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EDUCATIONAL EXPERIENCES OF HIGH PERFORMING ADOLESCENTS: IN THEIR OWN WORDS

A Dissertation Presented

by

Jean Olson

to

The Faculty of the Graduate College

of

The University of Vermont

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

October, 2009

Accepted by the Faculty of the Graduate College, The University of Vermont, in partial fulfillment of the requirements for the degree of Doctor of Education specializing in Educational Leadership and Policy Studies.

Dissertation Examination Committee:

Susan Brody Hasazi, Ed.D.

Advisor

Susan Brody Hasazi, Ed.D.

Judith A. Aiken, Ed.D.

Katharine Shepherd, Ed.D.

Catherine Donnelly, Ph.D. Chairperson

Patricia A. Stokowski, Ph.D.

Associate Dean,
Graduate Studies

Date: August 27, 2009

Abstract

The purpose of this qualitative research, using narrative inquiry, was to describe, illuminate, and analyze the perspectives of a unique population - six high performing adolescents - who reflected on their educational experiences in Vermont. With input from their parent/guardians, their educators and the students themselves, this study was intended to shine a light on the experience of each of these participants. "The central idea of narrative analysis is that stories and narratives offer translucent windows into cultural and social meanings" (Patton, 2002, p. 116). This study is framed in their first-person voices to reveal the perspectives of students, parents, and teachers related to the education that these talented learners encountered in Vermont.

As the starting point, my research questions related to perceptions of the students' educational experience and those factors leading to success as well as those which inhibited their learning. To provide an understanding of their educational experiences, I focused on first-person narratives from students, their parents, and an educator the students nominated as having made a significant positive contribution to their education. Next, I present a collective case study including the perspectives of the students, family members and teachers illuminating the essential elements of each group as culled from their descriptions. Drawing upon these descriptions, I describe the successes and challenges from the perspective of the student, family, and teachers.

Findings suggest these participants hold stories similar to one another. Students, parents, and educators related experiences that resonated with one another in their commonalities. Generally, the findings point to the importance of parents, teachers, and opportunities to learn with academic and artistic peers as being significant. These high performing students also valued independent learning experiences, flexible scheduling, and higher level reading experiences. Using their first-person accounts as the basis of this study, I conclude with a discussion of the implications of my findings and recommendations for the education community involved with high performing students.

Dedication

For the students of The Governor's Institutes of Vermont and

For my husband, George, and my daughters, Emilia and Sarah, who inspired this study and offered generous loving support each step of the way. I am so grateful to you.

Acknowledgements

First, I would like to acknowledge the students: Alan, Betty, David, Emma, Eric, and Lily for being willing to share their stories. Also, their parents and their educators who opened windows into their caring efforts on behalf of their students. They provided the inspiration to write this study and to aspire to advocate for other learners like them.

We learn from those people and those circumstances that provide challenge, support, validation, and affirmation. Dr. Susan Brody Hasazi inspired me with her interest in this study. She wanted to learn, as I was learning, about the educational experience of these students. We shared books, ideas, and questions along the journey. I am changed for the better from working with her.

I would also like to acknowledge the members of the 2003 Ed.D. Cohort, especially Amy Demarest and Shelley Vermilya, who helped to keep my interest strong through several hurdles. Both are ongoing models of academics with passion for their own studies.

Dr. Carol Story, a leader in gifted education in Vermont, is a friend, colleague, and invaluable mentor. Carol has been an advocate since 1984 for the people whose stories are in this study. She gently asked hard questions and challenged me to think critically about my findings and my writing. Carol has been very important to me in this journey.

Tracy L. Cross, Ph.D. has been a significant inspiration because of his ongoing dedication to bright students, his appreciation for Vermont and our efforts at The Governor's Institutes of Vermont, and for his willingness to speak and write on behalf of students he feels are overlooked in our education systems.

