] work so that [they] may do more real teaching, giving the [students] more adequate guidance in

[their] learning. There may well be an ‘industrial revolution’ in education. The ultimate results should be highly beneficial. Perhaps only by such means can universal education be made effective. (p. 47)

Pressey was well ahead of his time in the assertion that development of large-scale education does not necessarily translate into development of mass-produced and standardized education.

With exposure of issues with the factory model, greater value was placed on the ‘experimental’ methods of Dewey, Neill, and the open education movements of the 1970s. One of the most influential educational theorists of the time, David A. Kolb, drew on the early learning models of Lewin, Dewey, and Piaget to develop his *Experiential Learning Model* (Kolb, 1984). He defined learning as a “process whereby knowledge is created through the transformation of experience” (p. 38). Perhaps influenced by the opposite side of the pendulum—observing both the early schools of Dewey and the factory models in place at the time—Kolb believed that experiential learning requires an understanding of the nature of knowledge and, to effectively develop conceptual understanding, a knowledge base must first exist. He concluded that the two most important defining characteristics of experiential learning are (1) emphasizing the process of adaptation and learning rather than outcomes, and (2) understanding that “knowledge is a transformation process, being continuously created and recreated, not an independent entity to be acquired or transmitted” (Kolb, 1984, p. 38). The models outlined by Kolb are still relevant in today’s schools as they continue to merge the two conflicting ideas of mandated curriculum with student-centered practices. Kolb’s experiential learning model foreshadowed the direction of reform in the late 20th and early 21st Century. He described

schools that embrace student-teacher relationships, and interactive learning as truly personalized (Kolb, 1984). Schools that are rooted in the experiential learning theories of Kolb are those in which “intellectually transformative experiences encourage students to use their minds...[where the] production of high-quality and intellectually powerful work [leads to] a new level of involvement and sense of expertise” (Ancess, 2008, p. 30).

Modern High School Reform: The Late 20th Century and 21st Century

In the early 1990s, high school reform initiatives began to be presented as a viable next step in North America. In Alberta, the increased role of centralized accountability measures was accompanied by more school-level control over a ‘tight-loose’ philosophy of school improvement (OECD, 2011). An example of this in Alberta was the founding of the *Alberta Initiative for School Improvement* (AISI); designed to provide school authorities with the ability to address unique needs within their jurisdiction and at specific schools.

Lunenburg (1992) claimed that the primary successes of early North American school reforms were due to their nature as local initiatives at specific school sites, rather than widespread top-down mandates. Initiatives of this nature could be tailored to the needs of the specific schools and students, but most initiatives were common in their approach to reform as providing high quality teaching and learning that ensured the success for diverse students “based on measurements other than standardized test scores” (Lunenburg, 1992, p. 8). A few years into reform, participating schools reported positive results in the areas of decreased dropout rates, increased attendance, higher academic achievement, and fewer discipline problems (Sizer, 1992). In the wake of these preliminary successes, commonalities of high school reform initiatives were noted.

Responding to students' personalized learning needs and their success beyond high school, many of these initiatives focused on students working collaboratively to develop mastery learning of interesting and important content through experiential learning within a flexible learning environment and timetable (Lunenburg, 1992). Governing bodies such as Alberta Education (2009b, 2014b) aligned with the descriptions outlined by Lunenburg (1992), in seeking to develop the skills beyond the minute details of curricular rigour, in favor of giving students a personalized and self-actualized learning experience.

Following other introductory reform initiatives came the initiation of the *No Child Left Behind Act* (NCLB) in 2001, which was a national movement in the United States seeking to close the achievement gap associated with race and class (Darling-Hammond, 2006). However, while this reform sought to improve the metric of High School completion, some key provisions of the NCLB—primarily issues related to increased frequency of standardized testing—were at odds with the successful personalized nature of early high school reform models (Darling-Hammond, 2006). The two conflicting ideals of standardized assessment and individuality have now led to the recently implemented *Every Student Succeeds Act* in the United States. The new Act aims to replace the “one-size-fits all” approach of the NCLB in favor of a commitment to provide each student with a well rounded—personalized—education (Hirschfeld-Davis, 2015).

These widespread government reforms were not limited to the NCLB in the United States. Levin (1997) suggested that governments in Canada, the United States, England, and New Zealand appear to have based many of their modern educational reforms on similar results and similar ideals for implementation. OECD (2011) outlined how new educational strategies in Canada looked to “develop higher levels of trust,

generating more energy for continued improvement” (p. 68). For example, in 2003 the Ontario Ministry of Education took on similar reform goals to that of High School Redesign by enacting The Student Success initiative (OECD, 2011). This initiative looked to personalize the high school experience for students and improve the metric of high school completion in the province of Ontario. Subsequently, this initiative was successful, with high school completion increasing from 68% in 2003 to 79% in 2010 (OECD, 2011).

There are clear student-centered commonalities between early reform initiatives such as NCLB, Every Child Succeeds, Student Success, and High School Redesign. Levin (1997) pointed out that the level of success of these reform initiatives does not rest solely on changes to curriculum and instruction, or changes to school organization and governance. He contended that reform programs need to pay as much attention to what *students* do as to what governing bodies and testing agencies do (Levin, 1997, p. 259).

Quint (2008) described the “twin pillars of reform [as] (1) instructional improvement and (2) structural changes that personalize learning” (p. 66). These pillars are related, given that the practice of implementing personalized learning is a systematic effort on the part of a school to accommodate individual student characteristics through effective instructional practices in organizing the learning environment (Keefe & Jenkins, 2000). In a recent study entitled *Meeting Five Critical Challenges of High School Reform*, Quint (2006) examined reform models across the United States in order to outline transcendent principles for general reform across all high schools. These models were characterized by “combined structural and instructional changes connected by an overarching theory of action, and they share some common features” (Quint, 2008, p.

64). The key findings of Quint (2006, 2008) were that the reform models—appearing in over 2500 schools across the country—all implemented structural changes that personalized and individualized learning. Klonsky and Klonsky (1999) conducted a similar analysis and contended that personalized learning structures arose from students' greater sense for ownership of schooling and the school itself, closely linked to the Darling-Hammond et al. (2002) description of structures that would “substantively influence students' investment in learning by nurturing strong relationships and accountability between students and teachers” (p. 15).

The commonalities among reform initiatives that favor student-centered outcomes have caused continued reforms to restructure large schools “into smaller, more personalized learning communities focused on developing students academically, socially, and emotionally” (Peters, 2011, p. 89). Alberta Education (2009a) officials identify reform models pertinent to the notion of personalized learning as “the America’s Choice Model; the Breaking Ranks Model; the Career Academies Model; the Early College High School Model; the First Things First Model; several Small Schools models; and the Talent Development High School Model” (p. 17). Each exhibits common characteristics of extensive student support through small learning communities to foster meaningful relationships (Alberta Education, 2009a).

Research also indicates that important characteristics of successful reform initiatives are not exclusively about the size and structure of the learning communities, but rather the resulting relationships among the individuals in the schools. Ancess (2008) claimed that the successes of models of this nature can be attributed to their emphasis on

“community, intellectual and personal engagement, authentic learning and assessment, and trusting relationships among adults and students” (p. 28).

Personalized Learning Structures and Relationships

One of the most common and frequently-referenced themes defining personalization comes from the dedicated efforts of schools and school leadership teams to improve the relationships and connectedness among teachers, students, and the curriculum (Klem & Connell, 2004). This implies that personalization and its associated structures can only be realized when the climate is such that student and teachers value and work towards meaningful relationships (R. A. Cresswell & Rasmussen, 1996). These relationships allow teachers to personalize their approach to student learning by “tak[ing] into account varied experiences, interests, and learning styles” (Klonsky & Klonsky, 1999, p. 40). Ultimately, these relationships combine with personalized learning to create a:

mutual responsibility among teachers, teachers and students, and among students, where teachers are responsible for designing and implementing a curriculum that (a) engages all students, (b) provides opportunities for differentiated teaching and learning that addresses group and individual student needs, and (c) motivates and develops students’ capacities to become independent learners. (Prain et al., 2013, p. 662)

By maintaining personalized structures that foster these relationships, schools establish the vital characteristics of teacher awareness, collaboration, and student visibility (Klonsky & Klonsky, 1999). McClure et al. (2010) described how making more explicit connections between students and their learning environments results in positive

personalized school cultures. These cultures then lead to valuable relationships among teachers and students where fewer students are getting lost (McClure et al., 2010). The coupling can be accomplished by “leveraging these relationships to persuade students to transcend self-imposed limitations, forsake self-defeating habits, and try new problem-solving strategies that increase their chances for success” (Aness, 2008, p. 29).

The R. A. Cresswell and Rasmussen (1996) analysis of effective personalized schools found that students learn best from someone they know well, that teachers teach best when they know their students well, and that “teacher and student productivity will rise when a framework for personalization is in place” (p. 27). Similarly, Wallach et al. (2006) found that the involvement of students in the learning process led to increased rigour in instructional practice and organizational structure. This finding concurred with those of Aness et al. (2007), indicating that caring relationships characterized by teacher support and availability were the greatest predictors in students achieving at higher levels. This implies that student-teacher relationships stem from an understanding that “students benefit from working with adults who know them well and who create an atmosphere of trust [where] students grant teachers the moral authority to make greater demands on them as learners” (Wallach et al., 2006, p. 4).

With such inexorable links between personalization and relationships, there is value in examining the nature of many of these structures of personalization found within Alberta Education’s (2014b) High School Redesign schools. Rather than examining a multitude of small school models—as mentioned already by Alberta Education (2009a) officials—it may be more beneficial to look at the structural choices common to many of these models. Examining the specific implementations of successful reform models,

Ancess (2008) contended that “small size does not make such relationships inevitable—not even probable. Their inevitability depends on a determination to establish and sustain such relationships as a norm of the school's culture” (p. 29).

Quint (2006) looked beyond the size of the learning communities to their characteristics leading to success. Her conclusions indicated that a positive school climate was the necessary initial factor in the success of these small learning communities, where “implementing small learning communities is likely to improve the climate of schools but will not, in and of itself, increase student achievement. It may help to do so, but the studies do not provide conclusive evidence on this point” (p. 16). Quint posited that a climate characterized by students and adults who knew each other created a sense of belonging for students. On the other hand, while Quint (2006) did not specifically address the academic impacts of this increased belonging at the specific sites studied, Klem and Connell (2004) described how, “regardless of the definition, research links higher levels of engagement in school with improved performance” (p. 262).

Eaton and Nelson (2007) outlined how the flexible use of time and structure in conjunction with relationships between students and teachers allows schools to implement strategies to meet the needs of the school community and foster personalization. Many schools across North America have implemented a flexible timetable into the schedule to allow for such personalization (Alberta Education, 2009a, 2014b). Under these flexible schedules, schools can vary the number of hours, days, or other time restraints previously mandated by curricular and credit based reforms (Eaton & Nelson, 2007). One of the most common versions of this flexible time is a commonly scheduled block of time for student advising. Peters (2011) described the effects of this

advisory as providing students the opportunity to be well known by at least one adult in the school context. This offers students “a sense that there is an adult in the school looking out for their well-being” (Quint, 2006, p. 16). Thus, advisory times can leverage the successes of the small school model, even in larger high schools. The relationships between the reforms of advisory, flexible scheduling, and small schools groupings, lead to improved relationships between students and teachers that support the achievement of improved academic outcomes.

While the goal of advisory periods was to increase personalization and the associated relationships in schools, Wallach et al. (2006) found that many students experienced increased personalization in all student-teacher interactions, particularly those within subject classes. In her study, Quint (2006, 2008) found that these small learning communities or advisories do not in themselves boost attendance or achievement for students, but contribute to larger reforms in leading to improved student outcomes. This findings aligns with the multi-faceted foundational principles of the Alberta Education (2014b) High School Redesign Project that leverage personalized and flexible learning along with other student-centered and experiential learning structures. The key learning for implementing these flexible or advisory blocks as part of a personalized learning environment as outlined by Keefe and Jenkins (2000) is to understand that “the purpose of a schedule is to structure and facilitate the school program. In a program committed to personalization, the schedule must facilitate personalized pacing and instruction” (p. 76).

Questions Surrounding Personalized Learning Structures

If the number and direction of school reform cycles of the past century has been any indication, not everyone agrees with the idea of personalization or the associated personalized learning structures. One of the most substantial reasons was because the “antecedents of personalized education—non-graded education, continuous progress education, individualized instruction, individually guided or prescribed education—developed minimal success for students’ academic achievement with a great deal of increased teacher workload” (Keefe & Jenkins, 2000, p. 37).

This assertion is also attended to by Hattie (2009), who disagreed with the experiential constructivist views of Kolb, Dewey, and Neill. He contended that, “constructivism is too often seen in terms of student-centered inquiry learning, problem-based learning, and task-based learning” (p. 26). Hattie (2009) compared the effect sizes of “teachers as activators of learning” versus “teachers as facilitators of learning” (p. 109). His meta-analysis concluded that teacher determined direct-instruction had an effect size of 0.59. This contrasted with the lower effect sizes of elements of personalized learning such as inquiry-based teaching (0.31), smaller class sizes (0.21), individualized instruction (0.20), and problem-based learning (0.15). However, Hattie’s (2009) *Visible Learning* analysis does not measure effect sizes beyond quantitative academic achievement, nor were methodological problems and debates of the meta-data examined (Terhart, 2011). With this in mind, questions still remain surrounding the impacts of personalized learning.

In spite of a lack of evidence of enhanced student achievement, McClure et al. (2010) maintained that these positive relationships are worth the work put into

personalized reform. There is “growing evidence that indicates greater personalization—improved, trusting relationships particularly among teachers and students—are able to raise students’ expectations for themselves and teachers’ expectations for students” (p. 4). But McClure et al. (2010) are still unsure to what extent increasing personalization impacts academic achievement. Gini-Newman and Case (2015) ascribed to the ideals that “in terms of curriculum decision-making, both educators and students have expertise that must be respected” (p. 33). This implies that schools and teachers who subscribe to personalized learning structures will be challenged with balancing student individuality with high quality teaching and learning that results in improved academic achievement for students. Further, as schools move forward investigating the effectiveness of personalized reform, they must decide whether the links between personalization and academic outcomes are of primary importance, and align with the core values of the school.

D. Hargreaves (2005) juxtaposed the previously ascribed factory models of schooling with personalized reform by asserting that personalized learning is the necessary ‘mass customization’ of education. He claimed that personalization of any form means increased student engagement, increasing student responsibility, increased student maturity, and meaningful co-design of learning experiences. With this definition, Hargreaves is similar to many other researchers in focusing on the hidden curriculum pertinent to high schools where the value of personalized learning is attached to things beyond the academically measurable.

In addition to criticisms of the general impact of personalized learning structures, opponents of personalized reform maintain that too many iterations, new projects, and

new programs overlapping from school year to school year impacts teacher workload (Keefe & Jenkins, 2000). To challenges associated with increased workload, Prain et al. (2013) outlined how issues associated with implementing personalized learning environments must be addressed regarding the increased skills required of teachers in conjunction with the diversity of teachers' beliefs regarding scheduling, grouping, and flexibility for students. Similarly, Bryk and Gomez (2008) suggested that the strategy of implementing fast and wide first and fixing problems later has not served educational reform in the past. Rather, they posit that effective reform implementation means carefully analyzing how changes will be linked to outcomes and teacher effectiveness. Without these carefully established links between improved student outcomes and structural changes, "zones of wishful thinking—gaps in understanding, questionable assumptions about causes and effects, and tacit beliefs of the 'and then something good will happen' sort—abound" (Bryk & Gomez, 2008, p. 1).

The Future of Personalized Learning Structures

Although questions remain regarding the impacts of personalization and student achievement, solutions and positive gains offer schools confidence to further examine and pursue personalized learning structures (Kuo, 2010). However, Quint (2006), among others, offered important considerations for future stages of reform.

Quint (2006) contended that the most important lesson for reform is acknowledgment that substantial amounts of time, effort, and energy are required to design and implement an effective program. Accordingly, school leadership teams must understand that it takes time for the effectiveness of reforms to manifest, and that schools should stay on course until they have implemented an initiative long enough and well

enough to judge it fairly (Quint, 2008). In addition, careful evaluations of school reforms do not often lead to dramatic immediate effects, but incremental gains; particularly when building positive relationships (Quint, 2008). This is also confirmed by R. A. Cresswell and Rasmussen (1996), who found that upwards of two years were needed for personalization to grow within some schools.

Personalized learning does not involve another drastic pendulum shift towards student-centered freedom and student-generated curriculum. Nor does it need include the mass marketization of individualistic education or a return to the depersonalized regimes of standardized testing (Prain et al., 2013). It means considering the implications of student individuality in order to understand what Corbett and Wilson (1995) described as the new definitions of student success. Gini-Newman and Case (2015) believed that preparing today's students involves "preparing graduates for a rapidly changing world has as much to do with instilling life long habits of mind such as flexibility, curiosity and perseverance as it does with promoting a new set of abilities" (p. 14). To effectively create the environments that will prepare these students requires personalized learning structures that are clearly defined and investigated. Evaluating program effectiveness by gathering qualitative evidence, while examining the quantitative academic achievement of students, may mitigate against these reforms experiencing the same fate as some individualized reforms of the past.

The Research Question

Alberta Education has sought to create effective personalized learning environments with the implementation of the High School Redesign Project (Alberta Education, 2014b). The intended aims of Redesign align well with past initiatives and

literature, but further inquiry into its effectiveness is necessary. This study provides an introductory look into student perceptions surrounding Redesign. This study founded its qualitative research with the question: What are students' understandings regarding how reformed and personalized school environments have positively or negatively impacted student perceptions of success? Student success is defined within three areas 1) students' key relationships, 2) students' academics, and 3) students' pursuit of goals within and beyond the high school context.

Chapter Three: Methodology

This study explored how students perceive the impact of the personalized learning component of High School Redesign (Alberta Education, 2014b). Accordingly, the research was designed to inquire into students' perceptions of whether, and the ways in which, this initiative has contributed to their relationships with peers, their relationships with teachers, their academic standing, and their pursuit of goals beyond the high school classroom. In order to successfully gather this data, the methodology drew upon students' differentiated experiences. In doing so, the research uncovered students' perceptions by "unpacking [their] individual experiences" of High School Redesign (Savin-Baden & Major, 2012, p. 56).

