Investigating Secondary Home Education Student Academic Preparation for

Postsecondary Education: A Multiple-Case Study

by

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Abstract

This multiple-case study considered the experiences and perspectives offered by four postsecondary students who were home-educated during their secondary years of education in Alberta, Canada. I aimed to discover what secondary home education students do to help them prepare for postsecondary studies. I conducted two semi-structured interviews with each participant or case, analyzed transcription data for each individual case, and cross-analyzed the four cases before interpreting the findings. Important key findings from the four cases in this study include the following:

1. Home education appears to foster effective self-directed, independent learning, which could aid home education students with managing their time and studies as they transition to the postsecondary education setting.

2. The home education environment appears to lead students to desire to learn alone and to discourage collaborative learning.

3. Students who experience secondary home education without emphasizing grades and testing are not necessarily disadvantaged as they enter postsecondary education.

4. Home education students could be limited in what they know about how their academic progress compares with their peers, and they could experience less anxiety about their learning progress if they increase their exposure to students in other learning settings.

5. Home education students could benefit from improving communication with their parents about postsecondary academic preparation and planning for postsecondary life more deliberately, specifically by conducting more research on postsecondary institutions, learning more about admittance requirements and courses, and visiting

campuses and classes.

This study revealed that there are various ways to adequately prepare for postsecondary education through secondary home education. Also, learning from the views and perceptions of students who were home-educated in secondary education provided specific examples of how secondary education students might prepare academically for postsecondary studies. Home education parents, students, and families who are considering alternatives to traditional public schools could benefit from this study because it solicited the views and experiences of students who were home-educated during secondary education and gives readers an intimate look at specific situations where students' education happened outside of traditional school. Additionally, this research could be relevant for postsecondary admissions officers and administrators because it could help increase their understanding of the needs of incoming home education students.

Preface

This thesis is an original work by Timothy George Eaton. The research projects, of which this thesis is a part, received research ethics approval from the University of Alberta Research Board: Project Name: "Investigating Preparation of Secondary Home Education Students for Postsecondary Academic Success: A Case Study," No. Pro00073001, 04/26/2017.

Dedication

I dedicate this work to my wife and children. They have patiently supported my efforts to further my education. When we made the decision together for me to pursue this degree, we weighed what it would mean for our family and the sacrifice involved. The goal was to complete the degree before our oldest of six children would start secondary education. We will have achieved our goal. My highest aspiration is to be a worthy, present husband and father. It was not easy for me to dedicate so many hours to this study when I knew that time could have been spent with them. However, we believe it was beneficial to reinforce the importance of pursuing education and learning, and we hope this work might bless the lives of others in some way.

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I am extremely grateful for Dr. Cathy Adams. Every time I left her office, my confidence increased, and my motivation was strengthened. Although I am a novice researcher, she made me feel that my work was important and that my ideas had merit. I am also thankful for Dr. Jim Parsons and Dr. Bonnie Stelmach, my supervisory committee members. Their suggestions have given me clear direction about how to improve my research and writing. Dr. David Chorney, who chaired my candidacy examination, gave excellent counsel in my examination and I appreciate his kindness. I express my gratitude to Dr. Greg Thomas. I was fortunate to take several courses from Dr. Thomas, and I am thankful for his guidance and humor. Finally, I thank Debbie Feisst for helping me on multiple occasions and Kelly Parkatti for her help.

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Chapter I. Introduction

Over a decade ago, and a few years before our oldest child would begin school, my wife

Sarra and I began to ask some fundamental questions about the education of our children. Our

discussions led us to ask several people about how and why they had made their decisions

regarding their children's education. Sarra and I had only attended public school, she in the

Edmonton area and I in the suburbs of Chicago, and yet we found ourselves studying a unique

way to educate our own children. Friends who were homeschooling their children at the time

suggested that we read the works of John Holt, John Taylor Gatto, Charlotte Mason, and others.

The more we read, the more we felt that the principles of homeschooling aligned with the

lifestyle and environment we wanted to establish for our family. Despite preconceptions and

misconceptions that we held about home education, and the "types" of people who choose

homeschooling, we ultimately decided to commit to this educational path for our family. We

have now been educating our children at home for more than nine years.

"Home education," "homeschooling," and other forms of those terms can mean different

things to different people. For this study, it is necessary to provide a definition of home

education as I intend to refer to it as the researcher. Homeschooling is commonly defined as

parents or others educating children in the home instead of in schools. For the purposes of this

study, when I use the terms "home education" and "homeschooling" and other forms of these

terms, I am referring to situations in which parents or others have assumed the primary

responsibility for educating and overseeing the education of children outside of traditional

schools and principally in the home. I will use "home education" and "homeschooling" and

forms of those terms interchangeably in this dissertation. I will use the term "homeschool" as one

word, and I will use it as a noun, verb, and adjective. When I use the term "homeschoolers," I am

referring to families, including parents and children, who have chosen to homeschool.

Just as no two public classrooms or teachers are the same, no two home situations or homeschooling families are the same. Some homeschoolers approach learning in similar ways to teachers in the public school system, basically transferring the school to the home. Some adopt a specific curriculum that might not be offered in the current school system, like Waldorf education. Others prefer as little structure as possible to enable their children to explore different subject areas without the potential limitations of routine and structure. Unstructured home education is often referred to as "unschooling" (Holt, 1970) because the purpose is to break away from the so-called factory-like production system of public schools and to foster uninhibited discovery and learning. John Holt is considered the leader of this movement. Other home educators research and gather ideas from everywhere, including blogs and websites, about curriculum and extracurricular involvement and establish a routine and a structure specific to their family. As a home educator, I am reluctant to categorize or compartmentalize homeschoolers because it does not seem possible or justifiable to lump them neatly together in groups. The longer we homeschool our children the more Sarra and I realize how differently each family approaches education. This observation is not unique to homeschooling families, because all families view education differently and have their own educational goals for their children.

Since we made the decision to homeschool our children, we have learned that strong feelings exist for and against the movement, including among members of our extended families. Most questions directed to us are about our reasons for choosing to homeschool and concerns for the social and academic development of our children. We have learned to welcome these questions and discussions, and simply share our experience instead of taking a defensive position

as we were prone to do in the beginning. As we have pondered what motivated us to begin homeschooling, Sarra and I reckon that our main reason was to spend more quality time together as a family. That reason continues to be a driving motivation, but other reasons have become more apparent over the years. For example, we value the productive and flexible use of time in the way we educate at home. We feel that our children maximize and use their time productively in the homeschooling setting. We like customizing curriculum to our individual children and evaluating their progress in ways we deem most beneficial for them. We are pleased that our children see learning as something that is always happening from the time they wake up until the time they go to bed at night. Perhaps most meaningful for us, we feel that the way we have chosen to educate our children has helped them develop their characters and their minds in preparation for postsecondary education and for life on their own.

In the following three sections of Chapter I, I discuss the history, critiques, and growth of the home education movement to give the reader a foundational understanding of home education. Then I introduce my research question, explain how I situate myself in the research, and rationalize the relevance and importance of my study, including gaps in the home education literature that legitimize my study. After identifying my intended audience, I conclude Chapter I discussing the research tradition that undergirds this work.

History of Home Education

Prior to 1850, most education occurred at home and compulsory school did not exist in North America. By the mid-1970s, home education began to reemerge as an alternative to the public school system. Education reformers were frustrated with the public system and proposed alternatives that led parents to consider teaching their children at home. According to Lines (2000), the contemporary homeschool movement started mid-century as a liberal alternative to

school. The Christian right joined the movement in the 1980s, and many people seeking a different education for their children began homeschooling. Lines emphasized that universal compulsory education is relatively new—"only recently have we begun to treat schooling as a full-time affair entrusted to professional teachers" (p. 77).

Perhaps the most prominent name connected with the contemporary home education movement is John Holt. Holt was a teacher in the United States who became disillusioned with the public school system. He felt it was best not to have an established curriculum, and that children should pursue their own interests with the support of parents and other adults (Lines, 2000). Because he did not think it was possible to reform the existing system, Holt advocated homeschooling, and eventually encouraged "unschooling," a branch of homeschooling. Unschooling emphasized learning in a natural and stimulating environment, and it strongly opposed coercion of learners. Davies and Aurini (2003) explained that Holt encouraged his followers to educate their own children to escape the bureaucracy of the schools and the "inhumane routines" that prevented the cultivation of children's natural curiosity. Holt has produced many notable works including the book *How Children Fail* (1964) and "Growing Without Schooling" (1977), the first home education newsletter.

Nemer (2002) described the progression of homeschooling, which included homeschooling as the societal standard before public schools, followed by the factory system of education that excluded homeschooling from the mid-1800s to the 1970s, and finally, its later resurgence. "In recent decades, homeschoolers have moved from being resisted, to being grudgingly accepted, to now: knocking on the door of the commonplace" (p. 8). Basham (2001) has also emphasized the growing acceptance of the home education movement.

Classifications of Home Educators

It used to be that homeschooling families could be classified as belonging to one of Van Galen's (1988) two major camps—ideologues and pedagogues. Ideologues, including fundamentalist Christians, are concerned with instilling values and do not want to risk how their children are taught moral lessons. Pedagogues are typically disenchanted with the way they believe the public school system has stifled independent thinking and creativity. Many in this latter camp subscribe to unschooling, where children learn based on what they are interested in, and where exploration is encouraged and facilitated without a set curriculum. Knowles, Muchmore, and Spaulding (1994) also distinguished between ideologues and pedagogues. They explained that ideologues take school into the home but get rid of the undesirable environmental concerns from the public system. Ideologues have typically been characterized by their religious beliefs, whereas pedagogues are more concerned with their children's love of learning and freedom in curriculum.

According to Nemer (2002), more and more homeschooling families represent a diverse cross-section of society. Nemer's purpose was to introduce a classification model to expand Van Galen's binary typology of ideologues and pedagogues. She wanted to illustrate that motivations to homeschool are not neatly placed into these two categories, but that a wide variety of motivations exist. Nemer distinguished between the levels of ideological and pedagogical motivations. For example, homeschoolers with low ideological and low pedagogical motivations cause the most vocal apprehension from the educational community. In addition to ideological and pedagogical motivations, Nemer proposed "environmental motivations" (p. 19) as another driver, where factors such as bullying, drugs, and gangs influence decisions to homeschool.

Van Pelt (2015) also suggested the common motivation split between ideologue and

pedagogue homeschoolers, but, like Nemer, found that recent research "points to the spread of the practice to an increasingly diverse range of families" (p. 9). Van Pelt cited Gaither (2009) and Winstanley (2009) to show that more people are choosing home education not as a belief statement, but to more effectively accommodate their children's and family's lifestyle and activities. Homeschooling is becoming more "fashionable" and "pragmatic" than on the fringe or ideological (Van Pelt, 2015, p. 10). In summary, from the 1970s to the near turn of the century, homeschooling families have been viewed as either ideologues or pedagogues. But with the growth of homeschooling and a more diverse population of homeschoolers, categorization becomes more challenging.

Parental Motivations for Choosing to Homeschool

According to Lines (2000), in the mid-1990s, families' main reason for choosing to homeschool had changed from religion to dissatisfaction with instruction and/or environment in the public system. Bosetti and Van Pelt (2016) argued that more Canadian parents are homeschooling because they find it convenient, practical, and effective in addressing the individual needs of their children. Jones (2013) studied the relationship between students' motivation to learn and disaffection in the United Kingdom. Disaffection was the number one reason parents decided to homeschool in the United Kingdom.

In the Midwestern United States, 74 black homeschooling families indicated that their strongest motivation to homeschool their children was to protect their children from the ongoing racial discrimination within schools (Mazama & Lundy, 2012). Mazama and Lundy explained, "By taking the constant threat of racial harassment and discrimination out of the picture, and by giving parents effective control over the curriculum and methods of instruction, homeschooling provides African American parents the space and time to educate and socialize their children for

optimal personal development" (p. 743). As Nemer (2002) contended, people have various intentions for homeschooling stretching beyond the binary typology of ideology and pedagogy.

Van Galen (1987) conducted a home education study in the Southeastern United States and found that the three main reasons people chose to homeschool were the following: to strengthen the family, the school's values and beliefs contradict the families' beliefs, and parents know their children's educational needs best. Similarly, Knowles, Muchmore, and Spaulding (1994) found that many parents see the home as the best place to meet the needs of their children, gifted or handicapped, because it is "more intimate and conducive to nurturing their scholastic development" (p. 241). For many families the decision to home educate is a positive family decision rather than a rejection of the traditional system (Anthony & Burroughs, 2010).

Although most families in Van Galen's (1987) study were fundamentalist Christians, she found that their choice to homeschool was pedagogical as well as a declaration of their values and lifestyle (p. 161). Van Galen reported that homeschool families expressed the belief that "families are expected to assume a subordinate relationship to the school and that this subordination is symbolic of a more pervasive denigration of the family in modern society" (p. 164). Mothers felt homeschooling upheld the dignity of motherhood and allowed them to fulfill what they saw as their responsibility and privilege as mothers to teach their children. Many parents also expressed their concern with being supplanted by teachers because they observed that their children accepted what their teachers said without question. Several homeschoolers decided to homeschool as an "effort to reclaim a part in their children's learning that they had passively relinquished to the schools" (p. 166). Families wanted to protect their children "from competing value systems at least until they are able to more firmly and rationally resist the temptation of conflicting values" (p. 170).

Arai (2000) found that homeschool parents often chose to homeschool because of their own negative experiences at school, and because they wanted to assert their rights as parents. "The parents believe that they are the ones who should determine what is harmful, whether that harm comes in the form of secular humanism, school violence, consumerism, or something else" (p. 207). In short, there is a wide variety of reasons and motivations for families to choose homeschooling. Although many families have similar reasons for homeschooling, each family is unique and cannot be conveniently placed into a specific category.

Home Education in Alberta, Canada

Because this study considered the experiences and perspectives of secondary home education students who were homeschooled in Alberta, Canada, some background is appropriate to give further context. Compulsory education in Alberta was mandated in 1910. During the late 1970s, families in Alberta became frustrated because of limited education services (Olsen, 2008). In 1988, the School Act in Alberta changed to "provide a legal basis for home education" (p. 2). And, in 1996, funding was allotted for homeschooling in Alberta. Olsen explained that the homeschooling movement initiated as "a product of the hippie counter-culture movement" (p. 36), but that homeschooling in Alberta was characterized in the 1980s more by Christian fundamentalists.

The *Home Education Handbook* issued by Alberta Education (2010) reads: "Alberta's School Act and its funding guidelines for education recognize the central role of parents in the education of their children" (p. 1). Alberta laws authorize financial support and recognize school choice for families, but this handbook reminds families that rights come with responsibilities and careful planning. The handbook emphasizes that Alberta's future is closely connected with the education of its children and that all Albertans have an interest in how education happens.

In Alberta, home education parents can choose either an Alberta school board or an Alberta funded-accredited private school to assist in facilitating their children's education. For example, School of Hope began in 1988 as a homeschool program based out of St. Jerome's school in Vermilion, Alberta. As a non-resident board in 1992, this homeschool program accepted students from all over Alberta. In 1996 this program became a Catholic school called School of Hope in response to government funding cuts for homeschooling students. Wisdom Home Schooling started in 1995 as the homeschooling administration of Trinity Christian School in Cold Lake, Alberta. Wisdom emphasizes traditional homeschooling where parents are upheld as the primary educators of their children. Today Wisdom Home Schooling and School of Hope facilitate home-based and distance education for thousands of students in Alberta. The School of Hope and Wisdom Home Schooling, referred to as associate school authorities, work with home education parents and students to ensure that educational goals established by home education families are being met. A*lberta Education Programs of Study* has been provided to assist parents as they make specific decisions regarding their children's education. Home education parents have the primary responsibility to plan, manage, evaluate, and supervise their children's education and coursework.

Bosetti, Van Pelt, and Allison (2017) stated, "The increases [in homeschooling] give further evidence of the rise in parental attraction to seeking alternative options for educating their children" (p. 20). From the 2000-2001 to 2012-2013 school years, every province showed a decline in the share of students attending public school, nine of ten provinces showed increases for independent schools, and eight of ten provinces showed increases for homeschool enrolment. Approximately 24,000 students, or 0.5% of Canadian students from K-12, were homeschooled in 2012. The discrepancy among estimates of the number of students being homeschooled is

usually due to homeschooling families that do not register with a homeschooling facilitator in their respective province or territory, where rules and regulations vary regarding homeschooling registration and accountability.

Critiques of the Home Education Movement

An Argument for Public Good

Home education has grown over the years and so has its acceptance; however, the homeschooling movement has its critics. Lubienski's (2000) objective was to critique home education to promote what he deemed to be best for society and strong democracy. He emphasized, "The individual has responsibilities regarding the education of the community and the sustenance of the common good" (p. 208). Lubienski argued that public interests trump private goods; when strong families decide to educate their children at home, they deprive all students of important social interaction. He also expressed that homeschooling undermines democracy by placing private decisions above what is best for all.

If citizens claim to desire democracy, Lubienski posited, and if they pay taxes to support education, then they should demand a say in how any child is educated. Apple (2000) argued that public funding that goes to support homeschooling places an extra drain on school districts with no accountability from homeschoolers. However, Lips and Feinberg (2009) reported that homeschooling is "saving taxpayers as much as $9,900,000,000 each year" (p. 22). Their article asked the reader to consider the implications of having nearly two million homeschooled students at that time entering the public school systems throughout the United States.

Lubienski said that ensuring "tolerance, understanding, and exposure to difference" (p. 212) and moderating radical decisions are accomplished when education is viewed as a public good. He disapproved of home education because of what he viewed as an individualistic and

elitist movement. He believed homeschooling undermined collective values of the public, such as assimilation and cohesion. Lubienski suggested that home education, focused on private interests and goods, might lead to better education, but injures opportunities for others. Therefore, he conjectured we ought to either expand home education to make its benefits available to all, or "increase participation in the institution of public education to make it more effective" (p. 222).

Lubienski viewed home education as a selfish choice. He suggested that high performance among home education students cannot be connected to the practice of homeschooling compared to other forms of education. Rather, a commonality among homeschooled children is that they are nurtured by involved parents. He argued that the best choice is to improve public education and encourage universal participation, because homeschooling is not realistic for all. His opposition to the ideals of home education is captured in this statement: "When people exercise their exit option for individual advancement, they undercut the ability of the institution to improve as a democratic institution" (p. 226).

Like Lubienski, Apple (2000) viewed homeschooling as evidence that public responsibility was withering, and social inequality was increasing. Apple contended that home education was focused on individualism and consumer choice instead of democracy. He saw the movement as increasing segregation in society. Apple's assumption was that homeschooling meant isolation. He described home educators as paradoxically wanting freedom and equality, but then really desiring uniformity and for everyone else to be like them. However, Apple did not cite examples of home educators' responses that would indicate how they approached their decisions to home educate. He opined that homeschooling, although it might be advantageous to homeschooling families, marginalizes others and contributes to social injustice.

Arai (1999) pointed out that a common objection to homeschooling was limiting exposure to diversity and depriving students of the tolerance and difference taught in traditional schools. He said that critics will say that home-educated students are "cooped up in the home" (p. 4) and do not receive exposure to differences. Again, this clearly depends on how parents and families home educate. It is problematic to assume that all homeschoolers do it the same way.

Arai also argued that home educators are viewed as elitist because they remove their children from the public system, an act which might help that one student but gives no thought to the effect that doing so has on the other students. Arai emphasized the incongruence of the typical socialization objection to home education with the elitist argument from the critics. He found it contradictory for critics of home education to refer to home educators as the privileged elite and simultaneously question the socialization of home education students.

State or Parent Responsibility?

Arguments for or against homeschooling often rest on whether one believes that parents are primarily responsible for the education of their children, or whether such responsibility belongs to the state or the government (Payton, 2011). Ray (2013) stated, "Opponents of parent-led home-based education appear to have more faith in the state than they do homeschooling parents" (p. 334). If one believes the government is responsible for a child's education, then it is understandable that they would oppose home education. If one believes parents are principally accountable for their children's education, then he or she can fathom the option of homeschooling. It is important to recognize, however, that although home education might represent an exit from public education, not all homeschoolers have the same motivations for their choice. Exiting the public school system does not necessarily mean exiting society or community or other public venues, as intimated by Lubienski (2000).

West (2009) described the revolution of both law and education that had taken place since the 1970s when home education was illegal and few chose to homeschool, to more recently when homeschooling became legal in every state in the United States and regulation was minimal. She said that politicians and legislatures caved into the pressure they were receiving from religious parents who wanted to homeschool their children. West claimed that education is a core state responsibility.

The Possible Harms of Homeschooling

West (2009) stressed that, although she was criticizing deregulated homeschooling, she did "not deny for a moment that homeschooling itself is often—maybe usually—successful, when done responsibly" (p. 9). She felt home education could be effective when done right, and she did not deny that student performance does improve through home education. However, West suggested that unregulated homeschooling harmed students, homeschool mothers, and the communities where they are taught (p. 9). She argued that a potential harm of home education was that abuse could go unnoticed, especially considering that so many instances of abuse are reported by teachers in schools. Unfortunately, West did not include any statistics or figures to back up her claims and strengthen her position.

Another possible harm of homeschooling, according to West, is not being able to control immunizations among children. She believed schools provided the safest places for students. She said homeschooling might also be politically harmful, because so many homeschool families come from religious backgrounds and could be influenced by church leaders. This problem, West opined, would be exacerbated because homeschoolers are actively engaged in the political process and are highly likely to vote.

According to West, "educational harm is the most immediate, direct risk of unregulated

homeschooling" (p. 10). Nonetheless, she concluded that despite the potential harms of homeschooling, there are many good reasons for people to homeschool and to avoid public schooling. She said that "the children well served by homeschooling might outnumber the children who are badly victimized by the practice," but "reasonable state regulation" (p. 10) and standardized testing should be required of families choosing to home educate. To summarize, critics of the homeschooling movement emphasize that homeschooling undermines a democratic society and facilitates potential circumstances of abuse, and they believe education is more of a state responsibility than a responsibility of parents or guardians.

Growth of Home Education

A review of the literature on home education reveals a sustained emphasis on the growth of the movement. Homeschooling is a growing social trend where the family is reestablished as central to children's learning (Lines, 2000). The number of homeschoolers in the United States is growing at around 15-20% a year and growing in every state (Lines, 2000). Lines said that the "full range of American families are trying or considering homeschooling" (p. 78). Nemer (2002) explained, "Homeschooling is now a widespread, diverse, and important segment of education in America" (p. 5). Ray (2011) provided an updated estimate from various data sources of the number of homeschooled students from ages 5 to 17 in the United States. He reported that there were between 1,736,000 and 2,346,000 homeschooled students as of the spring of 2010, with approximately 8.3% growth each year. Despite criticism of Ray's research on homeschooling as unscientific, Murphy (2014) agreed with Ray about the growth of home education, noting that the homeschooling population grew from 10,000 to 15,000 students in the 1970s to nearly two million students by 2010.

More recent studies in the United States reveal similar findings. Redford, Battle, and

Bielick (2017) give the most recent national statistics on homeschooling in the United States. In 1999 there was an estimated 850,000 homeschooled students, followed by 1.1 million students in 2003, 1.5 million in 2007, and 1.8 million in 2012. Overall, the estimated homeschooling rate increased from 1.7% in 1999 to 3.4% in 2012. The International Center for Home Education Research (ICHER) lists the United States home education enrollment data for each state from 2000-2016, providing graphs for each state that chart the growth of homeschooling for each year (Icher, 2016). These graphs show steady growth among homeschooled students.

Growth of Home Education in Canada

Homeschooling continues to grow in the Canadian context as well, but not at the same rate as in the United States. Obtaining reliable estimates of homeschooled students in Canada is difficult because the registration and tracking of these students has varied across the country (Luffman, 1998). Some homeschooling families do not register because they do not want government interference. Luffman found that most homeschooled students in Canada are at the elementary level. She opined, "Home schooling at the high school level is more difficult" (p. 10) because curriculum is more challenging for parents, and teens want social and extracurricular opportunities that are harder to facilitate at home. However, provinces allowing homeschoolers' use of school libraries and resources "tend to have higher proportions of high school students studying at home" (p. 10).

Arai (2000) reported that home education research in Canada is limited but indicated that the home education population is rising, and statistics are likely higher than what is produced because not all homeschoolers make themselves accessible. Arai found that although homeschooling is increasing in Canada, "parents do not object to public education as a whole but rather to specific parts of the system" (p. 212), and most homeschooling parents view teachers in

the schools positively. In Canada, the normalcy and social acceptance of homeschooling is increasing (Davies & Aurini, 2003). As people seek educational improvement or change, homeschooling becomes less of a "radical departure" or "wholesale rejection" of public schooling and more of an alternative or choice (p. 65). Today, there is no consensus regarding what constitutes a good education. In such a climate, homeschooling becomes more attractive under this heading of choice, arguing that parents understand the best interests of their children.

Arai (2000) proposed several potential reasons for the increased interest in homeschooling in Canada based on results from the families in his study. These families generally expressed that the school environment was detrimental to their children, and that they were concerned about pedagogical and ideological problems with the schools. Arai suggested that Canadian families could have different motivations than families in the United States to homeschool because of the different legal contexts in Canada. Homeschooling appeals to more families as the numbers increase and as it becomes more accepted in society. Much of the legal battling for home education and educational choice has been fought and won. Homeschooling is more of an option rather than a radical alternative, as it was considered in the past. However, Arai pointed out that with more Canadian families relying on two incomes, it is possible that the homeschooling population could decrease, because most homeschoolers have one parent at home.

Van Pelt's (2015) report is probably the most comprehensive study on homeschooling in Canada. Her 2015 edition, updated from the 2007 edition, focused on the growth of research, regulation, and enrolments. She believes more families are choosing to homeschool because it is more "possible and practical" and it "offers flexibility for increasingly diverse family lifestyles" (p. iii). In the United States, homeschooled students represent between 3-4% of public school

students and .4% in Canada. From 2007 to 2012, Canadian homeschool families increased by 29% and public education enrolment declined by 2.5%. Annually, Canadian homeschoolers increase by about 5%.

MacLeod and Hasan (2017) reported that from the 2000-2001 to 2014-2015 school years, the only province that decreased its homeschooling enrolment was British Columbia. Alberta experienced an almost 83% enrolment increase in that time, and Manitoba experienced 183% growth among homeschooled students. Homeschooled students represent 1.5% of total enrolled students in Manitoba and 1.4% in Alberta. Every province in Canada has declined in proportion of students enrolled in public schools from 2000-2001 to 2014-2015. In 2014-2015, the total estimated number of enrolled homeschooled students in Canada was about 26,600, up from 19,500 in the 2007-2008 school year.

The Influence of Technology on Home Education

Research on the contemporary home education movement has been conducted predominantly in the Unites States. However, research on homeschooling in Canada and other countries is increasing as the movement itself continues to expand and morph, especially with the advent of online educational options and distance learning programs. For example, Davis (2011) emphasized, online learning can be "an invaluable opportunity for homeschooling parents to broaden their child's education and expand opportunities for their child to learn" (p. 33). Online resources allow home education students to access and use standardized tests and assessments, making it easier for them to enter college or university. Distance education and virtual schools offer flexibility and help more parents who might lack teaching confidence to provide a safe learning environment for their children (Davis, 2011).

Lips and Feinberg (2009) predicted the number of homeschooling students would

continue to increase, especially because of "technological and societal trends" (p. 22). They discussed the multitude of resources and networks that allow the facilitation of home education. Collaborative homeschool networks facilitate academic instruction and social opportunity. These authors conjectured that more people telecommuting and working from home could be another potential cause for increases in the homeschooling population.

Overcoming Opposition

Although home education has been growing, the growth has not occurred without growing pains and challenges. A recent example of challenges in the Alberta home education context is the closure of the long-established organization Wisdom Homeschooling by Education Minister David Eggen in October 2016. This organization has facilitated materials and curriculum for nearly one-third of the homeschoolers in the province.

Johnson (2013) described how homeschoolers in some states in the United States in the 1980s faced serious legal consequences for choosing to homeschool, but by the early 1990s, all fifty states legalized homeschooling. Lips and Feinberg (2009) recognized that although there has been much opposition to the home education movement, "efforts to restrict or tightly regulate homeschooling largely have failed" (p. 22). Davies and Aurini (2003) credited the growth of the homeschooling movement to its ability to influence legislation. Homeschoolers have learned to frame their discussions in terms of rights instead of language limited to religion or unschooling, especially as the homeschooling population becomes more diverse. Davies and Aurini observed, "Homeschoolers have become extremely adept at using existing laws to advance their agenda" (p. 67).

Gap in the Literature

Researchers (Bolle, Wessel, & Mulvihill, 2007; Cogan, 2010; Duggan, 2010; Holder,

2001; Jones, 2010; Kranzow, 2013; Lattibeaudiere, 2000; Ray, 2004; Ray, 2013; Saunders, 2009; Smiley, 2010; Snyder, 2013; Sorey & Duggan, 2008; Yu, Sackett, & Kuncel, 2016) have studied homeschooling students as they transition to postsecondary learning. However, little research has focused specifically on how secondary homeschooling students prepare academically for postsecondary education. What practices do secondary homeschooling students participate in and what specific aspects of homeschooling prepare students for higher learning?

After conducting a literature review of home education in Canada, and more specifically in Alberta, it is apparent that the research is based on the perspectives and views of parents and educators but not those of homeschooled students (Arai, 2000; Basham, 2001; MacLeod & Basan, 2017; Olsen, 2008; Patrick, 1998; Ray, 2001; Ray, 2004; Van Pelt, 2015). After a brief review of home education literature, Clery (1998) concluded, "It is clear there is a lack of studies which have as a major focus examined the interpretation and understanding children have of their home learning experience." Clery, Hoelzle (2013), and Jackson (2007) are a few studies that consider only the home education student perspective.

Research Question

I address the lack of scholarly literature on secondary home education student academic preparation and the limited student perspective in the literature review in the next chapter. In this study, I conducted a multiple-case study and interviewed currently enrolled postsecondary students who were homeschooled during secondary education so that I could obtain home education student perspectives. My specific interest was to explore students' descriptions of their home education experiences and their perspectives on how this form of education had prepared them for postsecondary learning. My research question is: *How do postsecondary students who were homeschooled during secondary education describe their academic preparation for*

postsecondary education?

Researcher Positionality

Situating who the researcher is within the research context allows the reader to more clearly grasp the assumptions and biases that the researcher might carry into the study. For example, it is essential for those who read this study to know that I am a home educator. Our reasons as parents for choosing to homeschool are unique to our family, and I recognize that every family comes to educational decisions differently. Although I believe that home education is an excellent fit for my family and I embrace many home education principles and philosophies, I do not think that home education is best, or even possible, for all families. I am also not against public school, although I recognize that some might attribute that bias to me as a homeschooler.

Instead of advocating for one way to educate over another, my purpose is to invite people to learn about available educational options and opportunities, and in this way, be able to make an informed decision regarding the possible value of homeschooling to some children and their families. I invite any person interested in education to influence legislation that allows families to make these choices without undue interference from governing bodies. In my experience, I have found that fewer people than I had anticipated are proactive about the education of their children. In my experience discussing education with others, I have found that most people are uneducated about educational options.

I believe it is important for the reader to know that I approach this study and everything in my life from a position of faith. I am devout in my religious beliefs and commitments and I realize that my faith influences my worldview and the ways that I analyzed and interpreted the findings of this study. Because of my faith, I admit that I might not be aware of how extensive

my convictions have been illustrated in my expressions throughout this study.

Relevance of the Study

The literature shows that the number of American and Canadian parents electing to homeschool their children has been growing each year (Bosetti, Van Pelt, & Allison, 2017; Icher, 2016; Lines, 2000; MacLeod & Basan, 2017; Murphy, 2014; Ray, 2011; Ray, 2013; Redford, Battle, & Bielick, 2016; Van Pelt, 2015). Families are choosing other educational options due to increasing concerns about the problems, inadequacies, and challenges of the traditional public school system (Ray, 2001). Current challenges in education and schools surround ideologies of competition, consumerism, and coercion. Purpel (2004) emphasized that grading, recognition, awards, cheating, and standardized test scores all impede community and interdependence in schools: "When we go to school we are taught mostly to learn to be alone, to compete, to achieve, to succeed" (p. 47). Concerning competition, Seidel (2006) asked, "What are we racing toward and what is the prize at arriving?" (p. 1910). Spring (2003) described consumerism in schools and that the goal in education is becoming the production of consumer-citizens. Other concerns about the public school system include violence, bullying, immorality, and inadequate academic preparation for university life and the global economy.

Highlighting the problems and challenges in the public system does not refute what I said previously about not being anti-public school. These problems are the realities of the day and they are irrefutable. In everyday interaction with friends, family, and educators, I am bombarded with concerns about the undesirable issues within the schools. However, this does not negate the many good things that are also taking place in schools that bless the lives of most of the country's children who are in public schools. Nevertheless, challenges in the schools are causing some people to seek out educational alternatives, including home education. The purpose of this

research is not to discuss whether the public educational system needs to be reformed or overhauled. The purpose of emphasizing these challenges in the public school system is to demonstrate some reasons why parents consider alternative forms of education for their children.

Student Perspective

In my study, I gathered data directly from students who were homeschooled during their secondary years of education and are currently enrolled in a postsecondary institution. Learning about the experiences and views of students who have been homeschooled provides rich and unique understandings. The findings of this study break new ground because they provide data that has been gathered from students instead of from parents and educators in the home education community.

It is not enough to merely know that the student perspective is underrepresented in the home education literature. What is the problem with this limited representation? What difference would it make to understand more about the student view and experience? How does this advance our understanding? Educators and administrators want to know how they can improve the learning experience for their students. Likewise, parents and other contributors to the education of homeschooling students will want to know how to more effectively meet the needs of these students. The student perspective also provides homeschooled students and parents with a better understanding of what it is like for the student to experience home education during the secondary years. Learning from students who were homeschooled during secondary education offers another important educational perspective in addition to parents and educators and yields insight into postsecondary academic preparation among homeschooled students.

Intended Audience

The results of this study are relevant for current homeschooling families and others who

are considering home education or other educational options. Findings from this work could influence postsecondary admissions officers and administrators to seek ways to more effectively accommodate the specific needs of homeschooling students who enter their institutions. This research is also important for students, parents, teachers, school leaders, and other stakeholders in the education community, because this is a study about the learning experiences of students who are currently engaged in postsecondary education reflecting on their recent past being homeschooled. Each participant is a case I study in-depth to gain rich understanding. This qualitative research yields greater understanding about how specific homeschooling students prepared academically for postsecondary studies.

Homeschooling parents face a great responsibility to prepare their children for postsecondary learning. They might have fears regarding their ability to provide the necessary learning to equip their children sufficiently for higher learning. If we can learn from home education students about their secondary homeschooling experiences, then we might receive clues about how to more effectively facilitate preparation for postsecondary studies. Although home education students are educated in different environs than other children, if there is something to learn about improving their preparation for university, there might also be principles and practices that could apply to students in other learning situations.

This study is important because parents and students want to feel confident that they can adequately prepare for postsecondary education without experiencing a traditional education in the schools. Studies suggest (Bolle, Wessel, & Mulvihill, 2007; Cogan, 2010; Drenovsky & Cohen, 2012; Holder, 2001; Jones, 2010; Kranzow, 2013; Lattibeaudiere, 2000; Ray, 2001; Ray, 2004; Ray, 2013; SanClemente, 2016; Snyder, 2013; Van Pelt, 2015; Yu, Sackett, & Kuncel, 2016) that home education students are well prepared for postsecondary academics. However, as

a home educator approaching the secondary years of education with my own children, I can attest to the concerns home education parents and students still possess. Home education parents and students might be aware that research indicates that home education students are generally well prepared for postsecondary academics, but might not know what aspects of the homeschool experience are yielding such preparation.

This study solicits the views and experiences of current postsecondary students who were home-educated in Alberta, Canada, during their secondary education years. Students who were homeschooled during secondary education and are currently enrolled in postsecondary are ideal participants because they share not only what they did during secondary home education, but also what they perceive prepared them for postsecondary learning. The purposes of this study are first to inform home education parents, students, and others about how specific secondary homeschooling students described being academically prepared for postsecondary and, second, to provide potential instruction and insight about how to prepare academically for postsecondary through secondary homeschooling.

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Research Tradition

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I begin this section by describing the research tradition or paradigm I adopt for this study, including ontological and epistemological implications. I explain the importance of maintaining consistency within this paradigmatic approach, especially in terms of my methodological choices. A more detailed description of case study methodology is discussed in Chapter III: Methodology.

Qualitative Research

According to Creswell (2014), qualitative studies are characterized by exploring and understanding meaning through open-ended and emergent questions, the researcher in the

participant's setting, analyzing data by moving from specific to general themes, and then interpreting meaning. Denzin and Lincoln (1994) explained that qualitative research happens in natural settings to interpret and make sense of phenomena and the meanings people bring to them. For these authors, qualitative research is characterized by inquiry into how social experience is created and given meaning. Qualitative research stresses "the socially constructed nature of reality" and "the intimate relationship between the researcher and what is studied" (p. 4). I similarly adopt a social constructivist perspective to frame my qualitative research, and the need to pursue close contact with my phenomenon of interest.

According to Bogdan and Biklen (2007), a qualitative researcher's goal is to better understand human behavior and experience. A researcher frames questions to investigate topics in context and in their complexity. A qualitative inquirer acknowledges that he or she cannot assume what things mean to the people he or she studies, so researchers approach the subject "in silence" (p. 25). Qualitative researchers believe that "approaching people with a goal of trying to understand their point of view, while not perfect, distorts the informants' experience the least" (p. 26). Researchers are compelled to interpret and identify meaning, reflecting on their backgrounds and experiences and how their biases might shape the direction of the study. This is what it means to be reflexive as a researcher.

Hermeneutics

Consistent with these qualitative ideals, the aim of hermeneutics or interpretation in qualitative research is to increase understanding of cultures, people, and individuals. The relationship between a researcher and a participant should strive to be mutual, and increased understanding is accomplished by "bringing into focus the deep assumptions and meanings that inform everyday existence" (Odman & Kerdeman, 1997, p. 186). A hermeneutically oriented

researcher might interpret the meaning of some aspect of education as it relates to those who participate in and experience it. In my case, I sought to increase understanding and derive meaning from the descriptions and views of students who were homeschooled during their secondary years of education. Meaning and interpretation are enhanced through increased familiarity with participants and their contextual settings.

Bogdan and Biklen (2007) explained that we construct meaning through interaction with others and even develop common definitions and perspectives as we try to derive meaning and understanding. They referred to the German Weberian term "verstehen" to illustrate the centrality of interpretation in understanding human interaction and that "meaning is always subject to negotiation" (p. 27). As I considered each case in my study, I documented, reflected upon, and interpreted the details of our interactions in search of meaning that can be useful.