My colleagues at the National Conference of Governor's Schools have offered constant support. In their work with talented students, they change thousands of lives each summer. They often struggle to keep their programs alive and they do it because they recognize the value of their work.

Friends, Cory and Shelley and others, generously offered to read early drafts and make comments. Coleen Austin kept the office running effectively through several months of intensive dissertation writing. This effort succeeded because of their support.

We also learn from adversity. My sense of purpose and persistence was reinforced by my first advisor for this study who challenged me by claiming that my study was not worth doing and that there were no faculty at the University of Vermont who would be interested or willing to work with me. Upon reflection, I understood then just a little of what the students and families in this study encountered in their educational lives. I understood the message to be that their stories, their struggles, did not matter, even to a leader in the college of education at the state's university.

Because of constant interaction with high school students participating in The Governor's Institutes of Vermont, I know these stories do matter. It is their stories that propelled me into this program and study. They describe educational experiences that are less than we can provide, if we would only choose to see them and their needs differently. Through this writing, I hope to illuminate their potential and advocate for their rightful and appropriate education. It is society's choice and it will bring both societal and personal gain if we acknowledge our brightest students in ways that nurture them to grow to their full potential.

My husband, George, and my daughters, Emilia and Sarah, provided love, support, encouragement, and unwavering belief that this study is important and that I could do it. They are my inspiration in all ways and I am so very grateful to have them in my life.

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CHAPTER 1: INTRODUCTION

The purpose of this study is to describe the educational experiences of a sample of high-performing adolescents in Vermont, as well as their parents, and the teachers who teach them. The term "high-performing" is used throughout and is intended to broadly represent that diverse group of students who are sufficiently advanced in any domain to require adaptation from the standard programming within their public school. Later in this paper there is a discussion of current definitions, including Vermont's, that typically use terms such as "gifted" or "talented," words that may be emotionally loaded for some readers and which may preclude openness to the world of students who are, simply, different learners. For that reason, I have chosen to use "high-performing" and "high-potential" although the reader is cautioned that these descriptors are meant to portray one domain, or perhaps more, but not every aspect of the student's academic or creative life.

A March 2004 meeting in Montpelier with former Education Commissioner
Richard Cate, which I attended, brought together educators and Vermont families who
have children with exceptional abilities who were concerned about the lack of policies for
teaching high potential students. Among the narrative themes were their perceptions that
Vermont's educational system is not well equipped to provide for students with
exceptional abilities. They noted their frustration with public school personnel who
lacked the training necessary to provide important resources, including identification,
validation, and appropriate educational challenges for their students. Students and
parents related stories of their desire to continue in public school programs, attempts to

escape being labeled elitist, pushy or different, and anguish when their efforts were ineffectual.

Beyond the logistical difficulties of finding appropriate educational services in public schools for high-performing students in Vermont, and the emotional cost for parents and children, many parents involved in the meeting cited the additional financial expense of educating their children. Though all parents at the meeting recognized both the need, and their willingness, to pay for additional educational experiences, they also noted their concerns about the resources they contributed beyond the usual costs of schooling to keep their students challenged, motivated, and engaged. One mother stated that she pays taxes for every other child in her community to be educated, but her two children require special services that they cannot access in their local school. As a result, she and her husband provide the financial resources for their children to be home schooled, as well as for the travel, books, and tuition needed for them to enroll in university courses. To give a sense of her son's math ability, she noted that as a 6th grader, he scored 680 in math on the SAT exam; as a 9th grader, he received an A in a college-level pre-calculus class, for which she paid for the tuition. She tried for many years to acquire adequate services for both her children and finally accepted the school system's inability to meet their individualized needs. With acknowledged sadness, she eventually removed them from school. She and the other parents questioned the Commissioner about the lack of resources for their children. He listened carefully and asked numerous questions, but made no promises of change.