This chapter outlines the methodology of how the study was conducted, as well as the associated factors such as assumptions, validity, and reliability accompanying the methodology of the research. Overarching the methods in this study was Dewey's (1938) framework of socially constructed knowledge and meaning (as cited in Boydston, 1981). Dewey contended that understanding "is to anticipate together, it is to make a cross-reference which, when acted upon, brings about a partaking in common, inclusive understanding" (as cited in Boydston, 1981, p. 141). This implies that understanding the interactions in which individuals orient their behaviour to an external reality—such as students experiencing High School Redesign—allows the generation of new understandings about both the reality and that individual (Garrison, 1994). Therefore, the systematic collection of student experiences throughout this study provides new knowledge about the perceptions of students' interactions within personalized environments (Neuman, 1997).

Ontological and Epistemological Assumptions

The constructivist paradigm of dialogical meaning-making described by Dewey has associated ontological and epistemological underpinnings of the construction of knowledge and the interpretation of reality and truth. J. W. Cresswell (1994) associated the constructivist paradigm with the ontological assumption that reality is subjective and is unique to participants in a study. He further described the epistemological assumptions associated with qualitative research as a co-constructed understanding between the researcher and the participants (J. W. Cresswell, 1994). These ontological and epistemological assumptions imply that interactions with study participants could uncover students' experiences through a "joint construction of meaning between the researcher and the participant" (Gay & Airasian, 2003, p. 210).

A Phenomenological Approach

Dewey's (1938) adherence to the constructivist paradigm also aligns with the phenomenological approach to research. Building upon Dewey (1938), educational researchers have described phenomenological pedagogy as the process of connecting teaching and curriculum to the individualized interpretations and experiences of students (Greene, 1978; van Manen, 1979). Similarly, Willis (2001) described phenomenological research as an interpretive investigation that seeks to represent a lived-experience. He explained that phenomenological inquiry explores the perceptions of individuals within a specific environment and seeks to describe these experiences and perceptions in as "raw and un-elaborated way as possible" (Willis, 2001, p. 1). van Manen (1979) also outlined how pedagogic thought—such as that reflected in High School Redesign initiatives—relies on a phenomenological analysis of what it is like to live as a young person in that

particular context. The question ‘What is it like?’ is, in fact, one of the key stems that characterizes phenomenological methodology.

Pinar, Reynolds, Slattery, and Taubman (2000) outlined the phenomenological research procedure as a four-step process; these steps guided the methodology of this study. First, an engaging and relevant phenomenon was identified—in this case, High School Redesign (Pinar et al., 2000). Second, the lived experiences of participants relative to the phenomenon were investigated. In this study, these lived experiences of the High School Redesign participants were gathered through participant interviews and focus groups (Pinar et al., 2000). Third, themes and structures arising from participants experiences were reflected upon (Barritt, Beekman, Bleeker, & Mulderij, 1984). Finally, participants’ experiences with the phenomenon are described through the act of writing (van Manen, 1984). By successfully attending to these phases in a qualitative framework, the phenomenon, from a student perspective, of High School Redesign can effectively be explained by bringing common or divergent themes to the surface. These subsequent themes are those that have emerged from student perceptions of their interactions with personalized nature of High School Redesign.

In addition to the four key steps outlined above, Willis (2001) outlined two other necessary components of phenomenological methodology. The first involves a description of the phenomenon by “setting aside the tendencies to analyze or generalize, and rather attempt to contemplate the thing itself” (Willis, 2001). van Manen (1979) described one primary challenge of this type of phenomenological description as seeing through the surface structures of everyday life to eventually get to the “ground structures of common educational phenomena and experiences” (p. 10). To attend to this important

stage of phenomenological research, the genesis of High School Redesign in Alberta, has had described implications for teacher practice and the student experience. Further, the literature review cites research that informs the phenomenon of personalized learning. The second of Willis's (2001) essential components involves describing the individualized lived-experienced of the student participants. In this study, the introductory step of interviewing school principals created a profile for how the phenomenon of High School Redesign has been specifically implemented in the participants' context. This is a relevant component to evaluate and synthesize student perceptions, because it created a picture of the intentions for the Redesign practices within these high schools. This also allowed the multiple contexts examined under the same phenomenological structure of High School Redesign to create a "layered picture... rather like a set of transparencies overlaid on an overhead projector" (Willis, 2001, p. 8).

Willis (2001) described how the thematic analysis of data in a phenomenological study requires research to focus on how the phenomenon is being experienced in a "range of settings and episodes, looking for recurrent themes in its lived-experience" (p. 9). These "different windows of experience" contribute to identifying and naming of essential themes (Willis, 2001, p. 9). By identifying these common themes and characteristics between schools, I am providing an interpretation of High School Redesign that aligns with what Aoki (2005) described as students' *lived curricula*. Thus, the narrative assembled by the common themes pulled from students' lived experiences and perceptions of High School Redesign assemble the main body of this phenomenological research. Subsequently, the associated methods of data collection in

this study aimed to develop “new insights and a new understanding” of personalized learning in Alberta (Gay & Airasian, 2003, p. 174).

Selecting Participants: Sampling

The participants in this study were drawn from schools currently participating in the Alberta High School Redesign Project. Specific schools were short-listed and information was compiled regarding each schools location, socio-economic demographics, brief history, and relationship to the High School Redesign Project.

Based on my previous understanding and communication with teachers and principals at the selected sites, I chose to contact three schools that utilized the flexible timetabling aspect of High School Redesign. These schools were multi-year participants in the High School Redesign Project. This choice was made to ensure that the impacts of the personalized learning structures being researched were truly reflective of the refined and intended iterations of the redesigns in place.

The first step in the research collection process was the completion of introductory interviews with the principals of each school (refer to Figure 1). To collect these interviews, school divisions were first contacted to request participation of specific schools in the study. The schools were then contacted by emailing school principals directly. School division officials and school principals were contacted using the Form Letter for the Recruitment of Study Participants (Appendix A). With the three principals who agreed to participate in the study, times were set for introductory interviews in the first semester of the school year, and principals were sent the Adult Participant Consent Form (Appendix B) to be collected when the interviews took place.

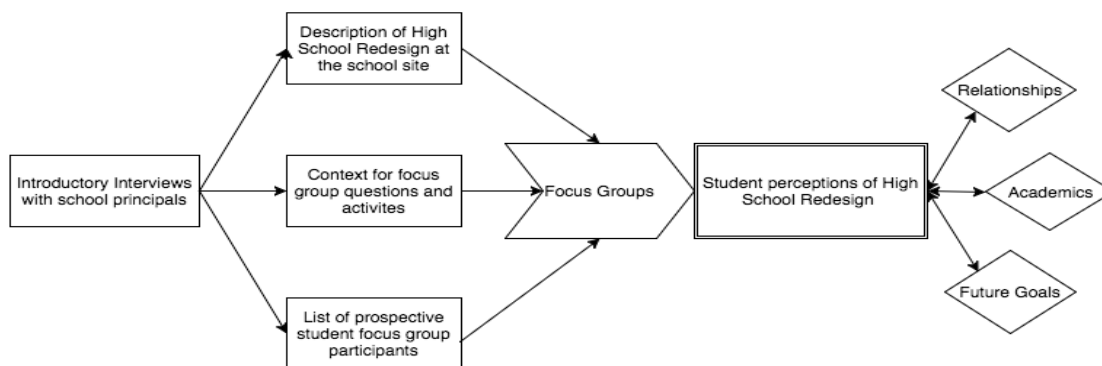


Figure 1. Outline indicating the flow of data collection to analysis stages.

These introductory interviews (1) provided context for the future group student interview data, (2) informed what and how specific themes may be addressed throughout the focus group interviews with students (refer to figure 1), and (3) provided key insights into how school leaders interpret the intended impacts of High School Redesign and how their perceptions as leaders influence choices about the implementation of Redesign.

Following these principal interviews, principals were asked to select students to participate in focus group interviews. The principals assembled five to ten students who were invited to participate in the focus groups. Because of the ethical considerations regarding student privacy, I was unable to make contact with students to overview the study and provide them with the Child Participant Consent/Assent Form (Appendix C). This required the school principal or other administration at the sites to make contact with a group of students and provide them with the form. All principals were asked to ensure the student participants represented the nature of diverse learners at the specific school; students who are looking beyond high school towards an apprenticeship or trades program; and students who intend to move to post-secondary studies at college or university. This purposive sample was requested in order to create a true image of the phenomenon of Redesign at work within each of the schools. With the students chosen by

each school principal, a time was set for conducting the focus groups in the latter half of the academic school year with each school.

All schools consisted of high school populations—grade 9 to 12—ranging from approximately 700 students to almost 1500 students. It should also be noted that these were primarily rural and/or suburban student populations with students of similar socio-economic status and cultural backgrounds. The schools examined were assigned the pseudonyms West High School, East High School, and North High School. Within each of these sets of school data, principals and students were assigned pseudonyms. The principal of West High, is Mr. Wilson, the principal of East High is Mr. Earnest, and the principal of North High is Mr. Nelson. The student focus group participants and their relevant demographic information are provided in the three tables to follow. The interview process with school principals and the focus group interviews with students will be further described.

Table 1

West High School Student Participant Demographics.

<i>Pseudonym</i>	<i>Gender</i>	<i>Grade</i>	<i>Goals/ Interests/ Aspirations</i>
<i>Wendy</i>	Female	12	Academics
<i>Whitney</i>	Female	10	Music and Academics
<i>Wanda</i>	Female	10	Athletics
<i>William</i>	Male	11	Academics
<i>Warren</i>	Male	9	Athletics and Academics

Table 2

North High School Student Participant Demographics.

<i>Pseudonym</i>	<i>Gender</i>	<i>Grade</i>	<i>Goals/ Interests/ Aspirations</i>
<i>Nathan</i>	Male	11	Academics
<i>Naomi</i>	Female	11	Undisclosed
<i>Neil</i>	Male	10	Athletics
<i>Nicole</i>	Female	11	Academics
<i>Nancy</i>	Female	9	Athletics
<i>Natalie</i>	Female	9	Undisclosed
<i>Nolan</i>	Male	11	Arts

Table 3

East High School Student Participant Demographics.

<i>Pseudonym</i>	<i>Gender</i>	<i>Grade</i>	<i>Goals/ Interests/ Aspirations</i>
<i>Ellen</i>	Female	12	Music and Academics
<i>Eric</i>	Male	11	Leadership and Athletics French Immersion Student
<i>Edward</i>	Male	11	Outdoor Education French Immersion Student
<i>Emily</i>	Female	11	Leadership and Athletics
<i>Emma</i>	Female	12	Undisclosed

Reconnaissance Phase: Introductory Interviews with School Principals

To gain understanding of personalized learning structures associated with High School Redesign, it was first necessary to understand the nature of those structures from the school leaders who implemented and/or maintain them. This deeper understanding was achieved through introductory interviews with the participating school principals. The goals for these interviews was to assemble what J. W. Cresswell (1994) defined as a “qualitative narrative” (p. 159). This narrative serves to describe the principals’ understanding of the reforms in place at their schools and the intended outcomes of these reforms. To inform this descriptive narrative, I implemented J.W. Cresswell’s (2012) interview protocol. The protocol utilizes “five open-ended questions that allowed participants maximum flexibility for responding” (J. W. Cresswell, 2012, p. 225). These interview questions are listed in Appendix D. Interviews with principals were recorded and anecdotal notes were taken throughout. These interviews were conducted either over the phone, or in the principal’s office.

The transcripts from principal interviews yielded quotations and insights that created the “qualitative narrative” for each Redesign school (J. W. Cresswell, 1994, p. 218). The principal insights described “the complex process or sequences of social life” at work in the high schools being studied (Neuman, 1997, p. 420). Principal interviews also provided the background necessary to effectively understand the school’s implementations of High School Redesign. This understanding of the schools implementations of Redesign was broadened to include the principals’ perceptions of the effectiveness of Redesign in their respective contexts. The principals were able to speak candidly about how they perceived this initiative to impact student success in the areas of

relationships, goals, and academics. These principal perceptions became valuable data when compared to the subsequent student understandings in the focus groups that followed. In that regard, the principal interviews also became a foundational basis for the nature of the student questioning in the second phase of research with students. By understanding the nature and intention of the personalized reforms in place, I was able to effectively parallel or contrast the student perceptions of the reforms in the second stage of the research—the focus groups with students.

Data Collection: Focus Groups

The second stage of data collection in this study was the participant focus group interviews. J. W. Cresswell (2012) contended that the focus group interview process allows for simultaneous collecting of “shared understandings from several individuals” (p. 218). These focus group interactions sought to facilitate an in-depth exploration into the constructivist mindset outlined by Dewey, who maintained that communication between several individuals serves to effectively develop meaning through cross-referencing and sharing common understandings (as cited in Boydston, 1981). In addition to these common understandings, there was an associated practicality with the focus group method and its capability to connect a variety of views simultaneously (Gay & Airasian, 2003).

The use of focus groups as a data collection tool was chosen in order to obtain the richest and most robust data possible in a single episode. The robust data that can result from properly structured focus group interactions has also been shown to outweigh some of the limitations (Belzile & Oberg, 2012; Kitzinger, 1994). Kitzinger (1994) described how focus groups can effectively bring the researcher into the commonly understood

context of the participants. Focus group interactions can “ensure that priority is given to the respondents’ hierarchy of importance’, *their* language, *their* frameworks for understanding the world” (Kitzinger, 1994, p. 108). As such, participants’ authentic voices assembled a key body of data for this study. This shared language emanating from the focus groups also served to establish common vocabulary throughout the focus group process. Lastly, Kitzinger (1994) suggested that focus groups can be instrumental in increasing the comfort level of participants, especially in situations where the researcher is not familiar to those participants.

J. W. Cresswell (2012) noted that effective focus group data collection requires careful consideration of group size, group demographics, and group interaction. Similarly, Fern (2001) described how the characteristics of individuals participating in focus groups affect group cohesion, compatibility, and how group members interact. As outlined in the *Sampling* section of this proposal, I worked in conjunction with each school principal to create focus groups of five to ten students from each school. It was expected that students possessed diverse views of the high school experience and have differing goals for their futures upon completion of high school. Therefore, a balance was struck between the random selection of this group and meeting the desired aims of looking further into the three previously identified groups of students with differing goals

beyond High School. This meant that ideal student participants represented a cross-section of pathways of preferred futures¹ while remaining heterogeneous in nature.

The research setting for these focus groups had the potential to greatly affect the perceptions of the participants (Fern, 2001) and the themes arising during the focus group. To ensure this group was able to leverage the benefits of the collective experience of students (Dewey, 1938) and their subsequent perceptions of the High School Redesign phenomenon, I ensured the research space was equally comfortable to all. To address Fern's (2001) concerns regarding lack of personal space, I asked principals to identify a space for the focus groups that accommodated the number of students chosen and were located in a place where students felt comfortable expressing themselves and their opinions.

Fern (2001) identified seven components of the focus groups framework as “group cohesion, the discussion process, the outcome, group composition, research setting, and group process factors” (p. 13). He described how the discussion process is at the heart of this framework and how two specific factors—the setting and the interview process—influence how this discussion process takes place (Fern, 2001). In this study, each of these components was acknowledged and attended to.

¹ The phrase ‘preferred futures’ describes diverse students who are completing high school and; (1) directly transitioning to the workforce, (2) completing trades or apprenticeship training programs, or (3) pursuing post-secondary studies at a college or university (see selecting participants page 46)

Fern (2001) also contended that effective focus group data collection attends specifically and with fidelity to a purposeful process. Specifically, the following focus group discussion process (Fern, 2001) were adhered to:

- The first stage, *globality*, refers to the process during which participants recognize who is taking part in the focus group and orienting themselves in the group;
- The *differentiation* stage refers to the introduction of the individuals in a round table format or through an introductory activity;
- The *social integration* stage involves a warm-up question or activity where the group members learn how to interact as a group;
- The *mirror reaction* process is the stage in the interviews where the group members begin to identify commonalities in their thoughts and understandings;
- The *condensing* stage is the point in the interview where some or all participants begin to generate collective perceptions about ideas;
- The final stage, *information exchange*, is where the group begins to exchange information with each other freely. (pp. 99-101)

In order to ensure the focus groups reached the important stages of *condensing* and *information exchange*, I also gave careful attention to how I began the focus groups interactions, and conducted the interactions throughout.

Data Collection: Conducting the Focus Groups

The focus group interview opened with all students introducing themselves by first name and grade. I revealed to the students the purpose of the focus group as

attempting to gain an understanding of students' experiences as part of a High School Redesign school (see Appendix E). Following this stage, students completed an introductory activity in which they were given a list of personalized structures previously identified through the qualitative narrative of school principals to ensure clarity. This list also had brief explanations and definitions for the students. Appendix F illustrates a single example of what this introductory text looked like for a particular student group. Students were asked to rank the structures in order of importance to their learning, with one being the most important. They were also instructed to omit any they had not experienced.

At the conclusion of the introductory activity, students were then asked a series of semi-structured questions (see Appendix G). The standard introductory set of questions were asked of all groups, but varying directions of dialogue were encouraged, and did take place from time to time during the focus groups (Gay & Airasian, 2003). The questioning period was structured to address similar topics, themes, and ideas with all of the groups. These focus groups were video taped, audio recorded, and anecdotally documented throughout. These videos provided additional data as to the nature of student responses, as well as ensured fidelity in the introductory activity and interview process with the students among all iterations of data collection. Video and audio data was then transcribed involving pseudonyms to ensure student privacy.

Data Analysis

The analysis of this data followed a qualitative data analysis framework in which the data was organized "into categories on the basis of themes, concepts, or similar features" (Neuman, 1997, p. 421). As a basic method of generating these themes or

concepts, Neuman's (1997) method of analytic memo writing was applied. In addition, the focus group data was analyzed using the three level coding structure outlined by Strauss (1987):

- *Open Coding* occurs in the first passes through the data, where themes are brought to the surface by the researcher annotating or sorting data. The list of themes identified during these first passes serves to stimulate future questioning and analysis.
- *Axial Coding* is the second stage or grouping data, which begins with a set of initial codes. During this stage, categories and concepts that cluster together with sub-categories that might emerge as more explanatory than the themes identified in open coding. Some of the initial themes may be expanded or altered in this stage, and some themes may be dropped.
- *Selective Coding* is the last pass through the data. Major themes have been solidified by this time. This stage requires searching for examples and cases that further explain or expand on these identified themes or concepts. In addition, this requires looking for outliers in the data that do not fall into thematic areas.

Strauss's (1987) open coding and axial coding stage also benefited the interview process by illuminating new concepts or ideas that students brought. In addition, this coding structure aligned well with the NVivo qualitative data analysis software concept of *Nodes* and *Sub-nodes* for the identification and sorting in the coding tiers described by Strauss (1987).