Research Paradigm

My view is that the research question needs to drive the study and determine the most appropriate methodology to pursue greater understanding. The methodology selected must be consistent with one's paradigm, or way of viewing the world. It is imperative that a researcher articulate his or her paradigm, or research tradition, so that all aspects of the research are consistent with each other and a researcher's way of understanding the world. We are human and subject to error; as well, no single paradigm has the corner on being the correct one. Qualitative researchers should "rely on persuasiveness and utility rather than proof in arguing their position" (Guba & Lincoln, 1994, p. 108).

Stated overtly, my paradigm is constructivist. I believe that there cannot be one truth regarding social constructions because people are numerous, diverse, from many cultures, and have a variety of experiences. My position is that a constructivist paradigm is not irreconcilable

with one's personal faith in a supreme being. Although I believe in God-given truths regarding morality and spirituality, I do not think that there is only one right way for people to understand and interpret their personal and social experiences. God-given truths do not somehow refute that people experience the world differently, and unique interpretations and understandings do not oppose God-given truths.

According to Schwandt (1994), constructivism is pluralist and relativist, with multiple constructions, and "truth is a matter of the best-informed and most sophisticated construction on which there is consensus at a given time" (p. 128). He clarified that the constructivist or interpretivist interprets the world to understand it. Similarly, I believe people construct their understanding and knowledge of the world based on their experiences and their reflections of those experiences. As we encounter something new, we try to reconcile previous ideas and experiences. We actively create our own knowledge as we interact with others and gain understanding through interpretation. Duffy and Cunningham (1996) explained that constructivism learning is an active process of constructing rather than acquiring knowledge. A researcher should watch, listen, ask, record, and examine (Schwandt, 1994) if he or she wants to increase his or her understanding of the world or of a specific phenomenon.

Creswell (2014) refers to the constructivist paradigm as "social constructivism." He characterizes the social constructivist through reliance on participant's views, broad questions that allow for the researchers to construct meaning, specific contexts, situating oneself in the research, and interpreting or making sense of the meanings others have about the world. Social constructivism means that meaning is constructed as we engage with the world we are interpreting. The researcher espousing this paradigm personally gathers data and makes meaning through interaction with participants. Therefore, according to Creswell's description, the

multiple-case study I conducted aligns well with this paradigm.

Ontology and Epistemology

As stated previously, research traditions necessitate consistency among ontological, epistemological, and methodological approaches. Guba and Lincoln (1994) posited that a constructivist paradigm means that one's ontology is necessarily relativism, epistemology is subjectivist, and methodology is hermeneutical or dialectical. Constructivist ontology means that reality is locally constructed, or that it is unique to the individual, suggesting that there are multiple realities. A subjectivist or transactional epistemology means that the researcher and the participant rely on interaction and "transact" with one another, so findings emerge or are created as the research progresses. A dialectical methodology implies a critical investigation of the truth through intimate interaction between inquirer and participant. Case study is an appropriate example of a dialectical methodology.

Denzin and Lincoln (1994) explained that relativist ontology implies multiple constructed realities, interpretive epistemology means that the researcher and subject interact and shape each other, and methods are interpretive and naturalistic. Naturalists, as opposed to rationalists, assume there are multiple realities, which are constructions made by people (ontology), and they believe that the enquirer and respondent interact and influence one another (epistemology) (Guba & Lincoln, 1997). Clearly, ontology and epistemology are tightly interconnected and can almost be used interchangeably because they relate to the congruent paradigm. Methodology must agree with the same paradigmatic threads of ontology and epistemology. In my study of the descriptions of students who were home-educated during secondary education, I employed an interpretivist or naturalistic methodology. I chose case study methodology because I believed it would help me increase understanding as I gathered rich data from participants and interpreted

the findings in pursuit of answering my research question.

Conclusion

In the first chapter, I provided background and rationale for my research interest in home education and I discussed the history, critiques, and growth of the homeschooling movement. I established my research question and positioned myself in the research, and I strove to reveal my assumptions and worldview to allow the reader to understand and interpret the study in context. I explained the relevance of my study by describing some of the challenges and problems in schools, and by emphasizing the growth of home education. Little has been written emphasizing what homeschooled students describe doing to prepare academically for postsecondary learning during their secondary years of education. Also, the perspective and viewpoint of the home education student is seldom found in homeschooling literature because the pattern has been to solicit the views of parents and education professionals. Learning about postsecondary preparation from students who were homeschooled during their secondary years might inform current home education families and other contributors to the homeschooling movement, including postsecondary administrators and admissions personnel.

Case study methodology is consistent with my constructivist paradigm, as well as an ontology that espouses multiple realities and an epistemology that is transactional or interactive. In Chapter II, I engage the reader in a review of the literature on home education research. I give specific attention to the scholarly literature on academic preparation because my research question focuses on descriptions of academic preparation of homeschooled students for postsecondary learning.

Chapter II. Literature Review

The research on home education has several common themes and topics repeated in the literature. Major themes and topics include the following: the growth of home education, the history of home education, parental motivations to homeschool, critiques of home education, lack of scholarly homeschooling research, questions and myths about home education, and academic performance of home-educated students. Recent studies represent an even wider range of homeschooling topics, including racial protectionism, concerns about alcohol use, transitioning from traditional schooling to homeschooling, distinguishing the role of parents and the role of the state, educational cooperatives among homeschoolers, and developmental outcomes (Anthony, 2015; Anthony & Burroughs, 2010; Bosetti & Van Pelt, 2016; Butler, Harper, Call, & Bird, 2015; Doke-Kearns, 2016; Green-Hennessy, 2014; Mazama & Lundy, 2012; Mazama & Musumunu, 2015; Morrison, 2014; Ray, 2015; Rothermel, 2015; Thomson & Jang, 2016). These topics help us understand the homeschooling movement better. However, academic preparation is central to this literature review because it is directly related to my research question.

I begin this literature review by explaining the lack of scholarly interest in researching homeschooling, followed by a discussion of the critiques of the scholarly research that has been conducted on home education. I then examine studies that emphasize academic performance of homeschooled students, including several studies reviewing postsecondary academic performance of formerly homeschooled students, from which the critics of homeschooling research draw upon. As well, I discuss the perceptions and attitudes toward homeschooled students entering postsecondary education, including concerns about homeschooled students' social preparation for postsecondary life and education. Understanding the lack of scholarly

research interest in home education, critiques of the scholarly research on home education, the emphasis on academic performance in home education literature, and perceptions and attitudes toward homeschooled students seeking postsecondary education admission provides a contextual foundation for readers to consider what has been written about academic preparation for postsecondary education among homeschooled students. After I attend to the issues with the scholarly research on home education, the emphasis on academic performance in home education literature, and perceptions and attitudes toward homeschooled students entering postsecondary education, I review literature about academic preparation for postsecondary education in general and conclude Chapter II considering studies that emphasize transition and academic preparation of homeschooling students for postsecondary education.

<div align="center">**Issues with Scholarly Research on Home Education**</div>

Lack of Scholarly Research Conducted on Home Education

Although the homeschooling movement and homeschooling research have increased, homeschooling tends to receive less research attention than other educational alternatives, like charter and private schools (Nemer, 2002; Wilkens, Wade, Sonnert, & Sadler, 2015). Davies and Aurini (2003) observed, "Despite mounting interest in homeschooling, the amount of scholarly research on the topic is surprisingly small" (p. 63). Although little can be firmly concluded from Martin-Chang, Gould, and Meuse's (2011) study about the efficacy of academic achievement in home education compared to public education, the authors stressed, "The increasing popularity of homeschooling is at odds with the dearth of scientific research being conducted in this area" (p. 201).

Wilkens, Wade, Sonnert, and Sadler (2015) suggested there are several challenges in studying homeschooling: (a) homeschooled students are harder to identify because they are not

embedded within the traditional school structure, (b) home education parents and families approach homeschooling in a wide variety of ways, (c) home education research is politicized between advocates and critics. Romanowski (2006) expressed that even with the growth of the home education movement and "evidence demonstrating that homeschooling produces excellent students and citizens, many people, including educators, are still plagued by various myths" (p. 125), including that homeschooling produces social misfits, homeschooling produces poor citizens, homeschooled students struggle academically and socially with college entrance, and homeschoolers choose to homeschool mainly for religious reasons. Romanowski suggests that these myths are perpetuated because of the challenges in studying home education.

Howell (2013) provided a simple explanation for the lack of interest in and scholarly research on home education. His article explored whether professional educators' attitudes toward home education were hostility or indifference. His view was that more educators are indifferent because their interests are with traditional school matters. He explained, "Research designed to show the relative effectiveness of homeschooling as an educational mode is unlikely to gain interest or acceptance among researchers who focus on schools" (p. 362). Democratic societies tend to promote public education and that is where the research is focused.

There are other practical reasons that home education receives little and public education receives much attention from researchers. Howell posited that educational research is structured by the concepts and methods and problems that are considered most relevant by those that fund the research. Therefore, most educational research takes place in public schools. And the public school system is much easier to research due to larger sample sizes that are grouped categorically, making it more feasible as well. Data collection is much easier in public schools because of the interactive data systems that provide the family information and educational

history of students. Howell also explains that the responsiveness of the public system, like in standardized testing, creates a market for researcher services. Howell stated, "Even the widely publicized dysfunctional aspects of formal schooling ironically strengthen the appeal of the conventional approach to educational research" (p. 360).

With myriad educational issues to consider, Van Pelt (2015) suggested, "It is timely to investigate whether researchers have given increased emphasis to studying the impacts and outcomes of home schooling" (p. 2). In response to Nemer's (2002) and others' (Davies & Aurini, 2003; Martin-Chang et al., 2011; Wilkens et al., 2015) suggestion for more research devoted to homeschooling, Van Pelt found that "a wider diversity of scholars in more established academic institutions are designing studies around an increasing array of focused topics" (p. 4). Van Pelt credited this expansion in research in large measure to ICHER's (International Center for Home Education Research) efforts since its establishment in 2012. Previously, the National Home Education Research Institute (NHERI), established in 1990, was relied upon almost solely for home education data. In conclusion, Van Pelt encouraged: "As K-12 graduates are increasingly challenged to prepare to compete and contribute globally, parents and policy makers cannot afford to overlook any legitimately promising approaches to education" (p. 31).

Critiques of the Scholarly Research of Home Education to Date

It is helpful to consider scholarly works critiquing home education research so that readers understand the range of sentiments concerning homeschooling research. Research on home education is criticized for being unscientific, not using random samples, and not controlling for important demographic variables (Gaither, 2017; Kunzman & Gaither, 2013; Lubienski, Puckett, & Brewer, 2013; McCracken, 2014; Murphy, 2014;). Sikkink and Skiles (2015), like Gaither (2017), point out that few studies on home education are methodologically

competent, especially studies that compare homeschool and traditional students. Medlin (2000) also recognized some challenges of home education research:

> Studies of home schooling and socialization have the customary faults of research in a very young field: no guiding theory, inadequate experimental design, poorly defined research questions, untried and weak measures, unorthodox treatment and presentation of data, and conclusions based on subjective judgments. Even a cursory look at the research reveals that many studies are qualitative descriptions of so few participants that the results cannot be generalized (Medlin, 2000, p. 118).

Gaither (2017) and Murphy (2014) contend that homeschooling research is limited by being predominantly qualitative and anecdotal. Both Gaither and Murphy reason that quantitative data is challenging to gather because demographic information is often unavailable, and legislation differs in every state. Riley (2015) conducted a quantitative study of 58 homeschooled and 40 non-homeschooled students to learn whether homeschooled young adults have their need for competence, autonomy, and relatedness satisfied more than young adults who were not homeschooled. Participants were 18-25 years old, had a high school diploma or equivalent education, and homeschooled students had been homeschooled for at least six years. Riley used the *Basic Psychological Needs Scale* (BPNS) to test competence, autonomy, and relatedness. The multivariate analysis showed that homeschooled students had significantly larger average competence and autonomy satisfaction scores and no evidence of difference in relatedness satisfaction. Unfortunately, Riley did not collect sociodemographic variables.

Kunzman and Gaither (2013) and Gaither (2017) stress that when researchers control for family background variables, homeschooling makes no significant difference on academic achievement. Lubienski, Puckett, and Brewer (2013) concede that homeschooled students

typically attain higher test scores, but they are not confident that homeschooling causes better achievement. They believe that families who choose to homeschool tend to have more advantages and that homeschooled children would perform similarly in schools. Homeschooling and higher academic achievement are clearly correlated, but Lubienski et al. argue that research has not shown a causal relationship.

Murphy (2014) conducted a study of the impact of homeschooling aimed at finding scientific evidence for academic achievement, and he agreed that until more rigorous scientific studies are carried out, the academic effects of homeschooling cannot be evaluated. He found that most of the research on homeschooling had been unscientific, for example, by not controlling for socioeconomic factors, making it difficult to accurately understand its outcomes and impact, consistent with Kunzman and Gaither (2013). According to Murphy, the non-representativeness of findings means that we have not been able to generalize these findings to the homeschooling population. However, he argues that homeschooling as a topic of research merits attention for what it indicates about education in America.

Critics of home education research tend to believe that most of the literature is politically motivated by advocates of the movement. Certain claims that advocates of homeschooling make about academic success, postsecondary attainment, more civic engagement, and reduced cost for taxpayers, are challenged by researchers (Lubienski, Puckett, & Brewer, 2013). Gaither specifically criticizes homeschooling studies on academic achievement, particularly those by Ray (2001, 2004, 2011, 2013) and Rudner (1999), because of design flaws that limit generalizability and reliability. Gaither asserts that the only conclusions that can be tentatively made about the academic achievement of homeschooled students are that homeschooling tends to improve students' verbal skills and weaken their math capacity, concurring with Coleman

(2014).

Kunzman and Gaither (2013) provided a comprehensive review of the scholarly work on homeschooling. These authors found that although studies on academic achievement show homeschoolers performing much higher than other students, these studies have the following potential flaws: (a) they rely on samples of recruited homeschoolers instead of random sampling; (b) respondents often report their scores; and (c) key variables like race, SES, parent education attainment, and marital status are not controlled for. In summary, the critics of homeschooling research emphasize design flaws, lack of random sampling, advocacy bias, and limited scientific evidence to show that the research struggles to be generalizable and reliable. Critics are trying to illustrate the need for more controlled, quantitative studies on homeschooling.

Home Education Literature Emphasizes Academic Performance of Homeschooled Students

Keeping in mind that critics have established a need for more scientific rigor among homeschooling studies, much research on the academic performance of home-educated students indicates that home education students perform at or above the level of students who are not homeschooled. "In study after study, the homeschooled have scored, on average, at the 65th to 80th percentile on standardized academic achievement tests in the United States and Canada, compared to the public school average of the 50th percentile" (Ray, 2013, p. 325). There are fewer homeschooling data from Canada than from the United States, but "the academic performance of Canadian homeschooled students appears to be comparable to the American experience" (Basham, 2001, p. 12). Lines (2000) said that "virtually all the data show that homeschooled children score above average, sometimes well above average" (p. 80). However, Lines pointed out that many homeschoolers reject test score performance as the greatest measure of educational success and focus more on teaching values and character development.

It is important to know that much of the research conducted on homeschooling has been conducted by advocates of the movement, and those who typically participate in studies are perceived to be higher achieving homeschooled students. Because homeschooling is decentralized, as Lips and Feinberg (2009) explained, it is "difficult to draw definitive conclusions about academic achievement and other outcomes" (p. 22). However, they believe home-educated students perform well in their environment.

Rudner (1999) conducted the largest survey and testing program for home education students to that date. His study included 11,930 homeschooling families and 20,760 homeschooling students. He pointed out that comparing home education with public education is fraught with problems, so his purpose was to see whether homeschooling worked for families who chose that route. He emphasized that his study was not a controlled experiment and that it should not be used as evidence that public schools are failing.

His major findings were that homeschooled students scored exceptionally high on achievement tests; homeschool parents had received more formal education than the general population; the median income for families with children was much higher among home education families; and most homeschooling families were married-couple families. Other findings indicated that performance differences between male and female home education students were not significant; more money spent on home education led to better academic performance, especially for higher grade levels; home education students who came from higher income families consistently performed better academically than students from families with lower incomes; the more television that a homeschooled student watched, the lower his or her academic achievement; and students who had only been home-educated achieved much higher academically than those students who participated in other educational programs.

Martin-Chang, Gould, and Meuse (2011) set out to determine how well home-educated students performed on standardized tests in a Canadian sample of 37 home-educated and 37 public school students, aged 5 to 10. These authors challenged what they saw as the common sentiment that homeschoolers performed better than traditional school students. They highlighted "key methodological flaws" (p. 195) with Rudner's (1999) popular study, and similar flaws with Ray's (2010) study that replicated Rudner's work. To be fair, Rudner recognized these flaws as limitations in the discussion section of his study. A problem Martin-Chang et al. pointed out with Rudner's and Ray's studies was that participants in both studies were self-selected; therefore, they might not have been representative of all home education families. Martin-Chang et al.'s study also involved self-selected participants, however. Families choosing to participate might have been confident that their children were performing well.

Martin-Chang et al.'s study is unique because they "did not rely on self-reported measures or data gathered by a third party; rather, each child in the present study was administered standardized tests under controlled conditions by a trained experimenter" (p. 196). They also used a carefully selected comparison group between homeschooled students and public school students, and they used an independent research body with no home education ties to conduct the study. Although they intended to compare homeschooled students and public school students originally, the responses caused them to divide the homeschooling group into two separate groups—structured and unstructured. Structured meant that parents had clear educational objectives and set curricula while the unstructured group allowed education to happen naturally without educational goals and curricula. These authors found that structured homeschooled students had "higher scores across a variety of academic areas" (p. 199) than public education students and unstructured homeschoolers. Unstructured homeschoolers scored

the lowest of the three groups. The small sample size in this investigation was listed as a limitation by these authors.

Homeschooled Student Academic Performance in Higher Education

In this subsection, I will consider several studies that measure the performance of postsecondary students who were formerly homeschooled. Wilkens, Wade, Sonnert, and Sadler (2015) conducted a study to determine how well home-educated students performed in a beginning calculus course at the college level. They also wanted to learn how homeschooled students differed from their peers in their secondary mathematics preparation, and in their demographic and socioeconomic backgrounds. They analyzed data from the 2009-2010 FICSMath (Factors Influencing College Success in Mathematics) survey of over 10,000 students, 190 of which were home-educated students.

They found that homeschooled students in their study were not significantly different demographically from the other students. Homeschool parents' education levels were comparable to those of private school students' parents, and typically higher than the parents of public and charter school students. Homeschoolers reported higher scores regarding a home environment that was supportive of math. Surprisingly, "among first-time calculus students who had not taken college precalculus, students who homeschooled earned significantly higher final grades than students who attended all other school types" (p. 44). This study left the authors puzzled as to why homeschooled students had higher final grades in this beginning college calculus course. They concluded "the magnitude of the effect of homeschooling (versus not) appears to be considerable" (p. 45). These findings appear to refute the claims made by Gaither (2017) and Coleman (2014) about homeschooled students performing low in mathematics.

Wichers (2001) conducted a meta-analysis to learn whether homeschooled students

would be able to compete academically in higher education. She found that homeschooled students performed significantly better on standardized testing compared to conventional school students, and that "not only was it not a disadvantage to be from a homeschooled environment and seek admission to higher education, but found they were being actively recruited" (p. 147).

Ray (2004) wrote an article to give the reader an idea of what to expect from homeschooled students as they entered higher education. Academically, home-educated students scored on average between the 65-80th percentile on standardized assessments in the United States and Canada. He reported that "both the SAT and ACT publishers have reported for several years that the scores of the homeschooled are higher, on average, than those from public schools" (p. 8). These results have led college admissions officers to actively recruit homeschooled students because they expected that home-educated students had the ability and experience to study and learn on their own. Other studies also show that homeschooled students perform well on standardized testing, and that they are being recruited by higher education institutions (Jackson, 2007; Lines, 2000; Romanowski, 2006; Wichers, 2001).

Ray posited that "research and probability show that the home-educated college applicant is very likely to succeed in college, both academically and socially" (p. 10). He asked college admissions officers for fair and open treatment for students who were educated at home. For example, Ray expected home-educated students to be required to take the SAT or ACT, but when asking for transcripts, he implored admissions officers to be flexible, as the home education curriculum is bound to be much different than the public system. Ray suggested that admissions officers ask for a bibliography of what home-educated students had read during their secondary years to get an idea of the scope of their education.

Almasoud and Fowler (2016) compared GPAs of homeschooled students and traditional

students after completion of a bachelor's degree at a private university in the Southeastern United States to determine academic achievement. The study included 44 total participants, consisting of 22 students who were homeschooled at least during their secondary studies. Half of the university's students were enrolled in engineering and the other half were dispersed among science, aeronautics, liberal arts, business, and psychology. All students in the university had a B+ average in math and science in high school, and over 90% of the students achieved at least a GPA of 3.0 in high school. Due to the university's requirements, Almasoud and Fowler assumed that the sample of students was equally matched academically, and that the excessive tuition implied that students either came from high socioeconomic backgrounds or were on scholarship for high academic performance. However, the authors do not provide this information for the specific students in their sample. Homeschooled undergraduates had a higher mean GPA (3.45) than traditional students (2.69).

Cogan's (2010) study yielded comparable results to those obtained by Almasoud and Fowler (2016), specifically measuring GPA performance of formerly homeschooled students. Cogan compared academic outcomes of homeschooled and traditional students prior to their enrolment in a specific postsecondary institution. This institution had a student population of almost 11,000 with 57% undergraduates, and it enrolled about 1,300 freshman students each fall. Data was taken from the institution's census file. Cogan's study was conducted at one institution with a small sample size of 76 homeschooled students from 2004-2009.

This study focused on academic outcome measures (dependent variables), including first-year GPA, fourth-year GPA, fall-to-fall retention, and four-year graduation. Independent variables included demographics, engagement, pre-enrollment academics, and first-term academics. According to the bivariate (ANOVA and Chi-Square) analyses, homeschooled

students were 2.5 times more likely to receive a Pell Grant than the entire cohort. They reported a significantly higher ACT composite score than the entire cohort and earned more college credits prior to their freshman year than other students. Homeschooled students achieved higher high school GPAs and transfer GPAs compared to the group. They earned a significantly higher GPA in the fall semester compared to the group (3.37 to 3.08) and a higher first-year GPA (3.41 to 3.12). Finally, homeschooled students earned significantly higher fourth-year GPAs compared to their freshman cohort. In the multivariate analysis, the homeschool variable positively impacted first and fourth-year GPA but did not significantly contribute to fall-to-fall retention or fourth-year graduation. However, homeschooled students achieved a higher retention rate and higher graduation rate compared to the overall population.

Snyder (2013) evaluated the academic performance of homeschooled students compared to traditional students in a Catholic university in Florida with a homeschool student population of about 33%, between the fall of 2007 and the fall of 2010. Using evaluation design methodology, Snyder measured the academic achievement of homeschooled students with the Key Evaluation Checklist (KEC) compared to public school and Catholic school students. Criteria for judging academic achievement included overall SAT/ACT scores, college GPA, major GPA, and core GPA. Snyder hypothesized that homeschooled students' mean academic performance would be significantly higher than that of traditional students in all criteria, and the bias for this hypothesis was informed by homeschooling literature. The hypothesis was verified for each criterion, consistent with findings from Cogan (2010) and Almasoud and Fowler (2016).

The findings from Snyder's study support claims about higher academic achievement among students who were homeschooled during high school, and the study provides empirical evidence for postsecondary institutions seeking to admit homeschooled students. Given the

findings of this study, "it seems reasonable to say that the homeschooling movement is preparing students for academic success in college" (p. 305).

Lattibeaudiere (2000) and Holder (2001) did not merely report academic achievement among homeschooled students; they also provided explanations and insights into what students were doing prior to their postsecondary studies to help them succeed. Lattibeaudiere investigated homeschooled students' transition to college, specifically focused on students after their first year of college. This study involved interviews with 25 formerly homeschooled students who were attending religious colleges and public state universities. The students also completed the Student Adaptation to College Questionnaire (SACQ). Participants identified faculty and staff at their respective institutions, and 22 of these faculty and staff were interviewed about the participants, providing an additional data source. The data sources showed that students at religious colleges adjusted better academically, socially, and emotionally than students at public universities. Lattibeaudiere also found that the longer students were homeschooled, the better they transitioned; factors explaining this finding include customized individualized learning, learning at their own pace, the option to study their own interests, being taught in a loving atmosphere, and opportunities to develop curiosity and love of learning.

According to this research, homeschooled students studied mostly on their own and most of their work was self-directed with much less parental oversight during their secondary years of education. Lattibeaudiere found that the students' time was typically spent doing independent work in textbooks, going on fieldtrips, and being involved in many creative and hands-on activities. Additionally, most of the students Lattibeaudiere interviewed were enrolled in courses at their community colleges during their Junior and Senior years of high school. She reported that students and their parents were commonly concerned about the students' academic

performance compared to their peers, but most concerns were alleviated after taking required standardized tests.

Respondents shared positive aspects of homeschooling, including flexibility, involvement in a variety of activities, and one-on-one attention. Negative aspects of homeschooling included missing out on traditional high school activities like prom and band, missing out on the social aspects of regular high school, and not spending much time with other students outside of family. Aspects of homeschooling that contributed to the transition to college consisted of working independently, having minimal supervision, scheduling and managing time, learning self-discipline and motivation to study, developing good study habits, spending more time on interests, and developing the ability to relate to adults and professors. Impeding aspects to college transition included not being accustomed to rigid deadlines and rigid class schedules, not being used to same-aged peers, needing additional math and science courses, difficulty adjusting to the class setting and class discussions, and difficulty participating in group projects.

Holder's (2001) study compared academic performance and socialization between homeschooled and traditional students. Homeschooled participants consisted of six students from a Midwestern United States university in this qualitative study. Holder attributed the better academic performance of homeschooled students in college to what respondents reported having learned in homeschool: the ability to learn on their own, good study habits, self-motivation, responsibility, learning at their own pace, and self-discipline. Homeschooled students had difficulty with extensive writing and research in postsecondary studies, meeting deadlines, managing time, and getting used to class schedules. Holder found that homeschooled students socialized well because they were used to interaction with a wide range of ages from homeschool activities and part-time work in secondary education. Homeschooled students were less

influenced by peer pressure and had higher self-esteem.

Transitional issues between homeschooled and traditional students were hardly distinguishable in Holder's research, except that homeschooled students had to adjust to traditional academics and teaching styles. To assist homeschooled students with their transition to postsecondary, Holder invited postsecondary institutions to consider interventions, like holding an orientation for homeschooled students, connecting homeschooled students to resident assistants, and advising homeschooled students about campus resources and student organizations.

In summary, studies have found that formerly homeschooled students perform as well or better on standardized tests and in postsecondary education than students educated in other settings. The research conducted by Almasoud and Fowler (2016), Cogan (2010), Snyder (2013), and Wilkens et al. (2015) appear to refute the criticism that homeschooling research does not control for demographic information. However, it is apparent that early homeschooling research was carried out by advocates of the movement, and homeschooling participants recruited for these studies were among the highest achieving (Holder, 2001; Lattibeaudiere, 2000; Ray, 2004).

Perceptions and attitudes toward homeschooled students entering postsecondary education. There is "increased willingness of public universities to accommodate homeschooling families through the development of alternative admissions policies that utilise entrance tests, portfolios and interviews" (Davies & Aurini, 2003, p. 66). Jones and Gloeckner (2004) conducted a study to learn about college admissions policies for homeschooled applicants as well as the attitudes and perceptions of admissions officers toward homeschooled graduates. Fifty-five admissions officers from five four-year institutions in the Western United States were surveyed. Almost 75% of the admissions officers from institutions that responded to the survey

reported having an official homeschool admission policy. This percentage represents a significant increase based on studies performed previously by Barnebey (1986) and Jenkins (1998). Required documentation from institutions with an official homeschool admission policy includes the following in order of priority: ACT/SAT scores, essays, GED or homeschool transcript, letters of recommendation, subject tests (SAT II), personal interview, and portfolio (Jones & Gloeckner, 2004).

About 56% of the admissions officers expected homeschooled graduates to do just as well as traditional high school students, and about 22% expected homeschooled students to do better. Only two admissions officers anticipated that homeschooled students would perform worse academically. Almost the same percentage of admissions officers responded the same way when asked about how homeschooled students would compare regarding first-year GPA, and there was a similar outcome regarding first-year retention rate and amount of credits earned in first-year. When asked about how homeschooled students would cope socially, about 43% expected homeschooled students to cope as well as traditional high school students in the first year of college, and 35% expected homeschooled students to not cope as well. About 73% of admissions officers did not think homeschooled students needed to attend a community/junior college before attending university or college, while about 16% thought they should.

Sorey and Duggan (2008) addressed the unpreparedness of college admissions officers to evaluate homeschooled candidates for admission despite increasing numbers of homeschoolers applying to postsecondary institutions. Through efforts mainly by the Home School Legal Defense Association (HSLDA), amendments to the Higher Education Act in the United States have helped homeschooled students qualify for federal financial aid and influenced legislation for admissions officers so that additional tests for homeschooled students are not required.

However, because community colleges do not typically require ACT and SAT scores for admission, and because homeschooled students do not always have a high school diploma or recognized transcript, homeschooled students are challenging for community college admissions officers to evaluate.

Admissions officers from every community college in one mid-Atlantic state in the United States were invited to participate in this study, and 12 out of 23 officers responded. Only half of the community colleges reported having an official policy for admitting homeschooled graduates. Schools accepted a variety of credentials for admission, including standardized testing, letters of recommendation, a homeschooling transcript, and GED results. All officers expected homeschooled students to be as successful academically as traditional students. Officers suggested that they could improve services specifically aimed at helping homeschooled students, like orientation, workshops, and one-on-one contact with a counselor. Sorey and Duggan suggested that community colleges could hold open houses to recruit homeschooled students and aid them with the admission process.

Duggan (2010) reviewed 105 community college websites in an 11-state accreditation region in the United States. Duggan found that these sites do not provide adequate information for homeschooled students and that homeschool admission policies are different with each institution. She believed sites could improve by customizing information to assist specific groups and increase communication availability with admissions officers.

In summary, the overall attitude and perception of home education students entering postsecondary has improved, illustrated by an increased number of institutions with policies in place for formerly homeschooled students. However, it appears that postsecondary institutions, and specifically community colleges, could accommodate more homeschooled students with

improved website information and better evaluation of homeschooled student qualifications for postsecondary studies.

   Concerns about homeschooled students' social preparation for postsecondary education. Medlin (2000) asked the following three questions to determine whether homeschooled students could meet the social demands of higher learning and in society: "Do home-schooled children participate in the daily routines of their communities? Are they acquiring the rules of behavior and systems of beliefs and attitudes they need? Can they function effectively as members of society?" (p. 110). Medlin found that homeschooled children were involved in many extracurricular activities. Medlin (1998) measured the diversity of homeschooled students' social contacts in a month. He learned that "home-schooled children regularly associated with adults outside their own family; the elderly; people from a different socioeconomic, religious, or ethnic background than their own; and children attending conventional schools" (cited in Medlin, 2000, p. 112).

   Although some homeschooled children felt they were missing out on social opportunities, reported Medlin (2000), homeschooled students who contributed to the family's decision to homeschool were especially positive about their social lives. Medlin intimated that homeschoolers' flexible schedule and efficient use of time allowed them to engage in community social routines, and that the notion that homeschoolers are isolated and uninvolved was inaccurate.

   Regarding the question of whether homeschooled children were acquiring rules of behavior and needed systems of beliefs and attitudes, Medlin found homeschooled students to be well adjusted and well behaved. He said, "Research confirms that home-schooled children are learning rules for appropriate social behavior and forming healthy attitudes toward themselves"

(p. 116). Medlin explained that because the research to that point was minimal about how homeschooled students fared long-term, it was difficult to say how effectively they would function in society. The few studies that had been conducted indicated that home education students would be successful in postsecondary schooling and in their employment, but these results could not be generalized.

Another part of the socialization question challenges parents' ability to provide a sufficiently broad education (Arai, 1999). Schools expose students to many teachers and ways of thinking, and homeschooled students are perceived as only being taught by parents. Arai said that this argument was valid if home education students are only exposed to their parents' ideas and teaching styles. Medlin (2000) found that homeschooling parents disagree with the idea that proper socialization is fostered in schools: "They describe conventional schools as rigid and authoritarian institutions where passive conformity is rewarded, where peer interactions are too often hostile or derisive or manipulative, and where children must contend with a dispiriting ideological and moral climate" (p. 109). Home education parents felt that much of the public school environment was detrimental to normal socialization and that home education proffered them age-integration and safety, among other social advantages. Medlin said homeschoolers admitted having to be conscious to provide social experiences, but they were not overly concerned about their children's socialization.

Romanowski (2006) argued that homeschooled students benefit socially because they are involved in a variety of activities outside the home and with people of different ages. Homeschooled students interact more with a broader range of ages than students in schools (Ray, 2013). Ray found that homeschooled students develop socially, emotionally, and psychologically as well as or better than students who attend institutional schools, and that public school students

have higher behavior problem scores. He also reported self-concept in the psychological development of homeschooled students to be significantly higher than that of public school students. However, when considering these findings, researchers should bear in mind the likelihood that the families Ray and other researchers sample from are typically confident in their children's ability to do well, potentially weakening the methods used for sampling and data collection.

Davis (2011) agreed that home education students are in contact and communication with a greater number and variety of students than they have previously, and credited technology and distance education for this increased contact. He opined, the socialization argument "has lost momentum in recent years with the awareness of bullying, cyberbullying, and violence in public and private schools" (p. 34). Basham (2001) found that most homeschoolers participate in multiple activities outside the home, and that home school associations in Canada and the United States contribute to successful socialization.

Early in his dissertation, Payton (2011) asked whether home-educated students are adequately socialized and prepared to enter university or college. Payton's purpose was to determine whether the stereotypes about homeschooled students being shy and socially inept, including having communication apprehension or speech anxiety, were legitimate. Ultimately, he concluded, "The evidence from this study that homeschooled students do not report significantly different levels of communication apprehension provides just one more element of support" (p. 126) for homeschooling.

Academic Preparation for Postsecondary Education

Because my research question investigates how currently enrolled postsecondary students who were homeschooled during their secondary years of education describe their academic

preparation for postsecondary education, and due to the lack of literature in the homeschooling context, it is necessary to also consider the scholarly literature on academic preparation for postsecondary education in traditional settings. A variety of searches on academic preparation for postsecondary education commonly leads to articles about "college readiness." According to Conley (2008), college readiness means "the level of preparation a student needs in order to enroll and succeed" (p. 24) in postsecondary education. He defines success as the students' ability to pass entry-level courses with enough proficiency to move to the next level of courses. Much research on college readiness has been conducted in the United States, and the term "college" is frequently used instead of terms like "university" or "postsecondary."

Academic Rigor and Postsecondary Alignment During High School

The literature on academic preparation for postsecondary education emphasizes academic rigor in high school and the importance of secondary schools aligning with postsecondary academic expectations. Allen, Bonous-Hammarth, and Suh (2003) investigated the extent to which school context influenced academic preparation for postsecondary education. They found that for students to prepare well for postsecondary education, students needed to network and obtain the best resources on college preparation, and that schools played an essential role in making resources available and in facilitating networking. The article emphasized that students who had experienced advanced levels of academic achievement in high school were better equipped for postsecondary studies.

One common finding among the research on academic preparation for postsecondary education underscores the importance of rigorous academic experience at the secondary level. For example, Reid and Moore (2008) and Allen, Bonous-Hammarth, and Suh (2003) stressed the importance of taking challenging courses in high school to prepare for postsecondary education.

Rigorous academic preparation in high school and strong social and academic support are crucial to postsecondary education preparation (Reid & Moore, 2008, p. 242). "Efforts to measure college readiness include college admissions and placement test scores, grade point averages, high school achievement exam scores, and academic rigor of high school courses" (Lombardi, Seburn, & Conley, 2011, p. 1). According to Warburton, Bugarin, and Nunez (2001), the more rigorous the high school curriculum, the higher the GPA in postsecondary education, and the greater likelihood of persisting in postsecondary studies.

Cline, Bissell, and Katz (2007) illustrated that merely meeting eligibility requirements for college does not mean students are prepared for college academic work. The need for remediation for first-year college students confirms the lack of academic preparation. These authors encouraged improving alignment between college expectations and high school curricula and skills. One approach to improving preparation for postsecondary work is to increase high school students' academic literacy in core content areas by introducing more challenging writing and reading requirements (Cline, Bissell, & Katz, 2007). This approach implies improved professional development among high school teachers to align high school curricula with college readiness expectations.

Conley (2007b) explained, "One of the major reasons that students falter in college is the gap between their high school experiences and college expectation" (p. 23). He suggested four strategies to increase student readiness for postsecondary studies: first, better align curriculum and instruction between secondary and postsecondary institutions; second, develop higher quality syllabi for high school courses, similar to what students would find at the college level; third, implement senior seminars where subjects are designed to prepare seniors academically for postsecondary; fourth, add missing content to high school courses, like increased emphasis on

effective writing, to prepare for the challenge and rigor that will be expected at college.

Roderick, Nagaoka, and Coca (2009) acknowledged rigorous coursework and rigorous examinations for college entrance as two common measures for college readiness. These authors issued two recommendations at the end of their article: first, raise standards by raising high school graduation requirements, increasing the rigor of high school exit exams, and aligning curriculum with college academic work; second, create data systems to track student progress across education levels and schools (p. 201). They suggested that schools should assume more accountability for students' postsecondary academic performance and improve how they track progress so that they know how to more effectively facilitate college readiness.

Postsecondary institutions use coursework, achievement tests, high school exit exams, and grades (GPA) as indicators for high school students' preparation for postsecondary work (Roderick, Nagaoka, & Coca, 2009). Reid and Moore (2008) found that educational expectations, academic preparation, family income, and support from family and schools are related to postsecondary access. They taught that exposure to postsecondary education is important for high school students to prepare for the postsecondary level. They emphasized the importance of having elevated expectations and establishing an environment that encourages preparation for postsecondary education. High school programs, including those that teach about opening bank accounts, developing interviewing skills, and honing techniques for networking, help students prepare for postsecondary life. High school faculty members and teachers are integral to the support of students pursuing postsecondary education.

Extracurricular activities, like music and sports, also effectively prepare students for postsecondary studies (Reid & Moore, 2008). Other specific aspects that help prepare high school students for postsecondary education include ACT/SAT prep classes, the development of

effective study habits and time management skills, and being exposed to more rigorous academic expectations. Participants in Reid and Moore's study expressed regret for missed opportunities, like wasting time in high school, not taking challenging courses, not filling out applications for grants and scholarships, and not taking schoolwork seriously.

Four Facets of Postsecondary Preparation for High School Students

Conley (2007) clarified that facets of postsecondary preparation are not mutually exclusive but extensively interactive. These features include habits of mind, key content, academic behaviors, and contextual skills and awareness. Habits of mind are "patterns of intellectual behavior that lead to the development of cognitive strategies and capabilities necessary for college-level work" (p. 10). Conley specified the following as habits of mind: intellectual openness, inquisitiveness, analysis, reasoning/argumentation/proof, interpretation, precision and accuracy, and problem-solving. Conley (2008) indicated that cognitive and metacognitive abilities, like problem-solving, analyzing, and reasoning, are central to postsecondary success.