Historically, "identifying and educating gifted youth has intrigued virtually all societies in recorded history" (Colangelo & Davis, 1997, p. 5). From ancient times to Renaissance Europe and Asia, there are examples of talented students being identified and educated based on the values of their culture, i.e., athleticism, militarism, arts, or other various intelligences. It is interesting to note that, beginning in the Tang Dynasty, the Chinese treated their talented students in ways we would now acknowledge as gifted education:

First, they accepted a multiple-talent conception of giftedness, valuing literary ability, leadership, imagination, reading speed, reasoning, and other talents. Second, they recognized that some precocious youth would grow up to be average; some average youth would later show gifts; and true child prodigies would show gifts and talents throughout their lives. Third, they realized that the abilities of even the most gifted would not develop fully without special training. Fourth, they believed that education should be available to children of all social classes, but that children should be educated according their abilities. (Colangelo & Davis, 1997, p. 5)

Times and educational policies have changed. At present in America, the No Child Left Behind Act (NCLB) aims the nation's attention and resources at ensuring that nonproficient students move systematically toward proficiency. "There is no incentive for schools to attend to the growth of students once they attain proficiency, or to spur students who are already proficient to greater achievement, and certainly not to inspire

those who far exceed proficiency" (Tomlinson, 2002, p. 36). This is not strictly a new phenomenon.

Over the years, we have discovered that when it comes to leaving no child behind, highly gifted students are the most likely to fall through the cracks in American classrooms. They are the most likely to underachieve, to suffer the greatest gap between their performance and what is asked of them. (Davidson & Davidson, 2004, p. 2)

Nationally known researcher and psychologist Linda Kreger Silverman highlights an affective facet of gifted students by saying that, "In addition to measurable underachievement, there is an emotional impact when students are not appropriately educated. To the uninformed, giftedness may seem a sort of privilege, but to the gifted individual, often it feels like a burden" (Silverman, 1993, p. 3). Silverman further notes it can be painful to be different in a society that mocks differences and that additional pain "may also come from internal sources - from a finely tuned psychological structure that experiences all of life with greater sensitivity" (p. 3). In her opinion, "Giftedness has an emotional as well as a cognitive substructure: cognitive complexity is fertile ground for emotional depth. Thus, gifted children not only think differently from their peers, they also feel differently" (p. 3).

When considering the controversy that arises when discussing if, or how, to nurture the talents of our brightest children, there are several ongoing concerns. One is that we struggle in America with issues of equity and excellence. Though I would argue we can achieve both, this idea is often seen as a paradox. When the Russians were about

to land on the moon ahead of the United States in the late 1950s, America geared up for a concerted effort to train children who exhibited gifts, particularly in math and science.

During other periods, there was a greater focus on equity with the prevailing view that we should treat all students equally. Deborah Stone describes the controversy that arises when equity is the goal, as different sides hold varying opinions about what equity means related to the distribution of services or goods, or in the case of education, opportunity and disadvantage (Stone, 2002). To illustrate the issue regarding equity, Stone used the example of a delicious chocolate cake that she wants to distribute equally among her students. She cites her solution of cutting the cake into a number of equal portions as obvious, but not everyone in the class agreed. Students challenged her starting idea with eight variations that essentially meant different size slices, but equality of something else. These student challenges were based on questions including: what about those who are allergic to chocolate or what about those who are "lower" in the hierarchy or who is "more deserving" because of a particular circumstance? (Stone, p. 39). In education, as with this cake, it seems that in principle, it is easy to define equity, but in practice, there are competing forces to accommodate.

In our most recent era of focus on equity, mainstreaming and collaborative learning have served some segments of the school population, but there have been negative consequences for high-performing students (Colangelo & Davis, 1997). Their progress is stymied in two respects because they are not generally able to work at their own speed and are frequently asked to "help" a collaborative group (Colangelo & Davis). While some interactions with less able students may be valuable, the issue of being held

back arises when there is little to no time with academic and artistic peers (Colangelo & Davis).