Under this three-tiered coding system, there are some considerations that needed to be adhered to within the phenomenological framework of research. Bednall (2006) described the challenge facing phenomenological researchers in allowing “the voices of subjectivity to emerge authentically in coming to an understanding of what the research respondents mean in their personal accounts expressed through the data collection” (p. 124). Aligning with the concerns and solutions posed by Bednall (2006), I sought to design a data analysis mechanism that enabled me to be aware of my own bias throughout the data interpretation. J. W. Cresswell (1994) discussed how true meanings within the social world of themes are a combination of collected data and the researchers interpretation of that data. As data was grouped and transcribed, responses and student perceptions that did not fall into the expected themes—academic success, relationships, and goals—were noted as outliers and valued as important data components of the phenomenon of High School Redesign (Bednall, 2006).

Validity and Reliability

While the phenomenological approach can provide rich descriptions and insight into lived phenomenon, it has been critiqued for its ability to arrive at reasoned conclusions. Pinar et al. (2000) contended that the phenomenological method can seem “messy” and less rigorous than “statistical studies have been alleged to be” (p. 407). At times, the analysis of this data can also seem religious, superficial, and only accessible to those “who believe” (Pinar et al., 2000, p. 407). There are also associated concerns with the reliability and the ability to replicate qualitative research findings (Gay & Airasian, 2003). This is linked to issues of phenomenological validity regarding whether the lived experiences of a small number of participants can be extrapolated or replicated.

To effectively convey a description of students' perceptions of their lived experience, I was aware that the phenomenological methodology and subsequent analysis "treaded a middle way between two extremes" (Willis, 2001, p. 9). This study remains situated in the lived-experience of students in how the data is collected and reported. For example, these themes describe context around the previously identified sub-questions regarding students' relationships, students' academic achievement, and students' pursuit of goals beyond high school. By staying firmly entrenched in the perceptions of the student experience, the data may be applicable to the experiences of other students and schools and may contain more generalizability (Gay & Airasian, 2003). However, in staying true to the phenomenological framework studying these three contexts, this might not be required of this qualitative study.

There are also additional concerns about the authenticity of the students who were selected by school principals for participation in the focus group process. Because students were specifically selected, this may have an impact on the description of the *lived experience* for all students at the respective schools. Although this selection and nomination process did in essence provide some degree of bracketing surrounding the student data, the value of assembling the representative sample outweighed the issues with purpose selection by the school principal. However, it should be noted that the student selection process outlined above involving the principal nomination and purposive sampling of specific students does pose some limitations and reliability concerns within the phenomenological methodology. Fern (2001) described how these focus groups may not be representative because of their size and the fact that they are not random in nature.

Issues of validity regarding the process of conducting and analyzing focus group data must be acknowledged and attended to. Several authors in the field (J. W. Cresswell, 2012; Gay & Airasian, 2003) cautioned against the ‘groupthink’ nature that some focus groups may assume. Group dynamics that encourage conformity may suppress or silence particular viewpoints and raise considerations for validity (Belzile & Oberg, 2012). Gay and Airasian (2003) alerted researchers to be cognizant of the inequality of data among focus group participants, where the number of responses from a few participants in the group “overshadows” the rest (p. 212). However, there are also associated benefits with multiple participants of focus groups as they represent a broader representation of perspectives (Gay & Airasian, 2003). By carefully constructing the interview process to ensure all participants were comfortable and believed they had an equal voice, the focus groups were able to yield ample data (J. W. Cresswell, 2012).

Limitations

Although I have mentioned that the groups were selected and identified to ensure the quantity of data is manageable, the small number of participants could be considered a limitation of this study. That said, when choosing a phenomenological approach, concerns about group comfort and constructive meaning-making are of more value than a higher number of student voices. This implies that the onus fell on the quality of the interview process and data collection methods to ensure quality data was obtained. In addition, some focus group participants had more or less ability to self reflect and share, thus limiting the richness of the data in some cases.

An additional limitation of this study surrounds the participant demographics of the data. Although this study seeks to inform the entirety of the High School Redesign

Project in Alberta, the schools studied may not describe all participating schools. The schools studied reflected rural or suburban demographics with middle socio-economic status. They were also less culturally diverse than many schools in the urban or metro-urban centers of the province. This means that data collected may not be as readily generalizable to the larger student experience of High School Redesign.

Researcher Bias

As an exploratory study within a phenomenological framework, considerations of researcher bias and validity must be attended to. As previously stated, I approached this study as an educator who has participated in the High School Redesign project for the past three years. My experiences with this project contributed to my values regarding personalized and differentiated student learning. In addition, over the past several months, I have been immersed in historical and contemporary literature surrounding the nature of personalized learning environments and the associated structural models. From Dewey (1938; 1915) to Quint (2006, 2008), the implications of personalized learning structures and experiential success for students have been well explored and documented. Time spent reading and synthesizing this literature has contributed to my understanding of the importance of personalized learning structures for students' successes. Integrating literature and my lived experience of High School Redesign has led to my inquiry into how personalized learning structures impact students. In this sense, I have been cautious to address my bias of an already ascribed belief that High School Redesign is effective in aiding students to attain their goals during and beyond high school.

Within the limitations of an exploratory phenomenological study, this thesis does not seek to inform an either/or approach to effective student learning as being either

personalized or universalized. As such, this study does yield informative data about effective and ineffective practices of personalized learning and associated structures, but it does not make a case for or against these reforms. Further, this study does not serve as a comprehensive examination of all possible iterations of personalized learning structures or High School Redesign projects in the province. One could argue that the three contexts examined could be interpreted as all being ‘success stories’ of the redesign project. Thus findings should not be interpreted as an argument to continue or discontinue pursuing the personalized practices of High School Redesign.

Chapter Four: Findings

This qualitative study sought to understand the perceptions of the personalized nature and characteristics of three schools participating in the Alberta Education (2014b) High School Redesign Project. The qualitative data was collected in the form of interviews with three principals of the schools and through conducting focus groups with groups of 5 to 10 students in each of the schools. The research followed a phenomenological framework, to convey the perceptions of students who were immersed in the personalized phenomenon of High School Redesign. Specifically, this study utilized three key components as outlined by the Redesign project as a framework for thematic branches of questions and areas of interest. Namely, the study leans on the foundational principals of *Flexible Learning, Rigorous and Relevant Curriculum, Personalization, and Meaningful Relationships* (Alberta Education, 2014a). This cross-section of foundational principles created the open-coding categories of interest for this study which examined student perceptions regarding how the project impacts: 1) students' key relationships within schools, 2) students' abilities to be successful as learners within the redesign structures, and 3) the impacts of the project on students' abilities to pursue the goals as learners both within and beyond the high school context. These areas of focus were then translated into a series of questions for principals and students, comprising the axial and selective coding phase for the data. Both the responses from school principals and students from these sites assembled the qualitative data for this study. Initially, principal interviews were held so as to gain an understanding of school context related to Redesign. However, as their insights proved informative, their thoughts about Redesign impact on students are reported and discussed in addition to the

findings from student participants. As such, the findings and discussion were informed by both sets of participant data.

In the findings that follow, a brief description of the context and situational variables of the schools being studied is provided. These demographics offer key understandings for the scalability of this study to other schools, as well as identify important contextual variables that enrich an understanding of students' perceptions of their experiences with High School Redesign, and why these perceptions might exist within a particular school or demographic group. Following the description of the case and demographics of each school, the findings of the study are outlined as organized into themes that emerged throughout the analysis of both the principal and student data. The themes that emerged aligned with what principals and students saw as benefits or results of the High School Redesign Structures implemented within the three schools. Specifically, these findings grouped into themes; (1) flexible school structures and their relationship to personalized learning, (2) the impacts of flexible structures on relationships in school, (3) the impacts of flexibility on students academic programming and academic success, (4) the impact on flexible learning structures on students personally identified goals within and beyond high school, and (5) other factors or impacts of flexible High School Redesign structures.

Study Participants

By utilizing the underpinnings of Creswell's (1994) description of a qualitative narrative alongside the qualitative interview and focus group data, this study sought to align with the phenomenological framework that Aoki (2005) deems *situational-praxis*. This occurs as students and principals evaluate their lived experience with implementing

High School Redesign— acknowledging the “uniqueness of every teaching situation” while understanding the commonalities of the implementation itself (Aoki, 2005, p. 165). The common features of the structures defined in the qualitative narrative as well as the principal and student perceptions from the three schools will come together as a collective body of data in this study. Although the key research question looks to ascertain student experiences of High School Redesign, the findings placed equal value in the perceptions of the school principals. This is because the data from school principals provided the beliefs of school leaders on how the Redesign project impacts student, which could then be compared to the student perceptions from the principals’ respective schools. The principal data also provided valuable insight into how Redesign has and continued to take shape within these schools, which was a key component to the lived experience of High School Redesign for the students (Aoki, 2005).

The first section of data analysis serves to inform the nature of reforms at each of three school sites. This analysis is intended to convey a picture of the lived experiences of students at the schools. In this narrative section, study participant data will be elicited to describe structures in place and communicate introductory perceptions of the experiences of the study participants. In the following discussion, the data from all school sites will be compared and contrasted through a thematic analysis of the data as a whole. This entire body of data then informs how the reforms associated with High School Redesign might impact students’ relationships, academic success, and goals.

Three Redesign Schools

Currently, many schools across Alberta are involved with initiating and implementing High School Redesign. There are upwards of 210 schools taking part in the

project across the province (Alberta Education, 2015b). While it was not possible to scale this study to research reforms and student perceptions in all Alberta schools, it was possible to identify some schools that have had multiple years of experience implementing the project. Timperley (2011) suggested that in schools with a highly adaptive capacity, attention is given to how schools become a coherent learning system. Therefore, the three schools participating in this study had experience with the adaptation of their school structures, goals, and environment in order to personalize learning for students.

Each of the schools had unique reforms but also shared a common understanding surrounding student flexibility and personalization. All had high school populations—grade 9 to 12—ranging from approximately 700 students to almost 1500 students. However, it should also be noted that these were primarily rural and/or suburban student populations that represented a fairly homogeneous student makeup in terms of socioeconomic status and cultural background.

The schools examined will be assigned the pseudonyms West High School, East High School, and North High School. For the purposes of this study, the schools and their learning structures associated with High School Redesign can best be outlined using the qualitative interview data obtained through the interviews (Appendix D) with the current school principals at each of the sites, as well as student comments from the focus groups about specific personalized structures in place at their respective schools. In addition to this interview and focus group data, some of the qualitative narrative is assembled through the use of relevant descriptive documentation ranging from publicly accessible school education plans, information from school websites, and information from other

school published reporting. Merriam (1998) referred to this process as mining data from documentation. Mining documents in this way provided important information for assembling the narrative of the school, but also strengthened the qualitative interview data by triangulating it with additional source material (J. W. Cresswell, 1994). These documents were not placed in the references section of this study so that school anonymity could be preserved. Likewise, pseudonyms are used for school principal and student participants for ease of reference as well as to ensure confidentiality among the research participants themselves.

West High School

This school of approximately 800 students is located in a town of 20,000 people. The student population is made up of students who live in the town itself, as well as students from farms, ranches, and acreages in the surrounding area. West High School has a longstanding reputation of striving for excellence. The school has been a fixture in the community for many years, and is regularly recognized for its continual pursuit of excellence in academics, athletics, and commitment to community involvement. A great deal of pride at West High School stems from their achievement on the provincial standardized examinations, as well as their ability to offer students strong and diverse programming beyond basic academic streams. Mr. Wilson, the school principal, described how students' "access to these broad based learning experiences, coupled with the high quality instruction that occurs in classrooms" is key to providing high quality instruction for the students of West High School.

West High School has been a participant in High School Redesign for the past four years. Mr. Wilson described how West High School's participation in the project

stemmed from a desire to meet the jurisdictional and provincial goals for secondary schools. He explained that the school was talking a lot about “21st Century skills and project based learning” and how High School Redesign allowed them “to get the supports and into conversations with the other schools who were involved in it...to just be a part of that bigger community and to have the ability to move in some of those directions.” Wilson described how their past and continuing participation allows them to “be more flexible with students and personalize their learning a little bit more.” According to Wilson, this personalization takes place at West High School:

When you really think about the student, the student learning experience, and being able to meet the needs of each individual student that resonates with teachers who are passionate about teaching and learning. They're always looking for what's the best way to do this. It was a lot of trial and error too. But that's the nature of the Redesign project.

West High attains this flexibility and personalization through the use of a variety of learning structures. Most notably is the implementation of a flexible time table, as well as their use of a *Flex Block* for students. The *Flex Block* at West High is positioned during the afternoon, where students are given an additional hour of time in their school day to make independent choices for their study. Wilson explained how *Flex* allows students “to pick where they want to go and get some help and support. Or maybe they want to do something for their health and wellness on that day.” Students “have abilities to study, work on additional homework or project work, access additional support from teachers, or sometimes engage in activities such as fitness or leadership.” Mr. Wilson described this flex block as just another tool “personalizing and giving some flexibility to the

students and allowing them to dig a little deeper.” But Wilson also noted that participation in the High School Redesign Project means more than timetable changes for West High. He believes that Redesign is about a shift in the educational mindset for West High School:

I think what I have noticed here really is, the student centric approach to everything that we do. We are not there yet, and there are still a lot of very traditional things happening in every single redesign school across the province, which is great. But, that sort of idea of the student centric approach is what’s important. Some would argue maybe we've gone too far that way, but just allowing a student to be able to have a little bit more choice in what they're doing. Whether its take a course online, or whether its deciding on what type of project they're doing and have a choice in that. Maybe in some cases instead of writing the test, maybe they're talking to the teacher and explaining what they know. There are all these creative things that are happening in all the redesign schools.

Ultimately, Wilson focused the conversation about Redesign at West High on the notion of students as individuals, “they’re our clients... our output, and our product.” He described the most effective curricular implementations of Redesign as being student centric, and “all about the student experience.” This is best summarized by Wilson’s assertion:

It’s things that good teachers were always doing. They were always looking for opportunities to connect outside of the building; they were always looking for opportunities to maybe tie in a chemistry class to an English class...It just gave us maybe a little bit more of a weight to say ‘this is now the mandate’ so people are

moving more in that direction. It gave permission to explore a partnership with a community builder to build houses, or permission to explore a service trip another country... And allowing us to play with the hours a little bit and to allow a student to have flexibility to write a diploma in maybe April, that wouldn't have happened without High School Redesign. Allowing us to say to a student who didn't complete the course in January, "You don't have to do the course over, lets just pick up these few pieces you need to fill in." And of course, those 25-hour credit ideas, getting rid of that provides a lot more options around flexibility. It's such a small thing, but really we didn't think it was a class unless it fills these hours. Now its like, we need to fill the outcomes not the hours, and it's about how we do that.

It should be noted that Wilson had several examples of personalization and flexibility at work in West High School, beyond those outlined above. Wilson described how Redesign has led to the implementation of structures such as *MyBlueprint* for post secondary planning, personalized scheduling for course offerings, access to alternative assessments, and unique learning experiences such as off campus courses or semester long curricular excursions. Wilson also seemed to downplay the importance of West High's specific structures associated with High School Redesign and emphasized a mindset of personalizing learning and flexibility.

West high school students' description of context. The students from West High School who contributed data are summarized in Table 1 on the following page. To provide context for the students, relevant student demographics are briefly summarized.

As with the school principals, pseudonyms are used to protect the identities of the students.

Table 1

West High School Student Participant Demographics.

<i>Pseudonym</i>	<i>Gender</i>	<i>Grade</i>	<i>Goals/ Interests/ Aspirations</i>
<i>Wendy</i>	Female	12	Academics
<i>Whitney</i>	Female	10	Music and Academics
<i>Wanda</i>	Female	10	Athletics
<i>William</i>	Male	11	Academics
<i>Warren</i>	Male	9	Athletics and Academics

To ascertain students' perceptions of the nature of High School Redesign Project at West High School, participants were first asked, "What does a *normal* school day look like?" Wendy, a grade 12 student, spoke about how she has mostly academic "core" classes in the morning. She explained how her day as, "hav[ing] three classes in the morning then flex and a spare last period." This contrasted with how Whitney in grade 10 described her day as involving more than the daily school timetable, "I'm in band, and so band is in the morning before school and then also choir that is after school on Wednesdays. But other than that just classes and Flex in the afternoon."

As students progressed through the introductory activity and the introductory conversations about their daily experience, they became more reflective about how Flex and other similar structures might impact their experiences as learners. Students first spoke about their experiences in Flex. They outlined how grade 9's and 10's are required

to go to a class for attendance in Flex, where students in grade 11 and 12 do not have a check in with a teacher in that way. They also spoke about the variety of uses they have for Flex; completing schoolwork, studying, chatting with friends, and getting help from their teachers. Wanda in grade 10 contended that Flex positively impacts her grades with the ability to get her work done, or get additional support. She also mentioned that if she does not need time to work or to get supports, “then I have time to just kind of relax and just calm down a little bit and refocus for the end of the day.”

Similar to Principal Wilson, these students insightfully utilized some of the suggested structures from the introductory activity to expand their understanding of personalization at West High School to more than just the flexible nature of the timetable. Whitney in grade 10 described how the most important change for her has been an emergence of what the introductory activity called “new and/or alternative ways to demonstrate learning.” She cited that simply completing tests and creating PowerPoint presentations can get a bit boring, and how she enjoyed her experiences in social studies this year. Whitney described how the class “did a simulation for Africa where we acted out the roles of different nations where we fought for Africa... kind of like a game, but it was historical. And we got a mark from that.” William in grade 11 agreed, stating that he also chose that structure as being the most important to him, and then gave evidence of how one of his unit tests was being replaced by a similar project surrounding the Paris Peace Conference.

The students at West High also identified the importance that flexible programming and choice of programming played for their experience as a high school

student. William explained how he feels privileged to be at a redesign school like West High:

There's a lot more options and stuff that could give you backdrop to what certain professions might be like. Like one of my old schools might not have the same experiences as here like things such as mechanics programs or programs for building houses for a year. I think it's a good idea to help people learn about building things so they can maybe see if that's something they might like to do.

Wendy agreed with William, describing how "there are a lot of options you can pick from the higher up your grade goes. Like studying film. You have a lot of exposure to different things and opportunities."

Another key structure identified by West High School students was the extra time to work or learn from teachers beyond scheduled class time. Wendy contended that "the teachers actually care, compared to my old school at least...they actually want you to succeed and want you to do well and are willing to help you better understand. Overall the teachers are really supportive." Students collectively elaborated on how structures such as access to teachers beyond class time and access to teacher support during Flex had impacts on their academics, as well as their relationships with teachers. This will be further elaborated on in the thematic analysis section of this paper.