Regarding key content, Conley (2007) emphasized competence in core academic subjects and skills, including English, math, science, social studies, the arts, and world languages. He expressed the importance of writing and research as overarching academic skills. Core academic skills, like analytic thinking and writing, need more attention in the high school years if students wish to prepare well for postsecondary studies (Roderick, Nagaoka, & Coca, 2009). Content knowledge, which is the foundational understanding of specific subject matter, is lacking at the high school level (Roderick et al.).

Academic behaviors (e.g., study skills) reflect self-awareness, self-control, and self-monitoring. Taking notes, collaborating in groups, and preparing for exams are some examples

of study skills. Content knowledge, and specifically writing ability, as well as academic behaviors like time management and study skills, are essential to preparing for postsecondary education (Conley, 2008). Secondary students need more development in non-cognitive skills, like self-awareness, self-monitoring, and self-control (Roderick et al.). Roderick et al. explained that GPA is a strong example and application of non-cognitive skills, and consequently, GPA is the best indicator of college performance (p. 195).

Perhaps the most recent facet of postsecondary academic preparation is contextual skills and awareness. This category involves knowledge and understanding about the processes, context, and culture of postsecondary life. For example, students need to understand how to work in diverse groups and how to communicate with professors. Contextual skills and awareness also include "college knowledge," or knowing how to navigate within the postsecondary culture. For example, low-income and minority students are challenged with college access because they do not know how to effectively navigate the college admissions process, apply for financial aid, or identify postsecondary schools they would like to attend (Roderick et al.). More selectivity in choosing a college increases the likelihood of graduating from college among minority students (Roderick et al.).

To summarize, effective academic preparation for postsecondary learning includes: increasing academic rigor in high school, specifically with courses and examinations; improving communication and alignment between high schools and postsecondary institutions; increasing high school students' exposure to postsecondary academic expectations; increasing extracurricular involvement; improving cognitive and metacognitive skills and habits, like analysis, problem-solving, interpretation, and thinking and writing; and increasing general knowledge of postsecondary life and awareness of admissions processes. This review of

academic preparation in traditional education for postsecondary studies provides a reference of comparison as we consider literature on academic preparation for postsecondary education in the homeschooling context.

Academic Preparation for Postsecondary Education in Secondary Home Education

Literature on academic preparation for postsecondary education in the homeschooling context is sparse, particularly in scholarly journals. Authors who write about homeschooling commonly include a chapter in a book about what it takes to get into college or university (Bauer & Wise, 2004; Blumenfeld, 1997; Griffith, 1999; McKee, 1998; Saba & Gattis, 2002;). Their general purpose is to inform homeschooled students and parents about the importance of keeping good records to eventually produce transcripts and portfolios, preparing for examinations like the ACT and SAT, and communicating with postsecondary institutions about admission requirements and processes. However, the literature does not seek out student descriptions regarding their academic preparation for postsecondary education. Little has been researched about what secondary home education students are doing to prepare for postsecondary academics. This gap illustrates the relevance of my study and affords an opportunity for investigation.

Non-Refereed Works

Due to lack of interest and lack of scholarly literature on the topic, it is helpful to incorporate non-refereed works into this study to provide greater context and understanding about what has been written about academic preparation for postsecondary education among home-educated students. Blumenfeld (1997) pushed homeschoolers to start thinking about postsecondary education as soon as possible. He encouraged students to find out about and complete courses required for admission to specific schools, communicate with admissions

officers and alumni of the schools they desire to attend, and inquire about available scholarships and applicable work experience. Blumenfeld counseled homeschooling families to keep excellent records and to prepare well for college entrance exams. Homeschoolers who choose not to document their learning limit opportunities for further education and employment (McKee, 1998).

Griffith (1999) discussed the concerns that homeschooling families have had about transitioning to high school and postsecondary studies. She said, "Oddly enough, it is often harder for a homeschooler to get into high school than into college" (p. 123). Griffith stressed the importance of thorough record-keeping for homeschooled students and presented a variety of methods to keep records, including traditional grades and transcripts, portfolios, and narrative evaluation. Narrative evaluation involves some form of written description, like a journal, of a student's work.

Like having children join a team sport or take music lessons, homeschool parents often need to outsource upper-level courses of education (Bauer & Wise, 2004). Examples of outsourcing include finding tutors, researching online services, and registering their children in correspondence courses, generally offered through local postsecondary institutions. Taking classes at postsecondary institutions and correspondence courses prepares students for the rigors they will encounter in university. Bauer and Wise (2004) opined that outsourcing also allows for necessary breaks between homeschooling parents and students. In strong home education communities, families and homeschooling facilitators will hold cooperative classes that are typically taught by home education parents, according to their areas of expertise.

Preparing for postsecondary education requires parents and students to begin researching postsecondary schools early on to identify the best match for the student. Bauer and Wise believe

that home education students do better in smaller private postsecondary schools than large public universities because they are used to more intimate settings. These authors found that smaller institutions are more open to homeschooled students and their "nontraditional preparation and nonstandardized transcripts" (p. 689).

Middle school is the time for students to begin thinking seriously about postsecondary education (Bauer & Wise, 2004). Bauer and Wise suggest that critical thinking courses, research projects, and courses in Latin and modern foreign languages are best for developing college readiness. They also encourage students to take higher-level math courses and to spend their time reading instead of watching television or playing video games. Additionally, they counsel homeschoolers to deliberately prepare for SAT and ACT examinations and to take many practice exams. Finally, when homeschooled students communicate with postsecondary institutions to learn about their preferences for admission (e.g. portfolio, transcript, etc.) and about financial aid and application processes, they increase their chances for successful admission (Bauer & Wise, 2004).

Bauer and Wise emphasized the importance of homeschooled students acquiring work experience because some of them complete their secondary studies early. Instead of merely finding random jobs, these authors advise homeschooled students to pursue "apprenticeships" that will prepare them for work they are likely to be interested in pursuing. Saba and Gattis (2002) agreed with this philosophy and felt that homeschooled students should volunteer to gain experience and take steps toward a career. They conjectured that volunteering and career experience provided meaningful preparation and fostered maturity for postsecondary life.

Most universities now have a policy in place concerning admission of homeschooled students (Bauer & Wise, 2004; Saba & Gattis, 2002). Saba and Gattis (2002) appropriately

remind homeschooling families that most traditional school students have much more experience with test-taking, and that homeschooled students should prepare well in advance for entrance examinations for postsecondary studies. These authors inform students to focus on just a few activities that they are passionate about and spend a lot of time on, instead of pursuing many surfaced extracurricular endeavors. They explain that postsecondary admissions officers are now less impressed with so-called well-rounded individuals who are involved in several pursuits rather than those who demonstrate proficiency in and commitment to fewer interests.

Scholarly Works

Academic and social preparation for postsecondary education. I will now review scholarly studies that investigate homeschooling students' academic preparation for postsecondary education. Unlike in my research where I only consider the perspectives of home education student participants, most scholarly works on preparing for postsecondary education emphasize the differences between homeschooled students and students in other educational settings like public school. Among the scholarly research, it is rare to find studies that only consider homeschooling student academic preparation because most studies also consider students' social preparation for postsecondary education and life.

The purpose of Jones' (2010) research was to understand academic and social attitudes of homeschooled graduates as they adjusted to postsecondary life. The study included 215 undergraduate students from the same postsecondary institution who volunteered to participate. Participants were divided into three subsample groups of private (24%), public (63%), and homeschooled (13%) students, and the 28 homeschooled students were educated at home for at least seven years. Students filled out a three-page questionnaire where they self-reported on academic and social perceptions and completed a 30-item Likert scale, with an additional section

for homeschooled students to select the frequency and types of extracurricular and academic activities they were involved in.

Respondents had to select from 20 learning strategies, such as textbooks, skits, and multimedia activities, to describe their primary and secondary learning prior to postsecondary studies. Homeschooled students reported higher use of creative writing, hands-on activities, and online and video supplements, as well as higher us of workbooks and tutors. They reported significantly lower use of group projects. Homeschooled students used an average of 11.32 learning strategies compared to 10.54 strategies used by their private school peers and 10.69 by their public school peers.

Participants indicated their involvement in extracurricular activities by selecting from 14 different options such as music, scouting, sports, or clubs. Homeschooled students reported less involvement in scouting and sports, and more involvement in dance, church groups, employment, arts, martial arts, and foreign languages. On average, homeschooled participants participated in 5.7 activities, private school participants in 4.6, and public school participants in 4.8.

When indicating their levels of satisfaction and attitudes toward early educational experience using a 5-response Likert scale, homeschooled and private school students reported higher satisfaction than public school students. Students from each subgroup were asked whether they would be open to homeschooling their own children, and 28% of private school participants, 29% of public school participants, and 89% of homeschooled participants said they would be open to homeschooling.

The university's admissions department reported that for the 2004-2005 school year, homeschooled students achieved higher average GPA scores as undergraduates and as freshmen,

sophomores, and juniors in university compared to both private and public school peers. Homeschooled students also achieved higher SAT scores.

Regarding study skills and academic work ethic, 96% of homeschooled respondents reported using many different strategies compared to 72% of public school respondents and 71% of private school respondents. Twenty-five percent of homeschooled students, 31% of private school students, and 52% of public school students expressed difficulty taking notes in lectures. Twenty-one percent of homeschooled students, 33% of public school students, and 41% of private school students were frustrated in tests and felt they were not good test-takers. Concerning time management, 35% of private school students, 46% of homeschooled students, and 54% of public school students found it challenging. Seventy-nine percent of homeschooled students, 70% of private school students, and 60% of public school students reported satisfaction with current grades. Almost every homeschooled respondent felt comfortable communicating with professors and 80% of public school students and 79% of private school students said they felt comfortable.

The following are more general results from the data: public school respondents felt more comfortable than their peers contributing to class discussions; homeschooled students felt less prepared to give speeches and presentations and less confident about math; homeschooled students felt that formatting and writing papers was more difficult than expected compared to their peers; and more homeschooled participants reported involvement in campus activities than their peers. However, homeschooled students felt that they adjusted to university life at a slightly lower rate than their peers.

Ultimately, this study concluded that homeschooled students are at least as prepared both academically and socially as their peers. Jones advised parent-educators of homeschooled

students to become more aware of coursework required of postsecondary institutions and specific programs within those institutions to more effectively prepare their children for higher learning. Jones also urged parent-educators to facilitate more interaction with cooperative groups and more class discussion experience.

Using a feminist essentialism conceptual framework, SanClemente (2016) focused on the unique experiences of homeschooled women as they transitioned to college academically and socially. One aim of the study was to encourage legislators and college professionals to empower homeschooled college women through supportive programs and tailored curriculum. Eleven second- and third-year female college students were selected for the sample. SanClemente found that participants viewed themselves like traditional students academically and in their social relationships, although they expressed feeling like they were raised in a different culture than other students. Homeschooled women reported being equally or slightly more capable academically than their peers and more self-directed in their studies, and they felt that they were closer to their families.

During homeschool, eight of the eleven participants related involvement in homeschooling cooperatives, five took classes at local community colleges, and five participated in a variety of clubs, like Spanish club. Seven respondents emphasized being self-taught, especially as they reached high school age, and individualization was a common thread among participants, specifically in pursuing personal academic interests and choices. Participants described the transition to college by emphasizing being exposed to others' opinions. Although most respondents felt well prepared academically, they struggled with college-level writing and having structured classes. All respondents stressed the importance of having been self-motivated to learn as they transitioned to college learning.

Bolle-Brummond and Wessel (2012) found that homeschooled students were adequately equipped academically and socially for college. In semi-structured interviews, all five participants reported having been well prepared for postsecondary studies because they were trained to be self-motivated and organized learners. However, one participant withdrew from college after her third semester because she found it academically challenging due to attention she was giving to other commitments, like family and work.

Cardinale (2014) explored how homeschooled graduates acquire math proficiency, examined through conceptual understanding, procedural fluency, strategic competence, adaptive reasoning, and productive disposition. Cardinale found that strong nuclear families, direct teaching, self-study or self-directed education, mastery of learning, purposive conversations, and challenging curriculum enhanced math performance. Parents were integral to their children's proficiency, including creating productive atmospheres, modeling positive attitudes toward math, and motivating mastery.

Duggan (2009) explained that there is little research on pre-college preparation for community college students in general, and fewer studies comparing the difference of public school, private school, and homeschooled students. Her study included 121 respondents, eleven of which were homeschooled and nine of which were in private school, representing a 10% response rate from students who were invited to participate in the study. Duggan believed that understanding college preparation better would help educators design interventions to increase student success and persistence.

According to Duggan's findings, 64% of homeschooled participants were involved in pre-college preparation activities like success seminars, ACT/SAT practice tests, driver's training, sports, fieldtrips, tutoring, and national conferences. Homeschooled students reported

enjoying freedom, flexibility, and working at their own paces. However, they lamented the lack

of competition academically and in sports, and they did not like the labels they automatically had

ascribed to them for being homeschooled. Sixty-four percent of homeschooled students said they

studied more than 16 hours a week during the year before entering college, compared to 11% of

public and private school students. Thirty-two percent of public school participants said they

spent more than 16 hours a week socializing with friends compared to 22% of private school

students and 18% of homeschooled students during the previous year.

Homeschooled respondents were more likely to credit their current skills, knowledge, and

abilities in postsecondary studies to previous educational experiences, followed by private school

respondents and then public students. More homeschooled students rated themselves in the top

10% of their peers in academics, specifically in math, reading comprehension, and the drive to

achieve. More private school respondents rated themselves in the top 10% of their peers in study

skills, and more public school respondents rated themselves in the top 10% for computer skills

and writing ability. More homeschooled respondents than their peers said they intended to return

to community college in the next twelve months.

Sikkink and Skiles (2015) analyzed data from the national Cardus Education Survey of

3,000 high school graduates aged 24 to 39 who were randomly selected throughout the United

States. The study was conducted in 2011 and repeated in 2014 and spans over 20 years of

graduating classes. Their sample includes 201 homeschoolers, comprising 141 religious and 60

nonreligious students. Homeschooled graduates are compared to 1,771 traditional graduates, and

the study controlled for demographic information and family background factors.

These authors reason that because of skepticism toward public institutions,

homeschoolers are more likely to achieve lower results academically, choose universities that are

smaller and less selective, and be less involved in civic and church engagement. They believe

that homeschoolers are socially alienated and struggle with a minority status, and therefore they

have lower levels of personal well-being even though they are active politically. Sikkink and

Skiles advise, "Instead of focusing on traditional measures of success such as grades, test scores,

and graduation rates, research ought to focus on how well homeschool environments are doing in

meeting their intended goals" (p. 1).

Bolle, Wessel, and Mulvihill (2007) studied the transitional experiences of first-year

postsecondary students who were homeschooled in high school and found no significant

difference between the transitional experiences of homeschooled and traditional students. These

authors encourage institutions to understand how homeschooled students encounter

postsecondary studies to help them transition with more success.

Social preparation for postsecondary education and life. Saunder's (2009) study sought

to discover whether homeschooled students could socially integrate well into their postsecondary

institution. This survey research was conducted at Wheaton College in Illinois due to its large

population of previously homeschooled students (about 10%). Subjects for the study comprised

the entire 2004-2005 freshman class of 596 students. Persistence, defined as the intention to

continue attendance the following year, was the dependent variable. Saunders found that

homeschooling does not negatively affect the ability to socially integrate into postsecondary life,

according to his analysis of the data. Saunders opined that institutions with similar demographics

as Wheaton can feel confident that homeschooled students can socially integrate and persist in

pursuing their education.

Kranzow's (2013) qualitative study involved two Christian schools in the Midwestern

United States. Formerly homeschooled students were between 18-22 years old in their first or

second year of postsecondary education and were homeschooled at least during secondary education. Kranzow conducted semi-structured interviews with 18 participants, interviewed focus groups, and had students write reflections on certain assigned topics. Data from interviews and focus groups were transcribed and categorized into emergent themes, and the researcher focused on social integration and transition process.

This article speculates that formerly homeschooled students might rely more heavily than other students on faculty connections because of the close relationships they were used to during homeschool. Kranzow found no student who expressed feeling socially isolated, but homeschooled participants did acknowledge that they were more sheltered than they had realized and they described being exposed to various ideas, behaviors, and situations in postsecondary education. Homeschooled students appeared to have more to learn about how to manage social time with academic demands, unlike other students who seemed to understand this balance prior to entering postsecondary studies. The study discovered that students generally maintained consistent contact with parents, family, and previous friends, and sought their support regularly. Kranzow argued that homeschooled students tend to receive more support during postsecondary studies because they typically come from above-average socioeconomic situations and from families where parents are more likely to be postsecondary graduates.

Kranzow suggested that homeschooled students might not integrate to the same degree as their non-homeschooled peers because homeschooled students tend to spend less time with those who do not share their values. Instead of expressing a desire to conform and assimilate, participants were glad to be sheltered. Kranzow encouraged postsecondary institutions that seek to serve homeschooled students better to inform faculty of the importance of their communication and connection with homeschooled students. Other suggestions include

assigning first-year advisers, developing faculty-in-residence programs to facilitate closer

relationships with formerly homeschooled students, and peer mentoring.

Drenovsky and Cohen (2012) conducted a study to learn whether the lack of social

stimulation during homeschooling led to problems adjusting in college, specifically with self-

esteem and depression. They sent an online survey to 1,580 college students from various private

and public postsecondary institutions who were homeschooled for some time during primary or

secondary education. One hundred and eighty-five students responded to the survey, representing

an 11.7% response rate. Of these repondents, 150 students had at least 1-3 years of

homeschooling experience, and two-thirds of the respondents were homeschooled for 10-12

years. A comparison group of 80 non-homeschooled students at a four-year university were

invited to complete the questionnaire.

The study used the Rosenberg Self-Esteem Scale to measure social and personal

adjustment to college, and adjustment was also measured by the Center for Epidemiological

Studies-Depression Scale (CES-D). According to Drenovsky and Cohen, "This study

demonstrates that homeschooled students adjust quite well to a college environment" (p. 31).

Homeschooled students were not significantly different from traditional students in self-esteem.

Homeschooled students demonstrated much lower levels of depression, achieved higher

academic success, and viewed their college experience more positively.

Conclusion

A review of the literature on home education reveals several repeated themes, including

the growth of home education, the history of the movement, motivations to homeschool,

critiques of the movement, questions and myths about homeschooling, homeschool student

academic performance, the lack of scholarly research on home education, and critiques of

homeschooling research. My research question focuses on the academic preparation of secondary

home education students for postsecondary education. Because relatively little has been written

about secondary students' academic preparation in the home education context, I reviewed

literature on the academic preparation that takes place in schools. Few studies (Bolle-Brummond

& Wessel, 2012; Cardinale, 2014; Duggan, 2009; Holder, 2001; Jones, 2010; Lattibeaudiere,

2000; SanClemente, 2016; Sikkink & Skiles, 2015;) specifically investigate what secondary

home education students do to prepare academically for postsecondary. My review of the

literature establishes the rationale for my study that solicits home education student descriptions

and perceptions about what they did during secondary education to prepare academically for

postsecondary learning.

Chapter III. Methodology

The purpose of this chapter is to first provide an overview of case study as a research methodology, and second, present the case study research design for my proposed study. Merriam (1988) declared that case study research "offers the greatest promise of making significant contributions to the knowledge base and practice of education" (p. 3). Referring to case study as a methodology seems presumptuous after reviewing the literature, because researchers do not readily agree on a universal definition of case study research. Because there is no complete consensus regarding the definition or purpose of case study research, "researchers need to be very clear about their interpretation of the case study and the purpose of carrying out the study" (Meyer, 2001, p. 348).

In the first part of this chapter, I discuss the definition of case study research and then review the following topics: types of case studies; the purposes of case study research; strengths and weaknesses of case study as a methodology; and case study design, including data collection and analysis. In the second part of the chapter, I justify my choice of employing a case study methodology to address my research question, and then I detail my research design.

Case Study as Research Methodology

Case Study

Although researchers have not settled on a single accepted definition of case study research, common elements distinguishing case study include rich, thick description, and studying a case in its context, where "case" is a bounded system. In case study research, interest is in "process rather than outcomes, in context rather than a specific variable, in discovery rather than confirmation" (Merriam, 1988, xii). Case study is non-experimental in that it is not testing variables based on cause and effect and prediction; but rather, it is descriptive research based on

rich description and explanation where the researcher immerses in the "totality of the case" (p. 60). Distancing himself from Merriam's hard line on case study being non-experimental, Stake (2000) explained that case studies could be used to test hypotheses and include statistics, but that case studies tend to be descriptive and qualitative, especially in the social sciences.

According to Brown (2008), case study research involves intimate contact with participants and utilizes informative and contextual data to interpret findings. Case study is unique from other qualitative research methodologies because it is "both the process of learning about the case and the product of our learning" (Stake, 1994, in Denzin & Lincoln, p. 237). Therefore, the case under investigation tells its own story, and the researcher also affects the story through interpretation and presentation. The case study investigator should be cautious that his or her interpretation does not compromise the accuracy of the findings of the case under study. Case study inquirers share the social experience and exchange with the case and then "assist readers in the construction of knowledge" (Denzin & Lincoln, 1994, p. 240).

Merriam (1988) cautioned that case study research requires the researcher to deal well with ambiguity and to have a capacity for adaptation and flexibility because the researcher proceeds with guidelines instead of step-by-step procedures. Verschuren (2003) lamented the ambiguities surrounding case study as a research methodology, including what methods it should use and whether it was an appropriate approach in quantitative or qualitative research. He chose to define case study as a research strategy, or the set of methods that formulate the design and way of analyzing research data. Although I understand Verschuren's frustration with case study ambiguity, I embrace Merriam's advice to accept the unclear nature of case study research and be flexible as a researcher. Qualitative research necessitates adaptation as it deals with human subjects, and case study is no exception.

Brown (2008) discussed how case study has been considered a methodology, a design, a strategy, and a data collection strategy, compelling the researcher to justify how he or she is using case study: "The greatest challenge for the researcher is not the case study strategy itself, but in fact articulating the research paradigm and theoretical framework that is guiding every aspect of their work and ensuring the trustworthiness and credibility of the data and method of research" (p. 9). Case studies can differ from other qualitative designs, like grounded theory, because they allow conceptual theories to guide research and analysis (Meyer, 2001). However, theory can emerge as data are collected and analyzed in case studies (Eisenhardt, 1989). The competing and conflicting ideas and sentiments of case study researchers can leave researchers and readers confused and frustrated. However, Brown's direction for the researcher to justify his or her definition of case study and how he or she will implement case study allows me to be the flexible investigator that Merriam encouraged.

Contrary to Brown and Meyer, Lichtman (2010) posited that case study is an approach without philosophical underpinnings. Qualitative case studies usually build theory instead of testing it because there is little theory to influence the design of the study or "no manipulation of variables and no predetermined outcomes" (Merriam, 1988, p. 59). However, all researchers carry theoretical predispositions and assumptions into the study. Merriam (1998) and Yin (2003) emphasized how case study is different from grounded theory and ethnography because prior theory does influence the research design. Again, the lack of alignment among case study researchers creates confusion about the place of theory in case studies, compelling researchers to attend to theoretical influences that they bring into their studies instead of ignoring them.

Key elements. Borrowing principles articulated by Merriam (1988), Gay, Mills, and Airasian (2012) referred to several key elements of cases studies. First, case studies are

particularistic because they focus on a specific phenomenon or situation. Second, they are *descriptive* because they require thick description of the phenomenon with many variables and analyses of their interactions. And third, case studies are *heuristic* because they increase the reader's understanding of the phenomenon.

Similarly, Cohen, Manion, and Morrison (2000) outlined important components of case studies: they include rich and vivid descriptions of relevant information; they provide a chronological narrative of relevant information; they blend description with analysis; and the researcher is integral in the case. McMillan and Schumacher posited: "Case studies can provide a detailed description and analysis of processes or themes voiced by participants in a particular situation" (p. 395). Case study researchers, including Gay et al. and Cohen et al., help us understand that case studies are identified by their rich descriptions and the researcher's interpretation of findings. However, these characteristics are consistent in qualitative studies and do not distinguish case study as much as the emphasis on the boundaries of the cases under study.

Bounded system. Miles and Huberman (1994) described case study as "a phenomenon of some sort occurring in a bounded context" (p. 25). Case study research means focusing on a bounded system and providing rich description (Gay, Mills, & Airasian, 2012). Combining the descriptive and interpretive qualities of case study with the notion of a bounded unit distinguish case study further. Case study is unique from "other research strategies because the focus of the research is a bounded system or case" (Brown, 2008, p. 2).

The emphasis on bounded systems sheds more light on how case studies are particularistic or focused on a specific phenomenon. Researchers need to provide an explanation of the restrictions of the cases in the study to clearly target what is being studied. It is up to

researchers to determine the limits or boundaries of the case (Lichtman, 2010). To not trivialize the case, it is essential that the boundaries of the identified case be kept in focus (Vershuren, 2003). By adhering strictly to the defined boundaries of the case, the findings of the case are more meaningful, and understanding of the case is enhanced.

Hamilton and Corbett-Whittier (2013) and Cohen et al. (2000) take us beyond a mere definition of a bounded unit to application of the bounded unit, or an understanding of how binding the case is beneficial. According to Hamilton and Corbett-Whittier, case study enhances understanding of communities, contexts, and individuals, and examines the complexity of educational settings. These authors want us to see case study as a research approach or genre aimed at capturing "the complexity of relationships, beliefs, and attitudes within a bounded unit" (p. 11). By identifying a characteristic, trait, or behavior, the researcher can more effectively locate people who might have the characteristic, trait, or behavior. Case studies aim to "probe deeply and to analyze intensively the multifarious phenomena that constitute the life cycle of the unit with a view to establish generalizations about the wider population to which that unit belongs" (Cohen et al., 2000, p. 185).

Purposes of Case Study Methodology

Choosing case study methodology. Case study researchers have effectively articulated the purposes of case study and when to use this methodology. According to Meyer (2001), case studies are often conducted to explore a new phenomenon, or to answer "why" and "how" questions. Case study is appropriate when the goal is to present a rich and thick description of a phenomenon on which little research has been conducted, as is the goal of this dissertation project. McMillan and Schumacher (1997) said case study is intended to understand a phenomenon in depth. Like Meyer, they clarified that researchers use case studies when the

purpose is to explore or discover. Researchers choose to explore when little research has been conducted on a topic, and the objective might be to lead to more inquiry.

Stake (2000) posited that some researchers prefer case study because it is in harmony with their theory of knowledge and experience. He believed an effective purpose of case study research was to deepen the reader's understanding based on insights from people's experience. Stake argued that tacit, or implied, knowledge, unlike explicit knowledge, was concerned more with understanding rather than explanation. In other words, the main aim of case study methodology was increased understanding based on tacit knowledge and perception.

However, not all case study researchers have agreed with Stake's emphasis of understanding over explanation. Gay, Mills, and Airasian (2012) explained that case study methodology is used when a researcher wants to answer a descriptive or an explanatory question, or when the researcher wants to study process. According to these authors, case study is also used to describe a context and to provide causal explanations. I tend to agree more with Stake because case studies are intended to understand specific phenomena in depth and pressing for causal explanations could lead to inaccurate generalizations more characteristic of a quantitative approach.

Merriam (1988) aligned more with Stake in seeking understanding through case study. Consistent with the qualitative approach and paradigms within this approach, case study methodology is concerned with "a highly subjective phenomenon in need of interpreting rather than measuring" (Merriam, 1988, p. 17). Emphasis is placed more on process than product, discovering meaning, and making sense of and interpreting experience. The researcher is the primary source of data collection and is responsive to the context, unlike an inanimate instrument would be. The understanding that comes from case study is concrete, contextual, and developed

by the reader's interpretations.

Informing methodology and research design. According to Cohen, Manion, and Morrison (2000), in case study "the purposes of the research determine the methodology and design of the research" (p. 73). They clarified that case study focuses on a specific instance and illustrates a more general principle. This instance is of a bounded system, like a person or a group. They expressed, "Case studies can penetrate situations in ways that are not always susceptible to numerical analysis" (p. 181), and case studies "investigate and report the complex dynamic and unfolding interactions of events, human relationships, and other factors in a unique instance" (p. 181).

Hamilton and Corbett-Whittier (2013) wisely suggested that two questions must be asked when planning to conduct a case study. First, what is the intended outcome of the study? And second, who is the intended audience? They said, "Good case study research always provides an explanation of the research process as a means for the audience to gauge the quality and validity of the research findings." Meyer (2001) also made it clear that the researcher should be transparent about his or her intentions with the study. For example, if the intent is to provide a rich, deep investigation of the case, the researcher should indicate this and allow the reader "to make judgments about the applicability rather than making a case for generalizability" (p. 348). Clearly, case study research can be characterized based on the intent of the study and the research questions (Gay, Mills, & Airasian, 2012).

Types of Case Studies

Case study research can focus on single cases or more than one case. Gay, Mills, and Airasian (2012) explained that collective, multi-case, multisite, or comparative case studies are studies in which the researcher collects data about the same phenomenon at multiple sites among

several single cases. Collecting data at multiple sites causes the researcher to consider the relationships among these cases to identify similarities and differences and what these similarities and differences might mean. Multiple-case studies require cross-site analysis of each case. Collecting and analyzing data at the same time helps the researcher make sense of the data and helps identify questions to drive further collection and analysis.

Hamilton and Corbett-Whittier (2013) acknowledged the contribution of several researchers to the development of case study methodology, including Yin (2003), Merriam (1988), and Stake (1995). Stake distinguished between *intrinsic* and *instrumental* case study to more clearly understand the purpose of the study. Intrinsic case study aims to understand a single, specific case in its entirety; instrumental, or delimited, case study looks at an issue or aspect of the case to be able to learn about other cases. Single cases can be either intrinsic or instrumental, but multiple-case studies are necessarily instrumental because there is more than one case that we are trying to understand.

Yin defined several approaches to case study research: *exploratory* case study collects data and looks for patterns; *descriptive* case study sets out possible theories to frame the study and research questions to focus it; and *explanatory* case study answers the "how" or "why" of whatever issue was being studied. Merriam outlined three types of case study: *particularistic* case study emphasizes a specific event or phenomenon and practical problems; *descriptive* case study creates thick description of what was being studied and how variables affect each other; and *heuristic* case study aims to increase understanding of the case.

Although they use different words to describe several types of case study, Yin and Merriam focus on specific phenomena and rich description. They both use "descriptive" as a type of case study, but by using this term Yin intended that researchers should clearly articulate

the theory influencing their study, whereas Merriam focused more on providing thick description of the case to highlight the specifics of each case. I have chosen to align my study more closely to Merriam's definition of "descriptive" case study rather than Yin's because I produce thick descriptions of participants' experiences preparing for postsecondary studies through secondary home education.

Strengths and Limitations

Focus on "the particular." Stake (2000) noted, "Full and thorough knowledge of the particular" (p. 22) makes understanding useful. This sentiment argues against the supposed superior place that generalizability tends to hold in scientific inquiry. Vershuren (2003) clarified, "This critique of low generalizability of the results of a case study is based on a reductionistic type of reasoning" (p. 134). Case study's strength is being able to deepen understanding in real contexts rather than through decontextualized scientific approaches (Hamilton & Corbett-Whittier, 2013).

Simons (1996) cited uniqueness and capacity for understanding complexity as the great advantages of case study research. She acknowledged that generalizability is often viewed as a disadvantage to case studies but argued that case study intends to deeply understand a case or situation, not try to generalize findings. Therefore, not being able to generalize is only a problem if that is what the study intends to accomplish. Simon's aim was to show that the in-depth and holistic perspective case studies provide allows them to "generate both unique and universal understandings" (p. 225). The paradox of case study is that it "celebrates the particular and the unique and frequently yields outcomes that are inconclusive" (p. 227) and that "by studying the uniqueness of the particular, we come to understand the universal" (p. 231). I agree that studying specifics in depth provides rich understanding and even gives us insight into the general;

however, Simons seems to contradict herself by stating that the purpose of case study is not to generalize, but then points to how the 'particular' informs the universal.

Sturman (1997) suggested that to "understand a case, to explain why things happen as they do, and to generalize or predict from a single example requires an in-depth investigation of the interdependencies of parts and of the patterns that emerge" (p. 61). A common criticism of case study research is that it is difficult to generalize because it is so subjective. Responding to this criticism, Sturman clarified that acknowledging the subjectivity of a case is important; however, uniqueness and regularity emerge by the presence or the absence of one or the other. The most notable features of the case should be well documented and thoroughly understood to illuminate another case (Sturman, 1997).

Stake (1994) explained that case studies are criticized by social scientists because of their uniqueness, particularity, and diversity, and lack of generalization-production. However, Stake pointed out that too much focus on generalizing and creating theory could lead the researcher to not attend properly to prominent features of the case. For the naturalist, generalizations are not totally possible, but transferability is more likely, depending on the similarity of contexts (Guba & Lincoln, 1997). Causality is futile to try to identify, so it is better to look for "plausible patterns of influence" (p. 87). Keeves and Sowden (1997) postulated, "The extent to which the findings can be generalized beyond the particular case depends on the basis upon which the cases were selected and the relationship between the selected cases and a wider population" (p. 298). Finally, Yin (2003) recognized that it is difficult to generalize from a specific case but responded that case studies are "generalizable to theoretical propositions and not to populations or universes" (p. 10).

Real contexts. Merriam (1988) expressed that the strength of case study methodology is

its ability to study complex phenomena in real-life contexts resulting in a rich and holistic account. Case study expands reader understanding and provides insight into the phenomenon under study. The strength of case study is observing effects in real contexts and conducting in-depth investigations (Cohen, Manion, & Morrison, 2000). In case study, the substance, quality, and intensity of occurrences are of higher priority than frequency and quantity (Cohen et al.).

Limitations. However, Cohen et al. acknowledged that reliability, validity, and generalizability could be challenging in case study because of the uniqueness of the situations being studied. Limitations in case study might also include time, money, or too much detail to sift through. Also, the researcher might lack training in methods of data collection, analysis, and presentation of the findings. Ethics concerns increase when the researcher is a primary instrument in data collection and analysis, consistent with all qualitative research methodologies. Merriam (1998) acknowledged that validity, reliability, and generalizability are challenging because of the specificity and uniqueness of the case in case study research. The strengths of case study seem to be its limitations, and its limitations seem to be its strengths.

Case Study Design

A research design is a logical sequence that connects the empirical data with initial research questions (Yin, 2003). For Yin, because case study is a methodology, it follows that the design, data collection, and data analysis are encompassed within the strategy. Kyburz-Graber (2004) emphasized that case study involves analyzing a real-life situation as closely as possible to the case, describing the case in detail, and explaining findings with as much clarity as possible. Meaning is given to participants' lived experiences by using interpretive methods.

Bogdan and Biklen (2003) compare case study design to a funnel, starting wide and deciding where to go with the study as data is collected and analyzed. The design and procedures

change as researchers learn more about the topic; therefore, the broad exploration at the beginning of the study is narrowed and refined. Because case study is about a deep understanding of the case and being able to provide rich, thick description, generalizability is not the goal. Still, a challenge for case study researchers is deciding to look for a typical or an unusual case or situation.

Case study researchers negotiate between their own interests and the interests of the audience they intend to target with their research in determining research design. Contrary to the positivist tradition, Hamilton and Corbett-Whittier (2013) advocated flexibility in changing aspects of the case study once it has begun, but they emphasized the importance of transparency in documenting changes. Research questions require attention "throughout the research process as they inform the navigation of research design, data collection, analysis, and dissemination and writing" (Hamilton & Corbett-Whittier, p. 56). As researchers clearly justify their research procedures, the dependability of the study increases.

Data collection and analysis are described by Bogdan and Biklen (2007) as "pulsating," meaning that the researcher conducts interviews, analyzes data, develops and refines theory, and follows the same pattern over and over (p. 73). Ongoing data collection and analysis is analytic induction or collecting pieces of data and illustrating how they are interconnected. Similarly, Keeves and Sowden (1997) recommended that data collection and analysis, at least in preliminary analysis, should be concurrent so that it is not overwhelming, and so that gaps in the data become apparent.

Data collection. According to Merriam (1988), there are no specific methods for data collection or data analysis in case study. However, Bogdan and Biklen (2007) stressed, "In good research, methods are consistent with the logic embodied in the methodology" (p. 35). Meyer

(2001) explained that choosing data collection procedures depends on the research question and the choice of design. However, she acknowledged that interviews, observation, and archives were typical methods. Hamilton and Corbett-Whittier (2013) concurred that selecting tools for data collection in case study is determined by clearly establishing research questions and what it is the researcher is trying to explore. Case study methodology typically involves interviewing, observation, and document analysis (Denzin & Lincoln, 1994). Eisenhardt (1989) emphasized the importance of field notes for overlapping collection, analysis, and coding.

Interviews. Interviews tend to be more open-ended and less structured in qualitative case studies to glean from the unique ways that respondents view the world. Semi-structured interviews are guided by questions or topics to explore, but they are flexible and adaptable based on the responses from interviewees (Merriam, 1988). Bogdan and Biklen (2003) stated that the purpose of interviews in qualitative research is to "gather descriptive data in the subjects' own words so that the researcher can develop insights on how subjects interpret some piece of the world" (p. 95). A researcher should be careful not to control the interview too rigidly because the point is to obtain rich data from the words and perspectives of the participants. An interviewer attempts to "understand the complex behavior of members of society without imposing any a priori categorization that might limit the field of inquiry" (Fontana & Frey, 1994, p. 366). Gay, Mills, and Airasian (2012) highlighted that challenges to interviewing include researchers trying to control the interview, the accuracy of participant responses, and the difficulty in sharing language with participants to be able to make meaningful inferences. A researcher needs to enter the research site as unobtrusively as possible to build trust and gather meaningful data.

Data analysis. In qualitative research, data must be analyzed as it is collected so that researchers know "whom to interview, what to ask, or where to look next" (Merriam, 1988, p.

123). Analyzing the data as it is collected requires the researcher to narrow the study, pursue specific leads while collecting data, and record field notes about what is being learned. Bogdan and Biklen (2007) emphasized the importance of descriptive data in qualitative research: "The written word is very important in the qualitative approach, both in recording data and disseminating the findings" (p. 5). The researcher conducts analysis to describe the data and interprets to make sense of the data. This process is ongoing throughout the research project. Data analysis requires the researcher to become immersed in the data. Through constant reflection throughout data collection and analysis, the researcher can construct meaning from frequent interaction with participants.

Data analysis in qualitative research is inductive (moving from specific to general) and iterative, or repetitious (Lichtman, 2010). Although analysis in qualitative research is not standardized, a systematic approach is encouraged. Lichtman discussed several methods of analysis, including content (textual) analysis, or using coding categories derived from the text or transcription, and qualitative comparative analysis (QCA). QCA compares across cases while preserving the complexity of single cases, like the constant comparative method of Glaser and Strauss (1967). In analysis, the researcher tries to code the data using words, phrases, and sentences from the text. Codes emerge in the process of reading and thinking about the text material. Case study analysis involves an iterative process of conducting interviews and then dissecting and categorizing the data into codes until all interviews have been coded. Then the researcher categorizes these codes until they are refined into meaningful concepts. In multiple-case studies, the cross-case analysis begins only after all cases have been analyzed.