Although many researchers advocate for the needs of these high-performing learners, these students are not a national priority at this time (Davidson & Davidson, 2004). They are also not a priority in most school districts in Vermont, though legislators have taken a small step to enhance the education of high-performing learners. In 1996, the Vermont Legislature passed into law a definition of Gifted and Talented Children, which is essentially winning and losing at the same time. While students can now be identified, by qualified professionals, there are no specific services mandated and there are few professionals in Vermont who have been educated to support students with high abilities.

A 2002 survey, completed by Vermont researchers Story and Bogue found that only nine percent of Vermont schools have a policy for services for motivated and talented students, and only 24 percent have a system for identification of these students. Fewer than 10 schools have comprehensive gifted or enrichment programs. In recent years, the state has not provided additional resources targeted for talented students or to prepare educators to appropriately teach these students. Teachers, guidance counselors, and administrators can currently be certified to work in Vermont with no training in identifying or serving these students (personal communication, DOE).

While there are potentially many students to identify, there is a lack of qualified professionals in Vermont to identify these students. We can question why this is the case, but the reality is that pre-service teachers, administrators, and guidance counselors

receive little or no preparation in identifying or serving gifted students. At Johnson State College (JSC), there is typically a one-hour lecture provided to pre-service education majors by one of the few educators in Vermont with a doctorate in gifted education. At the same time, JSC is at the only Vermont higher education institution that delivers a Master's Degree in Gifted Education.

The purpose of this study is to describe, illuminate, and analyze the perspectives of a specific population – high-performing adolescents – with input from parent/guardians, educators, and students themselves. "The central idea of narrative analysis is that stories and narratives offer especially translucent windows into cultural and social meanings" (Patton, 2002, p. 116). This study provides a lens for the perspectives of students, parents, and teachers related to the education that high-performing students encounter.

The backdrop to these stories is that education data is generally reported in the aggregate. A typical search for a snapshot of how students are faring in school will lead to reports such as the Vermont Department of Education's School Profiles. Information is available about the percentage of students who fall into certain categories, including the numbers of students who meet or exceed the standards, as well as those who are identified with certain risk factors such as smoking or early pregnancy, and other critical information. While giving a valuable image of a school, community, state, or nation, it is understandably impossible to glimpse the story of "one." Certainly, the large view is important, and I suggest it is also critical to understand the lived experience of high-performing youth in Vermont.

When questioning whether state officials and others in power can be engaged by personal narratives, as well as extensive data reports, it is enlightening to know that when former Education Commissioner Cate convened the meeting described earlier, the other participants and I arrived with a formal agenda and previously prepared two-minute reports related to the state of gifted education in Vermont. Commissioner Cate surprised us by requesting that we change the format to open conversation and that we, particularly the students, share stories about their education in Vermont. While I know this narrative approach was powerful for me, I also know it impacted Commissioner Cate as he elongated our meeting time from the scheduled 45 minutes to two and one-half hours.

I have come to value individual student stories, both for their singular messages and for the window they provide into Vermont's larger educational systems. Since 1994, I have worked as the Executive Director of the Governor's Institutes of Vermont, which offers summer and winter institutes for high-performing, motivated high school students. Throughout these years, I have heard repeated student comments that spurred me to wonder about the students' school experience. Because of their stories, I focus on four key questions:

- 1. How do high-performing students perceive their educational experiences?
- 2. What are the factors that lead to their success in educational settings?
- 3. What factors inhibit their opportunities to demonstrate their abilities?
- 4. In what ways can high-performing students maximize their talents through differentiated instruction related to their abilities?