North High School

North High School is home to nearly 1400 students in grade 9 to 12, and approximately 110 staff members with 70 teaching staff. Students attending this school come from several suburban communities of a small city. This school has been known for its high standard of academic achievement and, more recently, for its diverse

programming for students. North High prides itself on providing a wide variety of courses, and several unique learning opportunities to meet the needs of all students. North High celebrates students as individuals and seeks opportunities to connect with students on personal levels. This philosophy serves to empower students for personalized programming, develop strong relationships among the North High students, and invite input and participation on a daily basis. The school principal, Mr. Nielson, believes a focus on building positive relationships stems from North High's desire to create more meaningful student relationships that were not hampered by large class sizes and busy scheduling.

North High School has been a part of the High School Redesign project since 2014. Mr. Neilson outlined how, like most schools, "we started with a schedule change...seems to be the first step that people try. I wasn't the principal here when they tried it though." At the time, this block was titled *Focus* and that title remains today. In the grade 9 classes, this block has different expectations and is called *Prepare*. Continuing to define North High's adoption of the Redesign Project, Neilson explained that at the time of inception, participation in the project was not optional for the school. In fact, when North High entered the Redesign Project, all High Schools in their jurisdiction were required to participate. He described how this was perhaps why the adaptations at the time were subtle, describing how "all they did was put a 30-minute Flex Block into the timetable... they called *that* Redesign." When Mr. Neilson came to North High School in the following year, he made changes to the schedule. He wanted to redesign the schedule in consultation with the staff. What they arrived at was a similar flexible schedule but with more structure that allowed students to access additional

support from teachers in what they called “re-teaching sessions.” Also during this time, some teachers were able to have additional assigned time to make connections with students and their families if they were not doing a re-teaching session by contacting families when necessary during Flex. Lastly, their final change was to allow for some student choice during this time. Neilson described how this took place:

We tried to track attendance, we kept track of which kids were going to which focus block and kept some data on that. We did that for three months and then the teachers decided that was a waste of their time. Because with a flex block, not every kid has to go sometimes, sometimes it’s just okay to hang out with your friends. We had some mental health breaks as well, like our gym was open so kids could go and play basketball and we had our fitness centre open.

Currently, these structures are still in place for students during their Flex block. These structures also exist alongside some additional structures that took shape in the years that followed.

Neilson noted several times the importance of building student independence and resilience through strong relationships and anxiety management. This current focus came from some social-emotional issues arising among the students in North High. Neilson explains some of the key findings that indicated these important focuses for Redesign at North High:

Our district did a resiliency study a few years ago, and kids on our side of town don't have the resilience that the kids on the other side of town do...So our whole strategy with the mental health piece is to get teachers connected to kids and then they have an advocate in the building. So we pay them to literally walk around the

school and find a kid who's looking like they need to have a chat and sit down and talk to them and build some relationships. One of our old Vice Principal's was doing his masters and got some data. He surveyed some staff and students around staff-student relationships. The staff thought that 80% of them were relating to kids. And we surveyed the kids and found that 8% of them felt that they had a teacher they connected to in the building.

In response to these findings, North High School now utilizes their Redesign structures to focus on relationships in their building. The timetable was redesigned to have a rotating lunch hour, which Neilson suggested created smaller student groupings during both lunch and the flexible block. He described how rotating lunches are an attempt to provide physical space in the building, but also to create smaller student groups during these blocks of time. With less students on their Flex block or lunch block at a given time, more teachers would be able to develop some relationships with those students. For example, the grade 9 flex block has groupings of 30 students who began the year with 3 teachers from a variety of curricular areas. Neilson noted that they “really wanted to focus on connections. We asked our teachers to do everything they could. And, honestly, the first two weeks was nothing other than building relationships between students and teachers.” He went on to describe how this time then transitions into curricular focused opportunities like re-teaching sessions, broad concept review sessions, or vocabulary building work with tools like *Membean*.

Ultimately, what Neilson stressed repeatedly throughout the interview was a focus on making connections with students before stressing curriculum. He described how North High is, “trying to change the culture to be one where kids matter most, and then

the academic piece will take care of itself.” Neilson also included the values of relationship at North High when describing how the school utilizes Redesign to pursue academic student success by “making connections and understanding our student body better allows that academic personalization to happen naturally.” Beyond the Flexible scheduling aimed at providing a smallness in the large North High School, Neilson noted other structures that were inherent in their Redesign implementation such as new course offerings and credit attainment opportunities, international student partnerships, use of tools such as *MyBlueprint*, career counseling services, and new assessment opportunities that decreased emphasis on traditional pencil and paper testing. However, Neilson emphasized that these structures stem understanding of students as individuals first.

North high school students’ description of context.

Table 2

North High School Student Participant Demographics.

<i>Pseudonym</i>	<i>Gender</i>	<i>Grade</i>	<i>Goals/ Interests/ Aspirations</i>
<i>Nathan</i>	Male	11	Academics
<i>Naomi</i>	Female	11	Undisclosed
<i>Neil</i>	Male	10	Athletics
<i>Nicole</i>	Female	11	Academics
<i>Nancy</i>	Female	9	Athletics
<i>Natalie</i>	Female	9	Undisclosed
<i>Nolan</i>	Male	11	Arts

When participating students of North High School were asked to describe the nature of their school day, they communicated the variety of schedules at work for students in the school. Students talked about how the many groups and the rotating lunch hours have both separated the students, yet also exposed them to other relationships.

Nathan, a grade 11 student at North High, stated:

This is my first year at the school so I knew nobody. And the fact that each semester I had a different lunch time gave me access to different people that I didn't know and now I have a group of friends upstairs that I would have never known if I wasn't forced to introduce myself. At lunch, if you don't have lunch with friends it forces you to jump outside your comfort zone, which I think is fundamental to growing yourself and your personality.

Nathan's statement was somewhat in contrast to some of the other students, such as Naomi in grade 11, who found that, "it is kind of splitting everyone up from the groups and stuff like that when you have three different lunch periods. That is something I don't necessarily like."

Moving on from the discussion about rotating lunch hours, students began to describe their Focus block, or Prepare block for grade 9's. Students such as Neil in grade 10 outlined how Focus provided him with "one-on-one access with the teacher or in a smaller group than our class. That went a long way to helping me academically than just having class time." Similarly, Naomi in grade 11 stated that, "with Focus you have the freedom. If you have a lot of work you are able to use most of that time and have a small lunch. Or, if you don't have much work, you could use that as mostly lunch period."

Nathan added that, "I think it is really helpful for students...you know where the specific

Science or Math or English teachers are during Focus, and you just get help there. It's not difficult to find them.” This was also similar to what Nicole in grade 11 indicated was important to her during the re-teaching sessions offered by teachers. She explained how teachers have, “after school times where you can talk to them and they will reteach you the entire lesson... some teachers will actually videotape their whole lesson and post it on *Google Classroom* and you can go back and re-watch the whole lesson.” Some students pointed out that they could access these sessions during Focus, before school, or after school. Nancy in grade 9 described how she would, “normally go at lunch or Focus. I have sports and stuff before and after school, so lunch is when I have time.” But perhaps most importantly, Nick in grade 11 explained how Focus and re-teaching has impacted his grades by explaining a specific example. “Last semester my final math mark was 91. In a previous year when we didn't have Focus my mark was like 70 percent. So it went up like 20% since having Focus. In a more challenging course as well.”

It should also be noted that the grade 9 students reflected that they felt they did not have as much freedom during their flexible block entitled Prepare. Nick stated that, “it was like Focus but its turned into like an actual class. You have attendance and you have to be there.” Another grade 9 student Natalie contended that, “Prepare was supposed to be for things like getting caught up on your homework, but then they put classes like health into it... So you really only get to do homework in it like two classes per week.” Nancy expanded upon this idea by describing how one of their homework days was Monday, “and we never get homework on Mondays.”

When asked about other structures or ideas at work in North High School that might be different from another High School, students' discussion moved beyond the

timetable to the nature of their studies. Nathan in grade 11 described how he feels his teachers are passionate and engaged in their teaching, “I’ve never had a bad teacher. Every single teacher I’ve had is motivated...I have been to other schools where teachers just show up and teach. I feel like every single teacher here is doing a good job and more.” Many of the other students agreed with this notion. For example, Naomi stated how “there are definitely are a lot of teachers who go above and beyond.” It also seemed that this sense of caring from teachers has encouraged students to make effective use of their flexible timetable because as Nicole in grade 10 asserted, “since we have different lunches [and flex blocks], we don’t get to see the teachers we prefer to see. I personally find that okay because you get to meet different teachers, which is okay because they are all equally caring.”

The conversation also transitioned into another structure that was clearly important to these students at North High School. Students indicated that they felt they had access to flexible and personalized programming at North High. Many students identified that conversations with teachers or counselors at the school were helpful to establish their goals and scheduling to suit those goals. Naomi provided her perceptions of how her goals are addressed at North High:

All the teachers and staff are trying to help me meet my personal goals... if I talk to my counselor like once in a while, she will ask me how I am doing and stuff.

But she will ask me questions like what my goals are and what I want to achieve by the end of the year. She helps me plan and organize it.

Nathan expanded upon Naomi’s ideas, connecting his personalized programming to his personal goals and daily life at North High. He outlined how his AP courses are enabling

him to pursue his goals, and that he can choose when and which AP courses he would like to have as a part of his program. Another student, Nolan, took a different perspective when looking at flexible and personalized programming by stating how he feels his passions in the arts have been supported through the scheduling and offerings at North High. He contended, “Having arts at school have been very important for me. They have allowed me to get into extra-curricular things, and they have been fantastic for my personal life.” And Neil stated that in his case, “the school has been supportive in ensuring I have the credits to graduate but making sure I can stay on that science oriented track.”

East High School

East High School is a school of approximately 680 students in grades 9 to 12. It hosts students from the suburban communities of a small city as well as some rural students from the city’s surrounding area. This school has a longstanding history as one of the oldest schools in the rapidly growing city. The school centers its mission on creating a school culture that fosters life long learning, diversity, and success through collaboration. To accomplish this, East High seeks to provide unique and personalized programming for their students through opportunities such as a dual-track French immersion program, many second languages opportunities, Advanced Placement course offerings, and several global and citizenship learning excursions. The many co-curricular and extra-curricular offerings of East High are an important part of the schools’ identity, and these types of opportunities continue to grow in number, scope, and capacity as the school enters its fourth year of participation in the High School Redesign Project.

The principal of East High, Mr. Ernest, described the ongoing focus of East High School as looking for new and innovative ways to engage with curriculum while providing flexible and personalized programming for students:

High School Redesign allowed a school to do in terms of promoting cross curricular projects, extra time embedded in the day to support students who required it. Whether that's the very busy highly academic kid who has a significant load on their plate in terms of work and sports or academic courses, or if its the student who really struggles and needs that extra support and guidance embedded in their day.

The embedded time described by Mr. Ernest includes a flexible block of time from Monday to Thursday called *Focused Learning Time* (FLT). This block of time alternates from between classes in the morning, to between classes in the afternoon. In addition to this FLT time, there is also currently a literacy block between the morning or afternoon opposite FLT, and on Mondays there is a specific FLT time entitled *Connect*, which will be further expanded upon below.

When Mr. Ernest outlined personalization at East High, he referenced student success through, "feeling connected to a key adult in their building... its given time to kids who are needing some extra time or support in different areas like literacy and numeracy, or kids needing access to perhaps some mental health support." He continued by explaining how scheduling and flexibility associated with High School Redesign is helping these structures become a reality:

That embedded time is critical. I know its more than the timetable, we're starting to see collaboration amongst some staff. There is a willingness and a wanting to

continue to collaborate and look at new ways to collaborate in terms of projects and a continued re-definition of assessment, what that looks like in this building.

And the kinds of work that students are doing on a daily basis.

Mr. Ernest finished his introduction of the Redesign Project at East High with the caveat that there is a necessity for the staff and leadership of the school to continually, “tweak and assess redesign in terms of, where are we at? What do we need? And what does this structure look like?” He pointed to an example of recent changes that have occurred regarding their Flexible learning block, which they call *Focused Learning Time* (FLT). Ernest described how previously, this time was, “a bit too loose” and how key structures and protocols needed to be developed. With the understanding that relationships and connections were key for students and teachers, FLT has now been designed with certain days where students meet with a *connect teacher*. Ernest characterized *Connect Block* as an attempt to create a more personalized experience for students:

It gives them a teacher that they can go to, who is going to be an advocate, who will help drive them to appropriate use of their FLT time, who will bring up concerns to perhaps guidance. It's just someone to even have that conversation at the end of a tough day or beginning of a hard day or whatever. It is a familiar face for that student.

Mr. Ernest also described how these new connections with key staff members in the building have been leveraged to personalize students learning beyond what happens in this “connect” time. He maintained that this is taking steps towards, “personaliz[ing] a

student's requests and passions ... It's about really re-imagining what we can do with kids and for kids, in the classroom and outside of instructional hours.”

Mr. Ernest finalized his thoughts by explaining how Redesign allows East High to personalize the learning experience for students in a variety of areas, during their Focused Learning time, in the classroom, during Connect, or with conversations between students and staff:

I think that if we personalize things for kids and we build relationships with kids, and we get them involved and support them in their passions. If we don't say “no” to a kid because it won't fit their timetable, or “no” to a kid because he is needing extra support but we can't fit it in... You're going to get a student that honestly is happier and in a better place with school. And is ultimately going to feel more engaged with school. I think the more engaged the kid, the more the student is going to feel successful, and they're going to feel motivated. And it allows students to find their passionate interest areas. I honestly think redesign helps define for kids who they are; perhaps even at an earlier age than when I was in high school. In terms of what they want to do and what they want to pursue after high school. Whether that's the world of work or whether that's post secondary.

East high school students' description of context.

Table 3

East High School Student Participant Demographics.

<i>Pseudonym</i>	<i>Gender</i>	<i>Grade</i>	<i>Goals/ Interests/ Aspirations</i>
<i>Ellen</i>	Female	12	Music and Academics
<i>Eric</i>	Male	11	Leadership and Athletics French Immersion Student
<i>Edward</i>	Male	11	Outdoor Education French Immersion Student
<i>Emily</i>	Female	11	Leadership and Athletics
<i>Emma</i>	Female	12	Undisclosed

When the students of East High School were asked to describe the personalized structures at work in their school, they responded by outlining their schedules outside of *regular* class time. Ellen in grade 12 asserted how she is often at school early for choir or band, and Eric in grade 11 explained how his Phys Ed class was early in the morning before school started. He expanded by explaining the rest of his day, “I’ll have my 2 morning classes and then it’s almost guaranteed that I’ll have a meeting at lunch. Then I have two more regular classes and then Tuesdays after school I’ll stay for yoga.” It was interesting that many of the students alluded to how busy their schedule was beyond classroom time. Students talked about the many curricular, co-curricular, or extra-curricular opportunities and meetings at lunch or before school. Eric expanded on this in his description that highlights a large-scale school bike-a-thon event that the school does

every year. Eric described these busy lunch hours stating, “there’s meeting for leadership, bike-a-thon, lots of people meet for newspaper, I had to step away from that...but then there’s grad, and the bike-a-thon is a pretty big one cause there are several sub committees.”

Grade 11 student, Edward, addressed a unique opportunity he had last year to spend a portion of his semester in Australia that would only be possible through Redesign around credit hour requirements. He outlined his opportunity:

So our schedule was completely different. We had our first semester the same.

Then in second semester, I took French with a French teacher but we sped up the process since we left a month early for Australia...Then throughout the day we did special projects learning more about Australia and that was second semester.

Then at the end of second semester we went to Australia we did back country camping and surfing, and in New Zealand we went caving.

Beyond opportunities like the Australia trip and building homes, the students clearly had an understanding of the diverse opportunities available to them at East High. Edward contended that East High might:

Have certain classes that a lot of schools don't. That's why we have some kids that come here in the afternoons or who come to school in the morning here and leave in the afternoons. Cause we have certain courses that kids want to take, but can't take them at other schools. Like Japanese and other unique things.

As well, students explained the importance of community among their unique programs like the French track program. Eric described how they “have been a very close program

for the entire time [they] have been in school basically...we started Kindergarten together.”

When the students reflected on their scheduling, they began to realize how unique and different their schedules were from each other and, perhaps, from students at other schools. Eric asserted that, “other schools are more standard, like classes, lunch classes, then go home. We have scheduled time to read, we have FLT. Our schedule is really modified but I think it really helps with students who might need help.” In response, grade 11 student Erin characterized what she believed is the most important part of her school day:

For me its FLT and lunch. If I have homework I haven't done I can catch up or study. Or if I need to write a test I can use that. And lunch, just to get out and clear your mind cause you get stressed at school, unless you have meetings and other things.

Eric contended that, in the mornings before school, he felt he had better access to additional support from his teachers, explaining that “whenever I missed a concept it would be easier to come in early and catch up on that rather than do it during FLT or lunch where I was probably in a meeting or working on other homework.” Ellen similarly stated how she “like[d] focus better in the morning as well. And during FLT and lunch there are a lot of other students who need help, so if I am not in choir then I am getting help in the morning.”

Students also moved conversation beyond the idea of FLT as the main focus of personalized learning at work in East High. Students spoke about other structures from

the introductory activity they felt impacted their learning. Eric stated how he enjoys the use of MyBlueprint:

We are not doing that as much anymore but I am still using it on my own. Largely because its helping me determine what I need for university programs, where those programs can take me. Its sort of about planning the future rather than just staying stuck in high school mode. It lets me think outside of what's just happening right now.

Edward highlighted another structure at work, citing how he appreciated how teachers were beginning to create cross-curricular opportunities like the Australia trip, but also mentioned how, "If your teacher is pairing with another class you are struggling in it could negatively affect you."

Students also spoke about a new structure in place at East High: literacy block.

Eric outlined his thoughts:

I love reading, and I do read every day. But I don't like that it's during school time because I need that time to study and catch up on homework. I feel like they should just be a little more flexible about it. I think it's important for them to implement reading time but they shouldn't be that strict about it, because kids that do read, might need that time for school work.

After other students agreed with Eric, there were thoughts about how the block could be improved and, while students seemed to understand the importance of reading, they found it was not recreational or well placed in a block of time during the day. Edward asserted how:

They took time away from our focused learning time to do the literacy block. Last year with the 40 minutes of FLT I thought that was at least adequate to getting homework done. With the 30 minute FLT its like your setting up for the first 10 minutes and then packing up for the last few minutes. By the time, you probably only have like 20 minutes to focus on what you're doing.