Verbatim transcription of recorded interviews provides the best data for analysis in case study (Merriam, 1988). Keeves and Sowden (1997) provided specific guidance concerning how

to analyze interview transcriptions. They explained that data reduction involves coding the record, which means that the researcher identifies key words or numerical classifications. Structure is essential in coding to systematically use it in the detailed examination of the data. The researcher needs to summarize each point the participants make in the interviews and transcribe relevant quotations. Eventually, the researcher summarizes the themes from the interviews, checks these summaries with interview recordings for inconsistencies, and then member checks with participants to verify the data.

Purposive sampling. Purposive, or purposeful, sampling is most common in case study research because the researcher desires to choose cases that are the most helpful and rich in information to better understand the phenomenon under investigation (Gay, Mills, & Airasian, 2012). In purposeful sampling, the researcher selects the sample from which one can learn the most (Merriam, 1988; Stake, 1994). Purposeful sampling is ongoing as the researcher decides what data to collect next after having collected and analyzed data. Eisenhardt (1989) explained that the goal is "to choose cases which are likely to replicate or extend the emergent theory" (p. 537). McMillan and Schumacher (1997) explained that purposeful sampling intends to identify information-rich informants or cases. The investigator desires a sample that is "likely to be knowledgeable and informative about the phenomena" (p. 397) under investigation.

Ethics. Because case study research has "intense interest in personal views and circumstances" (Stake, 1994, p. 244), strict ethics are essential. Researchers are "guests in the private spaces of the world" (p. 244). Reasonable efforts are made to ensure ethical treatment and protection of participants. Participant involvement is voluntary, and participants need to understand that there is always some risk to them and that they can withdraw at any time throughout the research process. The researcher commits to do what it takes to protect

anonymity. Stake explained that researchers work to protect against the risk of exposure and embarrassment to participants and organizations. Reporting and collecting data must be clearly understood by participants, and member checking is essential to be sure cases are accurately represented and quoted.

When conducting interviews, the researcher imposes risk upon participants as they share personal thoughts and information. However, participants can benefit from being interviewed as they gain understanding by expressing their thoughts and views. Bogdan and Biklen (2007) emphasized the importance of obtaining informed consent and protecting informants from harm. They reminded researchers that informants should not feel coerced by the research site, informants' privacy and anonymity must be ensured, and researchers need to express the truth in writing their findings.

Writing the case study. Hamilton and Corbett-Whittier (2013) stressed that before it is time to write the case study, the researcher collects data, codes the results, and determines themes. Case study is typically presented in narrative form, but can be done in traditional format, including presenting an introduction, literature review, methodology section, findings, and discussion and conclusions. Writing the case study report involves assembling all data in the case record, determining the audience, selecting a focus, and outlining the report (Merriam, 1988). The researcher considers what the audience will want to know from the results of the study. Selecting a focus depends on the audience, the original purpose of the study, and the analysis.

Summary

Although researchers have not agreed on a universal definition of case study, the literature has emphasized the centrality of rich, thick description and the notion of a bounded system. Part 1 of Chapter 3 reviews several elements and types of case studies, and it emphasizes

strengths and limitations of this kind of research. The main strength of case study research is its ability to understand in depth the unique situations and phenomena being investigated. Paradoxically, this strength is also viewed as case study's greatest limitation because of the challenge of generalizing to larger populations. As in all qualitative research, case study design encourages simultaneous data collection and analysis. Through purposive sampling, the researcher selects participants from which to glean the richest and most abundant information. In Part 2 of this methodology chapter, I detail my research design and describe the methods I used in my study.

Research Design

The research design connects research questions and topics that emerge from the literature review with data collection and analysis. I begin this section with my research question and discuss how I implemented methods of data collection and analysis consistent with case study methodology. I describe how I attended to validity (trustworthiness), reliability (dependability), ethics, and organizing and writing the case study report. In Chapter IV, I analyze each individual case in this study, followed by a cross-case analysis, and then I connect the literature to my analysis.

Research Question

The ultimate intention of this project was to produce rich descriptions of youths' experiences with homeschooling to understand more about their academic preparation for postsecondary education, and to inform home education students, parents, and other contributors to the home education community. The following research question shaped and grounded the study: *How do postsecondary students who were homeschooled during secondary education describe their academic preparation for postsecondary education?* My research question is

important because homeschooling students and parents have concerns about their ability to adequately prepare for postsecondary academics. Additionally, most research on home education has focused on the views and experiences of parents and educators, but little is known from the perspective of home education students. Researchers have not given much attention to what homeschooled students do to prepare academically for postsecondary studies. The relevance of my research question is highlighted by the growing number of families, particularly in Alberta, opting to homeschool their children.

Bounded System

Among qualitative research methodologies, case study is unique because of its emphasis on thick description with few participants and clearly defining a bounded unit of analysis. Merriam (1998) explained how her thinking about case study evolved from seeing it in terms of the final product to emphasizing the bounded context. In my study, the cases are bounded because participants were homeschooled in Alberta during secondary school, and all participants were current postsecondary students.

Case study methodology is distinguished because prior theory can influence and guide the design of the study and data collection, unlike in other qualitative methodologies, like ethnography and grounded theory (Merriam, 1998). According to Merriam, education researchers employing a case study methodology borrow from "anthropology, history, sociology, and psychology both for theoretical orientation and for techniques of data collection and analysis" (p. 34). However, Merriam explained that in addition to disciplinary orientation, case studies could be defined by their overall intent. For example, in my study, I conducted a multiple or collective case study requiring a cross-case analysis of several cases. The current study was influenced by three major case study researchers: Merriam (1988, 1998), Stake (1994, 1995), and

Yin (2003, 2012, 2014). Because of her emphasis on case study in education specifically, I have chosen to align my study most closely to Merriam's work.

Case Selection

Merriam (1998) explained that the techniques for gathering data depend on how the study has been framed and how the sample has been selected. She emphasized establishing a theoretical framework based on disciplinary orientation and the literature connected to this orientation. From the literature, a researcher learns what has been done on the topic of interest, and then identifies the problem and purpose of the study he or she will conduct. Identifying the problem and the purpose of the study allows a researcher to select an appropriate sample to investigate.

I draw from the constructivist paradigm and ontology and epistemology within this paradigm. Specifically, I approach this study with a belief in multiple realities of social constructions and I rely on transactions or interactions with participants to produce meaningful findings that I interpret as the researcher. I also draw from literature on home education, and specifically from the major topics that have emerged in that body of literature. Consistent with my research question, I specifically looked at the academic preparation of secondary home education students for postsecondary education.

Multiple-case study. This research uses a multiple-case study design to learn about postsecondary students' descriptions of home education during secondary education. I contacted two institutions in Alberta to identify participants. Both institutions facilitate Alberta curricula to homeschooling families throughout the province. My aim was to work with 4-6 participants because case study is not as concerned with generalization as it is with understanding the case deeply and providing rich descriptions. To thoroughly and properly study, reflect upon, and

analyze each case individually, and then engage in meaningful and intensive cross-case analysis, it was best to focus on a limited number of cases (Stake, 1994; Sturman, 1997). By deeply understanding individual cases, we gain insight into the general (Merriam, 1998; Sturman, 1997).

After conducting, transcribing, and beginning to analyze data from the interviews with the first three participants, I noticed that many of their responses fit into the categories and themes I had established with the first interviewee. After interviewing a fourth participant and again observing that the participant's responses fit into the existing categories and themes, I could see this thematic overlap serving to reign in my study. Because interviews with these four participants yielded abundant, rich data, I determined to follow up with each of these participants and conduct a second interview before deciding whether to use more participants. Data from the second interviews with these participants also integrated well into my established categories and themes, and I could tell I had sufficient data from these four participants to fulfill the demand for thick, rich descriptions.

Purposeful sampling. Case study employs a purposeful, or purposive, sampling technique instead of random sampling. Purposeful sampling allows the researcher to select informants who will provide rich information according to the research questions and purposes of the study (Merriam, 1988; Stake, 1995). Case study's objective is to gain deep understanding of the case or cases. The two homeschooling facilitators in Alberta I contacted agreed to disseminate a research letter explaining the intent of my study to their former students and these students were directed to contact me. From student responses, I was able to secure participants.

Data Collection

Case study methodology does not claim specific methods for data collection and analysis (Merriam, 1998). Merriam expressed that if the intent is discovery, insight, and interpretation,

then qualitative techniques for data gathering and analysis need to be used. In qualitative studies, data collection and analysis are simultaneous and pulsating, and the researcher is the primary instrument for data collection and analysis. Merriam referred to all the information collected during data collection and analysis as the case record or database. The key is to keep this record organized to make intensive analysis easier after all data has been collected and analyzed.

Interviews. As soon as approval was obtained to conduct the study, I contacted the two home education facilitators in Alberta to formally identify cases. After respondents agreed to participate in the study, I set up appointments for an initial one-hour semi-structured interview with each one. Participants were informed that I wanted to conduct two interviews for the study. Before starting each interview, I carefully reviewed ethics concerns and helped participants understand the risks and benefits of the study. Each interview was audio-recorded for verbatim transcription. After discussing ethical concerns with each participant, I started the recording and asked broad questions to establish a comfortable atmosphere and build rapport. I used the interview protocol (see Appendix A) to guide the interview, but I was cognizant to ask other questions and engage the interviewee based on their responses and the flow of the discussion, according to my research question. At the end of the interview, I stopped the recording and reminded them that they were free to withdraw any, or all, of the interview up to one month after the interview.

After each first interview, I transcribed and analyzed the data to gain a deeper and more dependable understanding of the evidence. I sent the transcription to participants before the second interview and prepared a new interview protocol for each case based on the analysis of the first interview. Sending the transcription allowed respondents to evaluate the accuracy of their responses, fulfilling the purposes of member checking. After the second interview, I again

sent the transcription to participants for them to verify the accuracy of their responses. All data has been stored and filed. Data that is not saved on my personal computer is locked in my personal office.

Data Analysis

      Qualitative comparative analysis. Analysis of the data is a process of "consolidating, reducing, and interpreting" (Merriam, 1998, p. 178) to make sense of the data. For Merriam, the researcher decides what level of analysis to apply to the study. Qualitative comparative analysis is a data analysis strategy that can be used in qualitative case studies. The idea is to study the data and find incidences or responses and then compare them to other incidences or responses (Merriam, 1998). Recurring or regular units of data (words, phrases, sentences, etc.) that seem meaningful are grouped together. Comparisons among these units of data lead to potential categories and subcategories which are also compared to one another. The researcher is constantly comparing levels of concepts to develop theory.

      To illustrate levels of analysis, Merriam used the example of sorting food items from a grocery store. By comparing items, one can classify individual items into all possible categories, and then work to sort through and refine these categories according to one's choosing. The task is to make sense of each category and reflect the focus of the study and its purposes. Merriam explained that data analysis is essentially a step-by-step process of category construction.

      Merriam (1998) described this step-by-step process as follows. The researcher begins by reading through the transcript making notes, comments, and observations, especially focusing on "bits of data that strike you as interesting, potentially relevant, or important to your study" (p. 181). Once the researcher has finished reading the transcript, he or she will look over the notes and comments and group information that appears to go together. Next, the researcher moves to

the next transcript or set of data employing the same strategy, but with the groupings from the first set of data in mind. Then the researcher can compare sets of data to find similarities and differences. Recurring regularities and patterns will become more and more discernible among sets of data, allowing the researcher to refine categories and themes.

Researchers should be sure categories reflect the purposes of the study (Merriam, 1998). Categories are like answers to the research questions, or the start of the findings of the study. Fewer categories lead to clearer communication of the findings. Clues to developing categories include the following: the number of people who share the same information or how frequently something arises in the data, concepts that appeal to a specific audience, and uniqueness (Merriam, 1998).

Because data analysis is an iterative process, analysis begins when data collection begins, (Merriam, 1998). After each interview, it is crucial to begin analyzing the evidence. Within 24 hours of each interview, I transcribed the interview and began to study the transcriptions closely. My purpose in the initial read of the transcription was to note repetition, as well as words, phrases, or sentences of interest. I began grouping ideas toward developing categories. Second and additional reads through the data highlighted potential themes or categories from the participants' responses (see Appendix B). I followed Merriam's step-by-step process described above. Once this pattern of analysis was conducted for each individual case and after I refined the categories, I began the intensive cross-case analysis among the cases. The cross-case analysis did not begin until all data was collected from all interviews. The final stage of analysis required me to interpret and link categories in a meaningful way. Merriam encouraged researchers to speculate and make guesses and projections about the implications of the data.

Findings

Associating validity and reliability with qualitative research can be problematic. However, Lincoln and Guba (1985), Merriam (1998), and Stake (2005) used the terms validity and reliability with qualitative case studies, but they acknowledged that validity and reliability require explanation. These researchers agreed that research results should be trustworthy (valid) based on how the data was collected, analyzed, and interpreted. Are the findings dependable (reliable), and are they replicable?

Merriam believed that internal validity was a strength of qualitative case study because the investigator is close to the participants as the main instrument for data collection and analysis, making it easier to determine how well the findings match reality. To increase internal validity, Merriam (1998) emphasized triangulation, member checks, peer examination, and clarifying the researcher's biases and assumptions. Reliability has to do with replicating the findings of the study. Merriam opined that reliability is problematic in qualitative studies because these studies are not trying to isolate human behavior, but rather explain behavior as it is experienced, which requires researcher interpretation. Therefore, achieving reliability in the traditional way through qualitative studies is not possible according to Merriam. A researcher who utilizes case study is not searching for causal relationships among variables, as in experimental research. The goal is not finding the findings again, but rather seeing whether they are consistent with the data that is collected (Merriam, 1998). She stated, "Replication of a qualitative study will not yield the same results. That fact, however, does not discredit the results of the original study" (p. 172).

External validity is concerned with generalizing the results and applying them to other situations. Merriam (1998) argued that we can "extract a universal from a particular" and that

"the general resides in the particular" (p. 210). It is not the objective of case study methodology to enable universal application; therefore, generalizability is left to the readers of the study to make applications. To increase the likelihood of fostering generalizing by the reader, the researcher can provide thick description, clearly describe the case, and study multiple cases (Merriam, 1998).

In my study, I was the main instrument of data collection and analysis, which allowed me to investigate closely. I chose to only use interviews because my research focuses on student descriptions. Because my report is a dissertation, I worked with my doctoral supervisor and committee, providing triangulation through peer examination and review. I conducted two interviews with each participant and used member checks to ensure the accuracy of responses. This effort also enabled the participants to be actively involved in the progression of simultaneous data collection and analysis.

Writing the Case Study Report

Rigor in qualitative case studies "derives from the researcher's presence, the nature of the interaction between researcher and participants, the triangulation of data, the interpretation of perceptions, and rich, thick description" (Merriam, 1998, p. 151). Merriam stressed that reporting in case study research is the same as in any qualitative study, except that case studies are exceptionally rich in description. Such description should allow the reader to "vicariously experience the phenomenon" and should "transport the reader to the setting" (p. 238). Merriam provided two common ways of organizing the case study report. First, researchers write a descriptive narrative analysis followed by the interpretation of the analysis. Second, researchers "integrate descriptions and vignettes with commentary" (p. 243). After I completed the cross-case, or intensive analysis, I was ready to present the findings of the study. I used Merriam's first

suggestion of writing a descriptive narrative analysis followed by my interpretations of the data.

I have presented the entire case study report in the traditional format, with an introduction, a literature review, a methodology section, findings, discussion, and conclusions. Merriam explained that findings in qualitative reports are often organized according to categories or themes that come from data analysis. Findings are presented in the "findings" section of a report, and the researcher makes sense of the findings in the "discussion" section. For my dissertation, each section formed a chapter.

Ethics

Merriam (1998) made it clear that "ethical practice comes down to the individual researcher's own values and ethics" (p. 218) and conscience. The researcher is the primary instrument for data collection and analysis and will inevitably impose his or her assumptions and biases. Researchers ultimately decide what is included in the study, what is reported, and how it is reported. In qualitative studies, ethical problems are most likely to occur when collecting data and reporting findings, especially due to the relationship between the researcher and participants (Merriam, 1998). Anonymity is difficult for qualitative case studies because in-depth information can potentially identify participants. However, I endeavored to protect the anonymity of all my participants by using pseudonyms and labeling transcripts by number instead of by participant name.

A researcher is invited into the interviewee's private space and needs to be respectful and sensitive. In-depth interviews can have long-lasting effects as informants share potentially painful thoughts and experiences. However, interviews can also be positive experiences. Before each interview, I reviewed my ethical obligations with participants. I explained to participants that they could stop the interview or retire from the study at any time. However, I also explained

that after I thoroughly reviewed their responses through member checking and after the study was published, they would not be able to change their responses. At the end of the study interview recordings will be erased.

Conclusion

In Part 2 of the methodology chapter, I detailed the multiple-case study research design for my study on secondary home education student academic preparation for postsecondary studies. I presented my research question to emphasize the importance of connecting the design to the question and the purpose of the study. In case study research, a researcher uses purposeful sampling to select the best cases for the study, particularly within a clearly defined bounded context. After I selected participants through two home education facilitators in Alberta, I collected data from participants through semi-structured interviews. Aligning with Merriam's (1998) model for research design, I described how I used the qualitative comparative analysis for data analysis. I concluded the chapter by emphasizing ethics and how I decided to write the case study report.

Chapter IV. Findings

In this study I interviewed four postsecondary students who were homeschooled during secondary education. Each participant was interviewed twice over a period of several months. During each interview, and later as I engaged in more formal, written reflection of the interview, I realized how true it is that data collection and analysis are "pulsating" (Bogdan and Biklen, 2007). As the interviewer, I was mindful of my research question and genuinely interested in my topic. Therefore, with each response participants gave, I found myself naturally analyzing the meaning of their words and experiences. I knew that the interview was being recorded and that I would be able to ponder more carefully as I transcribed the recording. Knowing I would transcribe the interviews later made me comfortable to listen and focus on participant responses as each interview took place. I learned that transcribing affords an excellent opportunity to analyze and contemplate participant responses; in doing so, I became more familiar with each interview.

Analyzing the Interview Data

With each participant, I followed a systematic process of analyzing the data. Because this is a multiple-case study, I began transcribing each interview within 24 hours of completing the interview while the information and my thoughts were still fresh. After transcribing each interview, I read through the transcript to ensure anonymity and confidentiality by making sure any information that could conspicuously identify the participant was removed. I read through the transcript again and highlighted words, phrases, and sentences I felt were important to my research question (see Appendix B). Specifically, I found myself highlighting words, phrases, and sentences that were repeated, of specific interest to me as the researcher or to my intended audience, and unique (Merriam, 1998). Then I read through the transcript multiple times, looking

at what I had highlighted, and tried to determine themes. This time-consuming activity of studying the transcriptions required a lot of concentration and brain work. I confess I needed to take periodic breaks, because refining the data into themes demanded focused time and energy, especially as I considered the emergent themes in relation to my research question.

As I read through each of the transcripts several times, highlighting and identifying themes, I was also conscious to highlight, in blue, direct quotes I thought I might potentially use when writing up the findings (see Appendix C). I chose to highlight direct quotes I felt were particularly illustrative of the themes I was identifying and that I could use in the descriptive narrative. Feeling good about the themes I had labeled, I wanted to analyze them further. I counted how many individual themes had emerged and the repetition of each theme (see Appendix D). I realize that the frequency of themes emerging from the interviews with participants might have more to do with the nature of my questions, and might not necessarily be because these are topics that were naturally prominent in participants' homeschooling experiences. Similarly, the infrequency of themes surfacing in interviews might not be representative of what was or was not emphasized in participants' homeschooling experiences. In case study methodology, the substance, quality, and intensity of occurrences are of higher priority than frequency and quantity (Cohen, Manion, & Morrison, 2000).

A thorough analysis of each case provides the reader with rich understanding and highlights the differences and similarities among the individual cases more brilliantly, especially in the intensive cross-case analysis. My intent with the analysis is to describe the interview data in detail so that I can make sense of the findings in the interpretation of the analysis. In Part 1 of the findings chapter, I analyze the data from each participant, followed by the cross-case analysis in Part 2.

Process of Organizing Themes for Each Participant

After refining and reducing the first interview responses from Beatrice, I ended up with four main themes and several sub-themes. In describing the iterative, step-by-step process of analyzing the data from individual cases, Merriam (1998) instructed taking the groupings or themes from the previous case analysis to guide each successive case. I found this natural to do as I moved from participant to participant, analyzing the data, and trying to reduce and consolidate the information. The four main themes established with Beatrice accommodated each successive interviewee's responses. I considered "responses" to be separate ideas expressed by participants. Therefore, participants gave many responses to single interview questions. The four main themes that emerged included Learning Philosophy, Student Perception, Learning Activities and Skills, and Family Involvement. All participants recorded more responses in the Learning Philosophy theme than in the other three main themes, mostly due to the nature of the interview questions. Learning Philosophy was reduced to more sub-themes than were the other main themes.

Each of the four main themes was broken down into several sub-themes. Although all participants' responses fit into the four main themes and shared many of the same sub-themes, respondents did not have all sub-themes in common. For example, under the Learning Philosophy main theme, Meredith was the only participant with Learning Environment and Structured Time sub-themes, and the only participant without Independent Learning and Flexibility sub-themes. As well, some sub-themes were broken down into more sub-themes, further distinguishing the response categorizations for each participant. For example, Winona gave many responses that were categorized within the Independent Learning sub-theme within the Learning Philosophy main theme. All main themes and sub-themes are discussed in detail in

the individual analyses that follow for each participant. In the cross-case analysis in Part 2 of this chapter, I attend to the differences and similarities among participant responses. I begin the individual analyses with Beatrice.

Beatrice

Beatrice comes from a close-knit family of five, including her parents, an older brother, and a younger sister. Her father is a pastor, and her mother is employed part-time at the local library. Her mother assumed the responsibility of homeschooling the children all through their pre-postsecondary education, and Beatrice's father supplemented her mother's efforts. Beatrice and her siblings did much of their learning from textbooks, assisted by their mother. Beatrice said, "Some subjects we would learn together, while others we would go at our own pace. We had the freedom, with our parents' discretion, to choose the subjects that interested us and use the learning styles that best suited our individual personalities." During earlier homeschooling years, Beatrice and her siblings were involved in various activities with homeschool groups and at church. Currently Beatrice is enrolled in her second year at a college in British Columbia and will be completing a diploma this year. She is focused on developing leadership skills and plans to pursue business and leadership.

Learning Philosophy

Many of Beatrice's responses about learning philosophy focused on the purpose of learning and not taking tests merely to pass a class or get a grade. She said, "I never really study things just for the sake of studying them and trying to pass a test." In fact, Beatrice admitted that test-taking was rarely a part of her home education experience, except for the questions and quizzes she answered in textbooks. Beatrice made it clear that she only learned what she and her family felt was important, and 'important' meant that she could apply the learning and make use

of it in her life. For Beatrice and her family, learning was happening all the time— "You're always learning; you never stop learning."

Independent learning. Several comments Beatrice made centered on the concept of independent learning. When asked about what helped her to prepare most effectively for postsecondary studies, she responded that "being able to learn on my own independently" prepared her best. She explained that she was grateful to have learned how to be an independent learner because that is the way to learn in postsecondary school. As Beatrice and her siblings grew older, they were expected more and more to learn on their own. She described her typical routine of scheduling her own learning time and making her way through several textbooks each year during secondary studies. It was up to her to approach her mother or father when she had questions about something she was studying.

Flexibility. The notion of flexibility was significant from the data in the interviews with Beatrice. At least thirteen responses revealed flexibility in her homeschooling experience. Flexibility was illustrated in two sub-themes, including Learning Choice and Time. These sub-themes are tightly interconnected.

Learning choice. Beatrice overwhelmingly expressed how important it was for her to have the freedom to pursue her own interests and not be compelled to study things she felt were irrelevant to her. For example, Beatrice spent much more time studying biology than math or English. When asked if she would choose homeschooling again, Beatrice gave an emphatic "Yes!" because "I was able to learn about what I was interested in."

Time. Beatrice described the typical routine she set for herself of studying principally from textbooks for about an hour per subject until about 3:00 pm in the afternoon and having the rest of the day to engage in photography, art, or piano. She said, "There was routine, but it was

also very flexible." She explained that the older she and her siblings grew, it was less about routine and more about how they wanted to spend their time learning.

Curriculum. According to Beatrice, her family was not focused on covering a certain number or specific set of subjects. They studied what they felt was 'important,' as mentioned previously. She said her mother guided her in selecting subjects her mother felt were good to study, but the final decision was left to Beatrice and her siblings. Beatrice and her brother and sister each picked a language to study through secondary education, and they consistently used the same math and science textbooks each year. However, they seldom studied the same subjects together or at the same pace. Homeschool facilitators, who visited her family twice a year in Beatrice's home, were helpful to suggest a variety of materials and textbooks that Beatrice and her mother would review to determine whether they would acquire them. Beatrice explained that she was involved in more extracurricular activities when she was younger, but less and less as she advanced in secondary studies.

Assessment. The main form of assessment Beatrice experienced came from the homeschooling facilitators that visited her family each year. These facilitators gave general directions and suggestions about what to study and what to improve based on records they kept from previous years' visits. Beatrice and her mother recorded Beatrice's grades in what became her home education transcript. The transcript was the only entrance document the college Beatrice attended required for admission, so Beatrice did not take any diplomas or entrance examinations. Because Beatrice never wrote formal assessments or tests, she said the way she knew she was progressing in her learning was by making her way through textbook questions and quizzes, and by reviewing her learning in discussions with her family members.

Student Perception

Student Perception emphasizes Beatrice's perceived learning progress based on her interactions with peers. When she was asked whether she ever felt behind or ahead academically during secondary education, Beatrice stipulated that it depended on the subject and who she was being compared to. She added, "Most of the time, I felt at the same pace and might be a bit ahead." She explained that when she discovered her school peers were learning different subject matter than she was, it made her feel like she was behind, but it did not make her feel like she was missing out. Beatrice could tell that she was ahead just by talking with friends and comparing their level of knowledge to her knowledge. She specifically felt ahead in English, especially after completing an online university English course when she was in Grade 11.

Learning attitude. At the beginning of our first interview, Beatrice was asked to describe her home education experience generally during the high school years. She responded, "I enjoyed those years; they weren't stressful." After a few responses about her experience not being stressful but enjoyable, she was asked to explain what she meant, and she said she associated stress and enjoyment with taking tests and preparing for finals. She said her friends would convey their anxiety about taking tests and working to graduate, and that she did not experience the same levels of anxiety regarding these activities. Beatrice did not feel heavy pressure during secondary education because "the environment of learning at home was good and I enjoyed it."

Challenges and improvements. Beatrice expressed how challenging it was to take more responsibility for her learning and scheduling as she advanced in secondary education. Although she was glad to have learned to become an independent learner, it was not easy for her to manage her time. As she entered the secondary years, it "definitely did get harder as I got older because

we became more independent." Describing her transition from secondary to postsecondary learning, Beatrice said she had to discipline herself to study and control the time she spent socializing with friends at college. Having to take tests in college was new and challenging for Beatrice because she had little previous experience studying and preparing for formal tests.

According to Beatrice, secondary students are more "spoon-fed" than university students. She acquired independent learning skills in secondary education, but still had her mother and father close by and accessible to ask questions and get assistance when she needed it. Beatrice felt she and her family could have spent more time deliberately planning for postsecondary education. If she were to choose to home educate her own children, she would "talk about the university environment more and teach them how to study for exams or study for tests more."

Learning Activities and Skills

Learning activities. The six learning activities that emerged in the data were textbooks, discussion, fieldtrips and travel, reading, writing, and collaborative learning. Textbooks, discussion, and fieldtrips and travel are activities that Beatrice commonly engaged in, while reading, writing, and collaborative learning were less common or consistent. Studying from textbooks was the most routine and continual activity that Beatrice chose during secondary home education. She said she would go from one textbook to another, studying each one for an hour at a time, until late afternoon. This activity clearly involved much reading, but she did not spend a lot of time reading books and novels. Beatrice explained, "When I found a book I liked then I read it. I wasn't reading all the time." She admitted it is good to learn how to sit down and concentrate on reading because that type of study is so common in university.

After textbook study, discussion with family was the next most consistent activity in Beatrice's secondary learning. She said they discussed everything because they were always

together. Constant discussion with family helped her develop the skill of critical thinking. It was through discussing her learning with family that Beatrice learned over time that her family's philosophy emphasized learning all the time. Because they went on frequent family fieldtrips and campouts, and traveled abroad, Beatrice was exposed "to other cultures and other ways of doing things" and she learned that "there's so much more to the little bubble I was in."

In addition to spending little time on reading books or novels, Beatrice spent limited time on writing activities. She said she kept a relatively consistent journal and did quite a bit of writing through her online university English course, but she did not consistently engage in writing activities during secondary education. Besides learning with her siblings occasionally, she did almost no collaborative learning during secondary studies. She said it was common for homeschooling families to get together regularly, but her family did not participate in those groups very often in the secondary years.

Learning skills. Three skills emerging from the interview data include test-taking, note-taking, and critical thinking. Test-taking and note-taking were skills Beatrice felt she lacked. Test-taking was not an essential element in Beatrice's homeschooling career. She had to "learn how to navigate" studying for and writing tests in university. Beatrice navigated this by studying with classmates and experiencing the stress she had avoided during secondary homeschool. Learning to study for tests required time and effort. Beatrice was also not used to taking notes in secondary education. Much of her time was spent in textbooks and working with her mom to understand what she was learning. She described having to adjust to the lecture style method she was exposed to in university and having to learn how to take effective notes.

Although Beatrice struggled to learn how to take notes and take tests as she transitioned from secondary to postsecondary education, she felt confident in her ability to think critically.

She tried to convey how she acquired critical thinking by describing her home environment and said, referring to her parents, "It's just the way they live." She learned to "think critically about everything" because that is how her parents raised her. When pressed to provide an example, Beatrice shared her regular experience discussing the reasons her family chose to homeschool and why others choose to do things differently. She said they were taught to think through the purpose of everything they were learning and to not merely go through the motions.

Family Involvement

       Parental support and accessibility. The single sub-theme under Family Involvement is Parental Support and Accessibility. Beatrice experienced homeschooling with her brother and sister, but she gave few examples of actively learning with her siblings, besides family discussions. Most of her responses regarding her family involvement were connected to her parents, and specifically to her mother. Beatrice's parents were not only supportive and helpful, but they were always available and accessible. In her own words, "My mom and dad were always supportive and ready to help." Her mother was home, and she carried most of the weight of homeschooling Beatrice and her siblings.

       As an example of the help her parents offered her, Beatrice described the process of going to one parent with a question, and then to the other when the other parent struggled to provide enough insight. Most of the responses Beatrice gave regarding her family and parents centered on how they discussed the topics she was learning about. She said simply, "We would talk about things," and, "If we had questions they would answer us thoroughly or encourage us to question things." Discussing her learning with her parents and siblings is how Beatrice believes she acquired critical thinking skills. She said she was not only learning academics; she was learning to share values with her family members.

Having supportive and accessible parents was illustrated in the family philosophy of always learning together. Beatrice described an experience where her dad demonstrated to the kids how to unclog a sink and that he was deliberate about that being a learning experience. She also shared that her mom made it a point to teach them how to do taxes. Her mother would sit down with Beatrice at the beginning of each year in secondary education, plan out the year, and determine curriculum materials they would order based on what Beatrice was interested in studying. Although Beatrice was learning almost completely on her own by the time she started secondary education, her mother and father had clear expectations that she was to complete her textbooks and other academic work by the end of the year. For Beatrice, that meant staying on track each day.

Christopher

Since the first grade, Christopher was educated at home. His mother took on the massive responsibility of homeschooling her nine children, and her lawyer husband assisted her when he was home. Christopher remembers both parents being involved in their children's learning. Six of Christopher's siblings experimented with attending school and two siblings were solely homeschooled, as was Christopher. Christopher spent most of his time reading books throughout his homeschooling years, and he said that reading allowed him to learn about a wide variety of subjects. By the time he turned fourteen years old, Christopher was doing most of his learning on his own. He was a self-directed, self-driven learner. Throughout the secondary years of education, Christopher participated in several book clubs, played football, and focused on playing the guitar and making music. Christopher started postsecondary education with an academic scholarship at a small university in Virginia and transferred to a university in Idaho, where he recently graduated with a bachelor's degree.

Learning Philosophy

When his family started homeschooling, Christopher's parents' expectations were based more on checklists, and learning activities were quite organized. When he and his siblings advanced past the elementary years, the theme was "inspire don't require"; his parents would give suggestions and directions about what they should work on, but slowly weaned them from being micromanaged. By the time he was in secondary education, Christopher was learning almost completely on his own.

Christopher referred several times to his family's focus on the love of learning instead of working for a grade. "It was very little about grades, very little about succeeding in academics as much as it was to love to learn and to learn as much as we could." He and his brothers and sisters were taught to learn "so that we would become better people" and not merely to do well in college or get a job. When asked what specifically prepared him for university, Christopher said, "By the time I got to school, I wasn't going for a degree or to get good grades because I never had the mindset that I needed to get good grades. I actually wasn't given grades." However, in the first interview, Christopher shared an experience in university where he began to focus on grades because he was doing well and wanted to maintain his grades. He said he started to perform worse because he was not as focused on the learning and he did "better when I was just learning, and I was way less stressed out."

After describing the way his parents responded to his learning needs and the needs of his siblings, I asked Christopher how he would handle his own child if he or she were struggling with learning. He responded, "I'd probably spend a lot of one-on-one time trying to inspire them to love whatever they were learning and become good at it and become confident in it to the point where I could see they were getting it by themselves and then I'd step back and just let

them take over." He had described the pattern his parents modeled of working one-on-one with him when he was younger until he felt comfortable to perform the work on his own.

Independent learning. The sub-theme Independent Learning collected more responses than any other sub-theme from the data from Christopher. The information in this sub-theme can be divided into two categories; secondary education and postsecondary education. I will begin by analyzing the responses in the secondary education category.

Secondary education. When he started secondary education, Christopher had learned to work on his own and schedule his own time. His parents gave him suggestions about what to study, but "my learning became way more self-directed and less teacher-directed, or parent-directed…almost all of my learning, probably 95%, was self-directed studies." He said he would write out his goals in hourly increments in the secondary years, like how long he would read a book or study for the ACT. Christopher explained that his parents had spent so much time with him when he was younger that he "could start to take over and they could see that I was self-motivated enough to do that, and then they'd step back and just let me do my own thing." He said he always knew what he wanted to get accomplished in his studies.

Christopher appreciated being empowered to direct his own learning through homeschooling. He thought if he had lacked self-discipline, it would have been a great hindrance to his homeschooling experience. According to Christopher, it is much easier to not be self-directed and self-motivated to work. "If you're not self-directed you can kind of just give up a lot over and over again and just go do other things that are easier." He felt that without self-direction it is too easy to be entertained by other things.

Postsecondary education. When asked how he felt about his transition from secondary to postsecondary learning, Christopher confessed that he panicked at first because of what he was

anticipating. But he learned quickly that the independence he cultivated as a learner in secondary education was much like what the university setting required of students. He said it did not take long for him to find his "groove" because he was used to being self-directed, and most of his time in university was spent outside the classroom or lecture hall compared to time in class. Christopher attributed his ability to learn and perform well in university, despite his apprehensions going into postsecondary studies, to the self-directed learning he had experienced in home education.

From his observations, Christopher considered his self-directed learning unique compared to his peers. He found that his peers' time was structured and scheduled for them in high school, and he could not relate to that. He explained, "I didn't have a teacher there, I didn't have tests, I didn't have someone who would call home if I didn't attend school that day. It was literally up to me about what I wanted to learn and how hard I wanted to work." He observed his peers struggling in postsecondary academics because they were not used to doing things completely on their own.

However, he also struggled at times. But when he was unsure about something he was learning in university he "knew enough" to get help from someone who did know. He felt confident that he could find the help he needed and then do the work on his own. "It was able to work out because of self-discipline and self-confidence to know that if I apply myself it can work out." Christopher relied on the work ethic and ability to learn how to learn that he claimed he acquired through homeschooling.

Flexibility. Many of Christopher's responses revealed the importance of flexibility in his secondary homeschooling, specifically in how he used his time and what he decided to learn. Christopher considered himself a self-directed learner; having freedom and flexibility was

integral to him. He maximized his flexibility to learn by honing his interests and learning about them deeply and thoroughly.

Learning choice. Christopher loved being able to spend as much time as he wanted on subjects that interested him. For example, during secondary education he spent a lot of time studying entrepreneurship, business, and investing, because his father often returned home from business trips and shared books on these topics with Christopher. He felt he learned more deeply by being free to spend time how he desired; he and his siblings "could just learn whatever we wanted." He said, "It was a very free form of learning. I definitely got to spend unstructured time" [learning about] "things I really wanted to learn about." Christopher appreciated being able to choose *not* to learn about things he was not interested in, but more importantly, he was grateful to study topics he *was* interested to learn. The homeschooling facilitators that visited his home left him "free as far as how to grow and learn" because they would give ideas and suggestions for taking his learning "to another level." He said they did not pressure him but rather encouraged him and tried to help him broaden his horizons.

Reflectively, Christopher suggested that the focused and in-depth time he spent on his interests in the secondary years helped him smoothly transition to university learning. In fact, he chose not to pursue a diploma because he had other classes and subjects he was interested in, and he was pleased to learn that he could get into postsecondary schools without a diploma. "Homeschooling allowed me to study things that weren't studied in school," Christopher shared. Based on what Christopher felt homeschooling did to help him develop his mind and character, he expressed that he would not have traded his home education experiences for a diploma or "for anything" because homeschooling allowed him to pursue his interests.

Time. During the first years of secondary homeschooling, Christopher would get up early before his family and read for a few hours in bed before he got ready for the day. His family would typically start the day around 9:00 am and begin with what he called a devotional, involving prayer, scripture study, and singing hymns. They would usually end the more structured learning around 4:00 pm. Although he tended to keep to this 9:00 am to 4:00 pm schedule, Christopher was free to pursue his interests and work on things for indefinite amounts of time. "I would decide which hours I'd study and how long for which subjects."

Flexible learning time gave Christopher the space to put some of the things he was learning into practice. He described his experience starting a lawn mowing business and a business where he made crock-pot meals and sent them to work with his father for several of his father's co-workers. He sent these meals most working days for three years during secondary studies and learned a lot about making crock-pot meals, figuring out costs, and shopping for groceries.