As the researcher, I need to acknowledge that "especially in applied fields . . . a strong autobiographical element often drives the research interest" (Marshall & Rossman, 1999), p. 29). This is valid for my interest and requires a self-awareness that challenges me. As an avenue to illustrate and understand the place and stance of the researcher, I appreciate the beginning of Catherine Kohler Riessman's book, *Qualitative Research Methods: Narrative Analysis* (1994) because she names her Preface as "Locating Myself" and proceeds to write that:

The construction of any work always bears the mark of the person who created it. So, before formally discussing narrative analysis, I begin by locating myself and the contexts that shaped the volume and authorize its point of view. (p. v)

Following Rieissman's (1994) lead, I will attempt to locate myself so the reader can better appreciate my feelings and views on the proposed study. Early in our country's history, education was reserved for those who could both qualify and pay for schooling. As education became compulsory, schools created programming for gifted students. "By about 1920, approximately two-thirds of all large cities had created some type of program for gifted students" (Colangelo & Davis, 1997, p. 6). Throughout the rest of the century, there were ups and downs in interest that can be ascribed to events such as the Depression, which lessened interest, and to the Sputnik scare in 1957, which heightened awareness.

My most energizing public school academic experience was in grades six through eight and was the direct result of Sputnik. It was a time when America sought to identify and serve bright students (at least those who were strong test-takers) because policy makers perceived the United States was losing ground internationally, primarily in the realms of science and technology. It was also a time when the nation's focus was to ensure its economic success through talent development, not to cultivate intellect for the common good (Howley, 2000). One well-known researcher "described the aftermath of Sputnik as a 'total talent mobilization'" (Tannenbaum, as cited in Colangelo & Davis, 1997, p. 7). Schools, such as mine, created separate classrooms where acceleration, curriculum compacting, and ability grouping were implemented. Our multi-age curriculum was condensed so that we completed some high school courses before leaving middle school. We, unlike the other middle school students, were introduced to a foreign language. Unfortunately for me and others, "The Sputnik scare and the interest in educating gifted and talented students wore off in about five years" (Colangelo & Davis, 1997, p. 7).

Today, educators recognize a greater breadth, depth, and variability of intelligence, in great part due to Howard Gardner's research on multiple intelligences (Gardner, 1993). In the 1950s, other students and I were chosen to participate in the Academic Group due solely to our test scores. From an informed adult perspective, I know this left some qualified students behind in regular classrooms, but I also appreciate that some of us escaped into an environment better suited to our learning styles.

Remembering myself as that middle-school student, several key circumstances stand out clearly even 45 years later. One is the pace, the tempo of the learning. It was fast. I had started school a year early, a form of acceleration, and then suffered through

endless days of slow, repetitive activities until I was placed in an "Academic Group." Dr. Karen Rogers, a professor at the University of St. Thomas, Minneapolis, has conducted research on the impact of pace on learning and found that students with an IQ of 130 learn at a pace eight times faster than those with an IQ of 100 (Rogers, 1991). While this is important, what is perhaps even more important is her discovery of the difficulties bright students encounter when they are asked to learn at a slower pace; the information becomes less accessible to them.

Another memorable factor is that I was with intellectual peers, some of whom were a grade or two older. I remember learning tremendously from my classmates, many of whom seemed far more capable than I felt, at least in some subject areas. Instead of waiting while non-readers struggled with phonics, I had the inspiring opportunity to listen to my fellow students as they explored their creative and divergent problem solving skills and challenged all of us to greater heights.

This Utopia was an oasis. The school years before and following were grim.

Reflecting on the value of my educational experience is informative because much of who I was and what this classroom offered are engendered in current research on gifted education.

In a 2004 article focused on the role of chance in the lives of gifted students, nationally known researcher, psychologist, and educator Tracy Cross described basic personal attributes and added a brief home life sketch of four gifted students ranging from a girl, the oldest child of four, with a single mother working two low-paying jobs, to a boy who exhibited extraordinary talent in mathematics and who attends a rural K-12

school with only two teachers and one aide, to a migrant farm child whose family is continually on the move, and an adolescent girl, daughter of well-educated parents with financial resources and a stable, advantaged home situation. "Given the information shared about them, little of the actual likelihood of each of these children reaching his or her potential is emanating from his or her own potential and specific qualities, per se" (Cross, p. 2). Cross goes on to say, because they live in Wyoming rather than a state without the mandate to identify and serve high-performing students, they were all identified as gifted students and all are receiving appropriate services. Chance factors may have dealt them a combination of ability as well as some harsh circumstances, but there is reason to hope these students will thrive and grow into their potential because of these services (Cross, p. 3).