However, students appreciated some of the literacy arrangements that were made as a consequence of this literacy block, however. Ellen highlighted the “library carts that go around the hallways, along with the school newspaper.” She also described how this has increased emphasis on the newspaper itself. Eric responded that “students are actually reading it... People are excited when it comes out.” Emily in grade 10 also noted how there were book selections in each curricular classroom, “What they've tried to do is cater book selections in the classrooms to be more related to that subject. So in our science classes we have science books where as in English classrooms we would have more fiction.”

The final structure that students discussed at work in East High was their *Connect* block. This discussion delved into relationships with peers and teachers, which will be highlighted in the discussion section of the study. However, some descriptions of the structure itself are relevant to the narrative for Redesign at East High. Emma in grade 12 outlined how “on Mondays you have to go see your connect teacher for FLT. And I feel like students have a better relationship with that teacher.” Emma characterized these relationships, “they gave everyone a choice of where to go, a group of teachers. Related to who you matched interests with.” Eric responded to this with his experiences this year in Connect:

I do really appreciate the way that they did that. Because I think it's. I got paired up with our learning support teacher. And she is a teacher I would have not otherwise not known in the halls. But I would have never known her. And I think were pretty close now so it's really made a difference for me.

Students also all agreed that Connect has added to the already important relationships between teachers at students at East High. They spoke highly of specific teachers and how their relationships have impacted them. Eric described how one particular teacher “always talks to me about volleyball and getting scholarships...it stresses me out a little bit. But at the same time I like how she helps me... it takes away the stress a little bit.”

Emma provided her experience as well:

The fact that they understand and believe in you, helps encourage you and you start believing in yourself as well. Like for Physics, it is a really big struggle for me. But because Mr. W is there and he really does understand, he is always telling me that I can do it. So now my mark has actually gone up a lot.

Data Analysis and Themes

As previously mentioned, the above qualitative narrative was assembled primarily from interview and focus group data (J. W. Cresswell, 1994). These qualitative narratives paint a portrait that describes the students' lived experience of High School Redesign, aligning with a phenomenological framework (Aoki, 2005; Magrini, 2015). Beyond describing the lived-experience of the study participants, the interview and focus group data was transcribed and analyzed using the qualitative data management software, NVivo. Data analysis followed the Strauss (1987) multi-tier coding model by first looking for common ideas and themes between all participants in the study. This was

accomplished through analysis as transcription took place, a final read over transcribed data, and creation of word matrices or word clouds based on word count analysis of all the transcribed data often referred to as *Wordles*.

The next phase of data analysis used these possible themes to create themes for coding called *nodes* in NVivo based on similar themes, concepts, or perceptions (Neuman, 1997). With the data re-grouped into these nodes, the data was analyzed again to look for new emerging themes, as well as to note further connections among themes. The themes that emerged and the subsequent connections that were made in this final pass through the data assemble the findings of the study. The next section will present and describe the themes that emerged from this analysis.

Personalization and Flexibility

One of the most prevalent and obvious commonalities between the sites examined and outlined within this study was the notion of flexibility. Alberta Education (2014b) described this flexibility as understanding that learning transcends specific classroom hours, and providing students opportunities to take personal accountability for their learning. Although this definition of flexibility does not specifically reference daily class structures or credit hour requirements (CEUs), all schools in this study have implemented a flexible block of time into their schedule to acknowledge students' need for flexible learning spaces, times, and other opportunities.

Hand-in-hand with the ideas of flexible learning environments and timetables is the concept of personalization. Personalization in education has been a widely utilized term, often applied to describe any student-centered learning design. However, within the lens of High School Redesign, Alberta Education (2014b) defined personalization as the

implementation of any educational choice that accommodates for students' individuality as learners, which promotes their success academically and otherwise. In the case of the schools examined throughout this study, there are various structural and philosophical choices at work that encompass this idea of personalization. It should be noted that each of these experienced Redesign schools began their venture into personalization by making changes to the timetable, but are now looking to personalizing student learning beyond the structural changes that started their Redesign journeys.

In the case of these three schools, students identified the benefits with flexible time that were not directly tied to their ability to spend time completing or attending to work. The findings of both the principal interview data and the student focus groups indicated how this flexible scheduling was a key component of the schools' success with High School Redesign. The flexible scheduling afforded students and teachers the opportunity to personalize their use of time; however, it also had meaningful impacts on relationships, which fostered individualized instruction that ultimately allowed students to more readily pursue their individualized goals. These areas of relationships, academic success, and goals focused on throughout this study are described below as they are indicative of how the pursuit of flexible learning environments characterized by personalization within High School Redesign ultimately impacted how students perceived their learning experience.

The Academic Impacts of Personalized Learning and Flexibility

This study unveiled perceptions from both students and principals surrounding how they defined and pursued academic success. Principals and students at all sites outlined several instances of how personalized and/or flexible reforms associated with

High School Redesign have impacted students' academics. In fact, when initially asked to identify the benefits of Redesign, all principals and most students identified how flexibility was connected to student learning. As previously mentioned, often this flexibility impacted students learning by providing them with time and choices regarding how to approach their learning.

Students from North High School are given the most flexibility in their academic timetable and, therefore, are given the most personal accountability for determining how their flexible redesign impacts their academic success. As described above, this high degree of flexibility was because their timetable has rotating lunch periods that are attached to their flexible time. Students are able to utilize this time as they choose, and can either extend their lunch period or make other choices about how to access academic supports during that time. One student, Nolan stated that due to having "Focus before lunch, I was able to have some one-on-one access with the teacher... That went a long way to helping me academically other than just having class time." Neil explained, "Flex period definitely helps me to get my work done, at school. I need that time to also get help and ask questions." However, Natalie identified a shortcoming with this high degree of flexibility by stating, "With Focus, sometimes you have lots of homework. If you don't use that time it won't help. It doesn't help that they don't force you, so sometimes you can just procrastinate to do important work." Conversely, students like Nathan outlined how he "prefers to do homework at home. So I don't have any homework during Focus." However, Nancy explained that completing all of her homework at home may not be possible, as she felt that "some of the teachers assign way too much homework.

It's like they don't realize we have other classes... This semester I have like 5 hours a day.”

When describing the flexible scheduling choice at North High, Principal Neilson explained how the school's current model has evolved over time. He outlined how the current flexible structure at North High has evolved due to a combination of changing student needs as well as increasing numbers. Neilson described their initial approach to flexible scheduling:

We created a RTI (Response to Intervention) model. Teachers were assigned to different areas of the school at different times... One day they would do re-teach sessions... So for example one day a week in a given week a teacher would re-teach factoring to the grade 10's. So anyone who had struggling students would assign students to that re-teach block. Students also had homework time specifically on one of those days.

Although there have been many changes from this initial implementation, similar structures are in place for grade 9 students. He described how they found “the grade 9's were not mature enough to handle a flex block.” He explained that this block for grade 9's, called *Prepare*, has days to review broad concepts like literacy building, or “integers, and that might be with more hands-on approaches in temperatures and stuff like that. And those students still have designated homework days also.” However, for the grade 10 to 12 students, their Focus blocks look much different. They no longer have these more structured blocks with attendance and mandated tasks. Neilson believed that regardless of the specific structure, providing flexibility to keep students personally accountable and successful is still present throughout teaching and learning at North High.

The ideas about academic success and flexibility at North High were very similar to those from the students at East High School. All East High students interviewed expressed an understanding of the importance of effectively using their embedded time. Eric explained how he understands that “our schedule is really modified and I think it really helps students who might need help to be successful.” This also seemed to be the case for Emily, who agreed with Eric by stating that “time to work with teachers outside our regular class time” was key to her academic success. Edward expanded on these ideas with his insight that “FLT (Focused Learning Time) this year was about progress in our classes, so there was less emphasis on the relationships aspect between teachers and with peers.” He went on to contend that many students make the choices to “involve Flex in their schedule... They think about what needs to be done at home and what they will do during Flex.” Emma supported this notion with her description of choices this year. She outlined her flex choices:

This year I am trying more Flex with my math and sciences because I struggled at those and I see the improvement if I put the effort into it. And if you talk to your teachers about questions it helps. Sometimes when they talk about a method in class and you don't understand, you can always go to them later and have it explained further, or again.

Eric also mentioned how this time can be really important for all students. He described how it can go a long way to “making students feel more comfortable in class” because of those academic opportunities with peers and teachers. Emma agreed describing how she often gets help from her friends as well as her teacher on her studies in her flexible time.

Outlining how students' academic success is approached at East High, Mr. Ernest described their focus among staff on "how they work with students." He stated that "personalizing what the day of each student looks like, in a way that is best for them." A primary example was Ernest's depiction of how his staff works with students to effectively manage their flexible time. "If a student is struggling in math and science, that teacher is taking a look at that, having conversations, and programming for that student", which Ernest characterized as "programming" that student into a specific classroom for the flex block that day or week.

When asked about the academic impacts of Redesign, the students at West High only briefly mentioned the specifics of how they use their flexible block. They focused more on the flexible nature of their work throughout all of their studies. This idea of flexible learning transcended discussion of time and structures of the school day. Rather, the discussion centered around the general learning experience of students at West High. Principal Wilson alluded to how the flexible timetabling at the school provides students with the ability to "pick and choose where they want to go to get help and support on their studies." He also mentioned this flexibility extends to more macro-personalization of students' schedules, where, in some cases, West High has "students who are working completely independently on their own through online courses." Wilson also concluded that these flexible impacts on the nature of students academics are often the result of how Redesign is changing the conversation around student learning where students are "able to self-advocate more, and understand how to communicate about how they learn and what they need." His assertion that Redesign has opened up the conversation about learning in a different way also manifested in many of his thoughts about how Redesign

has begun to impact how students at West High are being assessed and the commensurate learning opportunities.

The impacts of personalization on assessment and instruction. Although the concept of assessment and instruction were not a clearly defined area of investigation in this study and its questions, it does fall within the definition of academic success. Foundational Principles of High School Redesign (Alberta Education, 2014b) provide clear linkages to what learning and assessment should look like in a successful Redesign school. These are also defined within the Foundational Principles of Mastery Learning, Rigorous and Relevant Curriculum, and Assessment. All school principals, and some students, indicated that they were beginning to see changes in the nature of their classroom instructional design and assessment. The principals of these sites described how they are using the flexible nature of their learning environment to pursue improved learning, and the students also reflected about how the nature of teachers' instruction impacted their academic success.

The discussion at West High was primarily focused on how assessment and learning experiences impacted students' academic success. Principal Wilson focused heavily on these emerging ideas. He talked about how West High began their High School Redesign work:

We were kind of interacting with High Tech High and were seeing some of the things they were doing there around cross-curricular, real-world project-based learning kind of things, and were really excited about moving in that direction. Wilson was outright in his belief that changes in instruction were key to transforming learning in his school. He believed that personalization hinged heavily on the "flexibility

for teachers and students [being able] to access their assessments in a variety of different ways.” He pointed to what he calls the “most important” thing at work in West High:

What I have seen is an amazing amount of flexibility by the teacher in how students are assessed. Whether it’s the time they’re assessed or the type of assessment. Re-dos, do-overs, projects, you know there’s just so much more flexibility around that then there was before Redesign. Its not perfect, and there are still a lot of classes that are getting there... you know notes, quiz, test and then maybe throwing in the project that is a token throw at Redesign. I wouldn’t say it has flipped education on its ear. But in some cases people are ready to go there.

Wilson’s assertions are supported by some of the experiences students have access to at West High School. Over the past few years, there have been several cohorts available to West High students. For example, grade 10 students are able to participate in the construction of a house for their entire school year, through which they cover their entire grade 10 curriculum. Grade 11 students are able to join a similarly structured science and environmental cohort. Wilson described these cohorts as their version of “schools within a school.” He contended that this was a shift in the teacher and student mindset because “High School Redesign is giving permission to explore some of these things.”

The students at West High discussed how these new forms of learning and assessment both within and beyond the classroom impacted their academic success. While students in the cohort models alluded to above were not part of the sample for the focus groups, many students still had experiences with unique assessment opportunities even in their regular day-to-day classes. William articulated how important “different ways to express his learning” is to his academic success. He not only referenced his own

success, but the success of his peers to support his assertion that “when teachers expect us to do the same thing all the time, it can get boring. And if you don’t know how to do that specific things well, you get really poor marks.” Wendy agreed with William’s sentiment, explaining how “lots of people may not test well, so the more hands-on projects and stuff obviously would help you to be more successful.” William expanded his thoughts, explaining that “I have test anxiety but am really good at projects and things that I have a longer span of time and am not so pressured. So just having other ways to show you understand can be helpful.” Whitney agreed, stating how “projects make it easier to show what you’ve learned if you are actually enjoying what you’re doing rather than just taking a test.” Wendy also spoke about the positive impacts these changes had on her academic grades in English, stating that “I think now we have an opportunity to improve too. In my English class we would do stuff in September but we could keep replacing the assignments if and when we did better throughout the year.”

Although students seemed to understand the benefits of the shifting instructional practices at work in their school, there was still commentary about how they perceived these practices to have potential drawbacks. Wendy mentioned earlier how she could understand how “new and alternative ways to represent learning” could give students greater success. However, Wendy also stated, “At the same time, its not as realistic because some people go to university and its all tests based so you need to be prepared.” She went on to further explain:

I feel like the cohorts are good but at the same time, you need to get through school. I think there are certain things you need to learn in school so being able to

build a building is a good life skill but you still need to get the basic education to be successful.

This assertion sparked some interesting conversation about preparedness and future success among this focus group that will be further examined in a later section of the paper.

The conversation among students at the two other sites was less centered on the nature of assessment and learning. However, principals at both schools explained that this is a continued area of focus as they move forward on their Redesign journey. In the case of East High, Mr. Ernest believed that High School Redesign has impacted his teachers' "instructional design and how they work with students. So that is anything from collaboration as well as the types of assessment they use in their classroom for students." He explained how he is starting to see a "broadening of how students demonstrate their knowledge and what that looks like...it's about teaching the kids, not the course."

Principal Neilson at North High School also alluded to the idea of innovative instructional design and new assessment methodology. Neilson outlined how understanding students' personally through relationship allows, "learning [to] be more suited" to the students. He explained that because his staff "knows the kids, they can make connections" between their instructional design and assessment to suit students as individuals. Neilson mentioned an example of this connection between relationships and instructional design:

The teacher got students out measuring people in the office so the office wasn't always the 'bad' place to go. These are the non-academic kids also. It is all about

making that connection... With that connection to students personally, we can get students to that next level in the academics.

The student experience at North and East High also seem to reflect a transition towards a more personalized approach to instruction and assessment. Eric from East High described one of these unique experiences:

There is one thing that Ms. E. has done with FLT and I think a lot of students appreciate it. She has associated it with a project for her students. Her Chemistry 30 students need to bring in someone with an occupation related to the sciences and they will present on what they do and how it affects the world, and how one comes to a career in that area. In a way, that is workplace career counseling that I have never had at school.

Ellen responded with a statement that provided context for how relationships with teachers have begun to contribute to personalized instruction and assessment opportunities. She asserted, “as much as they are teaching us, we are teaching them too, about ourselves and different ways we learn.” This statement summarized many of the students’ thoughts about what their learning looks like, and how they want it to look. There was a clear message from all of the students that the increased flexibility and subsequent relationships with teachers has begun to create learning opportunities that are personalized.

Personalized Learning and Relationships

In each of the interviews and focus groups, participants identified how High School Redesign has provided additional opportunities for teachers to recognize the individuality of students and make educational choices for those students based on their

unique needs. Alberta Education (2014b) described how personalization in the High School Redesign context required implementation of instructional strategies based on an understanding of students as individuals developed through relationships. This definition identified the importance of relationships in understanding how learning should be personalized for each student. In the three sites studied, there were clear indications that relationships in the schools were foundational in bringing the remaining characteristics of High School Redesign to life. In this study, the relationships discussed are those between students and the school staff, as well as between students and their peers.

When school principals were asked about the nature of relationships in their schools they indicated how the flexible structures afforded to them by the High School Redesign Project were key to fostering more meaningful relationships. In the case of North High School, Mr. Neilson indicated that their flexible scheduling was specifically designed to “provide time for teachers to make connections with students.” He described how before the redesign project, “there was a chaotic feeling in the building... teachers felt their classes were too large they didn’t have the time to connect with kids.” He outlined their current philosophy of “creating relationships before talking curriculum with students.” In fact, in the specific context of North High School, they found it was integral to provide high quality relationships between students and teachers because of the lack of resiliency and high anxiety among students at the school. Neilson believed it is integral for his students to “be mentally healthy, that’s our first priority. Then we can teach them to be resilient.” Neilson also explained that the importance of building these relationships extended beyond creating the safe and caring environment necessary at North High

School. He asserted that these relationships allowed teachers to better understand their students in order to personalize their learning. He gave an example of this:

If our staff can make connection to our kids and we find that Thomas is a provincially ranked ski racer we can personalize his learning to his sport...we can draw connection between his physics 20 classes and his skiing. That learning will be more suited to Thomas, versus telling him about wood blocks skidding down a ramp or whatever in the past. That's the personalization piece.

Neilson summarized his description of these key relationships in practice as being the foremost important change as a result of Redesign at North High. He contended, "It all comes down to relationships in our mind. Everything we do is about creating relationships because we think that if we have that we can get them to the next level"

It was also apparent that the focus on relationships as a foundation for personalization and academic success was a key component at the remaining schools in the study. East High principal, Mr. Ernest, described the "complexity of students today and their needs. Demands are great in the life of today's high school students." He believed that East High sees "issues with resiliency from teens...they're struggling more and more to get the support they need to be successful with their studies." Mr. Ernest believed the answer at East High is understanding that "relationships are key... When high school students go through their classes they can feel somewhat lost. It is about creating a personal experience by allowing students to have key Connect teachers in their building that they can go to." Ernest espoused the effectiveness of these relationships among students and teachers, "its about that feeling of knowing that you're supported,

there are options for you, and we're there to support you. It's not just, 'here's your timetable, good luck'".

Relationships and personalization were also described as key within West High School. Wilson explained his beliefs about these relationships as being reciprocal between students and staff. He explained that as this process grows and develops students are "really appreciating the flexibility that's been given to them. I think some of them are becoming more able to self-advocate for their learning needs."

The principals' descriptions above were mostly focused on how the flexible and structural reforms in place at their schools gave students and teachers further opportunities to develop relationships. They also all described how these relationships had a positive impact on the social-emotional health and academic success of students. When students were asked about the nature of their relationships at school they were asked about the two distinct relationships integral to their student experience: both teacher-student relationships, and student-peer relationships. In their discussion and responses to these questions, students indicated the importance of these relationships for their success.