A repeated concept that emerged in the Time sub-theme was focused learning. For example, it was not uncommon for Christopher to take a few weeks and delve deeper into a subject, like math. "Usually I'd want to do eight hours or six hours of really focused learning." Christopher described an experience where he participated in a play and was asked to play difficult music for the level of guitar he had achieved to that point. He spent a month and a half where he did extra lessons and spent nearly all his learning time at home working on learning to play the guitar. He remembered, "I would do my normal learning and then I would spend a solid six extra hours in a day just working on guitar or music. Sometimes it was upwards of eight hours a day, three days in a row, just guitar."

On another occasion, Christopher prepared for the ACT exam, by studying the ACT preparation books along with books on subjects he felt weak in, for more than a month. He especially had to catch up on the math he had chosen not to study since Grade 8. He said he barely gave attention to anything else during that preparation. "I spent a lot of seriously dedicated time to that instead of a more structured, from this time to this time it's math, and from this time to this time it's this class. I'm preparing for this now and I really want to give it my all, so I'm going to just study this and fit in the other stuff around it," Christopher reported.

Curriculum. The curriculum that Christopher used in secondary education was comprised mostly of books that his mother would acquire from used book stores. "She would go to used book stores and get bags of books that filled up a library that we could then dive into," he reflected. Christopher's mother also researched curriculum materials and ordered them from catalogues. He mentioned using a few textbooks during the secondary years, but most of his time was spent reading non-fiction and novels.

The interview data did not show that Christopher engaged frequently in formal curricular learning. For example, he did not do formal math for most of his secondary education but learned practical math when he built and sold picnic tables to earn money. Also, most of his responses indicate that he was learning without giving the subject matter labels. "I had never studied biology in my life before. I had, just in books I had read," he shared. He fondly remembered his experience going on nature walks with his family and pressing leaves, but he did not attach the experience to a specific subject. Christopher did not grow up compartmentalizing his learning because most of his learning came from reading books. He said, "I had no idea, but I was learning it."

Assessment. In the first interview, Christopher made it clear that he had limited experience taking traditional tests. Therefore, in the second interview, he was asked to share how he determined that he was progressing academically. The most common way he would gauge his academic progress in secondary homeschooling was based on how much time he would spend on a subject or interest. Christopher said he and his mother would track how many hours they spent on each subject during the week. They included the time he spent on subjects in the academic portfolio he and his mother maintained.

In addition to time spent learning, Christopher could tell he was progressing because he was able to do harder problems in math, for example, or understand something he was reading more thoroughly. He measured his progress informally by noticing that he could do things he could not do before, or that he could do things with more quality, like writing an essay with less red being returned to him from his parents' markings.

When asked to give more detail about his academic portfolio, Christopher remembered his mother feeling quite stressed as she helped him work on his portfolio in preparation for the homeschooling facilitator visits. He explained that the facilitator visits were very much an evaluation about how she was doing as a homeschooler. Not only was his work being evaluated, but his mother was being assessed also. Christopher remembered having to recall all the books he had read and outlining what he was working on to show the facilitators. The portfolio consisted mostly of long reading lists, extracurricular activities, like music lessons and plays, and descriptions of subjects he was studying, as well as documentation on how much time he spent on various subjects. Facilitators gave general advice about what to work on based on their review of his portfolio.

According to Christopher, admission to postsecondary schools is becoming easier for homeschoolers. He was admitted to a university in the United States principally based on his academic portfolio and his ACT score. He was not required to take the diploma exams or provide a GPA. Christopher secured academic scholarships and an international scholarship based on his portfolio.

Student Perception

More responses were categorized under the sub-theme Student Perception than all other sub-themes, except for Independent Learning, which received only two more responses. Because of the large amount of interview data in Student Perception, it is helpful to separate the information into smaller segments. Many responses reflected Christopher's perception of his personal experience. Almost an equal amount of responses had to do with Christopher comparing his learning experience with his perception of others' learning experiences.

Personal experience. Christopher related an experience that he said was repeated many times during his homeschooling years and added up to something meaningful that ultimately prepared him for higher learning. He told of sitting on the porch when it was raining and listening to his mother read to him and his siblings while they ate cherries from British Columbia. He referred to this kind of activity that was repeated so often as the "epitome of my homeschooling career." He gave another example of going to the library and getting stacks of books about airplanes and becoming immersed in reading them. Christopher testified that repeating this pattern with myriad topics and studying his interests in books not only taught him information but added up to shape his character and his ability to learn. "Somehow the little things all add up. I feel like it actually changes your character," he reckoned.

When asked what he would do differently if he were to homeschool his own children he replied, "I don't know what I would change because it worked so well for me." However, he admitted being surprised that things turned out so positively. He expected to be academically behind his peers both in secondary education and in university. He concluded, "It doesn't have to be the conveyor belt system to succeed in the next step of that system. You can jump in and it will still work out."

Comparison. Most of the interview data that reflected comparison between Christopher's learning experiences and the learning experiences of his peers were elicited from the interview question about whether he felt academically ahead or behind. "As a homeschooler, you do question yourself a lot as to whether you are behind, even if you're not," he admitted. It was common for Christopher to wonder if he was keeping up academically because he did not have classes and grades for measurement. He assumed he was behind academically because he never looked at the work his friends were doing in school compared to what he was doing. He expected regular high school to be academically rigorous, but assumed it was less intense than he had anticipated based on the descriptions he would get from friends.

Christopher figured he was academically ahead when he would talk with his friends about how they used their time in school compared to how he was using his time, and especially when he considered the time he spent reading. When he was younger, it was easy to feel academically ahead because he was grade levels ahead of his peers in math, for example. And in secondary homeschooling, he thought he was ahead because he "started to see that my reading lists were getting into the hundreds in one year."

Christopher continued to observe the learning differences he perceived between himself and his peers during university. He described feeling behind initially when he started university

because he had anticipated that university learning would be quite rigorous. "I felt super behind as soon as I arrived in anticipation, and then within the first two weeks I then felt ahead again because I realized that I had learned all this stuff," he recounted. In university, it was easy to know if he was ahead or behind because some of his professors announced grades in class, and peers often discussed how they were performing. Although Christopher had to learn to adjust to classroom learning in university, he noticed that his peers struggled more with disciplining themselves to study outside of class, but he was used to that from his homeschooling experience.

Learning attitude. In response to his general feeling about his homeschooling experience, Christopher reported, "I thoroughly enjoyed it. I think that's important to know. I really did enjoy it." He was always driven to learn and become better and he enjoyed learning new things. Although he had limited experience, apart from a few provincial examinations and taking the ACT, Christopher thought tests were "kind of fun." He found it enjoyable to pursue extra credit in a biology course he enrolled in during his first semester of university. Christopher was confident in his ability to learn. "I loved to learn. I knew that I could, I was confident in the learning, and I knew that I could if I wanted to," he shared.

Due to many responses dealing with flexible learning and flexible time in the first interview, Christopher was asked to comment on how he adjusted to postsecondary education demands on his time in the second interview. He viewed his university experience as an adventure and did not feel like he lost the freedom that he previously enjoyed during secondary education. However, he confessed, "It was a downer not to be able to spend more time on guitar and reading, but I didn't feel like I was cheated because I adjusted my time to other things."

Challenges and improvements. As much as he liked his experience, Christopher made it clear that homeschooling was not ideal. For example, he thought it would have benefited him to

have had more classroom experience before entering postsecondary education. He did, however, gain some classroom experience attending a scripture-based course with his peers. He said he would have liked to have attended some classes in the school that he was interested in, and he felt like he missed out on being in school classes with the excellent teachers he heard his peers talk about.

It was not easy for Christopher to think of challenges he had with learning. Finally, he remembered that writing was difficult at times. He recalled getting writing assignments back from his parents and becoming quite frustrated when he saw all the corrections marked in red. Sometimes he was excited and motivated to improve his work, but usually it bothered him.

One learning improvement Christopher suggested about his own experience was being better informed about postsecondary life. Although his parents talked about postsecondary education, Christopher said he did not think much about postsecondary education while in the secondary years until his friends started getting accepted to schools. Christopher would have appreciated having more knowledge about what university was like before he went but wondered if he would have prepared as diligently if he had had a better idea beforehand. In any case, "I was not well prepared for what it would be like" in university.

Learning Activities and Skills

Learning activities. Of the many learning activities Christopher engaged in during secondary education, three activities were emphasized in the data. Reading was undoubtedly the most common and most important activity for Christopher. He also gave several responses alluding to the concept of exploration. Collaborative learning was not a common learning activity but came up in the data based on interview questions.

Reading. Of the learning activities that emerged from the data in the interviews with

Christopher, reading was conspicuously most common. "That was most of my education, just

reading," Christopher said. He figured that 90% of his time learning during secondary

homeschooling was spent reading. Reading was fostered by the attention and priority his parents

gave to books. "I never needed to go far for a book and I would read, and read, and read," he

remembered. Christopher mentioned a few times how his mother filled their home with used

books, and how his father always brought a book home from a business trip. They had a library

full of books and an area in the library "designated as a quiet zone." Christopher could be found

reading in the library, but he was "in the living room reading a book usually, or in my own room

reading a book."

According to his descriptions, the essence of Christopher's homeschooling involved

reading. His family regularly read books together, talked about ideas they had, and discussed

what they liked about the books. Regarding the times his mother read to him and his siblings,

Christopher related, "I loved moments like that because we read so much that I wanted to

because I had done it so many times and had so many great experiences with it."

Christopher reasoned that constantly reading was enough to learn what he needed to

learn, regardless of the subject matter. He shared his experience reading about the Wright

brothers as an example of how prolific reading prepared him for postsecondary learning. He

explained that he never took a composition class or formally studied vocabulary and grammar

but that he did well in these areas because he had read a lot. "It wasn't because I learned the rules

as much as I just read a lot."

Exploration. I refer to another activity from the data as exploration. For example,

Christopher reminisced about the nature walks his family went on when he was younger and the

curiosity those experiences engendered that carried over into his secondary learning. When facilitators came to his home, they brought crates full of activities that were interactive and enjoyable. He would explore all that was in the crates for weeks at a time and said the activities "sparked enough interest to start learning more in books." It was clear that most of his exploration happened in books.

Collaborative learning. Collaborative learning is the last activity that surfaced from the interviews, and its emergence came more from interview questions than from what Christopher shared from his own experience. As far as Christopher was concerned, collaborative learning was minimal in his homeschooling. His collaborative learning experience came predominantly in the form of book discussions in person or online with other homeschoolers. "We would read a great book and get together and discuss it. That was a frequent thing through all my schooling."

Learning skills. Only one general learning skill, 'how to learn,' was emphasized in Christopher's responses. Although he rarely studied subjects formally or in the traditional format, Christopher understood what he was taught because he knew how to learn. Knowing how to learn was illustrated most clearly in his university experience. In university, "I found out that if I was behind in a subject, I caught up very quickly." He realized that he did not have to have the "previous knowledge bank to learn it because they're teaching it to me now" and he was confident in his ability to learn. Christopher said he enrolled in a math course his first semester in university and it took him two weeks of intense study to catch up and do well in the class.

Family Involvement

Parental support and accessibility. Like Beatrice, Christopher was homeschooled alongside his siblings and the entire family was involved. For example, he remembered his older brothers teaching him spelling using Pokemon cards, and his mother having him write essays

about hobbit potions. He shared about picking out books with an uncle and with an aunt and discussing the books over the phone or through Skype. However, most of the data emphasized support and accessibility from his parents, and specifically from his mother.

His mother was home and did most of the homeschooling, but he said his father would often help with essays and was "very involved." One way his parents specifically supported Christopher was by reviewing his goals each day and asking Christopher to tell them what he was planning to do each day. He explained how his parents worked closely with him when he was younger and prepared him to become an active independent learner. He was comfortable to approach his parents throughout his secondary studies whenever he needed help or had a question. Christopher was asked how his tenacious reading habits were instilled in him and he thoughtfully replied, "It must have been my parents."

Winona

Winona was homeschooled from the time she was five until she completed the secondary years of education. Winona explained how they decided to homeschool: "We chose to homeschool while we were living in a remote location in the far north, where local schooling options were rather lack luster." Academically, Winona advanced rapidly and graduated with a diploma at the age of fifteen. She and her three sisters were educated principally by their mother. Although her father was busy with his career, he was supportive and engaged in his daughters' learning at home. "My parents are both highly educated individuals; my father is a lawyer with four university degrees and a voracious passion for self-education, while my mother is fluent in three languages and is a trained lab chemist," Winona related. Winona's parents wanted their children to benefit from the best and most wide-ranging education they could provide. "Homeschooling proved to be the best fit for our family."

According to Winona, a non-traditional education gave her the flexibility and opportunity to pursue her academic interests outside of the confines of the traditional curriculum. With her parents' encouragement and support, she studied Latin, Greek, German, European history, creative writing, and drama. As she entered the high school years and began to prepare for her future, she structured her learning around the demands of part-time jobs and a variety of international travel opportunities. Winona was a very shy and reclusive teenager, but her employment outside the home was integral in teaching her how to socialize and interact with people outside her family. After earning her diploma, Winona worked full-time for six months before beginning her studies at university.

Adjusting to university life was a stretch socially but improved with time. Winona loved the academic challenge of university. She is currently one semester short of graduating with honors in her bachelor's program at the university she attends in the Western United States. Throughout her university career thus far, Winona has studied abroad in England and Israel, published several papers, and has earned several awards and research grants. After she graduates from university, she plans to move to Moscow to spend a year learning Russian before she pursues a master's degree in Germany. Winona believes her homeschooling experience instilled a desire to learn and succeed academically.

Learning Philosophy

According to Winona, going to university was a clear expectation established by her parents. Attending university was not in her mind as an option, but rather something she and her siblings knew they would do. Preparing for postsecondary education was "much more the pursuit of learning, a lot more about what I wanted to learn. Having the freedom to direct was very helpful."

Independent learning. The transition from having her mother's help to more independent learning in the secondary years of education was "difficult at first but I really enjoyed it." Although she found it challenging to manage her own time and become more independent, Winona attributed being well prepared for university largely to her ability to manage her time and work on her own. She stated, "The discipline I had started to learn at homeschool high school really came in handy." By the time she was working on material at a Grade 9 level, she was almost always on her own. Her mother trusted Winona to write a paper, for example, without helping. Another example of Winona's independence is illustrated by the research she regularly conducted to find scholarships to postsecondary institutions she was interested in attending.

Work ethic. Winona's work ethic is most clearly illustrated by the rigorous schedule she maintained throughout her primary and secondary years of schooling. She advanced quickly through her academic material and started high school courses when she was only 11 years old. She graduated before she turned 16. During the secondary years, she said she would typically wake up around 5:30 am and did her academic work until it was about the time she needed to be at work at 5:00 pm. She held a part-time job throughout the secondary years. Winona figured that her homeschooling experience was more rigorous than most people she knew because of the schedule she kept.

Winona believes it had to be her parents that instilled this work ethic in her. She said her mother's German heritage must have helped her develop "strong work ethic and [an understanding of] the importance of hard work." Her mother told her not to do things "slapdash" when she felt Winona needed to work harder or do better.

When Winona started university at age 16, she wanted "to take the hardest classes I can

find and see if this university is going to meet my standards." However, she reported that this was not the best decision she could have made. Ultimately, choosing hard classes did compel her to work hard and she was able to do well in her classes. Winona said she has been able to maintain a perfect 4.0 average throughout her university experience thus far because she learned how to work.

University learning has challenged Winona more than she experienced in secondary education. She explained, "In terms of the intellectual adjustment, it wasn't much. It was just a slight re-calibration of what I was doing. I think I had already learned the basics at least of how to study and how to work." In her experience, Winona has not found study techniques helpful but to be more like gimmicks. She believes doing well is simply a matter of knowing how to work and looking at school as a full-time job. "I'm going to be on campus by 7:00 in the morning and I'm not going to leave until 9:00 at night, and that's just the way it goes. That's what it takes to do well!" she exclaimed. She believes that performing well requires the individual to find a desire and determination to work hard from within.

Flexibility. Because of her commitments to the online program Winona participated in during secondary education, she did not experience the same flexibility of time as Beatrice and Christopher. However, Winona elected to enroll in the online program, and this choice was available because of the flexibility afforded through homeschooling. Due to the rigorous schedule and habits Winona preferred, she took advantage of flexible learning choices by studying topics of her own choosing after she met the requirements of the Alberta curriculum.

Learning choice. Winona expressed appreciation for the flexibility that homeschooling gave her to pursue her own interests. She enjoyed the autonomy she had to choose when and how she did her school work. Especially because she worked quickly, Winona had "freedom to

explore other interests that went beyond the normal Alberta curriculum." After she fulfilled her

requirements for the Alberta curriculum, her parents gave her "the time and the freedom and the

flexibility to pursue topics that I was really interested in."

During secondary education, Winona described her difficult experience applying to

attend Cambridge University. Although the experience challenged her youthful character,

Winona shared, "I felt like my homeschooling experiences and the freedom I had to develop my

interests and pursue things, channels that I was interested in, I felt like that's what gave me the

confidence to go and do that." Particularly as an avid writer, Winona felt that having the

flexibility and freedom to develop research topics effectively prepared her for postsecondary

learning.

Time. Although she maintained a full and rigorous schedule in the secondary years,

Winona determined how she used her time. She took advantage of the flexible time by pursuing

her personal interests and by working a job and saving money. Homeschooling benefited her

because it "let me work at things faster and it gave me time to go in to more detail."

Curriculum. When her parents observed that she was rapidly advancing academically

when she was younger, they thought it was wise to diversify her curriculum, principally to slow

her down. For example, she started learning Latin when she was seven years old. In secondary

education, she continued to study Latin and other subjects she was interested in, but she also

studied core subjects. Desiring to complete secondary with an Alberta High School Diploma

demanded that Winona fulfill the requirements of the Alberta curriculum. Therefore, she enrolled

in courses like English, social, math, and science. Most of her secondary learning was online, her

curriculum was facilitated by online teachers, and materials were provided by the online

program. Winona's older sisters had gone through similar programs, but her parents made sure

they customized the learning for her.

Supplemental learning. I have included Supplemental Learning within the sub-theme Curriculum because Winona supplemented her homeschool learning in diverse ways. Winona's secondary education homeschooling and postsecondary academic preparation were influenced by her online teachers and the experience she gained through part-time employment. Although she was mostly learning on her own in secondary education, her online teachers (and one social teacher in particular) and employment supplemented her personal efforts.

Teachers. Throughout the secondary years, Winona's family went through a homeschool provider in Alberta to locate online teachers for courses she wanted to take. Winona enjoyed most of her teachers but was particularly fond of a specific social teacher. He made himself available to her and communicated frequently whenever she had questions or topics she wanted to discuss. "He gave me a lot of freedom to do whatever I was interested in," Winona remembered. She recounted being given an assignment and approaching her social teacher and asking if she could write a ten-page paper on the Ukrainian genocide instead of a two-page paper on Stalinism. She was comfortable approaching him with this request because he provided a platform to do so. "He never made me feel like I was a freak or that I was unusual" for wanting to go beyond what was being asked.

Part-time job. Another supplement to her regular curricular learning was working part-time through the secondary years. "I think working was one of the more important parts of my homeschooling experience because it gave me that exposure and interaction with co-workers that I couldn't get otherwise because I was homeschooled," Winona shared. Working enabled her to interact with people outside her family and it helped her acquire different skills. She considered her jobs "extracurricular" because she was not involved with other common activities like music

or sports. Having a job helped her learn how to deal with people and it was "an essential counter-part to what I was doing at home." Winona believes that being employed was "one of the most valuable experiences" she had while she was homeschooled during secondary education.

Assessment. Homeschoolers in Alberta have two basic routes they can choose from regarding how they want their homeschooling facilitated. They choose whether to be parent-directed or teacher-directed. This choice has funding and curricular implications. Winona's family chose the teacher-directed path which allowed her to access curriculum and accredited learning venues through her homeschooling facilitator or provider, ultimately leading to her earning a diploma.

Tests, quizzes, and other forms of assessment were facilitated by her teachers through her online classes. She completed tests at home and had her mother sign off on them, which she found somewhat strange. She communicated with her teachers through email and they assessed the work she sent in and assigned her grades. Winona was glad to have teachers assessing her academic work, so she could measure her progress.

Winona expressed her disapproval for standardized testing and appreciated the way her learning was assessed. She thought of standardized testing as multiple-choice-driven and felt that this kind of testing was not about the individual learner, but more like "the factory farming of education." The tests she took were written-based and included essays and paragraph responses. In math she had to include the long form of her work instead of merely circling an answer or filling in a bubble. She was used to showing the step-by-step work of how she came to an answer and said it was never multiple choice.

Due to her lack of experience and personal dislike for standardized testing, she was asked how she handled the ACT and the diploma examinations. On the ACT, she said she scored

perfectly on English and reading sections, but not as well on math and science. However, she did well enough to get into the university she attended. Winona performed similarly on the diplomas. According to Winona, she scored poorly on the chemistry and biology diplomas, but did well enough overall to be admitted to university.

Student Perception

Like with Christopher, the interviews with Winona revealed substantial interview data about student perception. As a sub-theme, Student Perception received more responses than any other sub-theme in the interview data. The responses for Winona under Student Perception are reduced into similar sub-themes as Christopher's.

Personal experience. Reflecting on her experiences being homeschooled, Winona believes the homeschooling atmosphere enabled her to "blossom" and develop more than if she were traditionally educated. The homeschooling environment and her parents' support allowed her to advance academically at her own pace. However, Winona remembered feeling "like a freak and a little isolated," especially as she began Grade 9 as an 11-year old. She explained that she felt isolated and strange at the time, but that there was "no question" she would choose homeschooling again. "I attribute everything I've been able to achieve in university to the training I experienced through high school homeschool," she said. She felt her homeschooling experience provided her with a unique "skill set to take to university" and that she was well prepared for postsecondary education.

When asked what she might do differently if she were to homeschool her own children, she said she would follow the same general pattern as her parents, except she would not build up university as much as they had done. Winona expected everyone at university to "sit around and discuss the wonders of the universe, and that didn't really happen." She was disillusioned to find

that people at university are pretty much the same as she had encountered throughout her life. Winona was raised to never question authority, and said she "wasn't scared of university, but I had a healthy amount of respect for it." She had to learn on her own to challenge ideas that were being presented to her by professors and approach them with her thoughts. Because of her experience, Winona wants to prepare her own children to deal with all types of people and to not be intimidated by figures of authority.

Comparison. Following discussions and interactions with friends, Winona decided she preferred the academic focus of her homeschooling experience to what she perceived as more of a social emphasis in the schools. She described conversations with friends who were "terrified" of standardized testing, and she was glad not to feel that way. "I think what was really great about homeschool is the fact that I never worried about standardized testing ever," she expressed.

Winona shared her experience, as a teacher's assistant in the history department of the university she is attending, being quite surprised with the lack of writing ability of incoming freshman students. She speculated that it might have to do with schools' emphasis on "numbers-based results" compared to her experience, "which was much more ephemeral, and I had a lot more freedom to develop my vocabulary and learned how to write" from all the reading she did. She continued, "I had to teach myself and that gave me a sense of ownership and pride over my education that I just don't see in most of my classmates or the students I teach." Winona felt that people should not invest in a university degree if they are not willing to put in the effort that the degree requires.

Student Attitude. Overall, Winona loved to learn and loved to pursue topics she was particularly interested in, like the French Revolution and history in general. However, she did not

hide her lack of enthusiasm for some subjects, like chemistry and biology. She struggled with chemistry and sciences and confessed that she approached them with a poor attitude. The way she dealt with subjects she did not enjoy was "to make it as fun as possible" and then reward herself afterwards by doing something she did enjoy.

In addition to occasionally displaying a negative learning attitude toward some subjects, Winona described her challenge to be humble as a learner. She was used to working faster than her peers and siblings and did not enjoy the company of those who were not at the same level intellectually. She had "a great deal of intellectual arrogance" and it has taken time to learn humility. Winona has learned to be more open and submissive the hard way from experiences in university, and especially with professors.

Challenges and improvements. In Winona's case, she did not interact with many people through her primary years of education because she was homeschooled. And Winona was shy. Shyness as an 11- and 12-year old, and lacking social interaction, did not necessarily cause learning challenges, but they did not help prepare Winona for the realities of postsecondary life. Observing this potential problem, Winona's parents encouraged her to seek part-time employment. Winona attested to how beneficial it was to her homeschooling experience to have a job during the secondary years.

Because she was so young, Winona was homesick when she left for university. She said leaving her parents was the most difficult aspect about transitioning to postsecondary life. She had to learn how to "manage the university setting" and how to work completely on her own without the immediate availability of her parents. However, she reported that it was important for her to assume full responsibility for her performance.

Winona's "devastating" application, interview, and rejection at Cambridge presented specific challenges. When she returned from her visit to Cambridge, she was scheduled to take the ACT exam and the diplomas shortly after the ACT. She was unprepared and unmotivated to study for these exams and did not score as well as she wanted on certain sections of both exams. Winona thinks she would have performed much better if she had taken some practice exams or preparation courses. Certainly, she needed to have spent more time studying.

When asked about what might have hindered her learning during secondary education, she responded, "Being homeschooled, and kind of being isolated from the world, it gave me a lot of arrogance." She admitted that she entered university with arrogance and had to be humbled by her experience. Winona stated frankly, "I could have prepared better for that in high school."

Learning Activities and Skills

Learning activities. Like with Christopher, three learning activities were prominent in the data with Winona. Again, collaborative learning surfaced in the data mostly from interview questions. Reading and writing, and especially writing, were the most frequent and consequential learning activities Winona spent time on during secondary homeschooling.

Reading. In response to what she believed was most influential to her preparation for university learning, Winona shared, "Being able to read, having the time to read and the space to read." Winona remembered reading challenging books at an early age. In secondary education, Winona was interested in Rome and the French Revolution and went to the library to find more material after she exhausted all that her parents had on the subjects. She stated unabashedly, "I had a library card and I was not afraid to use it." Her mother took her to the library two or three times a week and she would check out 15 or 20 books, usually historical, and read through them all. She said she could finish a 300- to 400-page book in two or three hours. "I would just read

and devour information and follow footnotes and look things up and just really get into it," she recounted.

Learning how to read deeply, analyze information, and develop new topics were skills she felt she had acquired in secondary studies and found useful in postsecondary education. Among the skills Winona developed in secondary education were writing in "vast quantities" and speed reading. She said she did not do anything specific to develop skills in speed reading but naturally became a quick reader with all the reading she did.

Writing. When she was six years old, Winona's grandfather, who had authored books, read a story she wrote and encouraged her to develop her writing ability. She cannot remember how impactful her grandfather's confidence was, but she "was obsessed with developing my writing." To become a better writer, Winona made deliberate efforts to improve, like reading extensively and studying rhetoric. She read many books in secondary education and challenged herself to write the way her favorite authors wrote. Referring to a specific author she enjoyed reading, Winona pleaded, "If I ever learn to write half as well as he does then I will be absolutely thrilled." She related her experience with a professor in university who asked her if she had read a lot of F. Scott Fitzgerald's writing, because the professor found Winona's writing to be like Fitzgerald. Winona answered that she had read many of Fitzgerald's works to which the professor replied that she may want to write more concisely, like Hemingway.

During the secondary years, Winona finally felt liberated to express herself how she wanted to in her writing, and she developed her own writing style. However, it took her some time before she "could give myself permission" to write about topics she wanted to. She related an experience where she asked a teacher if she could write a 15-page paper on Macbeth instead

of having to take the final, and how she appreciated teachers who worked with her learning preferences.

Later in secondary education, Winona started a blog on Tumblr and said the pressure of having to produce content on a regular basis helped her improve her writing. She met friends online through the blog and they collaborated on various writing projects. Winona said it was not uncommon for her to read for two or three hours a day and write for six or seven hours. Much of her time was spent on writing assignments. When asked how she could write for hours a day, she explained that until she can see things written down and "tinker" with the words, she is not able to fully develop her ideas.

Collaborative learning. Winona did not do much learning outside the home or with other homeschooling families. Her experience with collaborative learning was limited to doing writing projects with friends and participating in online discussions with other students in her online classes. Winona made it clear that she does not particularly enjoy collaborative work, unless she is able to work with people with similar commitment. During her secondary years, Winona "didn't find it very helpful. It wasn't until university that I learned that if you pick your team selectively, collaborative learning can actually be a useful experience."

Learning skills. Two main learning skills, recitation and languages, emerged from the data with Winona. Recitation was a skill Winona employed typically with subjects she found more difficult. Her mother taught her to memorize and recite information until it became automatic to Winona. For example, she memorized the Periodic Table and could recite it by row. Winona remembered memorizing the names of all the bones in her hand and being able to easily identify each bone. With languages, like Latin and Greek, she recited verb endings, and she memorized lines in Latin and recited them to her mother.

Winona esteemed learning languages and having her mother emphasize grammar and English as integral to her postsecondary preparation. "She taught me grammar and English like it was a second language. She taught me how to break down a language to its core elements and then build it back up again," referring to the method her mother used. Her mother taught her Latin in the same way. From this mentoring by her mother, Winona learned Greek after the same manner. Winona continued studying languages in university.

Family Involvement

Parental support and accessibility. Several times throughout both interviews with Winona, she expressed how influential her parents, and particularly her mother, were to her homeschooling experience and to her postsecondary academic preparation. It was clear that her siblings and entire family were involved in the learning, but the data highlights the support and accessibility of Winona's parents.

Winona depended on her mother's help. "I certainly never felt academically behind. And I think it also helped that I had my mother on hand," she related. Winona remembered her mother micromanaging her work when she was younger and checking her work before she sent it to her teachers when she was in secondary education. She said her mom was not pushy and she was always available to help, particularly with biology and chemistry. Winona's mother motivated her with "a lot of gentle persuasion" to get through the sciences.

Although her mother mostly aided Winona with the sciences, her father could help most with English and social. Winona stated fondly, "Between the two of them, I had a lot of really great resources at my disposal." Her parents kept a high standard for their children's learning and made their expectations clear. Describing her parents' view, Winona said, "We have given you a gift by putting you in homeschool, so you really need to use it." Winona's parents inspired her to

achieve academically because they both possess advanced degrees and always displayed an example of higher learning. They tried to persuade her to develop her education. "For as long as I can remember, honestly, I have been encouraged to find whatever I thought looked interesting and start reading, and talk about it, and do more research and pursue it," Winona described.

Meredith

Although all participants in this research were bounded by having been homeschooled in Alberta, Canada, during the secondary years of education, Meredith is the only participant who attends a postsecondary institution in Alberta. Meredith was homeschooled through all the pre-postsecondary years of education until she was accepted into university. After a year of studying political science, she transferred into petroleum engineering and is currently in her final year of studies. She enjoys hobbies such as reading, playing the piano, martial arts, and horse-back riding. Meredith describes herself as a strong, faithful Christian and believes that her relationship with God is the most crucial factor in her life. Her strong family relationships have helped Meredith face the changes and challenges she has encountered.

Living out in the country near many members of her extended family enabled Meredith to receive much guidance and nurturing. Uniquely, Meredith was educated principally by her father's eldest sister, who offered to homeschool Meredith and Meredith's older sister in her own home. Her aunt had no children of her own and facilitated her nieces' education, supplemented by efforts from Meredith's parents, until Meredith's sister and Meredith entered university. Meredith feels that she had an ideal, rigorous homeschooling experience.

Learning Philosophy

Reflecting upon her first year of university taking political science courses, Meredith found the transition from secondary challenging, because for her, "education was about learning"

and not a platform to perpetuate personal bias. Learning was not limited to the academic sphere. An important part of Meredith's education included learning leadership skills, being on time, making a good first impression, resolving conflict, and maintaining personal character. In her own words, "It wasn't just about the academics but about building character." She was taught that her education was incomplete if it did not involve developing her personality and learning discipline.

Meredith's aunt, her principal educator, regularly emphasized being well groomed and being on time. Her aunt and other family members taught her to be comfortable and confident in her own thoughts and not to be swayed by the group mentality. Meredith believes thinking for herself "helped me at university to not think the way other people think just because they think that way."

Throughout her homeschooling experience, Meredith was nurtured by family members. She remembers taking many trips with various family members and learning "there is value to everything" and expertise to glean from others, if she was open to it. For example, cooking alongside her grandmother taught Meredith that there is always a better way to do something. Meredith expressed the importance of being an active and not a passive learner and of trying to learn something in every situation. She feels one of the greatest influences her homeschooling had on her was "to learn everywhere" and that "everything is a learning experience."

According to her faith, Meredith and her family embrace the teachings of the Bible and incorporated the Bible into her daily learning. She learned from the Bible that challenges are central to learning and growth; therefore, she said when she struggled to learn something, she viewed it as an opportunity. Instead of seeing challenges as negative, Meredith was reaching toward a goal. She explained, "If you've ever struggled through and labored for something, and

you got to a point where you thought that you couldn't do it, and it was really hard, but you pushed through and made it to the end, it's the greatest."

Learning environment. Living on an acreage provided a favorable learning environment, according to Meredith. From the beginning primary years until she completed Grade 12, Meredith was homeschooled at her aunt's home just down the road from where she lived. She described the inspiring views from the windows in her aunt's home where she spent her homeschooling days. She created a visual of her learning in the attic of her aunt's home and she and her older sister at their desks by the windows studying. Meredith valued being able to "take life a bit more slowly" in the atmosphere she grew accustomed to. Having always lived in the country and then making the transition to university was not easy for Meredith. "You don't realize the effect that a quiet environment has on being able to learn until you're out in the world," she shared. Both Meredith and her sister continued to do most of their studying in their aunt's attic, even while attending university.

Structured time. Meredith described her schooling as "very structured." She believes her aunt instilled discipline and character in her because of the rigid structure her aunt established. Meredith described her homeschooling as "rich" due to the structure. The school day always started with an hour of what Meredith called "devotions," which involved prayer and a close reading of the Bible. After devotions, Meredith spent an hour on each subject until all the day's studies were completed. Spending an hour on each subject was a constant expectation throughout secondary homeschooling. Meredith considered her structured schedule to be beneficial preparation for postsecondary education.

In the second interview, Meredith was asked how her experience would have been different if her homeschooling was not as structured. She believed it would have been a

disservice to her had she not had structure enforced by her aunt and other family members. She did not find the structured environment difficult because that was all she knew. Meredith said she did not feel like she was not allowed to explore her interests. But she reasoned that by spending more time than usual on certain subjects, she would get behind on the other subjects. Her aunt expected Meredith and her sister to do "well in every subject, so we couldn't afford to spend more time on a particular subject." She did remember spending more time on math and sometimes on science, but overall, subjects received equal time and attention.

Although her overall homeschooling career was structured, Meredith appreciated the flexibility of homeschooling, and that she could seize opportunities when they arose. "One of the benefits of homeschooling is the flexibility within a day," she said. And even though it meant she had to catch up with other subjects, Meredith did enjoy having the freedom to spend larger amounts of time doing math, for example.

Curriculum. Throughout the secondary years, Meredith began the day studying the Bible during an hour of devotions. Then she spent an hour on a variety of subjects. "I usually stuck to math, English, including grammar, writing, vocabulary, and spelling, then usually science and two elective type programs," she listed. In secondary education, her aunt was confident helping her with history, English, and humanities, and less prepared to help with math and science. During one year in secondary studies, Meredith took a life management class through the online provider they used, and she believed it was helpful preparation for postsecondary learning. She recalled only using the Internet for research when she was in secondary education, and the rest of her learning came from textbooks and curriculum materials. However, she has used the Internet constantly in all her university courses.

Supplemental learning. Meredith's parents were conscious to involve their daughters in many extracurricular activities, like sports and music, especially when they were younger, so that they were not only exposed to other homeschooling families. Meredith believes extracurricular involvement has helped her prepare effectively for a career. She was involved in less extracurricular activities during secondary education but said the frequent fieldtrips and road trips with her parents, aunt, and uncles provided meaningful supplemental learning to their usual routine.

When Meredith's sister was approaching secondary education, her parents became more concerned about their daughters going to university, so they researched and ended up having most of their learning facilitated by an online home education provider. Meredith said they "really liked the rigor" of the program run by the provider. The accredited program included instructional DVDs of daily recorded classes that students watched for each subject, and they sent their tests and other work in by mail and graduated with a diploma at the end of the program. Both she and her sister earned the Alexander Rutherford Scholarship in Alberta based on their performance in the online program. Meredith was especially impressed with how math and English were facilitated through the online program. The program provided excellent books and materials and her aunt "went through it with me so closely."

Assessment. Meredith thought she was assessed rigorously and said she and her older sister were expected by their aunt to get As, which meant they were expected to score between 90-100%. She thought this was a reasonable expectation because there were only two of them. When they did not get As on the quizzes her aunt administered, they immediately reviewed the quizzes with their aunt to see where they went wrong and went over the material until it was "very clear" before moving onto another problem. Meredith's aunt did most of the grading

during the primary to middle years, but her mother also helped.

Not only did Meredith feel that her aunt assessed her work strictly, but that the online program they used was also demanding. To get an A in a class facilitated by the online provider, students had to score a 94% or above, and Meredith had to get used to this elevated level of assessment. Although she did much of her academic work through the online program, Meredith's aunt stayed closely involved in assessing her work and making herself accessible when Meredith needed help.

In addition to her aunt, mother, and the online provider, the Alberta homeschooling facilitators would also come to check on her work and review her progress with her online coursework. However, they did not rely heavily upon the homeschooling facilitators for assessment because the accredited online provider offered adequate assessment.

Student Perception

Student Perception received more responses in the interview data for Meredith than any other sub-theme. Like for Christopher and Winona, Student Perception is divided into several sections. Meredith believes her homeschooling education was superior to the level of education she has received in university. She acknowledges that her situation was exceptional because of her aunt as her principal educator.

Personal experience. "Rich" and "exemplary" are the words Meredith used to describe her homeschooling experience. As she reflected upon her aunt's and her mother's involvement in assessing her academic progress, she concluded that the homeschooling years "were some of the greatest years of my life and that was some of the greatest information I know now." Because of her exemplary experience, Meredith emphatically stated she would choose homeschooling again. However, Meredith understands she had a unique opportunity to be homeschooled, principally

by her aunt, who dedicated years of her life to educating Meredith and her sister. She believes homeschooling is not "viable" for most people today.

When asked about the possibility of homeschooling her own children, Meredith doubted she "could prepare my own kids any better than I was prepared." She would, however, try to recreate the homeschooling processes she was guided through. Meredith valued being surrounded by family and constantly receiving their counsel because she knew they had her best interests in mind. She believes the most important part of her education was having a loving, caring family because it established a firm foundation that motivated her to "succeed in life and overcome difficulty."

Comparison. Meredith was prompted to think of times she felt either ahead or behind academically during her secondary homeschooling. She responded by asking if the question was intended to compare herself to others or with herself. She was invited to comment on both scenarios. Meredith explained that she generally felt ahead if she was ahead of what her aunt was expecting. She was counseled by many different family members and found that receiving guidance from family "put me ahead of other people because I had been used to living up to many variations of an expectation from different people."