There are demographic similarities between Vermont and Wyoming. Both are poor and rural states with many small schools. In 2003-2004, Vermont enrolled 99, 978 students in grades K-12, while Wyoming enrolled 88,116. For that same year, Vermont allocated an estimated \$1,125,183,000 for education and Wyoming an estimated \$970,940,000.

For the four students described above, and the many students who statistically could be identified across the widely heterogeneous group of high ability students, their lives may differ greatly based on the chance factor of their birth state. In Vermont, gifted programming is not mandated and no gifted funding is available; while in Wyoming, gifted programming is mandated and funding is available. The legislation provides for an

education program matched to the student's abilities in Wyoming, but is not available in Vermont (www.geniusdenied.com/Policies/StatePolicyDetail).

A major outcome of this study is to describe the educational lives of high ability adolescents in Vermont and to begin to uncover their personal sense of engagement in their education, as well as their understanding of their potential and what challenges and successes they met along the way. A second focus will describe the perspectives of all the interviewees including students, parents, and teachers. Through the discussion in Findings and Recommendations, I hope to advance the opportunities to enhance policy and practice related to high-potential and high-performing learners.

CHAPTER 2: LITERATURE REVIEW

In the United States, we are justly proud of our egalitarianism, of our demand for equal education for all, but we are equally proud of our goal of individualization to fit the program to each child's needs. We have moved far toward providing access to education for all, but we are less effective in meeting the differing needs and abilities of individual children. For those children at the extremes – the handicapped and the gifted – the commitment to individualization has been halting and incomplete. Failure to help handicapped children reach their performing is a personal tragedy for them and their families; failure to help gifted children reach their performing is a societal tragedy, the extent of which is difficult to measure but which is surely great. How can we measure the loss of the sonata unwritten, the curative drug undiscovered, the absence of political insight? They are the difference between what we are and what we could be as a society. (Gallagher, 1985, p. 4)

In this literature review, I describe current and historical definitions of giftedness, methods of identification, and characteristics of gifted students, including emotional aspects and social development issues.

Who Are the Gifted? A Review of Evolving Definitions

It is important to understand the practical and political purposes of defining giftedness. First, "a definition of giftedness is a formal and explicit statement that might

eventually become part of official policies or guidelines" (Renzulli, 1998, p. 2). Second, it is logical that written definitions could become the basis for identification and programming, resulting in great implications for educators and families. Renzulli underscores the importance of this because "we must recognize the consequential nature of this purpose and the pivotal role that definitions play in structuring the entire field" (p. 2). Finally, there should be a rationale that demonstrates the relationship between a definition and recommended identification and programming practices (Renzulli). In contrast to this opinion, Vermont's definition of gifted learners, described below, does not include a statement of need for appropriate services. Rather, the Department of Education (DOE) requires that "professionally qualified persons" should implement the process of identifying students; however, there are scant policies to guide schools and teachers.

While most current scholars in this area seem to agree that giftedness is a mix of intelligence with personal characteristics and other skills, which combines with positive environmental and educational factors to influence a young person's potential in a certain endeavor, I have encountered a variety of evolving definitions in my reading. In his landmark study, Terman (1925) identifies gifted individuals as those who score in the top two percent on intelligence (IQ) tests (Colangelo & Davis, 1997). Throughout his famous longitudinal study, Terman held to his belief that intelligence is biologically based and fixed; though over time he discovered that high IQs are not necessarily enough for an individual to excel in any particular domain.