Students' perceptions of peer relationships. While the findings about the positivity of increased teacher-student relationships were evident and consistent between the three principals' perspectives as outlined above, the perceptions of the students about how Redesign impacted their peer relationships were mixed. The most common assertion of students at East High was that there was some individual choice about using that flexible time to pursue peer relationships. Emily indicated that they had opportunities within their school day to work with their friends:

Sometimes you aren't in the same class or section as your friends for a course, but you can use flex to work together. So it affects how much you see them during school and after school if you have homework or volleyball it kind of limits that. Ellen agreed with Emily as well, stating that she "made many more friends this semester because we help each other out in physics during flex and I wouldn't really know them otherwise."

Students at West High School also found that peer relationships were becoming more valuable and accessible within Redesign. William indicated that their schedule allowed for new connections:

You meet people. If you both are in the same room working on a project, you can talk to each other and get ideas. Or meet someone and say, "hey, what do you know about this?" Because they're probably in there for a different reason or maybe the same. Its kind of more personal time where you might be able to make a friend. There's not like 40 kids in the room all the time.

William also asserted that peer relationships were more important to him than his strong teacher relationships: "they're our age and they're kids that are learning with us... I would say having relationships with someone your own age doing the same work as you is more important because they are going to be moving on with you." Students were then asked whether they would rather source peer or teacher support first. Whitney responded that she would more likely, "ask friends how to do a question before I would go to the teacher." In response, students expressed that they are more inclined to have conversations with their peers around school work because there is flexible time embedded into their school day, where they might not be able to do this otherwise.

Alternatively, Eric from East High mentioned how he feels the complexity of their school day “doesn’t allow enough time with friends or peers.” He described the busy academic, extra-curricular, and personal commitments facing him and other students at East High. He continued to explain his thoughts, “High School isn’t easy... homework is stressful and so is maintaining social relationships.” This sentiment was also similar to the response of students at North High. The North High students expressed the struggles they have with the split lunch and flex times as previously described in the school’s narrative above. Students talked about how the many groups and the rotating lunch hours have both separated the students from their usual peer groups, yet also exposed them to other relationships. Nathan described how “a different lunch time gave me access to different people that I didn’t know and now I have a group of friends upstairs that I would have never known if I wasn’t forced to introduce myself.” But Naomi found; “it is kind of splitting everyone up from the groups and stuff like that when you have three different lunch periods. That is something I don’t necessarily like.”

Students’ perceptions of teacher-student relationships. The most noted positive response from students regarding High School Redesign structures was the impact students felt that embedded time and flexibility had on their relationships with teachers. Eric from East High contended that he “felt lucky to be at East High, because there are a handful of teachers who go the extra-mile in trying to create relationships with students. They seem to value that connection and I appreciate that.” One of Eric’s peers at East High, Emma, agreed that this was the most important factor in place at East High for her success as a learner. She believed that “good relationships are key... If you have a good relationship with your teacher you will have a greater desire to achieve in that class.

And if you have a good relationship with your teacher you feel comfortable in that class.”

Edward responded that he had a very positive connection with his English teacher this year, and explained how that impacted his success, “I have never had strong grades in English... But my relationship with that teacher made me want to put in the extra effort... to show them what I was capable of.”

At North High, students also indicated that teacher relationships are important to their success, but looked deeper into how these relationships impacted both their learning and emotional health. Nathan explained how “their teachers really care, they’re invested in us and the subject they teach.” He also mentioned how the flexible schedule at North High has given him more time to work with the school counselor:

My time with the counselor has helped a lot. Sometimes school can get really stressful and you don’t know how to handle it. So spending that half an hour with the counselor planning or talking can really help with my mental health and grades, because it helps me feel more confident.

Nicole indicated that the value of relationships at North High extends beyond the students and teachers. She described how “one of the best things at the school is the janitor, Betty. She knows like, all of our names.” Laughing, Natalie agreed, and further elaborated how she “gets along with all of her teachers really well. They just care about their subject and want us to do well.”

These same findings were further supported at West High School, where the focus of personalization through relationship was described to impact instructional design.

West High students like William placed a lot of value on their relationships with teachers. He offered the example of his Biology teacher. “She meets with my parents and she

makes a good connection with the students...She really goes over the top and she cares about our personal lives as well.” He described another one of his teachers, stating how “she will ask how you are and she notices how you are doing... She asks if everything is OK... I think that is part of helping you do your best in school.” Explaining how these relationships develop, William’s peers explained how the increased flexibility at West High school creates opportunities for these teacher-student relationships to develop. Wanda contended that this was a result of “in flex, the teachers aren’t always teaching. They’re more relaxed and they’re open to talk about anything. So you can just have a good conversation with them. It doesn’t have to be about school all the time.” Wendy agreed with her belief that “it makes you more comfortable with them... It might make you more open to things during class too, because you know them as a person and they know you.” William again spoke about how these positive student-teacher relationships “make it easier to ask questions because you have a bond with them... Because they are people too.”

The relationships between students and teachers discussed in each of the three schools clearly describe how student-teacher relationships can be pursued and attained. The principals and students both indicated how flexible structures afforded teachers time and setting to develop these relationships. The impacts of these relationships also seem to be positive for students’ mental and emotional health, as well as their success academically. The academic success referenced by students seems to stem from both increased engagement by students through connection, as well as a personalization of what that academic experience looks like as teachers become more familiar with students

as learners. However, the academic successes of students extend beyond the foundation of relationships.

Structures, Goals, and Success

The principals at all three sites identified several structures they believed directly impacted students' pursuit of goals within and beyond High School. Perhaps the most tangible example was the use of MyBlueprint at all three schools. This online tool allows students to create digital portfolios, enter course information and grades, complete aptitude and personality assessments, and use this data to plan and view information about prospective careers and post-secondary options. Principals also outlined how Redesign has provided additional opportunities for career counseling or planning for students. Mr. Ernest at East High explained how their flexible time has provided important time to bring in outside post-secondary agencies:

Since lots of high school kids are not wanting to give up their lunch hour, we are bringing in SAIT or NAIT, or U of C into our learning commons during FLT where we're engaging kids and really exposing them to some cool opportunities that they may not have paid attention to in a traditional structure.

Similarly, Mr. Neilson from North High outlined how they are bringing in a dedicated career counselor who is "having individual conversations and meeting with the grade 12's about their plans when they leave school."

Principals recognized that student goals are also attended to in ways beyond those accomplished by structural changes. There were some very meaningful insights from school principals about the importance of attending to students' pursuit of personalized goals. Mr. Ernest explained how attending to student goals could be as simple as

supporting students “in terms of courses. Providing what they need, what they require, what their passions are.” He provided one example where a student had a very full academic timetable but wanted to complete AP art. “The teachers said they would work with her to get her set up, use some technology, connect with her during FLT time, so she could get through the course.” In this case, and others like, it the personalized scheduling accommodated for the individual goals of students. This same idea can be more universally applied creating opportunities for success in attaining high school goals. Mr. Neilson from North High stated, “I think in the past we believed our goal was to get every kid ready to enter university.” He explained how this is not the correct philosophy of Redesign. At North High “our job is to get ready to effectively pursue life after high school.” The distinction between preparation for university versus preparation for future success is key. Many of the opportunities inherent in these, and other, redesign schools in the province consider the many diverse future pathways available for students beyond high school.

Mr. Wilson from West High School had a great deal to say about how students are prepared within and beyond high school. To Mr. Wilson, the entire purpose of education is to help students achieve personally directed goals. He asserted, “they’re our output, they’re our product... So that’s what we center around, trying to get them to learn the lessons they need to be successful and contributing members of society.” Similar to the thoughts of Principal Neilson, Wilson explained how defining success in high schools is beginning to shift:

My definition of success would be that those students have the tools that they need to be successful in whatever they want to do, whatever their chosen

occupation or path. And contribute to society in a meaningful way, whatever that is. We don't need to be pumping people into universities and we don't necessarily need to be making sure students get a certain GPA, we just want to ensure every student has the tools they need... We are creating everything, doctors, lawyers, convenience store workers, they're all coming through here. And we need all those people in the world. So how do we best get them to understand how they can contribute in a meaningful way?

Wilson ascribed to the belief that schools are beginning to shift how they communicate to students what success is. He believed that schools are now trying to get students to understand what students learn in school "isn't about the curriculum, it has to do with teaching them how to be a learner... Because when you pop out of high school you've got to have the ability to learn new things, un-learn things, and re-learn things." He went on to outline how the current focuses that schools perpetuate are often "set up for turning kids into college or university." He explained how, for his school, this was one of the "impetuses of the house cohort project, to be focused on some of the other kids, that are going to contribute to our world in these other ways."

Student goals and success. When students at the three schools were asked about their pursuit of goals, they took a very similar approach to the school principals. Students' responses considered both the structures in place at their school impacting their ability to pursue their goals, as well as their beliefs about goals, and how success should be defined. The students of East High identified several examples of how their goals were approached throughout their high school experience. Emily described how personalized scheduling provided her with opportunities to pursue her desired post-secondary

programs. She explained how she “took math 10-3 and 20-3” but they are creating some schedule changes for her to “go back and complete math 10C.” She expanded by mentioning how this came about:

Teachers help you make lots of decisions. They can do that when they connect with you on a more personal level they will tell you what things might be a good choice, what schools to go to... they give you input, not to make decisions for you, but they can help you go forward.

Edward added to Emily’s statement:

They stress it to you, like in grade 9, what do you want to be? And what do you want to do? ... But I think as you go through High School you change your mind many times because you learn new things and find new interests. One minute you want to do something then you learn something or learn about something new and then you think maybe that’s what I want to do or that’s what I want to be.

This was not dissimilar to what students at North High described. Naomi explained how the structures at North High empower her to attain her goals:

It enhances it, because all the teachers and things are trying to help me meet my personal goals...Once you meet with the counselor she will check back in future semesters to see how its going... She will check up on you and make sure you are meeting the requirements to get into that college.

In response, Nicole also mentioned how “there are lots of boys and girls who are going right into the working trades too.” In the case of West High, the students focused heavily on their personalized goals. Wanda stated how it was important that she has access to “different courses, because I have a lot of interests so it’s nice to have a wide range to

choose from.” She also explained how the nature of flexible scheduling is important because many of the courses are offered at different times, or online, and “wouldn’t fit into my schedule during the day.”

Moving beyond specific structures, students also described their personal beliefs about what the goals of their high school education were and should be. This was one of the more unexpected findings unearthed throughout this discussion. There were interesting distinctions between how students perceived academic success, and how principals sought to foster new definitions of academic success. In one example, William from West High explained how he thought the house-building cohort would be interesting to him but he “didn’t want to be behind in the next year... It’s good if you’re going to use those skills but if you have a lot of other stuff you’re wanting to do you’ll get behind on that.” This comment brought up interesting thoughts from Wendy, who proposed how she knew in “other schools students are allowed to redo tests as many times as they want. I don’t think that’s realistic or how it is in the real world.” This seemed to be a similar perspective for many students at West High. They all indicated they wanted to attend university, regardless of their current academic standing or perhaps aptitude towards academics. Wendy explained that she believed many available structures in place, like cohorts or alternative assessment, weren’t for her because “I think the old way of having the teacher do the PowerPoint and write the test prepares you, cause that is how it will be in university.” The focus on university attainment at West High was also mirrored at North High and East High. All students indicated their goals were to transition to university programming, and hoped to attain the necessary courses and grades to make that happen. The complexity inherent in using university as a

benchmark for success was brought to the surface in a conversation at West High. When asked about how success in high school is measured, Wendy believed that “grades were a good start to be honest. Because that is what universities are looking at.” On the other side, William explained his measure, “I think about whether I understand it or not. Because if I can understand something, it doesn’t necessarily mean I get good marks.” He also gave a relevant example of how Redesign is struggling to effectively measure success for students moving onto the next level:

It’s also about the effort we put in. Some people would get really good grades without even trying and some people can work really hard and not get good grades. Like my sister, she tries really hard. She might not get the best grades but I feel like that is still success for her. If you’re trying hard but not getting good marks it’s better than not trying hard at all and getting good marks.

Next Steps in High School Redesign

At the end of their interviews, school principals were given a final opportunity to communicate some of their experiences with the High School Redesign Project. Specifically, principals were asked to address some of their approaches to Redesign that were not successful, and asked to identify some of their thoughts about the future of High School Redesign in their schools.

Mr. Neilson believed he may have approached the project too quickly as he transitioned into his role at North High. He described how as they move forward he hopes to build additional capacity among his staff. He noted, “With our rotating lunch times...there is no time for staff to sit down and meet.” He talked about how in the future

he hopes to delve deeper into “cross curricular grades pods” within the school to provide some additional opportunities for staff and students in the years to come.

Similarly, Mr. Ernest at East High acknowledged, “there is always work to be done in terms of High School Redesign. It’s a garden that continually needs tended to ensure it’s working for kids and working well for teachers.” He continued to describe how he sees the best work with Redesign in the Province as being “reflective of best practice of what’s happening at elementary and middle schools.” Ernest alluded to the same future Redesign pursuits as Neilson when he asserted:

I think this should just be a way of being. This should be how school operate...

Yes there were physical things that allowed us to achieve things with the removal of the Carnegie unit. But it was so much more. It dissolved some key mental barriers about how we approach students in our buildings. How we work with kids and how we support kids. Being able to do some really creative things with regards to credits for kids.

He finalized his thoughts about Redesign by describing his desires that Redesign really begin to affect “what we want to try with kids in the class. And what assessment really needs to look like.” He explained how moving forward it will be about that “instructional piece that will engage kids... About learner engagement.”

This was also similar to the beliefs of Mr. Wilson and the work required at West High School with future Redesign cycles. He believed “the principles that Redesign has put into place have been well selected. It is in like with really where today’s thinking is going on teaching and learning.” He continued to describe how the structures are almost a barrier to really embracing High School Redesign:

You just have to find your spots. It's very hard to do something totally differently... You have these pockets and they blow it out of the water and then somebody moves a little bit because they see that... It's incremental and organic... That's how innovation happens in education.

He ended his thoughts by linking the future of Redesign with the future of curriculum in Alberta stating, "I am looking forward to curriculum re-design... I hope it comes out of Redesign and we're doing things differently, but it will be a challenge."

Chapter Five: Discussion

The data from school principal interviews and student focus groups yielded key understandings consistent to all school sites. Participants communicated what was most important to them within their Redesign context. Principals conveyed their perceptions about what they believed key Redesign structures are, or what makes the Redesign project a success in their school. Student focus group participants articulated how their high school impacted them as learners. This study does not make direct conclusions about specific Redesign structures that are universally successful or unsuccessful for student learning. Rather, this study conveys how the lived experiences of students within the High School Redesign Project have uniquely impacted students in order to address the research question. Specifically, this study looked into how the personalized High School Redesign initiative impacts students' academic success, relationships in schools, and pursuit of goals.

These lived-experiences were uncovered through the use of a phenomenological methodology throughout the research process (van Manen, 1979; Willis, 2001). By examining the thoughts and beliefs of the principals and perceptions of students at the three school sites, data was generated that led to conclusions about how High School Redesign is being lived by students in the province of Alberta. These qualitative findings provided two key areas of discussion for the emerging discourse surrounding High School Redesign. Firstly, findings describe three instances of how High School Redesign, as stated by Alberta Education (2014b), are being implemented in Alberta high schools. Secondly, findings identify students' perceptions of how High School Redesign is impacting their academic success, their relationships, and their pursuit of goals within

and beyond high school. The discussion that follows will describe how the findings in these two key areas contribute to the ongoing discourse surrounding High School Redesign.

Unique Implementations of High School Redesign

In order to understand the phenomenon, or lived experience for students, it was necessary to first understand their unique high school experiences at each of the schools examined in this study. Although the primary focus of this study was not to describe the lived realities of three redesign schools in Alberta, this was a necessary step in the research process. In order to understand how students perceived specific redesign implementations to impact their success, there needed to be context as to what those unique reforms were for students attending different high schools. To generate this understanding, the logical conclusion was to interview the school principals. What was not anticipated was the valuable data that would result from these principal interviews. These interviews generated much more than a list of reforms and Redesign ideas at work within each school. They provided rich data as to how principals perceived Redesign to impact student success, and therefore became key components in answering the research question. These interviews also yielded data as to how Redesign was lived out for students, and became a complimentary data set to compare, contrast, and interpret student understandings of how Redesign might impact their successes in differing contexts with a variety of unique implementations or experiences.

This paper began by introducing the High School Redesign Project in the Alberta. This included a brief overview of the Foundational Principles of the High School Redesign Project (Alberta Education, 2014b). It was clear that these principles were

centered on personalizing student learning, but were extensive in scope and substantial structural changes to implement in an existing high school context. The documentation surrounding High School Redesign (Alberta Education, 2009a, 2014a, 2014b, 2014c, 2015b) indicated that the project can take many forms in its development and lived reality within any high school. It was also important to note that, while schools were encouraged to include and adapt each of the foundational principles to their context, it was not an expectation that a Redesign school immediately implement *all* Foundational High School Redesign practices. In the case of these three schools, they all paid similar attention to the foundational principles that centered on personalized learning for students through relationship building and curricular delivery. School leaders, in consultation with division personnel, school staff, and community stakeholders, chose how Redesign would be implemented in these school contexts. While each of these schools shared some common characteristics with respect to their student and community demographics, it was meaningful that these experienced Redesign schools each took similar approaches to the development and Redesigning high school for students. The nature of these reform implementations in these schools revealed a common set of values (Boydston, 1981). All three of these Redesign schools ascribed to the understanding that student success will occur when students are understood as individuals who should have a personalized learning experience. This understanding also aligned High School Redesign with how foundational authors defined personalized learning in practice (Dewey, 1938; Dewey & Dewey, 1915; Kolb, 1984).

These Redesign schools, and their leaders, clearly believed the key characteristics of High School Redesign encompassed personalized learning. On a larger scale, these

schools placed a great deal of value in how they could personalize student learning through flexible learning time, flexible learning environments, and the subsequent relationships that resulted from these flexible reforms (Eaton & Nelson, 2007).

The Effectiveness of Flexible and Personalized Learning

Literature indicates that flexible learning environments are often linked to personalized and experiential learning (Dewey, 1938; Kolb, 1984; Lunenburg, 1992). In this study, the concepts of personalized and flexible learning extended beyond student scheduling into a mindset surrounding instruction for students. This personalized mindset in a flexible environment was evidenced in all three of the redesign schools. According to the students, personalized learning has a dramatic impact on the nature of the high school experience for them, as actualized through the High School Redesign Project. Quint (2008) described the “twin pillars of reform [as] (1) instructional improvement and (2) structural changes that personalize learning” (p. 66). In the case of the three schools in this study, principals and students regularly referenced how daily learning experiences were personalized. Students and principals suggested that student ownership over this personalized time provided opportunities for teachers to improve student learning by differentiating instruction to students as individuals. These enhanced pedagogical approaches were also aided by embedded time, as well as supportive relationships between teachers and students (McClure et al., 2010). In other words, Redesign allowed students to pursue learning that would not necessarily be accessible within a traditional framework. The flexible structures were the bedrock that provided students with opportunities to delve deeper into learning that was most meaningful to them. As evidenced within several of the focus groups, students were being afforded unique

experiences and learning opportunities that emerged as a result of the individualized approach to instruction afforded by Redesign. The personalized environments were also most successful when they stemmed from an understanding of students as individuals developed through increased teacher-student relationships (Wallach et al., 2006).