As Meredith started university, she was disappointed because she viewed the education she received at home as superior to what she was getting in university. "I found that I got to university and the quality of educating was so much lower," she expressed. Meredith figured that the university instruction was inferior because the emphasis at the institution she attended was so much on research that effective teaching was lacking. She was used to having character development emphasized throughout her education and did not feel the same focus was applied

in university. Despite her disappointment with the quality of education in university, Meredith posits that her performance in university "verified the homeschooling process very well."

Student attitude. Meredith said she loved the years she was homeschooled. When she felt unmotivated to learn or discouraged by a task or subject, her aunt was there to make the learning more desirable. Meredith loved to learn math and would often spend extra time beyond the typical hour doing more math. Although she preferred math, she had it in her mind that she would pursue a law degree. Meredith started university by taking political science classes but did not enjoy her experience in those classes. She decided to switch to engineering where "consensus does not determine reality" and personal bias was so prevalent.

Challenges and improvements. In our second interview, Meredith was asked to recall something that was particularly challenging academically during secondary homeschooling. Meredith replied, "I think things are equally challenging as they come up and you just have to deal with it. At the time, you don't think of it as challenging but just something you need to learn." She described her experience struggling with a physics class in Grade 11. She felt that her physics teacher through the online program was a poor teacher because he did not combine pedagogy and practice. She managed to score between 89-93% in physics, but it was "the first time I felt below standard for something." Meredith was taught to see challenges as opportunities and she knew her aunt and other family members would help her where she struggled academically.

Meredith admitted that the transition from secondary to postsecondary learning was "rocky." She considered the university environment challenging because of how "political" and "hostile" she found it. However, she said her family had prepared her for such hostility. Learning

in university was a challenging transition because she was used to what she considered higher quality education and had to adjust to an environment of "low quality of instruction."

The competitive nature of her engineering courses has been difficult for Meredith and she perceives a deliberate effort among professors to make things difficult. The intention to overwhelm students has surprised Meredith because she is "used to people who want you to understand what you're learning." It has been hard to perform at the same level academically in engineering as the level she performed at in secondary education, so Meredith decided to get more involved with extracurricular activities, like being the president of her student club. She believes engaging in activities outside her coursework was an effective way to better prepare for a career path.

When asked if anything hindered Meredith's postsecondary academic preparation, she responded that if she knew she would have been going into engineering, she would have focused more on math instead of pursuing law. Meredith usually felt ahead in math and had to work harder in other subjects. For example, sometimes she procrastinated with her work in English or vocabulary. Meredith reasons that when she was not performing at the expected level, it was because she was not working hard enough, but she said this did not happen often.

Learning Activities and Skills

Learning activities. Like for Christopher and Winona, collaborative learning came up in the interviews because of questions I posed. Meredith was adamant about working alone. According to Meredith, reading was the most common learning activity she remembered about secondary education. Writing, especially precis, was another frequent activity Meredith engaged in, but I chose to discuss precis as a skill.

Reading. When she and her sister were younger, they spent a lot of their academic time reading or being read to. Meredith remembers the walls of her aunt's home filled with books and her aunt constantly reading "stories upon stories" to her and her sister. Meredith feels like they read every possible classic children's book, but said she stopped reading classics around Grade 11 as her academics became more demanding. Closely reading the Bible and examining every line was the most common reading activity Meredith remembers doing throughout her homeschooling years. Every school day started with devotions, including intensive study of the Bible.

Collaborative learning. Working in groups was not a common activity for Meredith and her sister. They rarely connected with other homeschooling families or groups. Meredith said peer pressure was not a part of her educational experience because she did not spend much time learning with people other than her sister during secondary studies. With limited experience working with others, Meredith now finds collaborative teamwork challenging because it is hard for her not to want to socialize. Meredith stated simply, "I do my best work alone." Being disenchanted with collaborative work has proven to be a consistent trial as Meredith works with groups often in her engineering program in university.

Learning skills. Two major learning skills surfaced in the data with Meredith. Precis is a skill that Meredith worked with her aunt consistently to master throughout her homeschooling years. According to Meredith, 'practice' is the most appropriate term to use to refer to the other major skill she honed during secondary homeschooling. Practice involved repeating and memorizing. Precis is also an example of practice.

Precis. From the interview data, the most common skill that surfaced was learning to write precis, or summarizing text. From the middle years to the end of secondary studies, her

aunt had Meredith write precis and work on concise writing skills. Regarding writing precis, Meredith said confidently, "I got so skilled in doing this that it really established a foundation." She remembers the homeschooling coordinator that would visit her being "shocked" with her ability to condense and reduce what she read.

In university, Meredith preferred the lecture format and taking notes because of the precis skills she acquired in secondary education under her aunt's tutelage. Writing precis, taking notes, and strong reading comprehension have helped Meredith do well in the humanities, but engineering has been a steeper learning curve. She still finds it easy to hone in on what is important and then synthesize the information of what she is reading. Her current program demands a lot of writing assignments of considerable length and Meredith is grateful that she learned to write precis, because that skill assists her with assignments.

Practice. Meredith said that practice and memorization were important skills she learned in secondary education. "I have always memorized and repeated so much until the patterns were readily available to me and then the understanding came," she stated. She and her sister were expected to practice their writing regularly. Meredith said she specifically had to be clear and concise in writing and in all communication. She recalls regularly practicing clarity and succinctness in writing and communication.

Family Involvement

Family support and accessibility. The main educators in most homeschooling families are the parents, and mothers usually bear the weight of facilitating most of the learning. Meredith had a unique situation because her aunt, her father's oldest sister, was the principal educator. Meredith's aunt educated Meredith and her sister throughout the primary and secondary years in her aunt's own home. Meredith explained that her aunt was more intimately involved in her

learning in the primary and middle years, but that she was always available when Meredith needed her during secondary studies. Even when Meredith began the online classes with the homeschooling provider, her aunt "was always doing the character teaching, devotions in the morning, and always augmenting the learning."

Her aunt worked closely with Meredith and established a strong relationship of trust. Meredith remembered a time when she wanted to settle for Bs instead of As, and her aunt showed her past work Meredith had done and explained that Bs were acceptable, unless one can achieve higher. Because her aunt lived on the same country road as Meredith's family, her aunt would share with Meredith's parents and "talk about our progress and share her ideas of what she would like to do with us" at dinner or when the families were together.

When asked about her parents' roles in her education, she described the trust they had in Meredith's aunt to educate them academically and in life. "They would tell me I'm getting a fantastic education and I could do whatever I wanted to do…they wanted us to have good educations," Meredith reflected. Her parents and aunt wanted her to have options and not feel limited in what she could do. Early experiences with her father telling her she could become whatever she wanted because of the excellent education she was receiving caused Meredith to begin thinking of careers and university at an early age.

In Meredith's family culture, the extended family was just as close as her nuclear family, and therefore, her extended family was involved in her learning. For example, Meredith recalled several occasions when her uncles and aunts took her on various trips around Alberta to learn about the history of specific places. When she contemplated becoming more involved in extracurricular activities and taking fewer classes in her engineering program, she consulted with her immediate and extended family members. Due to the emphasis her entire family placed on

higher education, Meredith remembers deciding in Grade 7 that she would attend postsecondary school.

Learner attention. This sub-theme received more responses in the interview data than any other sub-theme, except for Student Perception. Having only two students to educate allowed Meredith's aunt to customize and focus the education. Meredith remembers being young and her aunt teaching her to read. Meredith mused fondly as she thought of her aunt who "really took the time." She recalled being in Grade 8 and struggling with math and her aunt helping her to work harder and reach higher. In her words Meredith said, "When I didn't feel like I could achieve, my aunt would pull me back into the mentality of yes you can." Meredith struggled with understanding poetry and described the common occurrence of her aunt sitting next to her on a comfortable brown couch and going through lines of poetry and asking Meredith to look for what was important in the text. She is confident that she would not have been able to develop her skill in writing precis without the patient guidance of her aunt.

"The last three or four years were pretty self-directed" after having been trained for years by her aunt who always made herself available to aid Meredith. Even through university, she has continued to study at home in the attic at her aunt's home and her aunt still helps her when she has questions. Her sister also came to the attic to study when she was in university while Meredith was still in secondary education. Observing her older sister established a pattern of study that Meredith followed when she entered university.

Meredith's aunt was not the only family member to give quality attention to her learning. Her uncles and aunts would take her on trips around Alberta to historic sites and museums. She described one outing with her uncle when they spent hours taking their time as they walked through botanical gardens. Throughout her entire education she has always had family members

"checking in" with her to offer help and see how she was progressing academically. Meredith rendered family check-ins "very helpful." She knew she had many people she could turn to when she confronted problems in her learning.

Summary

In the preceding section, I have given close attention to the details of the individual cases in the study. After studying the data from the transcripts, and reducing and refining concepts and categories, I developed four main themes for all cases, and several sub-themes contained within each main theme. The four main themes include Learning Philosophy, Student Perception, Learning Activities and Skills, and Family Involvement. This initial analysis and presentation of the individual cases provides rich descriptions of the emerging data from participant interviews. In Part 2 of the findings chapter, I will conduct a cross-case analysis among participants.

Cross-Case Intensive Analysis

The intensive cross-case analysis of the four cases in this multiple-case study emphasizes the similarities and differences among the individual cases. Cross-analysis is the final stage of analysis and requires a researcher to link the categories that have been reduced and refined among participants in the individual case analyses. After analyzing the first case, Beatrice, I developed initial categories based on responses from the case. One sentence spoken by a participant could contain several responses because I considered responses to be separate ideas. The initial categories provided a framework to use for the other three cases and allowed me to refine and adjust categories as the next three cases were analyzed. The four main themes and most of the sub-themes were shared among the four cases. Common themes among the cases yielded a structured framework for conducting the cross-analysis.

I will consider each main theme and cross-analyze its sub-themes for each case to

identify similarities and differences that are meaningful, based on my research question. For example, I will begin by analyzing the main theme, Learning Philosophy, and its sub-themes for each of the cases. When one of the participants has a sub-theme that is unique, or shared by only one or two other participants, it is easily identifiable by this method of cross-analysis.

<div align="center">

Learning Philosophy

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Emphasis on Postsecondary Education

According to the data, the sub-theme Learning Philosophy received more attention from the interviews with Christopher and Meredith than from those with Beatrice and Winona. Winona's family stressed the importance at an early age of pursuing higher education, as did Meredith's family. Winona said the notion of not attending university was not an option she ever entertained. Christopher and Beatrice remembered their families discussing and encouraging postsecondary studies, but their families did not seem to give higher education the same emphasis as Meredith's and Winona's families.

The Purpose of Learning

The responses from Beatrice, Christopher, and Meredith highlighted the purpose of learning. Beatrice was never focused on taking tests or getting grades. She was concerned about learning what she considered to be relevant to her life and interests. For Meredith, education was about building character, developing leadership skills, being on time, and resolving conflict. Meredith was disappointed in university because she believed her professors were more interested in propagating personal bias and Meredith had been taught that education was about the beauty of learning and discovery. She was taught to think for herself and to not feel pressure to join the group mentality if it opposed her values.

Christopher's family emphasized the love of learning instead of working toward getting a

grade. He was not only taught to enjoy learning but to learn as much as possible. Learning was

about becoming a good person, more than it was about doing well in university or securing good

employment. Christopher was not accustomed to receiving grades, and therefore, he never

focused on grades.

A Culture of Learning

Learning is something that happens all the time, according to Beatrice and Meredith.

Although Beatrice did not view learning as compartmentalized activities, but rather as something

that was always happening, she was selective about what was important to learn. She felt

strongly about not studying subjects she was not interested in, or things she did not feel were

relevant to her life. Meredith described family trips and fieldtrips and how she was taught to

learn with every opportunity and situation. Her family encouraged her to observe closely and see

value and develop expertise in whatever she was learning about. She was trained to look for

better ways to do things and to be an active learner who tries to learn something with every

opportunity.

Modeling Teaching

Uniquely, the interviews with Christopher yielded data concerning teaching methods.

Following the primary years, the family philosophy still included, but shifted away from, the

love of learning to what he called "inspire don't require." He explained that his parents had spent

so much one-on-one quality time with him during his younger years to enable him to learn

effectively on his own later. His espousal to this mode of thinking from his parents was

illustrated in his description of how he would go about helping his own child if that child was

struggling with something academically. Christopher imagined himself spending one-on-one

time with his child until that child felt confident and comfortable to be more self-reliant in his or

her learning.

Facilitating an Environment of Learning

Surprisingly, apart from Meredith, the participants' responses did not reflect a significant focus on learning environment. This might be due, in part, to the nature of interview questions. Each participant inevitably shared their experiences learning at home and talked about where they would study in their homes. For example, Christopher said he typically found himself reading or studying in his room or in the family library, and Beatrice usually studied at the kitchen table. Meredith's frequent descriptions of studying in the attic of her aunt's home facilitated a vicarious experience for the researcher. Meredith and her sister each had a desk in the attic under a window with a beautiful view. When she was not studying at her desk in the attic, Meredith was likely to be sitting next to her aunt reading together on the big brown couch in her aunt's study.

Meredith felt that living in the country provided a favorable learning environment, and she appreciated not feeling like life and learning had to be rushed. Meredith contrasted her quiet home setting to the hustle and bustle of the university environment and lamented how the transition from home to university was challenging because of the drastic change in the learning atmosphere. Meredith and her sister continued to study in her aunt's attic during university because they viewed the attic as a familiar and comfortable escape from the demands of university life.

Independent Learning

All participants stressed the importance of independent learning. They expressed that they were learning almost completely on their own by the time they started Grade 9. Meredith and Winona did much of their secondary learning through online homeschooling programs.

Winona fulfilled the requirements of the Alberta curriculum by taking online classes, and Meredith used DVDs provided by her homeschooling provider. All four participants went about their daily studies principally on their own; however, they also made it clear that their parents, and specifically their mothers (or aunt, in Meredith's case), were available and accessible when they required assistance.

Self-directed learning. Although participants affirmed they were learning mostly on their own by Grade 9, each conveyed this process of learning on his or her own as a gradual process. Beatrice, for example, explained that the older she became, the more her parents expected her to learn on her own. In secondary education, she began to organize her learning schedule on her own and went through her textbook regimen principally alone.

Christopher also said he was comfortable working on his own and scheduling his own time by the secondary years. The training he received from his parents in earlier years gave Christopher the confidence to learn on his own, allowing his parents to step back more and more and assist his younger siblings. Besides receiving suggestions and encouragement from his parents, Christopher self-directed most of his learning. For example, he determined the subjects he would study, the books he would read, and how he structured his time. His interests fueled his decisions. Influenced by his father, Christopher often read self-help and entrepreneurial literature and learned about setting and accomplishing goals. He wrote daily goals of what he wanted to accomplish and scheduled his day in hourly increments.

Meredith and Winona worked mostly on their own, but they were not as directly involved in determining what they studied as Christopher and Beatrice had been. Because Meredith and Winona elected to use their respective online programs, the curriculum and materials were mostly chosen for them. However, Winona did say that she would spend much time reading

books she was interested in after completing the required work of her online classes. Meredith was less likely to venture outside the course material of her online program. Beatrice and her mother worked together to plan what she would study each year. And Christopher made most of these decisions alone, based on his interests. As a sub-theme, Independent Learning received more responses than any other sub-theme for Christopher.

Initially, Winona found the transition from having her mother help her regularly to more independent learning somewhat daunting. However, she enjoyed working on her own. Meredith, reflecting on an interview question about collaborative learning, expressed that she preferred working alone. Christopher values having been empowered to direct his own learning.

Postsecondary learning preparation. Except for Meredith, each participant stressed how independent learning prepared him or her effectively for postsecondary learning. In fact, Beatrice and Christopher believed that their ability to learn independently was the best preparation they received for university learning. For Beatrice, university learning requires independent learning, and therefore, it is best to acquire the skill of independent learning before attending postsecondary institutions. Winona considers the ability she acquired through homeschooling to manage time and work on her own to have been excellent preparation for postsecondary learning.

When he first transitioned from secondary to postsecondary learning, Christopher "panicked." However, he quickly gained confidence as he realized, like Beatrice, that the self-directed learning he experienced in secondary homeschool was quite like university learning. He attributed performing well academically in university to the independent learning he acquired in secondary education. Christopher observed that being a self-directed learner was unique compared to his peers at university. He could not relate to having someone structure and

schedule his time like his peers were used to. When he struggled with learning in university, he did not despair because he was confident he could learn and that he could find someone to help him learn. Christopher expected to work on his own after he received assistance from professors or classmates. In secondary, he developed work ethic and learned *how* to learn so that he flourished academically in university.

Work ethic. Strong work ethic was pronounced in the data from the interviews with Winona. Her academic schedule was rigorous during the primary and secondary years. All through secondary homeschooling, she held a part-time job and believed that having a job prepared her well for postsecondary learning and life. Winona said that her parents instilled a strong work ethic in her, and that her mother regularly encouraged her to produce quality work. When she started university, she deliberately selected challenging courses and felt confident because of the rigorous schedule she had maintained in the secondary years. She views her university studies as her full-time job and said she had developed the discipline to study and work while in secondary education.

Flexible learning choice. Although the concept of flexibility surfaced in the data with Meredith, she was the only participant who did not emphasize flexible learning choice. Beatrice, Christopher, and Winona expressed how important it was for each of them to have the freedom to pursue their own interests. Winona wanted to earn an Alberta High School Diploma, so she spent much of her time fulfilling required curriculum before she could focus on subjects of her own choosing. However, Beatrice and Christopher were completely free to study what they desired, and neither was compelled to learn subjects they viewed as irrelevant to them. Beatrice's mother gave her suggestions about what to study, but ultimately left it up to Beatrice to decide. Beatrice said she would choose homeschooling again specifically because homeschooling

allowed her to pursue her own interests.

Winona and Christopher feel that being able to pursue their interests did more for them than simply giving them freedom to study what, how, and when they wanted. For example, Winona opined that the freedom to pursue her own curiosities helped her develop the confidence to face challenges, illustrated by her application to Cambridge University. And Christopher said that pursuing his own interests helped him develop his mind and character. He chose not to pursue a diploma because he was inquisitive about a variety of topics, like leadership and music, and he was glad to learn that a diploma was not always necessary for university entrance. The homeschooling facilitators that visited his home encouraged him to pursue his interests and provided suggestions for him to consider, without applying pressure.

Interview data showed that Christopher and Winona studied the subjects they were passionate about in depth. Christopher spent as much time as he wanted focused on an interest; his time, unlike that of the other three participants, was not limited to a certain duration per subject. He felt that focused in-depth study in his interests made the transition to university learning smooth. Similarly, Winona reasoned that studying topics she wanted to learn deeply, like the French Revolution, effectively prepared her for postsecondary learning. She especially loved choosing what she learned because it allowed her to learn and advance as quickly as she could.

Flexible time. The general daily learning schedule for all participants in the study began around 9:00 am and ended around 3:00 or 4:00 pm, much like the schedule in traditional schools. Beatrice chose to spend about an hour on each subject, usually engaged in studying textbooks. The older she became, the more Beatrice structured and scheduled her learning time by herself. Meredith also spent an hour per subject, but this pattern of study was set by her aunt and was

much more structured compared to the other three cases. Christopher usually worked on academics until about 4:00 pm each day, but he, like Beatrice, determined how he would spend that time. It was also common for Christopher to spend hours into the night studying something he was interested in.

Winona was empowered by her parents to use her time how she determined best, and she chose to impose a rigorous learning and work schedule. The flexible time allowed her to pursue her personal interests, hold a part-time job, and save money in preparation for postsecondary education. Winona was grateful to work at her own pace and advance as rapidly as she wanted academically.

According to the data, Christopher gave the most responses pertaining to flexibility with time and learning schedule. He regularly woke up early and read books in bed until his family gathered for breakfast and their family devotional. He frequently spent focused time, even weeks or months, and long hours in a day on his interests. Flexible time allowed Christopher to implement some of the things he was learning. For example, after studying about entrepreneurship and business, he attempted a lawn maintenance business, he made crockpot meals for individuals at his father's office, and he built and sold picnic tables.

Christopher valued the space to dedicate time to deep, focused learning. He explained that he preferred gaining expertise on a few topics rather than skim the surface on many, despite his desire to read and learn about a variety of topics. Knowing that he could immerse in a subject is illustrated by Christopher's example of spending an entire month focused on preparing for the ACT exam.

Structured time. Structure was evident in each case, but the way in which Meredith's learning was structured was unique compared to the other participants. Meredith emphasized the

importance of structured time throughout her interviews and suggested that structure instilled

discipline and character. From the primary years until she completed secondary, Meredith started

every day with devotions, consisting of prayer and a close study of the Bible. She was expected

to spend an hour on each subject each day. Meredith said she was glad her aunt expected her and

her sister to give equal attention to all subjects so that they could perform well in all subjects.

She preferred having her time structured and admitted that structure was all she knew. She did

not feel like the structure stifled her freedom to pursue her interests; however, she did not want to

get behind in other subjects. Meredith considered her structured schedule beneficial to her

postsecondary preparation.

Curriculum

The cross-case analysis of the Curriculum sub-theme under Learning Philosophy is

divided into three sections— Subject Matter, Materials, and Supplemental Learning. Curriculum

responses were well represented for each case, but each participant's studies were quite distinct.

Christopher appears to have had the most unique curriculum selection among participants,

specifically because he did not focus on core provincial subjects.

Subject matter. Beatrice, Winona, and Meredith studied some of the same core subjects,

including math, science, social studies, and English. Because she wanted to earn a diploma,

Winona decided to do the Alberta curriculum and completed core subject requirements. In

addition to studying traditional core subjects, like math, science, and history, Meredith engaged

in daily Bible study, and she enrolled in an online life management course through her online

program. Beatrice selected a language to study in secondary education. Winona studied

languages, principally Latin, since she was seven years old.

Distinct from the other participants, Christopher did only a limited amount of formal

curricular learning. He was not learning subjects in a conventional way or by label, but rather, Christopher learned subjects by reading books without knowing the formal subject to which the information he was gleaning belonged. He was not used to compartmentalizing his learning into subjects. Christopher spent most of his time in secondary homeschooling reading about his interests and learning practical applications of subject matter. For example, most of the math he learned in secondary was from pursuing business ideas, like building and selling picnic tables. He did, however, learn and relearn many math concepts as he prepared for the ACT.

In Beatrice's home, the children were taught to choose subjects they felt were most relevant and important instead of a specific number of subjects. Beatrice chose different subjects than her siblings, like biology instead of chemistry, because she was more interested in biology. Choosing their own subjects enabled them to work at their own pace.

Materials. Because of their involvement with their respective online programs, Winona and Meredith were provided with curriculum materials, like textbooks, tests, and quizzes, from the online facilitators. Winona's online teachers gave assignments and facilitated her coursework. In university, Meredith is constantly required to use the Internet to do assignments, and she expressed how strange it was to her that she rarely ever needed the Internet during secondary homeschooling.

Beatrice and Christopher followed a similar pattern to each other for selecting curriculum materials. Their mothers researched various curricula, textbooks, and books, and deliberated with their children to decide what materials to acquire. One of the main purposes of the visits from the homeschooling facilitators was to review what Beatrice or Christopher were studying, and then make suggestions of books and other curriculum materials to consider. From facilitator suggestions, Beatrice and Christopher both said their mothers would research the materials and

involve Beatrice and Christopher in what to order or buy. Beatrice studied textbooks mostly, but Christopher seldom used textbooks. Most of his time was spent reading non-fiction books and novels. Christopher's mother acquired many books from used bookstores and she researched curriculum materials in catalogues.

Supplemental learning. Winona and Meredith enrolled in online programs for most of their academic learning in secondary education. Winona's family found various online teachers through a local homeschooling program in Alberta. Her social teacher was particularly influential to Winona's learning. In her online program, most of the curriculum Meredith utilized was facilitated through instructional DVDs. The program provided excellent materials, according to Meredith. She believes the teachers on the DVDs were generally excellent. Meredith's aunt continued to make herself accessible to Meredith throughout secondary education. Meredith feels that frequent family trips and fieldtrips presented enriching learning opportunities to supplement their typical routine as well.

Extracurricular involvement did not emerge frequently in the data. Except for Winona, the other three shared how their parents had them participate in extracurricular activities, like music and sports, when they were younger. Meredith continued extracurricular involvement throughout the secondary years, specifically in martial arts, but much less than in the primary years. She believes her extracurricular involvement influenced her preparation for postsecondary education because it afforded her exposure outside her home and family. Christopher participated in theatre and took guitar lessons in secondary education. He spent much time practicing the guitar on his own, but he did not consider extracurricular activities to be a main element in his homeschooling experience.

Although she did not get involved in common extracurricular activities, Winona

maintained a part-time job all through the secondary years. Having a regular job taught her to deal with a variety of people and gave her exposure she lacked as a homeschooled student. Winona considers her time working part-time in secondary as a meaningful supplement to her academic learning and as having provided an excellent preparation for postsecondary responsibilities. Meredith and Beatrice did not report that they held jobs during the secondary years. Christopher, however, started a few businesses in the secondary years with his father's help.

Assessment

The Assessment sub-theme under Learning Philosophy consists of four sections in the cross-case analysis, including Facilitators, Records and Grades, Tests, and Determining Academic Progress. Each section is discussed below. Because Meredith and Winona both enrolled in online programs in secondary education, they share similarities in each of the four sections. Beatrice and Christopher had more in common with each other than with Meredith and Winona in the four sections of Assessment.

Facilitators. Homeschoolers in Alberta register with a homeschooling provider, and each provider assigns facilitators to assess homeschooling students and families. All four participants had facilitators coming to their homes once or twice a year to review their progress. However, the participants did not value the facilitators' involvement equally. Beatrice and Christopher relied more on homeschooling facilitators than did Winona and Meredith. When the facilitator came to Beatrice's home, Beatrice and her mother would prepare her transcript record and the facilitator would review her work and compare it to previous years. Based on the review, the facilitator recommended changes and study materials to help Beatrice advance her learning. Christopher considers preparing for facilitator visits as the most stressful memories of secondary

homeschooling. He and his mother prepared for visits by compiling book lists and updating the extracurricular activities and subjects to which he devoted most of his time. Like Beatrice, as they reviewed Christopher's portfolio each year, the facilitators made suggestions about books and topics he might be likely to explore.

Because most of their learning was assessed by teachers from the online programs they were enrolled in, Meredith and Winona were not as dependent on facilitator visits. Winona's family chose to have their homeschooling teacher-directed instead of parent-directed, which meant that a teacher from the homeschooling provider would oversee her work and give her access to accredited learning venues and curriculum, so she could earn a diploma. Meredith's homeschooling facilitators made their visits to check her progress and review her online coursework, but she did not rely on the facilitators for assessment because her online teachers and her aunt assessed her work.

Records and grades. The participants in the study recorded grades and academic progress differently. Beatrice and her mother kept her grades, determined by them, on her transcript, which was simply a Word document they used to record textbooks and subjects she completed each year. Beatrice's grades were measured more by completion than performance. Like Beatrice, Christopher's family gave little emphasis to grades. He and his mother tracked the time he spent on a subject and recorded it in his portfolio. Time dedicated to learning mattered most to Christopher. He explained that his academic portfolio was basically a record of the many books he read in secondary homeschooling, as well as his involvement in extracurricular activities and work experience. With only his portfolio and his ACT score, Christopher was admitted to university and he secured academic scholarships.

More attention was given to grades and assessment for Winona and Meredith because they

were regularly assessed through their online programs. Meredith believes she was assessed rigorously, not only through the online program, but also by her aunt. Meredith said the online program graded her work competitively and her aunt still expected her to achieve an A average, which was an average of 94-100% with her online program. Both Meredith and Winona submitted their tests and assignments through email or regular mail, and the online provider kept a record of their grades.

Tests. Of the four participants, Winona was the only one who elected to take the Alberta diploma exams, because she wanted to earn an Alberta High School Diploma. Unfortunately, Winona laments that she did not prepare well for the diplomas but did well enough to get into the university she attended. Winona and Christopher were the only participants to take the ACT, because they chose to attend universities in the United States, and Meredith and Beatrice chose to attend in Canada. Beatrice was admitted to university with only her transcript and was the only respondent that did not take any diplomas or entrance exams. Besides the ACT, Christopher had limited experience taking tests or exams. Tests were almost absent from Christopher's and Beatrice's homeschooling educations.

Although testing was not a part of their homeschooling, the data did not reveal significant oppositional feelings from Beatrice and Christopher toward standardized testing. However, Winona expressed strong sentiments against standardized testing. She criticized standardized testing, especially multiple choice testing, as a less effective way to measure student performance. Winona appreciates the written-based and qualitative methods used by her online teachers in assessing her work. Despite her lack of experience and disapproval for standardized testing, she did have to take the diplomas and ACT. She performed well enough on those exams to get into university.

Determining academic progress. Participants were asked to comment on how they could tell if they were progressing academically. Winona and Meredith were assessed through their online programs and were used to receiving grades and feedback from teachers. Since the primary years of education, Winona could tell she was advancing because she was grades ahead of her peers academically, and it was challenging for her to find common interests with kids her age. Meredith always had her aunt nearby to communicate with her and her parents about where she was excelling and how she could improve. Beatrice said she knew she was progressing because she could successfully get through textbook questions and quizzes, and she applied things she was learning in family discussions. Christopher gauged his academic progress most commonly by how much time he dedicated to an interest or subject, or by how many books he had read on a topic. He measured his development by noticing that he could do harder problems, or problems he could not do before. He could understand concepts he had been studying more clearly and could discuss them in depth.

Student Perception

As a main theme, Student Perception absorbed much of the data from Christopher, Winona, and Meredith, and not as much from Beatrice. For Christopher, the sub-theme Student Perception received more responses than all other sub-themes in his interviews, except for Independent Learning. Student Perception was markedly the most prominent sub-theme in the data from the interviews with Winona and Meredith. The cross-case analysis for the sub-theme Student Perception is divided into two main sections: Personal Experience and Comparison.

Personal Experience

All participants in the study expressed an appreciation for their homeschooling experience and answered that they would choose to be homeschooled again if they were to start secondary

education over. Christopher could not think of how he would homeschool his own children differently from the way he was homeschooled. However, he said he did not expect to perform as well as he has academically in university, because he was homeschooled. Winona said that if she were to homeschool her own children, she would do generally the same things as her parents, but she would not make university out to be as intimidating as her parents had portrayed. She regretted approaching university professors and students with as much deference as she did and would have her children more confident in their ability to think and reason.

Meredith described her homeschooling years as rich and exemplary. Although she would choose homeschooling again, she believes it is not a viable option for most people. She doubts she could provide the same quality of experience she received if she were to homeschool her own children but said she would try to recreate the same processes and patterns she became accustomed to. Meredith loved having family around her. She felt that family support was the most important part of her education because they had her best interests in mind and heart.

According to Winona, the homeschooling environment served her better than a traditional setting would have. However, she admitted feeling isolated and strange, especially because she was so far ahead academically. Parental support and flexibility enabled Winona to advance at her own pace and study subjects in greater depth. She attributes her success in university to having been homeschooled, because she had the freedom to develop her interests and ideas.

Reflecting upon all the years he spent as a homeschool student, Christopher remembered books. Reading books and being read to epitomizes homeschooling for Christopher. Frequent trips to the library to check out stacks of books on some subject and then spending hours reading through them was a regular occurrence, much like with Winona's experience. According to Christopher, reading books was just as much about developing character as it was about

acquiring knowledge and learning information.

Comparison

Interview data showed that participants had a greater tendency to compare their education with others' education than share perceptions and observations about their personal experience being homeschooled. Although the interview data from Beatrice was limited regarding the perceptions of her personal experience, she did compare her learning with others. For example, she expressed feeling ahead of her peers in English because of the online university course she completed in Grade 11. She felt ahead of her peers based on discussions she had with them. However, she felt behind when she learned that her peers were learning different material in school.

Comparing his progress with others' progress was difficult for Christopher during the secondary years. He always wondered whether he was behind his peers academically because he did not have grades for measurement, and he was rarely with peers in an academic setting. He judged his academic progress by learning what peers were reading compared to what he was reading, and by comparing the way he used his time at home to how they described using their time in school. As the books on his reading lists grew to the hundreds, Christopher felt academically ahead of others. In university, it was easier for Christopher to measure his development with his peers because they talked about academic performance openly with one another. Christopher could see that his self-directed learning experience in secondary homeschooling gave him a great advantage academically because he was used to learning on his own.

Meredith and Winona made comparisons regarding their academic progress differently than Beatrice and Christopher. Uniquely, Meredith compared her progress against her aunt's

expectations and her own capabilities instead of comparing her progress with peers. She felt ahead if she achieved beyond her aunt's and her own expectations, and behind if she performed under her aunt's and her own standards. Generally, Winona felt ahead academically because she was years ahead of her peers and graduated quite early from secondary education. During the secondary years, Winona perceived among her peers a greater emphasis on socializing compared to the academic focus of her own experience. She also remembers her friends expressing fear of standardized testing, but she never had those feelings.

Most of Winona's comparison observations have been made in the university setting. For example, Winona was surprised with what she deemed as low-level writing ability among her peers while working as a teacher's assistant in the history department in university. She learned to work on her own early in secondary education and felt that in-coming university students were not used to learning on their own.

When Meredith compared her educational experiences with others, she thought mainly in terms of her family situation. She believes that receiving counsel from many family members gave her an advantage academically. According to Meredith, the education she received at home that was facilitated by her aunt was superior to the education she is currently receiving at university, because the university she attends is focused on research instead of teaching, according to Meredith. At home, Meredith was taught to develop her character, and she does not see the same emphasis at university.

One unique aspect of comparison emerged only in the data with Christopher. Christopher gave several responses revealing a discrepancy with his expectations and reality. For example, he expected to be behind his peers in secondary and postsecondary education but learned that he was not behind. He imagined high school to be quite rigorous academically, but based on

descriptions from his friends, he assumed it was less rigorous than he had anticipated. Initially in university, Christopher anticipated being academically behind because he thought the subject matter would be more challenging than he had experienced in homeschooling. However, he quickly felt ahead in university and knew he had acquired more knowledge and learning than he had realized in secondary education, and he was confident that he could learn whatever was being presented.

Learning Attitude

All participants conveyed that they enjoyed being homeschooled and learning in a home environment. According to Beatrice, homeschooling was enjoyable because she did not have to stress over tests and she could pursue her own interests. She was not anxious like her peers because she was not constantly concerned about tests and finals, and she was not worried about graduating. Winona was most content when she could pursue her specific interests.

Christopher went beyond the other participants in stressing how much he enjoyed his homeschooling years. It is important to Christopher that others know he loved being home-educated. He was confident in his ability to learn. He thought taking tests was fun because tests were novelties to him, and he saw them as games. Christopher believed that he was unique, even compared to his siblings, because he was always driven to learn new things and become better at something. He saw university as an adventure and did not feel like the freedom he enjoyed in secondary education had been stripped from him. He did, however, lament not being able to spend more time reading books and playing guitar as he transitioned to university life.

Participants did not always express a positive learning attitude. For example, Beatrice and Christopher did not enjoy learning about subjects they had no interest in, and they chose not to spend time on those subjects. Christopher recalled getting corrected papers back from his parents

and was typically bothered rather than motivated to correct them. There were times when Meredith was not feeling enthusiastic about what she was learning, but her aunt would motivate her to push herself and work harder. In her physics course through the online program, Meredith was not excited about the learning because of what she viewed as poor instruction from the teacher. And in university, Meredith switched from political science to engineering because she did not like the personal biases and personal agendas, she opined, that were being pushed in political science.

Winona was the most candid respondent regarding what she did not like learning in secondary education. For instance, she did not enjoy the hard sciences, like chemistry and biology. When she had to work on sciences, she thought of rewards she would look forward to and then treat herself to them when she met learning goals. Winona made several comments about being arrogant as a learner. She was ahead of her peers academically, graduated early, and did not enjoy many people. She reports that she is learning humility the hard way through experiences with professors in university.

Challenges to Learning

Challenges among the participants deal mostly with the transition from secondary to university learning, instead of relating specifically to the secondary years. Beatrice, Winona, and Meredith struggled with the transition to university learning because they were not used to being away from their mothers and other family members. Although all three girls were relatively independent learners in secondary education, they were accustomed to always having access to their mothers and family. Attending university quite young caused Winona to feel homesick and vulnerable because her parents were not immediately available.

According to the data, time management posed another challenge to learning, specifically

for Beatrice and Winona. Beatrice struggled to manage her time. She had to stretch to assume more responsibility and schedule her learning time as she advanced in secondary learning. Transitioning to university required even more discipline to manage her time between studying and socializing. Beatrice has had to learn to study and prepare for formal tests in university. Winona has felt comfortable using her time well, but she struggled initially to navigate the university setting.

With the few exceptions mentioned above, each respondent experienced subjective challenges to their learning. For example, Winona's shyness and lack of social interaction being homeschooled posed a problem for postsecondary preparation. Her parents encouraged her to work part-time to give her more opportunity to develop socially. Christopher felt he could have benefited from more classroom experience before entering the postsecondary education setting. He felt he missed out on some great high school classes and teachers.

Meredith described how she was taught to see challenges as learning opportunities, and to deal with them as they presented themselves instead of honoring them with a label or giving them undue attention. Ironically, more challenges to learning emerged in the data with Meredith than the other participants. Meredith struggled with her online physics teacher and felt he was a poor educator who did not teach effectively. She found the transition from secondary education to university challenging because of the hostile and political nature of her university courses. She found it difficult to adjust to what she viewed as a lower quality of instruction in university. Meredith has struggled with the competitive nature of the engineering program. She was used to people wanting her to learn and succeed and had to adjust to what she perceived as professors deliberately trying to confuse and convolute concepts.

Learning Improvements

Planning and preparing for postsecondary education are aspects each respondent thought they could have improved during their secondary years. Beatrice wished her family could have been more deliberate in planning for postsecondary education. She thinks her family could have spent more time talking about university and preparing purposefully to help her know what to expect. Christopher also suggested that he could have been better informed about what to expect in university. He wanted to have spent more time thinking about postsecondary and preparing for what it would be like. However, he cautioned that he might have not worked as hard had he realized how well prepared he was academically. If she knew she would have been switching to engineering in university, Meredith said she would have focused more on math instead of pursuing law in secondary education.

Regarding subjects she was less interested in, like English and vocabulary, Meredith wished she had not procrastinated working on them as much as she did in secondary schooling. Winona regrets not spending more time preparing for the ACT and the diploma exams and knows she could have done much better. She thinks it would have been wise to have taken preparation courses and spent more time studying specifically for the ACT and diplomas. Generally, Winona knows she could have prepared better for university by learning more academic humility in the secondary years.

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Learning Activities and Skills

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Learning Activities

This sub-theme under Learning Activities and Skills is broken into four sections, including Reading, Writing, Collaborative Learning, and Other Activities. Reading was a common activity shared by all participants, and writing and other activities were practiced less

consistently by participants except for Winona. Respondents viewed collaborative learning similarly. They did not spend much time in secondary learning collaboratively with others, and all four prefer to work and study on their own.