Interpersonal relationships were a key factor in students' perceptions of success and engagement in the Redesign contexts studied. Students described how flexible scheduling and flexible learning environments contributed to positive relationships with both peers and teachers. This was in part due to diverse learning opportunities students had in the form of smaller or personalized groupings embedded into their learning day. The flexibility afforded to the schools through the Redesign project provided unique avenues to explore student groupings, scheduling, and access to unique learning experiences such as cohort learning models. These smaller, more focused opportunities were instrumental in the development of the meaningful relationships and something students regularly referenced, and principals affirmed, throughout the data collected in this study.

The idea regarding student grouping aligned with Peters (2011) description of effective reformed High Schools. He contended that successful schools have restructured their student groupings into "smaller, more personalized learning communities focused on developing students academically, socially, and emotionally" (p. 89). The flexible implementations at the three sites examined all had some type of student learning community grouping that was specifically designed to provide additional connection and support for learners' academic studies. These groupings took different forms in the three schools: some were more fluid and flexible, while some were structured and selected.

However, all schools adopted variations of those collected by Fijal (2013) in the Alberta Education (2009a) review of Redesign literature. The schools in this study took their lead from early reform models across North America in the “America’s Choice Model; the Breaking Ranks Model; the Career Academies Model; the Early College High School Model; the First Things First Model; several Small Schools models; and the Talent Development High School Model” (p. 17). Each school implemented some aspect of these smaller *schools within a school* models. Principals and students described the many successes that resulted from these personalized groupings or models. Principals explained how they provided students with improved access to learning opportunities through personalization, increased accountability for learning, and ultimately a greater connection to the learning or the school itself for students. These learning communities in practice also evidenced the Alberta Education (2009a) description of effective redesign schools as those that value extensive student support, developed by small learning communities fostering meaningful relationships. The students affirmed the important role that personalization played in their experience of school.

The successes of these Redesign schools make a strong case for flexible scheduling as an introductory step to effectively undertake Redesign. In the provincial context, the High School Redesign Project asks more of schools than simply flexible and personalized programming. However, the perceptions of students within this study convey a much deeper meaning behind flexible structures than simply choice and extra time. These initial steps toward flexibility created a shift in the culture of these schools. By providing students and staff with embedded time, they were able to think beyond the requirements of the *regular school day* and think differently about student learning.

Perhaps most importantly, these small groupings and flexible structures provided students and teachers with the ability to build relationships and, through these relationships, allow personalized instructional practice to develop. In this regard, High School Redesign is “building a community of independent learners” similarly to aims of Neill’s Summerhill school (Cassebaum, 2003, p. 578).

Redesign Impacting Relationships, Academics, and Goals

McClure et al. (2010) described how making more explicit connections between students and their learning environments results in positive personalized school cultures. The development of these personalized cultures lead to valuable relationships among teachers and students in which success was more likely (McClure et al., 2010), thus linking flexible and personalized learning environments with student success. Both past literature and the findings of this study indicate that effectively redesigned schools provide flexible student-centered structures that lead to improved relationships that, in turn, result in student success within and beyond high school (Aness, 2008; Eaton & Nelson, 2007).

This literature and the findings of this study provide clear answers for the research question examined: how personalized reforms impact students’ relationships, academic success, and goals within and beyond high school. In the case of High School Redesign, this personalized initiative did not impact relationships, academics or, goals as independent factors. Rather, the flexible reforms and structures in place at the Redesign schools studied led to increasingly valuable relationships within the learning environments of these three high schools. In turn, these relationships contributed to increased student academic success linked with instructional practices. It was when

students were more successful in the high school context, that they were enabled to successfully pursue their goals both within and beyond the high school context.

The flexible underpinnings of personalized reforms were not as explicitly stated throughout recent literature to the extent that they were present in the findings of this study. There were clear links between flexibility, personalization, relationships, and success throughout literature (Ancess, 2008; McClure et al., 2010). However, the findings of this study went further to reveal that flexible learning environments can serve as foundational steps to fostering improved relationships and student success within high schools. Each Redesign school in this study initiated a large portion of their Redesign journey by making structural changes that pursued flexible learning conditions for students. Principals described that the flexibility afforded to students and teachers within High School Redesign was paramount to the success of the Redesign Project in their schools. Findings described how students perceived that flexible timetabling and a flexible approach to their learning created conditions that led to increased independence, increased engagement, and improved relationships within these Redesign schools. Both principals and students provided evidence for how flexible time was a key condition that provided students with an increased advocacy for their learning, which in turn manifested in interpersonal and academic success.

There is a great deal of importance in understanding flexibility as a foundational component to implement and sustain high school reform. Firstly, this indicates that students are already actively looking to be greater advocates for their learning and want to pursue meaningful relationships within schools. Redesign schools should consider how to effectively create conditions for students to pursue independence and relationships.

When students are given flexibility within their academic schedules, they are able to make independent and reasoned choices about how to effectively learn, achieve academically, and build positive relationships with peers and school staff. Therefore, before schools attempt to look to create additional structures or initiatives geared at providing students with academic success, school leaders should understand that the provision of independence and flexibility can have a great impact on student experience of high school. If the goal is to provide students with tools and opportunities to effectively pursue goals within and beyond high school, then improved academic success and relationships are necessary underpinnings.

Relationships as a foundation. The value that students placed on relationships and their development was central to the findings of this study. A majority of participants in the study conveyed the importance of teacher-student and student-student relationships. These relationships were clearly central to the successes of students in feeling connected to their schools. Additionally, these stronger relationships contributed to a greater sense of commitment to curricular learning in these schools. As a result, these feelings of increased belonging and investment were linked to improved academic success. Additionally, many students who developed improved relationships with teachers experienced a more personalized approach to their learning and assessment. This personalization also led to improved academic achievement for students.

This study's finding that relationships are foundational to student success is clearly supported by previous literature and research. Ancess et al. (2007) described how small communities, such as those in these three Redesign schools, provided students with greater success, in part, due to the fact that teachers were available to support students.

Quint (2006) also acknowledged that flexible learner communities of this nature offered students “a sense that there is an adult in the school looking out for their well-being” (p. 16). Similarly, students in these Redesign schools communicated how the flexible structures led to students feeling connected to their teachers. The students ascribed to the belief that their teachers cared about their success, and began to appreciate the support their teachers provided them both personally and academically.

Akin to the title of her article “Small Alone is Not Enough”, Ancess (2008) purported that students need more than effective time and groupings to be successful within a redesigned high school. Ancess (2008) contended that successful schools demonstrate “community, intellectual and personal engagement, authentic learning and assessment, and trusting relationships among adults and students” (p. 28). Ancess’s (2008) assertions were supported by the findings of this study, particularly the development of trusting relationships between adults and students. Students felt that the importance or value that teachers placed on building trust and rapport to accommodate their individuality led to personalizing student learning in many aspects of the students’ daily high school experience. Klonsky and Klonsky (1999) described how this personalization was attained, asserting that developing relationships allowed teachers to “take into account the varied experiences, interests, and learning styles of students” (p. 40).

McClure et al. (2010) contended that positive relationships are worth the work put into personalized reform. They cited “growing evidence that indicates greater personalization—improved, trusting relationships particularly among teachers and students—are able to raise students’ expectations for themselves and teachers’

expectations for students” (p. 4). This implies that other reformed high schools should focus on creating opportunities and conditions for student relationships to flourish.

Academic success and student achievement of goals will follow.

Relationships’ impact on academics. The relationships developed between teachers and students at the three participating schools had an impact beyond increasing student belonging, engagement, and individualization. According to students, there were many instances where improved relationships contributed to more effective instruction and assessment. These instructional improvements support the remaining Foundational Principles of High School Redesign. The principals at all three schools spoke about how relationships are significant for improving instruction. Similarly, Prain et al. (2013) posited that student-teacher relationships:

Create a mutual responsibility among teachers, teachers and students, and among students, where teachers are responsible for designing and implementing a curriculum that (a) engages all students, (b) provides opportunities for differentiated teaching and learning that addresses group and individual student needs, and (c) motivates and develops students’ capacities to become independent learners. (p. 662)

The students in this study described how effective teachers built relationships through both their curricular and non-curricular interactions. Students described how effective teachers interacted with them about their interests and goals, and would then develop instruction and assessment that aligned with student needs. In doing so, these teachers were extending the personalized and flexible attributes entrenched within their schools to pursue the remaining aims of the High School Redesign Project. This provided a concrete

example of what Gini-Newman and Case (2015) characterized as student-centered curriculum in which “both educators and students have expertise that must be respected” (p. 33).

The pursuit of personalized instructional design and assessment was also described as a focus moving forward by each of the school principals. The principals clearly indicated that flexibility and relationships were foundational to transformational change in instruction and assessment. By implication, then, a personalized foundation for learning is key in the pursuit of unique instructional design. In these three schools, examples include real-world experiences, cross-curricular opportunities, hands on cohort models, and authentic assessment tasks.

Each Redesign school examined in this study had a strong grasp on the personalized nature of Redesign. The schools are now leveraging the information that personalized cultures provide about students to impact how learning is taking place within classrooms. The schools are modeling how to effectively pursue and attain the Alberta Education (2014b) foundational High School Redesign principles associated with instruction and assessment: *Rigorous and Relevant Curriculum, Mastery Learning, Assessment*, and implement the necessary *Educator Roles and Professional Development* to make this a reality. It certainly was evident that the leaders in these Redesign schools understood that flexible structures lead to improved relationships. In turn, students are perceiving that improved relationships have and are now continuing to impact how they learn and there are signs that the focus on relationships are also beginning to change how they pursue their goals.

Student goals and personalization. A great deal of conversation about the goals of effective 21st century high schools surrounds the idea of preparing students for what lies beyond high school (Darling-Hammond et al., 2002). Darling-Hammond et al. noted that the most effective high schools are those that give students the opportunities and skills to be successful in whatever they pursue beyond graduation. Current literature also mirrors the importance of goal achievement as a foundational reason for high school reform and redesign.

Fijal's (2013) review of literature for effective high school redesign in North America made several references to how emerging reform models emphasized characteristics aimed at making student transitions to post-secondary training more effective. Models like the Early College High School Model, Career Pathways Model, Vocational Training focused routes, and Dual-Credit Programs have all sought to effectively implement programming to create student pathways to success beyond the conventional high school classroom. In fact, ACSD asserted that personalized learning occurs when students "work with educational mentors and career coaches and take ownership for connecting their learning with future goals" (Fijal, 2013).

With respect to goals, this study yielded findings that were less consistent with many of the aims of these early reform models. Principals, and many of the students, understood the various routes available for students beyond high school; yet, there seemed to still be strong emphasis on students transitioning into studies of a professional nature at a university. Nearly every student described their future pathways as pursuing careers in medicine, law, nursing, or other similar professions. This meant that not one of these focus group participants viewed themselves as transitioning to the workforce,

pursuing vocational training at college, or moving into the trades. In order to pursue university-level studies, a more traditional approach to high school education may be better suited, while many of the innovative instructional practices in high school redesign are less applicable. For example, a hands-on cohort opportunity with a focus on developing skills in the trades would not directly serve these students who planned on attending university. It should be noted that these students' common goal might be reflective of the demographic and socio-economic nature of the schools within this study.

The principals interviewed in this study all seemed to articulate how education, and specifically high school education, is in flux. They described their understanding of how the current structures of school remain entrenched in the factory models of the early 20th century (Petrina, 2004; Toffler, 1970). Further, they discussed their belief that there is a great deal to be done to fully embrace what High School Redesign could be for their school and others. The principals believed that these current structures do not serve vocational, workforce-bound, or trades pathway students as well as they could. Although principals described specific initiatives that were successful in this area, these practices were not yet widely embraced.

Both societal expectations and current high school structures seem to have had impacts on how these students set their individual goals. Staff and teachers at these schools are not explicitly stating these students should all be setting goals of pursuing university. Yet, these are the goals these students believe they should be working towards. Setting the societal and socio-economic factors aside, there are ways in which high schools could more effectively serve students who might be well suited to pursuing diverse pathways beyond high school other than university. Rather than specific

initiatives impacting small cohorts of students, Redesign schools should seek to exemplify practices that provide students with daily authentic experiences that apply curricular learning to a wide variety of pursuits beyond high school. With these reforms in place, students become more readily able to connect learning in curricular subjects to a variety of goals beyond high school. This could mean that students would value academic achievement as more than a grade that ensures university entrance, but rather as a way to gain knowledge and skills that they see as serving them in their preferred futures.

Additional Impacts of Flexible Scheduling on Student Development

In addition to the findings that directly answered the research question, there were also important tangential findings about the nature of flexible time that extended beyond students' academic success. Despite not being specifically asked, students and principals often referenced how flexible scheduling and instruction provided time for students to develop maturity and independence alongside the inherent academic benefits. The three sites selected to participate in this study were chosen because each had experience with the implementation of a flexible timetable that provided students with some degree of independent learning time embedded into the school day. Although this was known and noted before the interviews were initiated, what was not known was the importance this flexible time would play in the narrative and lived-experiences of the staff and students at the three schools.

In the context of Redesign across the Province, there is clearly something meaningful about this flexible time, given that a majority of the over 200 participant schools have implemented a flexible timetable of some fashion. In the years since the High School Redesign Project began, there have been criticisms of this flexible time.

Some stakeholders ascribe to the belief that students are not using their flexible time effectively and that, perhaps, it should be more structured or eliminated in order to give this time back to students' curricular subjects. However, responses from students indicated the tremendous value that flexible scheduling provided for both their academic learning as well as their personal and interpersonal development not associated with curricular outcomes.

Principals explained how Redesign has allowed them to provide opportunities for students to engage in activities beyond the curriculum, to develop their interpersonal skills, to build relational skills with peers and mentors. Students communicated how increased flexibility provided them with opportunities to take a break from what they interpreted as stressful daily schedules, to build peer relationships that were previously lacking without this flexible scheduling, and to give them time to communicate with teachers in ways that were not always necessarily tied to their academic achievement. Both students and principals described the complexity facing students today. They discussed busy school, extra-curricular, interpersonal, and work schedules. These busy and engaged learners then described how they were able to make independent choices about their needs within these flexible schedules. Students were being empowered to make choices about whether this time should be used for academic purposes, used to access mentorship from trusted teachers, or perhaps just to use as time to connect with a peer with whom they do not have opportunities to interact with outside the regular school day. Some students even talked about how flexible time could extend to their mental health by accessing opportunities like yoga sessions, or simply sitting and reading a book to get a break from their daily textbook fatigue. This served as a reminder that education

is about more than academic achievement and university transition rates. The high school of today must develop citizens, not only students. The self-advocacy and independence provided through flexible timetabling serves as an avenue to provide the opportunity to develop skills that extend beyond the curriculum.

The statements made by principals and students about the non-curricular value in flexible time provide important considerations for future iterations of High School Redesign. These three schools have provided excellent case studies for the implications of High School Redesign on students' personal development. These schools are evidence of the value a school plays in teaching students to be self-aware, future oriented, and how to make reasoned choices about their needs to be successful, educationally *and* otherwise.

Reflections and Possible Areas of Future Study

Although this research was primarily focused on students' perceptions of High School Redesign, it was necessary to spend time investigating the nature of Redesign in three schools. Through the phenomenological investigation of this lived experience, the research uncovered a deeper understanding of how Redesign can be successfully implemented in a variety of contexts. The principals' interviews provided a much more valuable component of the study than anticipated. These interviews gave insight into how and why Redesign implementations came to fruition and how these Redesign structures influenced student academic success, goals and relationships. With an understanding of the nature of Redesign at each site, student perceptions became more meaningful.

The additional insight provided in principal interviews uncovered further areas of investigation that continued inquiry into High School Redesign may seek to explore or examine. There is a complex interplay between desired school reforms, their

implementation, and the students' lived experience of those reforms. There would be value in investigating how teachers perceive High School Redesign to impact students' academics, relationships, and goals, rounding out the perspectives of the school leaders and the students. This would add to the High School Redesign narrative and provide greater details as to both how Redesign takes shape in schools, and how all stakeholders are experiencing it.

Future studies might also investigate how Foundational Principles are being implemented and to what extent. Further, it would be valuable to explore how Redesign is changing over time. This would be valuable research at both a school site and provincial level. The three schools in this study had several similar characteristics and similar demographic composition. There are many Redesign schools with differing contexts that have not been similarly researched and for which a gap in literature presently exists. For example, large urban schools and small rural schools could have unique perspectives as to how Redesign is lived out. These experiences and perceptions could resonate or diverge from the perceptions uncovered in this study, therefore adding to the conversation about the lived experience of High School Redesign for *all* students. These further studies at a wider variety of schools would also provide data regarding how Redesign is implemented, what is successful, and what challenges schools experience. Regardless, further research will continue an important dialogue around High School Redesign in Alberta as well as general high school reform for the broader educational community.

A further avenue that would supplement examination of the effectiveness of High School Redesign would be research into how the personalized nature of the project

impacts students' goals and successes. As previously described, this study conveyed surprising findings with how students perceived High School Redesign to impact their goals. These students still ascribe to the belief that high school transition is primarily focused on moving towards professional studies at the University level. However, this is in contrast to the Redesign Project's goals of providing additional avenues of student success beyond high school such as vocational training or trades' pathways. It is possible these findings are because the Redesign Project is in its early stages for these schools. Alternately, this finding may be due to the fact that schools like the three examined in this study have not yet made reforms encouraging vocational or trades opportunities for students.

As the effectiveness of High School Redesign Schools across the province continues to grow, it seems reasonable to assume that the inherent goals associated with Redesign will become norms for what effective high school looks like. It is my hope that this study provides an entry point for future investigations regarding the High School Redesign Project. As this project continues to develop and take hold among Alberta High Schools, there needs to be continual investigation into its nature and effectiveness across Alberta's diverse contexts. As high school reform continues, it is important for unique implementations of Redesign to be documented and studied so other Redesign schools can leverage successes and findings to impact their own reform.

Conclusion

The past successes of personalized learning structures have been explored and documented (Keefe & Jenkins, 2000). Specifically, in the province of Alberta, there appears to be support for the continuation and development of these personalized learning

reforms through the High School Redesign Project (Fijal, 2013). This support has been the result of data that indicates increased student engagement as evidenced by decreased drop out rates, improved attendance, and improved academic achievement (Klonsky & Klonsky, 1999; Wiggins, 2011). This study, however, was not focused on quantitative measures of student success. Rather, the study elicited perceptions of students regarding how personalized reforms such as High School Redesign have impacted their learning and experiences at school.

The findings within this study indicate that Redesign schools are doing more than implementing a set of structures, they are embracing a new mindset about what secondary education can and should look like. The students in this study offered their voice as evidence that Redesign schools are enabling students to become more independent, make effective and reasoned choices about their academic and personal needs, and build valuable relationships with teachers and peers.

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Appendix A

Form Letter for the Recruitment of Study Participants

To Whom It May Concern:

My name is Dan New. I am a graduate student from the University of Lethbridge and I am currently completing my thesis project as a culminating activity for my masters of education with a specialization in educational leadership. I am contacting you with this email to request the participation of your [school division / school] in my research for the 2016/2017 school year.

The title of this research project is *The Student Experience of High School Redesign: Investigating the Perspectives of Diverse Students in a Personalized Learning Environment*. I wish to collect research that seeks to inform the nature of the student experience in the Alberta Education High School Redesign Project. Specifically, I hope to ascertain how this personalized initiative has impacted (1) student relationships with adults and peers in a variety of redesigned contexts, (2) student engagement with their studies, and (3) the initiatives implemented at schools which serve to effectively enable students to pursue their preferred goals beyond high school.

Based on my understanding of the redesign work occurring at your [school division / school] I would like to request your participation in my research. This would entail three separate visits to the school building. The first of which would be introductory interviews with the school principal. This would involve a single interview with the principal in their office for approximately 60 to 90 minutes. These interviews will serve to inform the High School Redesign practices at work, the desired purposes of the school's participation in the project, and to create somewhat of a profile of the school to inform research findings. Additionally, these introductory interviews will lead into the second form of data collection by discussing the nature of prospective students who might participate in focus group interviews. These focus groups with students would involve conversations regarding the personalized redesign practices at work within the school. They would take place in the school year, approximately late spring. Each of these two focus groups will take approximately 60 to 90 minutes of the students' time. I will be providing a blank consent form for the school principal for their participation. I will also be providing the school with several blank consent/assent forms for students, which will be given to a secretary or another third part at the school to disperse and collect from the student participants.

At this stage, I have completed the introductory components of my thesis work and am approved from my Graduate Studies Committee and have received ethics approval from the University of Lethbridge Human Subject Research Committee to conduct my study. I would love the opportunity to discuss this study and your prospective participation further over the phone or in person. At your earliest convenience, please provide me with your telephone contact and some appropriate times to speak so that I can further discuss this research process with you.

Thank you for your time and should you have any further questions, please reply to this email at dan.new@uleth.ca, or contact me over the phone at (403) 827-4415.

Sincerely,

Dan New

Appendix B

Adult Participant Consent Form

You are being invited to participate in a research study entitled *The Student Experience of High School Redesign: Investigating the Perspectives of Diverse Students in a Personalized Learning Environment* that is being conducted by M.Ed. student Daniel New. Dan New is a graduate student in the Faculty of Education at the University of Lethbridge and you may contact him if you have further questions by phone at (403) 827-4415 or email at dan.new@uleth.ca

As a graduate student, I am required to conduct research as part of the requirements for a degree in Masters of Education with a specialization in Educational Leadership. It is being conducted under the supervision of Dr. Carmen Mombourquette and Dr. Pamela Adams. You may contact Dr. Mombourquette at (403) 329-2018 and Dr. Adams at (403) 332-4070.

The purpose of this study is to explore the conditions and characteristics of the personalized reform initiative. This will be accomplished through examining the personalized learning experiences of diverse learners who attend schools that are part of the Alberta Education High School Redesign project. The study will investigate student understanding regarding how these reformed school environments have positively or negatively impacted student perceptions of school success.

There will be careful consideration throughout the research process surrounding the contributions of personalized learning environments towards (1) student relationships with adults and peers in the various Redesign contexts, (2) student engagement with their studies, and (3) the initiatives implemented at schools to serve in effectively enable students to pursue their preferred goals beyond high school.

The qualitative data gained from focus group interviews with students attending these schools will be utilized to inform that nature of the student experience in personalized High School Redesign schools. Examining the data of diverse students and their experiences with High School Redesign will serve to illuminate what the positive and negative attributes of High School Redesign might be, and how they can be further leveraged to the benefit of other high schools. The consideration of how and why these types of personalized reforms are implemented, and how they benefit diverse high school learners is crucial to sustaining successes and scaling learnings to other high school contexts. The results and analysis of this study will serve the students, teachers, community, and jurisdictions within which it will be conducted.

You are being asked to participate in this study because of your commitment to the Alberta Education High School Redesign Project. Based on my previous understanding of your implementation of the foundational principals of redesign (Alberta Education, 2015), I believe your school provides an ideal setting to investigate student perceptions regarding the impacts of the variety of personalized initiatives in place within the high school context.

If you agree to voluntarily participate in this research, your participation will include an audio-recorded introductory interview as the school principal. This introductory interview will take approximately 60 to 90 minutes, and can be conducted in your office or another location you believe to be suitable. This interview will serve to assemble a profile of the redesign work occurring at the school. Additionally, this interview will be used to develop a prospective list of students to participate in student focus group interviews at the school. These students will be

selected and given the opportunity to participate in focus groups in the late spring regarding how the personalized redesign initiatives are contributing to the three factors identified above.

This research is not associated with any provincial or jurisdictional initiatives. Your participation in this research will provide valuable information for your school and future iterations of the High School Redesign Project and its contribution to student relationships, student achievement, and student pursuit of personally identified goals. To aid in this, I will ensure that you are provided with the study in its completion.

There are no known risks for your participation in this study. Your participation in this research must be completely voluntary. If you do decide to participate, you may withdraw at any time without any consequences or any explanation. If you do withdraw from the study your schools' data will be omitted from the research and subsequent research findings.

In terms of protecting your anonymity, all names and any possible defining characteristics will be made into pseudonyms for any data collected in this study. Some school details in terms of demographics and setting will remain true to the nature of the your school (i.e. rural versus urban, approximate school size, etc.). However, all other information such as school, principal, and student names, and other defining characteristics will be made anonymous.

Minimizing the people who have access to the study data will protect your confidentiality and the confidentiality of the data. Information collected in the interviews will only be accessible by myself as the researcher and possibly viewed on occasion by my thesis supervisors. At all times, transcripts, media, anecdotal notes, and other data will remain on my personal encrypted laptop and not made accessible over email or cloud data. Once the study is completed, all identifying data will all be disposed of securely and not retained for any other purposes. However, the study findings, with anonymity ensured, will be retained for prospective further publication.

The primary use of this anonymous and confidential data will be for the completion of my culminating thesis. However, if reasonable opportunities present themselves, the findings of this study may be used at other academic presentations, published in academic journals, or utilized for other publications of interested parties. Further, you will be provided with the thesis findings immediately upon completion.

In addition to being able to contact the researcher [and, if applicable, the supervisor(s)] at the above phone numbers, you may verify the ethical approval of this study, or raise any concerns you might have, by contacting the Office of Research Ethics, University of Lethbridge (Phone: 403-329-2747 or Email: research.services@uleth.ca).

Your signature below indicates that you understand the above conditions of participation in this study and that you have had the opportunity to have your questions answered by the researchers.

Your signature below indicates that you understand the above conditions of participation in this study, that you have had the opportunity to have your questions answered by the researchers, and that you consent to participate in the study.

Name

Signature / Date

A signed copy of this consent will be left with you (the participant), and a copy will be taken by the researcher

Appendix C

Child Participant Consent/Assent Form

You are being invited to participate in a research study called *The Student Experience of High School Redesign: Investigating the Perspectives of Diverse Students in a Personalized Learning Environment* that is being conducted by M.Ed. student Daniel New. Dan New is a graduate student in the Faculty of Education at the University of Lethbridge and you may contact him if you have further questions by phone at (403) 827-4415 or email at dan.new@uleth.ca

As a graduate student, Dan is conducting research as part of the requirements for a degree in Masters of Education with a specialization in Educational Leadership. It is being conducted under the supervision of Dr. Carmen Mombourquette and Dr. Pamela Adams. You may contact Dr. Mombourquette at (403) 329-2018 and Dr. Adams at (403) 332-4070.

The purpose of this study is to explore how students view the High School Redesign Project. To complete this research, students who have experience attending a High School Redesign School will be interviewed. The study will look at three main areas. How High School Redesign impacts (1) student relationships with adults and peers, (2) students academic success, and (3) whether High School Redesign has helped students meet their goals beyond high school.

This information will show what the positive and negative of High School Redesign might be, and how this information can help all schools participating in the Redesign Project. The results and analysis of this study will serve the students, teachers, community, and school divisions, where your child attends high school.

Your child is being asked to participate in this study because they have valuable experience attending a school that participates in the Alberta Education High School Redesign Project. Your son or daughter has been identified by the school principal as being representative of peers and for their ability to contribute effectively to the research.

If you agree to permit your child to participate in this research, his/her participation will include two separate video recorded group interviews in the 2016/2017 school year. These interviews will occur in late spring. In these focus group interviews, your son or daughter will be completing activities and answering questions about their high school experiences.

These interviews will be taking place during school hours on dates that have yet to be set. That in mind, your son or daughter may miss 60 to 90 minutes of instruction on each group interview. In order to minimize the negative impact of this time, the interviewer will try to ensure focus group times happen during flexible time for the students. However, students may need to ensure additional work or instruction is caught up on prior to or following the focus group interviews.

Participation in this research may come with some potential social risks to your son or daughter. As with any time where students publically share their opinions and thoughts in a room of their peers, there are possibilities that peers disagree with other student perceptions. To prevent or to deal with these risks the researcher will make it clear to all of the student participants that there are no right or wrong answers to the questions discussed, and that all students are entitled to openly and honestly share their opinions in the same focus group space without concerns for criticism both during and beyond focus group time. At all meetings with students, they will be reminded that discussions that occur within these focus groups are confidential and should not be

discussed beyond the focus group times. However, even with these reminders it cannot be guaranteed that students will not discuss focus group conversations beyond the interview times.

Your child's participation in this research could serve to improve the quality of education at their school. The anonymous data compiled from this study will be shared with your school and school principal with the hopes that it will help inform future school choices.

As a way to compensate your child for any inconvenience related to his/her participation, he/she will be given a small token of a ten dollar iTunes card to thank them for their time. If your son or daughter decided to withdraw from the study part way through, they will still be given the iTunes card. Your child's participation in this research must be completely voluntary. If you do decide to allow your child to participate, you may withdraw your permission (and your child from the study) at any time without any consequences or any explanation. If your child does withdraw from the study his/her data will not be included in the final study findings and publication. Due to the nature of focus groups and the cross-talk between students and the mixture of video images that result from this type of dialogue, it may not be possible to completely remove all the images from the raw data. However, the data will be removed to the best of the researchers ability.

To protect your child's anonymity, defining characteristics, like names, will be protected by pseudonyms. In addition, all data collected throughout this research process will remain completely confidential. The data collected will remain only in digital form on an encrypted and password protected computer. The data will not be shared with anyone other than the researcher, and possibly the supervisors of the thesis. This data will also never be transmitted via email or located on a cloud-based storage system. When the study is completed, all identifying data such as video, transcriptions, and notes, will be deleted securely and not stored or retained for any reason. However, the study findings, which involve student pseudonyms and ensured anonymity, will be retained for prospective further publication.

The main use of this anonymous and confidential data will be for the completion of a thesis paper. However, if other opportunities present themselves, the findings of this study may be used at other academic presentations, published in academic journals, or used in other publications. As well, the school and school principal will be provided with the anonymous findings immediately after the research is completed.

In addition to being able to contact the researcher [and, if applicable, the supervisor(s)] at the above phone numbers, you may verify the ethical approval of this study, or raise any concerns you might have, by contacting the Office of Research Ethics, University of Lethbridge (Phone: 403-329-2747 or Email: research.services@uleth.ca).

Your signature below indicates that you understand the above conditions of participation in this study, that you have had the opportunity to have your questions answered by the researchers, and that you consent to participate in the study.

Name of Student

Signature / Date

Your signature below indicates that you understand the above conditions of participation in this study, that you have had the opportunity to have your questions answered by the researchers, and that you consent to having your child participate in the study.

Name of Parent / Guardian

Signature / Date

A signed copy of this consent will be left with the parent of the participant and a copy will be taken by the researcher.

Appendix D

Principal Interview Questions

1. What was your motivation for taking part in the High School Redesign Project?
 - a. Can you describe how your school came to be part of the redesign project?
2. What do you see as the key characteristics of High School Redesign in your school?
 - a. Why do you believe these are the key characteristics?
 - b. Can you describe how these characteristics came to be at your school?
3. In what ways does the High School Redesign Project personalize student learning in your school?
 - a. Are there any other impacts of personalization you have noticed?
4. In what ways does the personalized aspect of High School Redesign impact students' pursuit of their goals beyond high school?
5. Do you believe High School Redesign has been effective in personalizing learning for the students in your school?
 - a. In what ways has it been effective?
 - b. In what ways has it been ineffective?

Appendix E

Focus Group Introduction Script

Dan: Now that I know a little bit about each of your contexts, I want to give you some more information about who I am, and why we are meeting here today. I am in the process of completing research as part of an education masters degree. This goal for my research is to gain a greater understanding of what High School Redesign looks like in the province of Alberta, and how students like you feel the Redesign Project is impacting your high school experience.

For the next little while I will be asking you a series of questions that I would like for you to respond to, and discuss amongst yourselves. The purpose of these discussion questions is to look deeply into what your perceptions and beliefs are, surrounding the unique implementations of High School Redesign at your school. Please try to give a detailed response to each question asked, explaining *why*, as much as possible. Also, feel free to discuss questions when you are prompted. Remember that these are your opinions, so there are no right or wrong answers. And you should also know that if you do not want to respond to a question that is fine. But, I do hope you feel comfortable sharing your thoughts on each of the questions.

Anything discussed or said today, will, of course remain totally confidential. This session is being taped and recorded today so that I can watch our conversation at a later date, as well as transcribe your responses for when I compile my research. You will also notice that I will be writing notes today. These notes are taken so that I do not forget important information that comes up during our time together.

Appendix F

Ranking the Impact of Personalized Redesign Structures

Instructions:

Below you will find a list of structures your principal has identified as components of High School Redesign that personalize learning at your school. Using the terms and descriptions provided, please rank these structures in order of importance to your learning. For these rankings consider number 1 as the most important, followed by number 2 as second most important, and so on. Additionally, you may leave out and not rank any structures that you don't believe you have had any exposure to.

Structures:

_____ *Flexible Learning Time*

A scheduled period of time that occurs either throughout the day or the week where students are given choices as to how time is used.

(i.e. A one hour block in the morning between their first two classes when students can work on homework, projects, or seek additional instruction)

_____ *Cross Curricular Learning or Projects*

When students participate in projects or instruction that involved more than one curricular subject.

(i.e. When Chemistry 30 students explore their organic chemistry unit in conjunction with the Mechanics class by investigating car fuel sources)

Appendix G

Student Focus Group Interview Questions

1. Describe a regular school day for you.
 - a. How do you think this school day is unique from the school day of a student at a different high school?
 - b. What part of this regular day is the most important to you, and why?
2. Describe one positive and one negative moment you have experienced in your *regular school day*?
 - a. What about this moment was meaningful to you?
 - b. How did this moment impact you as a learner?
3. How have the unique characteristics or structures in place at your school impacted your relationships with your teachers?
 - a. Which specific structures examined in the previous activity do you feel have impacted your relationships with teachers most?
 - b. Were your relationships with your teachers a deciding factor in how you ranked the importance of personalized structures at your school?
4. How have these structures in place impacted your relationships with your peers?
 - a. What specific structures do you feel have impacted these relationships?
 - b. How important are peer relationships to success in high school?
 - c. Were your relationships with your peers a deciding factor in how you ranked the importance of personalized structures at your school?
5. What do you believe the impacts of these structures have been on your success as an academic learner?

- a. How do you measure this impact? Are your grades the best measure?
 - b. Do you feel that your academic success has been increased because of these structures? How so?
 - c. Do you feel that these structures contribute to your understanding of the connection between what you learn in class and why you learn it?
 - d. Was your academic success a deciding factor in how you ranked the importance of personalized structures at your school?
2. What structures impacted your goals for high school?
 - a. How have these structures impacted your goals?
 3. What are your goals after high school? Have these structures impacted your goals in any way?
 - a. Describe how, or how not.
 - b. How do you measure your success and whether you have attained your goals?
 4. Is there anything else that you feel is important about your experiences of these structures, and why?

Appendix H

Human Subjects Research Approval Letter



Office of Research Ethics
4401 University Drive
Lethbridge, Alberta, Canada
T1K 3M4
Phone: (403) 329-2747
Fax: (403) 382-7185
FWA 00018802 IORG 0006429

Thursday, 18 August 2016

To: Daniel New, M.Ed. candidate
From: Susan Entz, M.Sc., Ethics Officer, Office of Research Ethics

Study Title: The Student Experience of High School Redesign: Investigating the Perspectives of Diverse Students in a Personalized Learning Environment

Action: Approved
HSRC Protocol Number: 2016-068

Approval Date: August 18, 2016
Approval Period: August 18, 2016 – June 20, 2017

End of Study
Report Due: June 30, 2017

Dear Dan,

Thank you for addressing the Committee's concerns. Your human research ethics application titled "The Student Experience of High School Redesign: Investigating the Perspectives of Diverse Students in a Personalized Learning Environment" was approved by delegated review on behalf of the University of Lethbridge Human Subject Research Committee (HSRC) for the approval period **August 18, 2016 to June 20, 2017**, and has been assigned Protocol #2016-068. The HSRC conducts its reviews in accord with University policy and the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (2014).

Please be advised that any changes to the protocol or the informed consent must be submitted for review and approval by the HSRC before they are implemented. Please also submit an end-of-study report to the Office of Research Ethics no later than **June 30, 2017**.

We wish you the best with your research.

Sincerely,

A handwritten signature in black ink that reads "Susan Entz".

Susan Entz, M.Sc., Ethics Officer
Office of Research Ethics
University of Lethbridge
4401 University Drive
Lethbridge, Alberta, Canada
T1K 3M4