Reading. Surprisingly, reading was the only learning activity significantly represented in the interview data that all participants had in common. Beatrice did most of her reading in textbooks. Using textbooks was the most common activity that occupied her time in secondary education. Although she read a lot in textbooks, it was rare for Beatrice to sit down and read a novel or other type of book. Meredith and her sister spent much of the primary years reading and being read to by their aunt. They read from the Bible starting in the primary years, but in the secondary years Meredith engaged in close, intensive reading of the Bible every day.

Reading books was central to Christopher's and Winona's homeschooling. Reading was clearly the most common learning activity in Christopher's education. His parents fostered a love of reading and filled their home with books. He mostly read books on his own, but his family also read books together, and Christopher remembers being read to by his mother as the "epitome" of homeschooling. Christopher believes that his best preparation for postsecondary learning came from reading books on many topics of interest.

Winona feels reading was one of the most influential activities she did to prepare for postsecondary learning. She read challenging books at an early age and exhausted books her parents had on subjects she was interested in. Reading deeply and learning to analyze and synthesize information adeptly prepared her for postsecondary work. Reading widely helped her learn how to develop new topics. Winona described being able to read quickly and said she learned to speed read by reading extensively.

Writing. All respondents spoke of writing as a regular learning activity they participated in

during secondary homeschooling. However, Beatrice and Christopher did not emphasize writing as much as Meredith and Winona did. Beatrice generally spent limited time writing, except for keeping a personal journal and the writing she did in her online English course in Grade 11. Meredith was consistently writing precis and working on improving her writing. In the next section, Meredith's writing is analyzed as a skill in addition to a learning activity.

From the data, Winona stressed writing far beyond the other participants. Most of her time in secondary education was spent on writing assignments. Winona was specifically encouraged by her family members to develop her writing because of things she had written when she was very young. She decided to read avidly and study rhetoric to develop her writing ability. As she progressed in writing, she tried to write like her favorite authors wrote. In secondary education, Winona finally felt like she could write in her own fashion, and on topics she was passionate about. It was not uncommon for her to ask her online teachers to lengthen assignments, so she could write in more depth on topics. Winona kept a blog during the secondary years that compelled her to produce content regularly, and she participated in collaborative writing projects with online friends.

Collaborative learning. Collaborative learning surfaced in the data more because of interview questions than responses originating from participants. Collaborative learning was limited in each participant's experience. Meredith and Winona especially expressed a dislike for collaborative learning, except for when they worked with people who were equally committed to doing their part. Meredith said she still does her best work alone, despite the frequent requirement of working in groups in her engineering program.

Every participant experienced homeschooling with at least one other sibling, but none of the participants spent a lot of time learning collaboratively with his or her siblings during

secondary studies. Each respondent remembered getting together occasionally with other homeschooling families during the primary years, but seldom in the secondary years. However, Christopher participated in book discussions with other homeschooling students regularly during his secondary education. As well, Winona collaborated with friends online to write together, and she participated in online discussions with other students in her online courses in secondary education.

Other activities.

Discussion. Discussion is another learning activity that all respondents participated in during secondary homeschooling. Meredith frequently discussed what she was learning with family members, mostly because her immediate and extended family lived so close and spent so much time together. For Beatrice, discussion was one of the more common forms of learning. She gave several responses about discussing with her family the reasons for what they decided to learn and why these subjects were relevant. According to Beatrice, frequent family discussion helped her develop critical thinking and highlighted the importance of learning all the time. In Christopher's home, most education discussions surrounded books they were reading individually or as a family.

Trips. Meredith and Beatrice believe that trips were another important learning activity. Beatrice described regular family campouts and traveling with her family members. She viewed trips as educational and appreciated how trips taught her to open her mind to differences among people and cultures. During the primary years, and more often in secondary studies, Meredith went on regular fieldtrips with various family members. The purpose of these fieldtrips was to gain exposure and hands-on experience with a variety of topics intended to supplement the learning occurring at home. For example, they studied or read about botany and then visited

botanical gardens. After learning about cars or art, she would go with her mother, or an aunt, or an uncle, to a related museum to extend the learning.

Learning Skills

Learning skills acquired by the participants in the study were more unique than common to one another. Hence, I have not separated this sub-theme into various sections in this cross-case analysis. Meredith's responses about writing precis were the most frequent data pertaining to learning skills among all participants. Precis, which is the ability to produce a succinct and concise written summary or synopsis, was the most common skill practiced by Meredith in secondary education. Writing precis, taking notes, and strong reading comprehension resulted from practice, and close reading of texts, especially the Bible. Communicating and speaking articulately, and recitation, were also emphasized in Meredith's homeschooling experience.

The most prominent learning skill in the data for Beatrice was what she called 'critical thinking.' She said she learned critical thinking from constant family discussions and communication with one another. She was taught to consider the purpose of what she was studying instead of merely going through the motions. Beatrice admitted she lacked test-taking and note-taking skills and experience, but she was confident and calm as a learner because she felt skilled in critical thinking and knowing *how* to learn. She felt she was taught how to learn through consistent communication, principally with her parents.

Like Beatrice, Christopher was taught *how* to learn so that he could become comfortable learning something that was initially unfamiliar to him. He said he could catch up quickly in university courses because he had developed the ability to learn. He attributes this ability of knowing *how* to learn, to learning on his own and reading constantly.

Two main learning skills were evident from the interviews with Winona. Recitation was

emphasized stronger in Winona's data compared to Meredith's data. Winona usually used recitation with subjects she found more difficult, like the sciences. Her mother had her memorize and recite information until it became familiar. For example, she memorized verb endings and lines in different languages. Learning languages was another skill Winona acquired in secondary. She felt learning languages and grammar were essential to postsecondary preparation. In addition to recitation and learning languages, Winona developed strong writing skills and excellent reading comprehension and retention through extensive reading and writing.

Family Involvement

Parents, siblings, and extended family members were involved in the education of the participants. All cases in the study experienced homeschooling with at least one sibling. Meredith is two years younger than her sister and they did much of their learning together, including in secondary studies. Beatrice, Christopher, and Winona were homeschooled alongside several siblings, but none of them reported extensive collaboration and learning with siblings during secondary education.

In the data for Beatrice, nothing emerged regarding involvement from her extended family. The only data on extended family from Winona was her retelling of her grandfather encouraging her to pursue writing after he had read a story Winona had written when she was much younger. During secondary education, Christopher connected with an aunt and an uncle on separate occasions to discuss books they had agreed to read together.

Meredith makes no distinction between her extended family and her immediate family. Her extended family was closely involved in her life and education. Meredith described frequent fieldtrips and other trips with various aunts and uncles. She remembers regular encouragement from her extended family to pursue higher education. She continues to seek her family's advice

during regular "check-ins" as she makes education and career decisions in university.

Meredith's Aunt

Meredith's parents were supportive of her education and her mother was accessible to Meredith when she needed help throughout her homeschooling years. From the beginning of the primary years, Meredith's father's older sister agreed to be her principal educator. She did not have children of her own and was willing to educate Meredith and her sister in her own home. Her aunt constantly communicated Meredith's progress with Meredith's parents, who lived only a few minutes up the road from the aunt. Meredith's parents entrusted her aunt with Meredith's overall education. Meredith remembers her parents giving her regular reassurance that she was receiving a quality education because of her aunt.

Meredith's aunt was intimately involved in Meredith's learning and she was available when Meredith needed her, even in the secondary years, when Meredith's coursework was facilitated through the online program she enrolled in. Meredith expressed trust and appreciation for her aunt, and she was especially glad her aunt did not allow Meredith to settle for mediocre effort. At least two times during the interviews, Meredith acknowledged how unique her experience was to have, other than her parents, a family member who had the time, ability, and willingness to provide a quality education for her.

Parental Support and Accessibility

During secondary education, all participants reported having access to and support from both parents, except for Meredith, whose father passed away before she started the secondary years. Still, Meredith remembers that her father instilled confidence in her that she could pursue any career and be successful, and Meredith's mother was always supportive. The mothers of Christopher, Winona, and Beatrice facilitated most of the homeschooling for their children, and

their fathers supplemented the efforts of the mothers. Meredith's aunt was Meredith's principal educator and Meredith's mother did the supplementing.

Parents provided ongoing support for their children, but the support was different in each case. Christopher's parents surrounded him with books and instilled a love of reading. They encouraged him to set goals and reviewed the daily goals Christopher set out to accomplish. His parents helped him become a proactive and independent learner by working closely with him while he was younger, modeling learning for him, and then gradually pulling away when Christopher was confident on his own. Winona's parents also emphasized independent learning and encouraged her to pursue her learning interests and develop them fully. Both parents have advanced degrees and held a high standard for her learning. They felt homeschooling would help Winona develop most effectively.

According to the data, Beatrice's parents appear to have been more involved in the homeschooling as a couple compared to the other participants' parents. Beatrice gave several responses about discussions with both parents regarding what she was learning on her own. She said her parents most commonly gave support by discussing her learning and communicating openly. Both of her parents regularly seized opportunities to teach Beatrice about the basic operations of the home. According to Beatrice, her family was always learning together.

Mother. Beatrice, Christopher, and Winona had their mothers home with them throughout their homeschooling years, including during secondary education. These three participants shared several comments about going to their mothers with questions because their mothers were always present. Beatrice recalled sitting down with her mother before each new school year as they decided on curriculum materials she would need. Christopher described listening to his mother read books as the essence and epitome of homeschooling. For Winona, her parents, and

especially her mother, were integral to her academic preparation for university. She said her mother was always available to help. Winona remembers her mother micromanaging her work when she was younger, and described her mother checking her work during secondary education. Winona especially appreciated the work ethic that her mother instilled in and required of her. She expressed thanks to her mother for the needed assistance with learning the sciences.

Learner Attention

Homeschooling afforded all participants focused attention from their parents and family members who facilitated their learning. Although they all learned at home alongside siblings, the limited number of students to attend to enabled greater personal attention. Meredith, the only participant with only one sibling, was especially unique. Having only two students who were close in age allowed Meredith's aunt to customize and focus the curriculum more. Also, Meredith and her sister did not live with her aunt. Therefore, her aunt's efforts were entirely focused on Meredith's education without the additional concerns Meredith's mother looked after.

Meredith's aunt spent much time helping her to read when she was younger and continued to emphasize close reading throughout secondary education. She regularly sat next to Meredith on the couch and read through poetry, and she taught Meredith to write precis. Meredith was especially grateful that her aunt pushed her to work harder when she felt less motivated or lacked confidence. When Meredith struggled with certain subjects or concepts, her aunt was able to take the time necessary to work through problems and concepts without rushing, so Meredith could improve her understanding.

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Summary

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The purpose of the cross-case intensive analysis was to compare each individual case, according to the data from interviews, to highlight similarities and differences among the cases.

Overall, and according to the interview data, Beatrice and Christopher appear to share more similarities with one another than they do with Winona and Meredith, and Winona and Meredith seem to have more in common with one another than they do with Christopher and Beatrice. For example, Beatrice and Christopher were not as focused on academic performance during secondary education as Winona and Meredith. Grades and tests were not emphasized in Beatrice's and Christopher's homeschooling experiences. Because Winona and Meredith chose to enroll in online programs during secondary education, they had similar experiences with meeting course requirements of the programs, and they were exposed to more teaching styles than Beatrice and Christopher.

However, each individual case has clear distinctions. Beatrice spent most of her time in secondary education reading textbooks. She is the only participant who was admitted to university with nothing but her homeschool transcript. Christopher is unique because of the amount of freedom and flexibility he had pursuing his interests and using his time how he determined. His secondary homeschooling consisted principally of reading, with limited curricular demands. Winona spent most of her time on writing assignments in the secondary years. Like Christopher, she read extensively and enjoyed the freedom to pursue her own academic interests, which mostly involved writing. Winona is unique from the other participants because she maintained the most rigorous schedule, including part-time employment throughout secondary education. Meredith is distinct from the other respondents because her aunt was her principal educator. Meredith's immediate and extended family members were integral to her homeschooling experiences and her postsecondary academic preparation. Unlike the other cases, Meredith's homeschooling is characterized by rigid structure and routine. Her daily practice reading the Bible and writing precis also highlights the uniqueness of her experience.

Chapter V: Discussion

The research question that guided this multiple-case study was: *How do postsecondary students who were homeschooled during secondary education describe their academic preparation for postsecondary education?* My purpose has been to learn directly from home education students about their academic preparation for postsecondary education, based on their descriptions, perceptions, and reflections of their homeschooling experiences. The findings from this study are principally intended to inform homeschooling students and families as they make decisions regarding secondary and postsecondary education. Findings could also assist postsecondary administrators and admissions officers by increasing understanding of the specific needs of potential homeschooling students. Any member of the education community can increase her or his understanding of students' experience with home education and general principles of education.

In the intensive cross-analysis, I followed the general order of the themes from the individual analyses to produce a clear organization and conceptual framework for the reader to follow. I will continue this general order in the discussion chapter for enhanced clarity and understanding, and to give adequate attention to the important emergent themes from the data, especially as they pertain to my research question. As I interpret the findings from the cross-analysis, I incorporate literature that supports my findings.

Learning Philosophy for Homeschooled Student Preparation for Postsecondary Education

Communication Among Homeschooling Family Members

It is important for homeschooling families to talk about postsecondary studies and encourage their children to think about and purposefully plan for postsecondary school. Blumenfeld (1997) stressed the importance of families engaging in regular dialogue regarding

postsecondary plans and added that families should communicate directly with admissions officers of institutions they hope to attend to understand admission requirements. Bauer and Wise (2004) push home education families to begin earnest consideration of and planning for postsecondary during the middle school years, prior to secondary studies. Like Blumenfeld, they also recommend communication with admissions officers so that families understand admission requirements, financial aid, and application processes.

It was not clear from the interview data gathered in this study how often or how much emphasis homeschoolers should place on postsecondary consideration. All the participants attend a postsecondary institution, but they did not receive the same amount or type of communication regarding postsecondary learning during their secondary education years. I believe it is reasonable to expect that the more parents and educators emphasize postsecondary education, the more the students will be likely to plan and prepare for postsecondary education with increased purpose.

Purposes of Learning

From all participants, we see that when the purposes of learning are to enjoy learning, and to learn deeply and constantly, learning might be more desirable. When attention is not unduly placed on grades or merely preparing for employment, learning could be enhanced. When Christopher placed too much emphasis on achieving high grades in university, learning became about the grades instead of gaining knowledge and developing character, and thus it impaired his academic performance. If students see learning as relevant to their circumstances, as illustrated specifically in Beatrice's case, they might be more motivated to learn. Developing a love of learning could contribute to effective preparation for postsecondary academics (Lattibeaudiere, 2000).

In each case, and especially demonstrated in the data provided by the interviews with Beatrice and Meredith, learning was constant. Learning could be more desirable to students when it is perceived as always occurring, instead of an activity that is turned on and off based on location or amount of time. The more relevant a student considers a subject to be, the more likely he or she could be to learn that subject and put in an earnest effort to learn it. Therefore, it behooves parents and educators to pay close attention to students' interests and facilitate learning that students will find particularly relevant. Several studies have illustrated the positive effect on preparation for postsecondary education among students who were encouraged to pursue their own interests (Bolle-Brummond & Wessel, 2012; Cardinale, 2014; Duggan, 2009; Holder, 2001; Jones, 2010; Lattibeaudiere, 2000; SanClemente, 2016). Training students to be deliberate about their learning and to see all situations as learning opportunities might increase awareness of and desire for learning. Meredith's case teaches us to look for different, better ways to do things, inspiring improvement and innovation, as illustrated by her experience learning to cook with her grandmother, and the multiple occasions on fieldtrips with her family members who taught Meredith to look for the expertise in how people performed the labors of their craft.

From Christopher, we learn that when teachers are overt about teaching methods and philosophies, student learning might be enhanced because students could better understand why they are learning what they are learning. For example, when parents or teachers spend one-on-one time with a student, modeling initially and then gradually granting the student space to learn and explore on his or her own, the student might gain confidence and become a more self-reliant learner. Cardinale (2014) and Lattibeaudiere (2000) also stressed the importance of parent modeling and one-on-one attention in preparation for higher learning. Beatrice's parents made a conscious effort to be transparent about the purposes behind what they felt she should learn,

including their rationale for homeschooling. Meredith's and Winona's parents also made it clear to their children that they felt homeschooling was the best educational option for them. This confidence concerning the educational path they had chosen for their children created enough buy-in from each participant to feel assurance and peace about homeschooling.

Learning Environment

The familiarity and comfort of learning in the home do not necessarily impede preparation for postsecondary learning. Studies show that the home environment could enhance learning (Cardinale, 2014; Drenovsky & Cohen, 2012; Lattibeaudiere, 2000; Wilkens, Wade, Sonnert, & Sadler, 2015). Learning among siblings, and with parents or family members, could provide a productive learning atmosphere conducive to necessary preparation for higher learning. For example, in one study, a supportive home environment contributed to homeschooled students' higher performance in a beginning college calculus course (Wilkens et al., 2015). Christopher and Meredith demonstrated that learning in quiet, unrushed settings could enhance learning. However, Meredith's experience showed that learning in favorable circumstances at home could present a challenge to adjusting to the busy university environment. Nevertheless, during her postsecondary studies, Meredith now seeks the same quietness and solitude she experienced in her secondary homeschooling.

Independent Learning

Experience with independent learning appears to be a clear advantage for home education students. According to Ray (2004), college admissions officers actively recruit homeschooled students because they expect these students to have the ability and experience to study and learn on their own. Self-directed, independent learning can be effective preparation for postsecondary learning because it is like the learning required at the postsecondary level

(Cardinale, 2014; Duggan, 2009; Holder, 2001; Jones, 2010; Lattibeaudiere, 2000; SanClemente, 2016). According to Beatrice and Christopher, acquiring independent learning skills was the best preparation they had for postsecondary learning. Online learning helped Meredith and Winona prepare for postsecondary academics because they were used to being responsible for their own learning, selecting classes, and submitting assignments.

University students navigate their own schedules and manage their own time to meet the demands of university academics. Some studies show that homeschooling students find it difficult to manage time in the postsecondary setting, including adhering to the rigidity of class schedules and deadlines (Holder, 2001; Kranzow, 2013; Lattibeaudiere, 2000; Sikkink & Skiles, 2015). The cases in this study were used to learning on their own in secondary education. All participants in this study were learning mostly on their own by the time they began the secondary years, showing that homeschooling might be an effective way to prepare students to learn on their own early, in preparation for postsecondary education. By the time they started secondary education, participants were expected to do most of their own scheduling of their study time, with limited assistance from parents. This finding about home education students being self-directed learners is consistent with Duggan (2009), Holder (2001), Jones (2010), Lattibeaudiere (2000), and SanClemente (2016). In her study, Clery (1998) also found that homeschooled students are highly autonomous, independent learners.

Student confidence might increase as students are expected to learn on their own and structure their learning time. When students are more independent in secondary education, they can gain the discipline required for university to manage their time and studies. Students who have been taught to become independent learners also tend to know their interests more keenly, because they have been empowered to learn on their own. When they are granted

such learning latitude, students naturally gravitate to what they are curious about (Lattibeaudiere, 2000). Therefore, when students feel empowered to pursue their own interests, they could improve their motivation and enjoyment of learning.

Independent learning helps students learn *how* to learn, and developing the ability to understand the learning process could be more valuable than knowledge acquisition and retention. Christopher had not learned the specific subject matter he was presented in his first year of university, but he quickly learned the material and understood it. He was able to catch up quickly because he had acquired the ability of learning *how* to learn in secondary homeschooling, and he had the confidence that he could learn, consistent with findings about home education students (Bolle-Brummond & Wessel, 2012; Duggan, 2009; Jones, 2010; SanClemente, 2016). Additionally, Christopher and Beatrice were resourceful and knew what to do to find answers. Independent learning breeds resourcefulness, including knowing who to go to and what questions to ask in pursuit of learning and understanding.

Rigor

A strong work ethic in secondary education might enhance preparation for postsecondary learning. According to Winona, time is better spent helping students develop persistent work habits than having them learn study tricks. Postsecondary learning is considerably more rigorous than typical secondary learning. Therefore, when students are used to rigor, both academically and in their daily schedules, they might come to postsecondary studies better prepared. Literature on postsecondary preparation strongly recommends that students take rigorous courses in preparation for postsecondary education (Allen, Bonous-Hammarth, & Suh 2003; Bauer & Wise, 2004; Cardinale, 2014; Lombardi, Seburn, & Conley, 2011; Reid & Moore, 2008; Roderick, Nagaoka, & Coca, 2009; Warburton, Bugarin, & Nunez, 2001).

Winona maintained a full and challenging schedule, academically and with other responsibilities, during the secondary years. Working part-time all through secondary education taught her discipline and responsibility, and increased her capacity to prioritize and sacrifice, which she viewed as excellent preparation for postsecondary education. Bauer and Wise (2004) explained that work experience, especially experience apprenticing and gaining exposure to fields of interest to students, was valuable for homeschooled students. They also suggest that volunteer work is good preparation for postsecondary studies and for entering a career. Holder (2001) found that homeschooled students were commonly taught to be responsible and self-disciplined.

Parents are integral to their children's ability to work and accept responsibility (Cardinale, 2014). Winona's parents provided work and learning opportunities and established expectations that helped her prepare for postsecondary education demands. Meredith's aunt did not allow Meredith to settle for mediocre effort but required her to work diligently at the level her aunt knew Meredith was capable of, such as by asking her to redo a quiz to improve her score. Beatrice was expected to complete her entire textbook studies each year, and Christopher's parents encouraged him to pursue topics he was interested in for as long as he desired.

Structure

When time is structured for homeschooled students, students might learn discipline and routine. Structured learning time might not encourage as much exploration and might discourage student confidence in their ability to choose how they spend time, but they can learn discipline and strong work ethic through it. A structured routine teaches students that by doing small increments of learning regularly over time, they can cover much material. From Meredith,

we learn that giving equal attention to a variety of subject matter can convey that all subjects are important; however, equal attention does not necessarily help students learn material deeply. Meredith admitted that she regretted not having pursued her interests and talents in math more during secondary education. She believes that if she had done more math, she would have had more of an advantage in her engineering program in university.

From the interview data gathered, Meredith appears to have had the most structured homeschooling regimen required, and Christopher seems to have had the least structure imposed. Contrasting Meredith's and Christopher's experiences with flexible and structured learning schedules teaches us that not all students are the same, and that students are products of how they are nurtured and trained. In both cases, students were sufficiently prepared for university admittance. It is difficult to determine who was more prepared academically, especially because of the distinct homeschooling environments they came from, and because they pursued different fields of learning and attend different institutions.

Flexibility

Flexible learning time might foster exploration and application of learning. As evidenced by Christopher's attempts to start businesses from what he was learning in books he read, flexibility and discretion with managing time enables homeschooled students with greater potential to explore and apply what they learn. When students are empowered to study what they are interested in, especially illustrated in the cases with Beatrice, Christopher, and Winona, learning motivation and enjoyment might increase. From Beatrice and Christopher, we learn that allowing students to avoid subjects they do not view as relevant for them could also stimulate learning and enjoyment. However, Meredith's and Winona's experiences reveal additional insight. Because they were expected to give equal attention to subjects of lesser interest to them,

like science for Winona and English for Meredith, they learned to leave their comfort zones and opened themselves up to other forms of learning that they were unlikely to have pursued on their own.

It is not clear whether learning only subjects of interest to students or being compelled to learn subjects that students do not desire to study is better preparation for postsecondary learning. It seems to depend on individual student needs. However, I am inclined to believe that if students can choose what they study, they will be better prepared for postsecondary education. Interview data in this study did not provide enough evidence to the contrary. Students are not forced to enter a specific program when they enter the postsecondary setting, but rather they choose a field they would like to pursue. However, there might be required courses within a program that are less desirable to the student. By choosing what subjects they study in secondary education, students can develop confidence to select a field and a career in the future. Winona's case taught us that being free to choose what and when she studied gave her the confidence to make decisions and face challenges, like with her experience applying to Cambridge University.

The data from the interviews with Christopher and Beatrice teach us that when homeschooling parents and facilitators offer students suggestions about what to study and learn, based on student interests, and without pressure or coercion, they might increase the likelihood that students will view learning favorably. When students see that their decisions of what to study matter to parents and facilitators, they could be more likely to pursue suggestions parents and facilitators give. It appears that helping students maintain a love of learning and a desire to pursue learning interests could increase motivation to learn more than requiring them to study specific subject matter. For me, cultivating a love of learning and encouraging students to pursue their interests translate into more effective academic preparation for postsecondary education.

This sentiment is reflected in scholarly research (Duggan, 2009; Holder, 2001; Jones, 2010; Lattibeaudiere, 2000; SanClemente, 2016).

Participants in this study preferred working flexibly at their own pace to spending time with peers at school, like the participants in Jackson's (2007) study. Jackson found that the three students she interviewed all valued the flexibility of time, curriculum, and autonomy afforded through their homeschooling experience. These students also felt more comfortable at home and felt less pressure than when they were at school. Duggan (2009), Holder (2001), Jones (2010), and Lattibeaudiere (2000) viewed working at one's own pace as a benefit to homeschooled students.

Flexibility to choose what and when to learn might increase the likelihood of learning subjects in greater depth. Christopher could learn for as long or as little as he wanted and was not stifled by time constraints. Because he was empowered to study deeply, his passion for his interests grew. Studying subjects deeply and increasing passion for learning could prepare students to focus more clearly on what to study in postsecondary education and other future decisions, like decisions around their career, because students have learned what they prefer, and they are used to deciding what to learn. Spending more time on a subject usually means that fewer subjects or interests are given attention. However, Saba and Gattis (2002) found that admissions officers are more interested in students who demonstrate proficiency in few areas, and that they prefer expertise to so-called well-roundedness.

Learning subjects in greater depth might develop an ability to learn unfamiliar material more quickly. For example, Christopher spent a month of concentrated preparation for the ACT exam, specifically in math, because he had not done math consistently since Grade 8. He was able to prepare sufficiently to perform well on the ACT because he had learned to study

deeply, and because he had the flexibility and was comfortable taking time to dedicate with such focus. From this example, there appears to be a close relationship between learning process and deep learning. It seems that the more students learn process and *how* to learn, they learn more deeply and increase their capacity to learn new material.

Curriculum

Subject matter. Conley (2007) and Roderick, Nagaoka, and Coca (2009) underlined how important it is to study core subject matter in preparation for postsecondary education. But according to the data in this study, following a formal, traditional core curriculum does not necessarily influence postsecondary academic preparation significantly. For example, Beatrice and Christopher studied subjects they were most interested in during secondary homeschooling, and they were not concerned about covering core subjects. Christopher was not used to labeling his learning and compartmentalizing where learning belonged, yet he still learned and was able to prepare well enough for postsecondary learning. Learning process and deep learning seem to be at least as important as emphasizing core subject matter. When the participants in this study started to think more seriously about postsecondary education and where they might attend, they each learned what would be required academically for that institution. Accordingly, participants incorporated subjects into their homeschooling that would prepare them specifically for the specific institution they hoped to attend.

When homeschooling facilitators and parents organize curriculum based on student interest and ability, student learning appears to be enhanced. Involving students in selecting customized learning materials can influence student motivation to learn and teaches the process of *how* to learn. Christopher and Beatrice decided what to order with their mothers, based on their learning interests. They learned how to search for curricula and specific materials they

thought they would enjoy. Researching and ordering materials created buy-in and made them look forward to learning.

In all cases, but especially in the data with Winona and Christopher, the library was an essential resource for acquiring learning materials during secondary education. Winona described going to the library with her mother to check out stacks of books and then devouring them as soon as she arrived home. Christopher spent most of this time in secondary homeschooling reading books he retrieved from the local library, in addition to used books his parents brought home.

Involvement in extracurricular activities and supplemental learning opportunities might enhance postsecondary academic preparation. Reid and Moore (2008) agree, and they suggest ACT/SAT prep classes to supplement learning. Other studies show that extracurricular involvement is good preparation for postsecondary learning (Duggan, 2009; Jones, 2010; Lattibeaudiere, 2000; SanClemente, 2016;). Extracurricular and supplemental activities, like online courses, part-time employment or self-employment, and involvement in sports, theatre, or music, give students exposure to new learning situations and help them develop new skills. Bauer and Wise (2004) strongly encouraged homeschooling families to research opportunities for their children to take courses online, or at a nearby postsecondary institution, to supplement their learning at home. Davis (2011) and Lips and Feinberg (2009) predicted that more home education students would take advantage of online resources.

Secondary homeschooling students can be exposed to teachers and mentors apart from their parents, and without being in traditional school. Exposure to other leaders, besides their parents and family members, prepares students for different professors or instructors they will experience in postsecondary education. For example, Winona feels she benefited greatly from

several occasions when one of her online teachers encouraged her to go beyond minimum class assignments and write in more depth. Meredith faced a challenging physics teacher in an online course and learned to deal with different teaching approaches. In contrast, Christopher laments his lack of exposure to classroom teachers and feels he would have been better prepared for the postsecondary classroom setting if he had had more experience in traditional classrooms.

Assessment

In preparation for postsecondary learning, formal assessment measurements, like grading and testing, are not necessarily superior to alternative assessments. However, research on academic preparation for postsecondary learning stresses the importance of GPA and entrance examinations as strong indicators of postsecondary readiness (Lombardi, Seburn, & Conley, 2011; Reid & Moore, 2008; Roderick, Nagaoka, & Coca, 2009; Warburton, Bugarin, & Nunez, 2001). Christopher and Beatrice did not receive grades or take regular tests but received suggestions from parents and facilitators about how to improve and what they needed to spend more time on academically. Improving academic performance had more to do with spending more time on a subject rather than emphasizing a student's standing compared to her or his peers at a given point in time. Homeschoolers tend to reject test score performance as the greatest measure of educational success and focus more on teaching values and character development (Lines, 2000).

From Christopher's and Beatrice's cases, I cannot conclude that regular test-taking helps prepare all students for postsecondary learning. However, Beatrice admitted she had to study extra for tests in university, because she was not used to taking tests. Christopher rarely wrote tests in secondary homeschooling, but when he learned he would have to take the ACT exam to get into the university he wanted to attend, he immersed himself in an ACT preparation course

and prepared enough to score well enough to gain admittance to the university of his choice. Also, Christopher did well on exams in university without much testing experience prior to postsecondary education.

How student learning is assessed and how student progress is measured might be less important than assessing and measuring regularly. Meredith and Winona were mostly assessed through assignments and tests administered by their respective online teachers and programs, and Beatrice and Christopher relied more on homeschooling facilitator visits to review their progress from previous visits. Methods of assessment and measurement appear to be less important than frequency and quality. Frequency and quality of assessment and measurement can be adjusted for each student and situation. Winona feels that qualitative methods are much more effective than quantitative methods, and therefore does not like standardized and multiple choice testing. Interestingly, Martin-Chang, Gould, and Meuse (2011) found that structured homeschooled students, who establish educational goals and study set curricula, perform better than public school students and unstructured homeschooled students on standardized tests. Wichers (2001) and Ray (2004) also show homeschooled students performing well on standardized tests.

Record-keeping. Some home education literature strongly emphasizes the importance of keeping good academic records, particularly for postsecondary admittance (Bauer & Wise, 2004; Blumenfeld, 1997; Saba & Gattis, 2002). In his article, Ray (2004) implores admissions officers of postsecondary institutions to be open to the unique forms of academic records that homeschooled students will submit. For example, he asks them to expect homeschooled students to produce extensive bibliographies of books they have read during secondary education. Regularly reviewing academic progress necessitates accurate record-keeping for homeschooling

families. Clearly, families and students benefit from keeping detailed records of all they are learning, including subjects, book lists, extracurricular involvement, fieldtrips, employment, and anything else related to their learning and academic development. Mckee (1998) described limitations home education families impose on themselves when they do not document their learning, including less effective transcripts for postsecondary admissions and less continuity for younger homeschool siblings. Beatrice and her mother maintained a homeschooling transcript that was reviewed and updated with each facilitator visit. Similarly, Christopher and his mother kept a portfolio that consisted mainly of lists of books Christopher had read, a record of the time he spent on subjects, and documentation around other academic activities he was involved in, like music and theatre.

Because Beatrice was not required to take exit exams in secondary homeschooling, nor entrance exams for the university she attends, she relied heavily on her homeschooling transcript to get into university. Christopher only used his ACT score and his homeschooling portfolio to be admitted to university, and he was still able to secure academic scholarships. The online programs Meredith and Winona used in secondary education maintained their academic records and issued them each a diploma when they graduated. Additionally, homeschooling facilitators in Alberta regularly visited Meredith and Winona and reviewed their progress during the secondary years. Homeschooling students and families could benefit by researching potential postsecondary institutions to know what records and courses those institutions prefer. Because schools have different entrance requirements, students and families should customize what they do in secondary education to meet the institution's requirements.

Homeschooled Participants' Perceptions of Their Secondary Homeschooling Academic Preparation for Postsecondary Education

General Observations of Homeschooled Participants

Homeschooling could be a desirable way to receive an education, and homeschooling students might consider homeschooling their children when their experience is positive. Clery (1998), Drenovsky and Cohen (2012), Jackson (2007), and Jones (2010) found that home-educated students tend to enjoy being home-educated and would likely homeschool their own children. All participants in this study expressed a desire to homeschool their own children, mostly in the same ways they were taught. However, it is not possible to predict whether homeschooling students who decide to homeschool their own children will facilitate learning effectively enough to prepare their children adequately for postsecondary academics in the same manner they were prepared. All children are different and have unique needs.

Homeschooling parents and students might consider giving more attention to helping students feel more prepared for the realities of postsecondary academics and life. All participants gave comments expressing a variety of anxieties about feeling unprepared for and unaware of what postsecondary education is really like. Research on traditional school students reveals similar findings (Conley, 2007; Roderick, Nagaoka, & Coca, 2009). Visits to postsecondary campuses and classes might help students have a better idea of what postsecondary education and life are like and what is expected. Students could benefit by observing classes and student behavior and learning how campuses are laid out, going beyond the typical orientation week activities for incoming students. Students could visit several campuses throughout the secondary years of education to become more familiar with and comfortable in a postsecondary school atmosphere. When students begin postsecondary

education already feeling more comfortable to navigate the new setting, they could be more likely to channel their energy and concerns into the demands of their classes, instead of feeling overwhelmed because of change and unfamiliarity.

Homeschooling might foster an effective learning experience for gifted students. From Winona, we learn that homeschooling might accommodate gifted students effectively because they are able to learn at their own pace and go into as much depth on various subjects as they desire. However, parents should be attuned to the needs of their children so that they minimize the possibility of their children feeling isolated and strange as they advance academically (Kranzow, 2013; Sikkink & Skiles, 2015). Winona's parents encouraged Winona to work part-time to give her more social interaction with peers, but she still felt isolated. After all that parents can do to help their children assimilate, each child is different and will respond differently in every situation. I believe it is essential for homeschooling parents and educators, including educators in any situation, to know that they cannot fully control outcomes for their children and students. Parents and educators do their best and move forward.

Increase the rigor of secondary education writing requirements. Cline, Bissell, and Katz (2007) urged high schools to require more challenging reading and writing to align better with postsecondary expectations. Conley (2007b) put forth several strategies to help high schools prepare better for postsecondary academics, and one strategy included adding content to curriculum that would focus on more effective and challenging writing. Compared to her experiences with writing during secondary education, Winona observed that new university students possessed weak writing skills when she worked as a teacher's assistant in the university's history department. It is difficult to know whether her observation has anything to do with being home-educated, but it seems plausible that the more writing is encouraged and

cultivated by homeschooling parents or educators, the more students could improve their writing abilities, as illustrated specifically in the cases with Winona and Meredith. Students who enjoy writing might develop their writing ability more in homeschooling because of the flexible schedule, particularly if they are empowered to spend as much time on writing as they wish, like Winona had been.

Reading books and being read to regularly might contribute to meaningful postsecondary preparation. Christopher believes his best preparations for postsecondary learning were reading and being read to. Multiple times in his interviews, Christopher acknowledged that he knew it sounded strange that he could learn about virtually any subject by simply reading books, and that doing so would adequately equip him to perform well in secondary and postsecondary academics. He said repeatedly, "It just works!" He explained further that reading books did not teach him the specifics about subjects, like how to solve a certain math problem. Rather, reading extensively taught him to love learning and gave him the confidence that he *could* learn what he wanted or needed to learn, illustrated by his experiences taking the ACT and catching up in his first semester university courses.

Homeschooled students might have a greater tendency to compare their learning progress with their peers. In his study on students who were homeschooled but likely to re-enter public school, Jackson (2007) learned that the most common fear upon returning to formal schooling was whether the returning students would be at a similar academic level as their peers. Homeschooling students appear to have a heightened tendency to compare their progress with other students and peers, because they are not regularly assessed and measured against other students. Despite findings that homeschooled students display strong self-concept (Clery; 1998; Ray, 2013; Romanowski, 2006), these students want to know how they compare to others

academically because they want to feel confident they are being sufficiently prepared for higher

learning and pursuing careers. Homeschooling parents and educators might not think about, or

talk to their children or students enough, about how their children or students feel they compare

to their peers academically. Consequently, homeschooling students are left to wonder about their

progress, because they will inevitably notice that they are being educated quite differently from

the masses. Especially in Christopher's case, we see that homeschooling students could have

more peace of mind and confidence if they had a more accurate understanding of how they

compare academically with their school peers and with university learning. However, not all

homeschooling students would have the same level of concern or insecurity.

The more homeschooling students cultivate independent learning, the more confident

they might feel in their postsecondary preparation compared to their peers. Although he often

wondered how his learning measured up to his school peers, Christopher reckoned that

developing as a self-directed learner gave him academic advantages. He intimated that

comparing academic performance might hinge on how students in schools and homeschooling

students respectively make use of their time, and the way in which their time is structured.

Beatrice teaches us that homeschooling students could benefit by understanding that learning

different material than their school peers does not necessarily mean that they are ahead or behind

academically as she had assumed. I believe that academic comparisons between homeschooled

students and students in other education settings is problematic because of the many differences

among the various learning settings. However, I understand that homeschooling families tend to

compare academic performance and outcomes because they anticipate postsecondary learning to

be more like traditional methods of schooling than homeschooling.

When the principal homeschooling educator establishes clear academic expectations,

students might measure themselves against those expectations more than comparing with

school peers. Because her aunt established clear, elevated standards for academic performance,

Meredith was more concerned with meeting her aunt's standards of measurement than being

distracted by comparison with her peers. Meredith's aunt held her to a standard based on

Meredith's ability and capacity, and Meredith consequently measured herself against her own

potential instead of the performance of others. Because homeschooling enables students to cover

material as quickly as they choose due to the favorable teacher-student ratio, students might feel

academically ahead because they can move through curriculum faster. Christopher, Winona, and

Meredith expressed confidence because they perceived being ahead of their peers academically

at times.

From Beatrice's and Winona's comments about not feeling overwhelmed or fearing

grades and standardized tests throughout secondary education, and still performing well enough

to fulfill postsecondary admittance and entrance requirements, we can infer that choosing not to

emphasize grading and testing in homeschooling might decrease anxiety about tests and grades.

Beatrice and Winona specifically remembered their school peers frequently feeling anxious and

overwhelmed about grades and standardized testing, and they were glad they could not relate to

those feelings. Uniquely, Christopher seldom took tests, viewed them as games he enjoyed, and

tested well in university.

Secondary Homeschooling Student Learning Attitude

Secondary homeschooling students might view their homeschooling experience more

favorably, and feel more motivated to learn, when they do not experience stress over grades

and tests, and when they are given freedom to choose how they use their time and what

they study. Students who are naturally self-motivated, like Christopher, might prefer a

homeschooling setting to prepare for postsecondary education because they could have more flexibility and freedom to use their time as they choose (Bolle-Brummond & Wessel, 2012; Duggan, 2009; Holder, 2001; Jones, 2010; Lattibeaudiere, 2000; SanClemente, 2016). I wondered if students who were used to free time and exploration during secondary education would be challenged by the transition to the postsecondary learning schedule. Christopher admitted that he missed reading books he wanted to read, and he lamented not having more time to practice guitar, but he did not think the freedom and flexibility he enjoyed in secondary homeschooling hindered his transition to university. He viewed university as a new adventure where he could apply all that he had gleaned from homeschooling. I assume that students would adjust to this transition differently, despite what Christopher reported of his experience.

Secondary homeschooling students might lack motivation to learn. Homeschooling students are not exempt from feeling unmotivated to learn (Sikkink & Skiles, 2015), and they too can feel less than excited about learning certain subjects. Beatrice and Christopher were adamant about not wanting to spend time studying subjects they saw as irrelevant to them. It might be said that they were not motivated to learn topics they found uninteresting. However, they were not expected to learn subjects they did not want to study. Although students may prevent their own learning opportunities if they can choose not to study certain subjects, motivation to learn might increase for topics they do want to learn about.

Winona taught us that when she did not desire to learn a certain subject, it was effective to give herself rewards when her learning goals were met. Preparing rewards inspired greater effort. She also helped us see the importance of teaching humility in education, and how humility prepares students to adjust and perform better in postsecondary education. She learned this the hard way because she entered university, according to Winona, with much academic arrogance.

When homeschooling students are feeling undermotivated, the teacher-student ratio in homeschooling might allow for more encouragement, illustrated especially in Meredith's case. However, the close and comfortable relationship between homeschooling educators and students can pose other concerns, like increased complaining by the students and increased emotional drain on parents and educators. When homeschooling parents and educators detect lacking motivation from students, the flexibility of homeschooling creates opportunities to change up the learning schedule or take a fieldtrip or a day off, if necessary.

Challenges to Learning in Secondary Homeschooling

     New sociality and worldviews. Various challenges to learning confront home-educated students as they prepare for postsecondary education. Arai (1999) discussed the common concern whether home-educated students can cope in the real world and with diversity of views. Many studies consider homeschooling students' capacity to transition to postsecondary life and exposure to current ideas (Almasould & Fowler, 2016; Bolle, Wessel, & Mulvihill, 2007; Cogan, 2010; Drenovsky & Cohen, 2012; Kranzow, 2013; Snyder, 2013). Homeschooled students might struggle with new ways of teaching and new ways of viewing the world (Holder, 2001; Lattibeaudiere, 2000). They are typically exposed to a limited number of educators, and principally their parents. Meredith was exposed to her online teachers and other mentors in secondary education, but she was also surrounded with many like minds from her immediate and extended family. She struggled to adapt to what she considered to be the strong biases and positions of her university professors, especially because their views were so different from how she was taught to view the world.

     Depending on the student, homeschooling can present challenges regarding social requirements of university learning, like communicating with professors and peers. However,

studies show that homeschooled students feel more comfortable communicating with professors because they are used to more adult interaction (Drenovsky & Cohen, 2012; Jones, 2010). The cases in this study all illustrated not only a lack of collaborative learning experience, but a dislike of collaborative learning. Classroom experience and exposure to a variety of teachers and teaching methods can help prepare students for what learning will be like in postsecondary learning settings. Parents can help provide this experience by exposing their children to more worldviews and by talking openly about prominent views and how to respond to differences.

Home-sickness. Although homeschooling enhances the capacity for students to become more self-reliant as learners, participants in this study demonstrate that having parents or educators constantly accessible can make the transition to postsecondary life more challenging. It appears that independent learning does not necessarily resolve home-sickness for students who go away from home to attend postsecondary institutions. It is not clear how unique this challenge is to homeschooling families, although homeschooling families tend to spend much more time together than other families.

Time management. As students are required to schedule and manage their time in secondary education, they can enhance their preparation for postsecondary life and learning. Some research indicates that managing time is a common challenge for formerly homeschooled students (Holder, 2001; Jones, 2010; Kranzow, 2013; Lattibeaudiere, 2000; Sikkink & Skiles, 2015), while other studies show homeschooled students responsibly managing time (Bolle-Brummond & Wessel, 2012; Cardinale, 2014; Duggan, 2009). Like for Beatrice, it can be challenging to manage social and study time in postsecondary life, especially when parents are not there to offer immediate assistance and encouragement. Learning to navigate the university setting and manage one's own time applies to all new postsecondary students.

Learning Improvements

Learning improvements have been suggested and discussed throughout the discussion chapter of this paper. However, a few notable learning improvements stand out in the interview data with participants, regarding preparation for postsecondary studies. Homeschooling families can improve planning for postsecondary education by discussing postsecondary plans more with their children and preparing more purposefully by researching institutions and visiting campuses. Bauer and Wise (2004) agree that home education families should do more postsecondary research to match institutions to students. They find that smaller private postsecondary institutions are best for most home education students because these students are accustomed to small, intimate settings.

Based on this multiple-case study, parents or educators and their students can prepare more effectively for exit and entrance exams depending on the requirements of the institutions that students plan to attend. Parents and educators can help their children and students be more deliberate in what they choose to study in secondary homeschooling based on the postsecondary schools they want to attend and what those schools require for admission. However, Christopher suggested that there might be wisdom in leaving some aspects of postsecondary life and education unknown so that students do not mistakenly slack in their efforts if they learn they are doing well academically in secondary education.

Learning Activities and Skills for Secondary Homeschooling Students

Learning Activities

Reading. Data from interviews with Winona and Christopher propose that learning appears to be enhanced as parents and educators: cultivate a love for books and a love for reading by regularly reading to their children, fill their homes with books, and make books

readily available to their children and students. From Winona, Christopher, and Meredith, we learn that reading extensively might improve reading skills and comprehension. Careful, close, and concentrated reading might also enhance reading comprehension (Duggan, 2009), specifically demonstrated by Meredith's daily study of the Bible and poetry with her aunt.

Writing. Most of Winona's learning time was spent writing during secondary homeschooling. Extensive writing, including rhetoric exercises, blogging, collaborative online writing projects, and regular papers and assignments, prepared Winona for the rigorous postsecondary writing in her history major. Meredith's focus on writing regular precis from before and throughout secondary education taught her to synthesize information and express her thoughts concisely in writing. Learning to analyze, synthesize, and write clearly and succinctly requires consistent attention from secondary students, and can prepare students well for postsecondary courses. According to some studies, writing is an area where homeschooled students need to improve (Holder, 2001; Jones, 2010; Sikkink & Skiles, 2015).

Collaborative learning. Bauer and Wise (2004) encourage home education families to collaborate with other families to facilitate classes and learning opportunities, especially where parents exhibit expertise. They believe homeschooled students benefit to augment the typical learning they do in their homes, specifically to give homeschooled students more exposure to other learners and teachers. Anthony (2015) was surprised to find that the homeschooling families in his study were not only dependent on educational cooperatives, but they also seemed to relinquish some of the freedom of their educational environment to the cooperative and looked relatively like traditional school organizations. However, collaborative learning was not viewed as important preparation for postsecondary learning based on the cases in this study, contrary to SanClemente's (2016) findings. From interview data gathered in my study, homeschooling

seems to encourage independent learning and a desire to work independently, and homeschool seems to discourage collaborative learning and the desire to learn with others, consistent with Lattibeaudiere (2000) and Jones (2010). The desire to learn with others might increase, however, when students observe similar commitment levels and work ethic among students they are assigned to work with, illustrated by Winona's and Meredith's comments.

Discussion. One of the most surprising findings to me was the emphasis given to discussion as effective preparation for postsecondary learning. Formal and informal discussion helped participants gain more understanding and command of the principles they were learning in various subjects. By verbalizing what they are learning with parents and family members, students are compelled to formulate their thoughts and learn to express their views on topics. Discussions can help students make sense of what they are studying as they learn to analyze information and apply knowledge to their own lives (Cardinale, 2014). Christopher demonstrated how his learning was enhanced by discussing with his family and others life lessons he was exposed to in literature he read. Discussing topics from literature, textbooks, and other learning sources can prepare students for higher learning because students in postsecondary will read about a myriad of issues, make decisions, and justify their positions. Lattibeaudiere (2000), however, found that homeschooling students did not feel as comfortable as their peers contributing to class discussions in postsecondary education.

Beatrice teaches us that family discussions encourage learning at any time, or all the time, and that discussions help students review and solidify learning. Discussions provide opportunities to be exposed to a variety of viewpoints, although families tend to teach and share similar values. However, siblings and parents have their own minds and ways of seeing things and can benefit from one another's opinions and thought processes. Learning and discussing with

family could contribute to a foundation from which to consider the worldviews that will be presented in the postsecondary environment.

   Trips. Homeschooling enables families to frequently take trips and fieldtrips due to their flexible schedules and the limited number of students. Trips, fieldtrips, and travel might enhance what is being learned at home and expose students to the 'real world' application of these concepts, in preparation for postsecondary learning and making career choices (Duggan, 2009; Lattibeaudiere, 2000). The benefits of trips and fieldtrips were especially demonstrated with Beatrice and Meredith. Trips teach students that learning happens all the time and that every situation affords a learning opportunity, especially when parents and educators deliberately teach and ask questions to stimulate thinking and wonderment.

Learning Skills

   Reading and writing. Reading and writing emerged in the interview data from participants as learning activities and learning skills. Christopher and Winona especially illustrated that extensive reading can cultivate reading comprehension. By reading extensively, Winona said she also developed the skill of speed reading. Meredith's close reading of the Bible and poetry improved her reading comprehension. Careful reading also helped Meredith to improve her writing. Writing regular, brief precis teaches students to read with purpose and synthesize information to then write about concisely and succinctly. Postsecondary courses and programs require students to articulate their thoughts concisely as they write essays and papers.

   Recitation and repetition. Recitation and repetition, emphasized in the data with Meredith and Winona, can be valuable skills that cement learning (Cardinale, 2014). Recitation means that students memorize and recite information verbally, usually before their parents or some other audience. Meredith and Winona memorized information, whether from literature,

languages, or a science unit, and recited and repeated the information so often that it was readily accessible. Memorizing, repeating, and reciting created a foundation that enabled them to extrapolate and articulate principles from subjects they were learning.

Family Involvement in Home Education

How Family Members Influence the Homeschooling Experience

Siblings. Interview questions did not specifically focus on participants' experiences learning with their siblings, but several participant responses included information about learning alongside siblings. However, during secondary education, participants clearly did not do much learning directly or collaboratively with siblings. Respondents explained that they were learning principally on their own by the time they started secondary education. Learning on their own and pursuing their own interests seem to discourage learning collaboratively with siblings, according to the interview data gathered in this study. But lack of collaborative learning with siblings does not appear to adversely influence postsecondary academic preparation.

Extended family. Extended family could have an important influence on students' preparation for postsecondary education by supplementing the efforts of parents or principal educators. Winona's grandfather; Meredith's grandmother, aunts, and uncles; and Christopher's aunt and uncle show that even small encouragements might be meaningful for students to develop their learning and enhance their education. Extended family members who show genuine interest and inquire about progress might help students strive for higher learning.

Demonstrated most clearly with Meredith, extended family members can participate in teaching and facilitating learning experiences and can be solicited to augment the efforts of parents or principal educators. Meredith's situation was obviously unique because her aunt was her principal educator throughout her entire homeschooling experience; other family members

outside her immediate family contributed to her education and postsecondary preparation. Incidentally, Meredith's case illustrates that homeschooling could be successfully executed by someone other than a parent.

Family relationships. Meredith's aunt helps us see that when students have a strong personal relationship with their teacher or parent, they might enjoy a better learning experience. Her aunt maintained elevated standards for Meredith and encouraged her to reach her potential as a learner. Interview data from all participants revealed that when teachers or parents gain respect and appreciation from students, make themselves available to students, and encourage students to come to them with questions, students might develop greater confidence and love of learning. The homeschooling situation might foster stronger family relationships because family members tend to spend more time learning together at home. However, more time together might also introduce challenges, like making it difficult to leave home to attend postsecondary institutions.

Parental Support and Accessibility

Independent learning. This multiple-case study reveals that parental support and accessibility might be important for secondary homeschooling student preparation for postsecondary learning. Clery (1998) learned that family support and family relationships are strong among home-educated students, increasing their confidence to pursue higher learning. Cardinale (2014) and Lattibeaudiere (2000) also emphasized the positive preparation a strong family affords homeschooling students. All parents of participants in my study were supportive, according to the participants, and parents were available to their children when their children needed assistance. Christopher's case teaches that parents who train their children to become independent learners prepare them for the kind of learning required at the postsecondary level. The data for Christopher also illustrated that parents could foster a love of books and reading and

help children to set goals and schedule their time efficiently.

Parents and educators can take advantage of daily opportunities at home to teach and emphasize learning by asking questions, instilling a spirit of inquiry and wonderment in their children or students, and refusing to answer questions their children or students can find on their own. For example, Winona was expected to research topics on her own if she wanted to learn more about a subject, like the French Revolution. She expressed gratitude to her parents for not coddling her academically, specifically because of how it helped her prepare for university learning. Meredith's aunt and other family members consistently fostered learning situations by requiring her to notice the mundane and common. And Beatrice's parents regularly asked her to explain *why* she was learning what she was learning.

Model learning. Beatrice taught us that parents could use the simple economy of the home to teach important lessons to their children that prepare them not only for postsecondary academics, but for life in general. Parents and principal educators can establish a culture of learning in their homes. They can model learning by pursuing their own interests and providing an example of insatiable and lifelong learning, as Christopher's and Winona's parents had done, and as Meredith's aunt had exemplified. Meredith gave several responses about her aunt always learning, Christopher spoke of his father sharing books he had read with Christopher, and Winona aspired to higher learning because her parents had earned graduate degrees.

Deep learning and discussion. We see from Beatrice, Winona, and Christopher that parents can encourage their children to focus on their interests and develop deep understanding and subject mastery. Responses, specifically from Beatrice and Christopher, demonstrate that parents might help their children learn principles more deeply as they discuss what their children are learning regularly with them, and as they grant time and space for their children to learn

indefinitely. Discussion, whether from subjects they learn with their children, or asking children to share what they are learning from any source, might be a nonthreatening way to enforce learning. Constant discussion and communication show children that parents are interested in what they are learning, and that student learning is important to the parents, as well as important *for* their children. Obviously, these findings are not limited to the homeschool setting, but the homeschool setting might foster more opportunities for deep learning and discussion because of more time spent together with family.

Mothers. From all participants, we see the essential role that mothers can play in their children's education and postsecondary preparation. Mothers principally carried most of the responsibility of facilitating homeschooling for participants. They taught their children how to research curriculum and acquire learning materials. They showed support by facilitating learning and helping children to learn on their own. Mothers were present and accessible to their children when they had questions. Interview data from participants reveal that mothers can explain concepts, check work, develop transcripts and portfolios, assign grades, facilitate discussion, require revision of work, and read to their children often, all in preparation for higher learning.

Learner Attention

Homeschooling might be a favorable setting to focus attention on learners and customize learning to fit the needs and wants of a limited number of students (SanClemente, 2016). Parents and educators can learn about their children's or students' interests and seek curriculum and learning materials that increase student interest. When students are more interested they might experience more enjoyment and might retain more of what they learn. Having few students enables parents to slow down and grapple with problems their children experience with subjects or specific concepts. Because they can cover material quickly, homeschooling parents can afford

to pause and take the necessary time that individual students require to improve their understanding and grasp the learning more firmly. Learner attention was particularly evident in Meredith's case. For example, Meredith described several occasions when her aunt sat next to her and slowly reviewed concepts, or read lines of poetry, until her aunt was satisfied that Meredith understood enough to move on.

Conclusions

Multiple-case study requires researchers to analyze each individual case followed by a cross-case analysis of all cases, as demonstrated in this study. Case study methodology also mandates a thorough interpretation of the analysis. In Part 1 of the discussion chapter, I systematically interpreted the analysis. In the conclusions section, I will provide a summary of my study, highlight the contributions of my research, list important key findings in a more succinct fashion than in Part 1 of the discussion chapter, suggest possible implications for practitioners, and close with the limitations of my study and ideas for further research.

Summary

As a homeschooling parent of six children, I view homeschooling as an effective way to provide a meaningful education for my children. However, my wife and I have only homeschooled our children during the primary years. We wanted to learn more about what home education is like during the secondary years of education, according to homeschooling students. This study is important to home education students, parents, and others who might be looking for alternatives to the traditional school system. My research question follows: *How do postsecondary students who were homeschooled during secondary education describe their academic preparation for postsecondary education?*

Home education, or homeschooling, is growing every year in the United States and

Canada (Bosetti, Van Pelt, & Allison, 2017; Icher, 2016; MacLeod & Basan, 2017; Murphy, 2014; Ray, 2011; Ray, 2013; Redford, Battle, & Bielick, 2016; Van Pelt, 2015). Most of the literature on home education has been conducted from the perspective of educators and parents, and little has been written about what homeschooled students do to prepare academically for postsecondary learning. Parents and students want to feel confident that a secondary homeschooling education adequately prepares students for the rigors of postsecondary academics. They want to know how they can improve their education. The responses, views, perceptions, and descriptions of students who were homeschooled during secondary education provide rich insight into what it is like to experience secondary homeschooling, and how they perceive being prepared academically for postsecondary education.

I interviewed four currently enrolled postsecondary students who were homeschooled in Alberta, Canada, during their secondary years of education. Because the purpose of case study is to thoroughly understand the case or cases being investigated, and after gathering abundant, thick, and rich data from four participants, I determined that four participants provided sufficient data for the purposes of my study. As well, I observed that interview data was extensive and knew that each case had to be thoroughly and properly analyzed and interpreted, according to case study methodology. Important purposes of case study are to gain rich understanding and produce thick descriptions. According to Merriam (1998), limited cases enable deep understanding of each case, increasing the likelihood of gaining insight into the general. However, generalizing was not a goal of this study. My purpose was to fully describe and interpret the views and perspectives of each participant to foster greater understanding of the participants' experiences and to identify potential practices and principles of academic preparation for postsecondary learning.

Each participant was interviewed twice. I prepared an original semi-structured interview protocol for the initial interview. After first interviews were completed, I immediately transcribed the audio-recordings of each interview and began an initial analysis. From the data I had collected and analyzed, and as I focused on my research question, I developed a second interview protocol customized to each participant. After the data from all interviews were collected, I continued the analysis of each individual case, followed by an intensive cross-case analysis of all cases, as mandated by case study methodology, and in accordance with Merriam (1988, 1998).

Contributions

First, this study confirms to home education families that there are several ways to successfully prepare home education students academically for postsecondary education instead of a one-size-fits-all approach. Although the individual cases in the study shared commonalities, each experienced secondary homeschooling uniquely, and each was sufficiently prepared to be admitted into and remain in a postsecondary institution. Knowing that home education can effectively prepare students for postsecondary education could help people considering alternatives to the traditional school system with educational decisions based on their educational philosophy and objectives. The findings from this study offer parents and educators numerous suggestions about how to facilitate secondary home education in preparation for postsecondary learning.

Second, this project is a pioneering effort that places more emphasis on the homeschooled student perspective in home education research. The secondary home education student perspective is valuable and informative for home education parents, students, and others who are exploring education alternatives. For example, it is beneficial to know that

homeschooled students in secondary education might be apprehensive about what postsecondary education is like, and that they desire reassurance that they are being sufficiently prepared for postsecondary learning. To highlight another example, current home education families might be more likely to solicit assistance from extended family members, based on participants' perspectives in this study. Understanding more about homeschooling from homeschooled students' descriptions can also inform postsecondary administrators and admissions officers about how to better assist incoming homeschooled students.

Third, through case study methodology, my research enhances existing knowledge about secondary home education because the study produces rich, thick descriptions of student experiences, providing the reader with a vicarious opportunity to understand more about what it might be like to be a secondary home education student. For example, readers imagine what it is like to be guided and mentored sufficiently to be entrusted with the freedom and flexibility to choose when and what to learn and still be well prepared academically for postsecondary studies. They can observe how secondary homeschool students structure their own time and schedules.

Key Findings

The purpose of this study was to learn about academic preparation for postsecondary education from the descriptions, views, and experiences of students who were homeschooled during secondary education. Based on my research question, there are several key findings resulting from this multiple-case study, outlined in Part 1 of the discussion. I believe that the following are the most important findings from the research. Findings are not listed in any specific order.

- By increasing communication about postsecondary preparation and by planning more deliberately for postsecondary education, homeschool parents and students could become

more aware about what postsecondary life and learning are like, potentially helping them feel more comfortable as they approach the unfamiliarity of the postsecondary setting.

- By increasing their exposure to students in other academic settings, homeschooled students could create more awareness and measure their academic progress, potentially decreasing apprehension among homeschooled students.

- Increased experience and exposure to new ideas and worldviews outside the home seem to prepare homeschooling students more effectively for postsecondary education.

- In preparation for postsecondary learning, formal assessment measurements, like grades and tests, do not appear to be superior to alternative assessments and measurements, like time spent on subject matters and repeated revision. Methods of assessment and measurement appear to be less important than frequency and quality.

- Academic performance and postsecondary preparation could improve when home education parents and students give more attention to learning enjoyment, deep learning, purposes of learning, and relevance of subject material, instead of to grades and testing.

- Learning processes and deep learning, including extensive reading, researching, and writing, and regular formal and informal discussion, seem to be at least as important as emphasizing core subject matter. The processes of *how* to learn might be more effectively cultivated when students learn deeply, increasing the capacity to learn new material.

- One way that secondary home education appears to effectively prepare students for postsecondary learning is fostering efficacious self-directed, independent learning, especially due to a flexible homeschool schedule and a limited number of students.

- The reduced teacher-student ratio in homeschool could increase the potential for more attention given to individual learners and could enhance flexibility to customize learning plans and activities, including frequent fieldtrips and travel.

- Maintaining a rigorous academic and extracurricular secondary schedule appears to prepare homeschooling students purposefully for postsecondary learning.

- Flexibility to choose what and when to learn could increase the likelihood of learning subject matter in greater depth, also increasing passion for learning. However, both flexibility and structured routine, whether the structure is imposed by a parent/teacher or the homeschooled student, could improve academic preparation for postsecondary studies.

- Collaborative learning does not appear to be perceived as important preparation for postsecondary learning by participants in this study. Based on data gathered from the interviews in this research, homeschool seems to discourage collaborative learning and the desire to learn with others, posing potential postsecondary learning challenges.

- Enlisting help from immediate and extended family members appears to contribute meaningfully to home education students' academic preparation for postsecondary through regular involvement and mentoring, consistent support and accessibility, and training students to become self-directed learners who understand the processes of deep learning.

Practical Implications

Practical implications are intended for practitioners. Based on my research, practitioners include home education parents and educators, students, and others who are involved with homeschooling. Practitioners could also include postsecondary administrators and admissions

officers. The implications of this study are principally derived from the key findings. For clarity in writing, I only refer to 'parents' and 'students' as I discuss implications below, instead of trying to address the many homeschool situations that exist.

- Parents could focus more on students' needs and interests and customize the learning to enhance student motivation to learn. This study suggests that facilitating learning based on assessed needs entails adjusting curriculum, or choosing not to study certain subjects, depending on the student.

- Parents and students could conduct more research about alternative forms of assessment and measurement and select methods they like best. However, students might want to be mindful of requirements of the postsecondary institution they desire to attend, like entrance exams, so that they can prepare accordingly.

- Understanding what students enjoy and what is relevant to students requires close attention and consistent, open communication between parents and students. Parents might want to regularly communicate purposes of learning and help their children to focus on learning processes and principles of deep learning.

- Parents and students could plan more purposefully for postsecondary education by researching institutions and visiting campuses and classes throughout secondary homeschooling, based on where students might be likely to attend.

- Parents could periodically discuss with students how students feel they are progressing academically. Based on student responses in these discussions, parents could choose to have their students visit different types of schools to be exposed to other settings. Homeschooling families might want to arrange visits with friends or family members who are not homeschooled and view learning materials and

textbooks of children in school, preferably at the same education level, and engage in dialogue about academic progress.

- To help students incorporate more rigor into their secondary homeschooling, parents and students could research and enroll students in more challenging courses that they are interested in, including at the college or university level, specifically aligned with institutions or programs students are likely to attend at the postsecondary level. Parents could encourage students to seek employment, build a small business, or become more active in extracurricular activities.

- As parents train their students to structure their time and schedules and teach them the process of researching and acquiring learning materials according to personal interest, they facilitate both flexibility and structure for students. Parents could approve schedules that students make for themselves or impose a learning regimen if the student prefers.

- Parents could encourage more extensive reading and writing, they could read more frequently to their children, and they could invite students to read specific books, according to students' interests.

- Parents could consciously and regularly discuss what their students are learning in books, in classes, and everywhere. They might choose to facilitate daily discussion and make it conspicuous to students that what they are learning is important to the parents.

- Parents might be able to embolden students to pursue their learning interests and explore areas they think they are less interested in, instead of mandating a specific curriculum. However, students might have to comply with a specific state or

provincial curriculum, based on the requirements of the postsecondary institution they plan to attend.

- Parents could facilitate more involvement in activities outside the home to increase exposure to the ideas and worldviews of other teachers and leaders. Parents could be mindful to discuss with their children the worldviews they are learning about outside the home and give students space to express their thoughts.

- Parents and students could foster more collaborative learning through book clubs or other activities with other families, including homeschooling families. Parents could plainly explain to students that many postsecondary programs require collaborative efforts among students and that they would benefit to be prepared to learn with others.

- Parents could invite extended family members to mentor their children, especially in areas in which family members demonstrate some level of mastery and in which students are likely to be interested. Parents could choose to make use of the resources that exist among their families, friends, and community, and invite these people and utilize available resources to supplement their homeschooling efforts.

- Because home education parents tend to have more time and less students than traditional education situations, they might choose to take more fieldtrips and travel more, requiring them to research within their towns and cities for places to visit according to their interests.

Limitations

The most obvious limitation in any case study is the limited number of cases, which is a reality of this methodological selection. Case study sets out to discover particularity and

uniqueness. Because the purpose of case study is to gain deep, rich understanding and produce thick descriptions of one or few cases, the results of case study are not intended to be generalizable (Simon, 1996). Stake (1994) warned that over-emphasis on generalizing could lead researchers to not attend properly to prominent features of the case. Nevertheless, despite educational principles gleaned from my research, the data was collected from only four respondents.

I acknowledge that this study involved participants who are currently enrolled in university, so the results are based on students who have already successfully completed secondary homeschooling. Therefore, the findings of this research might apply to an even narrower segment of the home education population, depending on the percentage of home education students who go on to pursue postsecondary education.

Also, it was apparent from the interviews that each participant came from religious families and practiced his or her beliefs. It had not been my intention to find participants with strong faith-based backgrounds. Sharing a common faith perspective could limit the findings of this study because many readers might not be able to relate to the experiences of the participants. For future studies, I recommend that researchers deliberately select for a more diverse background. For example, researchers could purposefully select participants of different faiths, cultures, and socioeconomic backgrounds, as well as distinct homeschooling motivations, like ideology and pedagogy.

Finally, my research question focuses on student descriptions, experiences, and perspectives. Therefore, only interviews were used for data collection, contrary to the purposes of method triangulation and validity. However, my research is a multiple-case study with four participants, and I do achieve data source triangulation. This report is a dissertation and I have

worked with my doctoral supervisor and committee, providing triangulation through peer examination and review. Member checks by participants occurred after each interview. Observation and document analysis are commonly employed in case study, but I chose not to use these methods because I wanted to learn directly from student responses. I did take notes as I conducted the interviews; however, I transcribed interviews within a day of when each one occurred, and I did not find that my reflections afforded additional data.

Future Research

Based on my study, I suggest the following six questions for further research:

First: How are the experiences and perspectives of secondary home education students who do not attend postsecondary institutions different from those who do attend postsecondary institutions? Do home education students who attend postsecondary institutions do different things than those who do not attend postsecondary institutions? These questions are important because the answers could help us distinguish differences between home education students' preparation for postsecondary studies. Also, researching these questions could yield greater understanding about whether to attribute home education students' preparation for postsecondary studies to unique aspects of homeschooling, family support and circumstances, religion and other demographic information, a combination of these factors, or something else.

Second: How do home education students who are not assessed by using grades and tests perform in postsecondary education compared to home education students who are regularly assessed by using grades and tests? I was fascinated that Beatrice and Christopher did not consider grades and tests integral to their academic preparation for postsecondary education. By learning how home education students who use grades and tests perform compared to students who do not use grades and tests we could explore more academic assessment options and

customize these options to students. As well, learning more about the effects and importance of grades and tests could have implications on student anxiety, depression, and general mental health.

Third: How do home education students who do not follow a prescribed core curriculum perform in postsecondary education compared to home education students who do follow a prescribed core curriculum? Comparing these two groups of home education students could either lead to encouraging and emphasizing core curricular subjects or exploring a wider variety of curricular choices during primary and/or secondary education, depending on findings from the research.

Fourth: What effect does it have on academic performance in postsecondary education for secondary home education students to develop their own curriculum based on their interests and plans of what to pursue in postsecondary education and for a career, instead of using a curriculum developed by their parents or the state/province? I want to know how well home education students can be taught to self-direct their educations sufficiently to develop their own curriculum and still perform adequately in postsecondary education. If home education students can learn to develop curriculum effectively, parents and principal educators might give more attention to facilitating this development.

Fifth: What are the academic effects on home education students who are regularly read to by their parents or principal educators during secondary homeschooling? I was impressed with Christopher's experience being read to regularly by his mother when he was younger. Meredith also emphasized the importance of being read to by her aunt. I am interested to know how students' academic performance is influenced by being read to regularly by a caring parent or educator in secondary home education.

Sixth: What percentage of homeschooled students are principally educated by someone other than a parent and what difference does it make academically when homeschool students are principally educated by parents compared to someone else? This study revealed Meredith's unique experience being homeschooled mainly by her aunt. I assume that few homeschooled students are taught by someone other than their parents, but I do not know for certain. This idea for future research would help us clarify in greater detail what parents or others do to educate homeschooled students, and what roles parents and others play in educating homeschooled students.

Concluding Thoughts

This research was intended to explore the home education phenomenon to gain more understanding of what secondary home education students do and describe doing to prepare academically for postsecondary education. Although this was a study focused on the home education setting, the findings from the study illuminate principles of education that are applicable and relevant in other teaching and learning situations. For instance, developing self-directed learning skills and customizing curriculum could be beneficial to learners in other learning settings; parents or family members who are actively engaged in the education of their children and family could enhance student learning and preparation for higher learning; and regular discussion of what students are learning could reinforce students' understanding of pertinent principles and concepts and aid students' retention of knowledge. Home education families and others who are seeking to learn about alternatives to the traditional education system were the target audiences of this research. However, any individual or group who is interested in education can glean something meaningful from the study.

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Appendix A

Initial Interview Protocol

Research Question: How do postsecondary students who were homeschooled during secondary education describe their academic preparation for postsecondary education?

1. Thinking back, could you tell me about your homeschooling experience for grades 9-12? Did you have a specific routine?

2. How was your learning assessed?

3. Did you ever feel academically ahead or behind? Can you tell me about how you came to this understanding?

4. Were there specific experiences you had or specific routines you practiced at home that you believe helped prepare you for postsecondary?

5. What are some things you did or did not do that you feel were a hindrance to your postsecondary academic preparation?

6. How would you describe the transition from the way you learned as a home education student to the way you learn as a postsecondary student?

7. How did you prepare for diplomas and postsecondary entrance exams?

8. Based on your learning experiences during grades 9-12, would you choose homeschooling again?

9. If you were to home-school your own children during grades 9-12, what would you do differently to prepare them academically for postsecondary?

Appendix B

Example of Transcription – Important Words, Phrases, and Sentences Pertaining to the Research

Question

[handwritten top margin]: not sure about chicken + egg → do self-driven students especially thrive in a home education setting; or does the setting encourage students to be self-driven; how much is just who they are?

[handwritten right margin, vertical]: ownership + pride in learning;

and that gave me a sense of ownership and pride over my education that I just don't see in most of my classmates or the students I teach. It gave me a completely different worldview going into it and I attribute everything I've been able to achieve in university to the training I experienced through high school home-school.

How did you develop writing? How did you develop your academic behaviors or skills?

[handwritten right margin, vertical]: family support; access; encouragement; work ethic; to the involvement

I've always loved writing. That's always been a strong talent of mine. I remember when I was about 6, I wrote a short story about something in ancient Rome and someone had been kidnapped and made a slave, I don't really remember the details. But I was really, really proud of this story. I thought it was basically the best thing that had ever been written. I showed it to my grandfather who has written many books and he read it and put it aside and he said, "Alright kid, you have a talent with words and you need to be a writer, so you need to develop this." So I kind of made that my purpose in life. I was obsessed with developing my writing and being as good of a writer as I could. During high school, I obviously read a lot and I found people whose style I particularly admired so I would make it a challenge to myself to okay, "I'm going to answer this English essay writing like Dickens. I'm just going to figure out how to do it and I'm going to copy Dickens and we'll just see how it turns out." And that worked out really well. I figured out what stylistic things I liked and what sounded good. Intuitively knowing what sounds good, that's worth its weight in gold. I worked really hard at it and read a lot and how it was written and studied rhetoric and things like that. Also in high school I had what's called a "tumbler blog". It's a social media platform and I got involved with it when I was about 14. It was basically a comedy, sarcastic blog. The pressure of that and the pressure of having to produce content and a regular steady flow of content, that was also very helpful. I also got involved with a couple of friends of mine in collaborative online writing projects. We would create characters out of nothing and write stories with them in it and place the same characters in different stories, different plot lines. All of that was a really good training ground as far as writing skills.

[handwritten left margin, vertical]: Confidence; emphasis on reading + writing; academic fearlessness + willingness to experiment; self-driven

[handwritten left margin, vertical]: time spent on academics; extra curricular + learning working; academic + learning facilitation + involvement

How often were you reading and writing through the high school years?

Most of the time for hours a day. I was probably reading for at least 2 or 3 hours a day. Most of what I did was write for assignments and things. I'd be writing probably 6 or 7 hours a day of just actively working on it.

[handwritten]: reading + writing.

Paint me a picture of you reading a book in high school. Where were you and what were you reading?

[handwritten]: self-driven

[handwritten right margin, vertical]: resourceful + library use

[handwritten right margin, vertical]: parental support + access

In high school, I was an absolute aficionado of the Edmonton Public Library service. So I had read everything my parents had on a few topics I was interested in. I was really interested in early imperial Rome, the French Revolution. I had read everything that my parents had on it and I wanted to know more. I had a library card and I was not afraid to use it. So I would make my mother take me to the library two or three times a week and every time I would come home with probably 15-20 big heavy historical books on different topics, and I would just sit down and read. I'm a very quick reader so I could finish a 3-400 page book in maybe 2 hours. So I would just read and devour information and follow footnotes and look things up and just really get into it. I was a very odd person.

[handwritten]: read!

Appendix C

Example of Transcription – Potential Quotations

Were both parents communicating expectations and were they rigorous in what they expected?

Generally it was just in our regular discussions but at times it was more of a rigorous expectation, like getting ready for the ACT. There were some specific directions they gave as to how to prepare for that. As far as the balance between my mom and my dad, it was mostly my mom because she was the one at home homeschooling us. But there were a lot of assignments where my dad would read over our stuff and give us feedback. He was also very involved.

Family support (2): expectations

Did anyone else besides your parents really influence your education?

There were a few times where I would get a mentor to inspire me. My uncle would have me read books on Political Science and Government, and History and then we'd discuss them over the phone. That was over the course of maybe a year. I did the same thing with my aunt for literature in general. We picked books together that we wanted to read and then we'd discuss them over the phone or over Skype. That went on for a long time. I had guitar mentors for a while, two of them, but it wasn't for very long. And my religious education teachers had a lot of influence also. Even though I was just one of the students in the class there were times when they would stay and chat or whatever.

Outsourcing-mentorship (3); family support (2)

How could you tell that you were progressing and advancing in subjects without taking tests?

One indication was time spent on something. A lot of our school was time-oriented so we'd try to spend like six hours of focused study a day. You could look back in a week and figure how many hours you spent on something. That was the most common one we'd use. And the other one was just knowing more stuff than you did before. For instance, I could do Math problems that I couldn't do before or I could read harder books than I was before. But it was hard to track progress because when I got to university I thought I'd be so far behind because I didn't know where my progress was.

Assessment (2); pedagogy

How did you adjust with the time difference in university to explore your interests like you did during secondary?

It was a really smooth transition and I didn't expect it to be that smooth. My initial anxiety was finding the classroom and knowing how to interact in the classroom. A lot of it was learning the "norms", like how often do people ask questions? And within two class sessions you have it figured out. The self-discipline I had from spending so much focused time on things like guitar because you really want to progress at that one specific thing really helped with school. So much of a university degree doesn't happen in the classroom but when you get home. Undergrad is three hours at home for every hour in the classroom so three times as much self-directed learning. I think that's what made the transition so smooth because that's how I had learned anyway. When other kids were struggling with their freedom of three hours outside of class, I was only struggling to get used to the one hour in class.

Appendix D

Example of Emergent Themes and Number of Responses

responses = 130+

Themes for Meredith

1-Work ethic – 5
2-Learner attitude – 25
3-Self-directed – 4
4-Free Learning – 3
5-Outsourcing – 7
6-Family Support – 50
7-Curriculum and pedagogy - 26
8-Character – 10
9-Ability/Confidence to Learn – 2
10-Reading – 4
11-Writing – 3
12-Observation/Comparison – 1
13-Student Performance – 2
14-learner attention – 9
15-Assessment – 10
16-Learning Assumptions – 2
17-College Knowledge – 2
18-Learning Environment – 3
19-Modeling – 2

Teaching and Learning Philosophy	Learning Attitudes and Activities	Family Involvement
Independent and Self-directed Learning -4	Learner attitude-25 *perception/Self-Awareness*	Outsourcing-7
Freedom/Choice Learning-3	Work ethic – 5	Family Support/Accessibility-50 *Most on family involvement*
Curriculum and Pedagogy-26		Modeling – 2
Assessment-10	Learning Ability/Confidence-2	
Learning Environment-5		
Character – 10	Reading-4	
Learner attention – 9	*Student Performance - 2	
	Observation/Comparison-1	
	Learning Assumptions-2	
	College Knowledge-2	
	Writing – 3	

Student perception
Student perception?