Fifty years later, former U.S. Commissioner of Education Sidney P. Marland (Marland, 1972) proposed this broader definition, which includes an emphasis on professional expertise. It provides the foundation for many state definitions:

Gifted and talented children are those identified by professionally qualified persons who by virtue of outstanding abilities are capable of high performance. These are children who require differentiated educational programs and services beyond those normally provided by the regular school program in order to realize their contribution to self and society.

(p. 5)

There are several ideals in Marland's (1972) definition that will be repeated throughout the following definitions: the importance of professional identification; the concept of individual potential rather than a fixed capacity; the requirement for appropriate and differentiated educational services; and the goal of realization of potential, both personal and societal. These principles are at the core of current ideas regarding how best to support all learners, including gifted students.

Among modern definitions and conceptions of giftedness, those proposed by theorists Howard Gardner, Joseph Renzulli, Francoys Gagné, Robert Sternberg, and Abraham Tannenbaum are part of the current evolution. Gardner, in 1983, shifted prevalent thinking at the time when he presented the idea of multiple intelligences and stated that "...a prerequisite for a theory of multiple intelligences, as a whole, is that it captures a reasonably complete gamut of the kinds of abilities valued by human cultures" (Gardner, 1993, p. 82). Similar to other definitions cited in this paper, Gardner highlights

the importance of the particular ability being valued in the culture. An example of an intelligence that was once valued, and is no longer to the same extent, is that of the hunter. For many humans, their survival historically depended on hunting. In many areas of the world, it is no longer relevant. Among Gardner's intelligences, spatial and bodily-kinesthetic abilities are at the core of a hunter's expertise and now would likely be measured in a more relevant domain such as engineering or athletics. His list of intelligences, which continues to grow, includes linguistic, musical, logical-mathematical, spatial, bodily-kinesthetic, intrapersonal, and interpersonal.

Joseph Renzulli, based at the National Center for Research in Gifted Education at the University of Connecticut, divides giftedness into two broad categories. The first, which he calls "schoolhouse giftedness," is described as individuals who are strong in academic areas and who are successful test takers with the skills necessary for school achievement. The second category he refers to as "creative-productive giftedness," which he uses to describe areas where the value is on the creation of original material designed for specific audiences (Renzulli & Reis, 2004).

Renzulli believes that there is often interaction between the two areas, both of which are equally important. He recognized further components of creative-productive giftedness and refers to them as creativity and task commitment (Renzulli & Reis, 2004). Renzulli created his three-ring model of giftedness based on research with creative adults who have made valuable contributions to society. In this model, he proposed that:

Gifted behavior . . . reflects an interaction among three basic clusters of human traits – these clusters being above average (but not necessarily

high) general and/or specific ability, high levels of task commitment (motivation), and high levels of creativity. Gifted and talented children are those possessing or capable of developing this composite set of traits and applying them to any performingly valuable area of human performance. (Davis & Rimm, 1998, p. 19)

In his definition, Francoys Gagné (1993) describes a distinction between giftedness and talent. His concept of giftedness refers to natural aptitudes, in at least one domain, which places a child in the top 15 percent of their age peers. Talent, on the other hand, describes superior mastery, systematically developed skills, in at least one domain which also would place the child's achievement within the top 15 percent of age peers in that field. In this model, like others noted, natural ability is the starting place with the caveat that it will be affected by intrapersonal and environmental factors. Like Renzulli, Gagné highlights the critical role of motivation in helping to propel a student forward (Gagné).

In his triarchic theory of human intelligence, Robert Sternberg (1997) states that unless the multiple sources of intelligence are examined, there is a risk that large numbers of gifted individuals will not be identified. He proposes the three main kinds of giftedness include "analytic, synthetic, and practical abilities." Examples of each are presented in the same order: being able to dissect and understand a problem; being insightful, intuitive, creative; and the last involves the ability to apply one of the previous abilities in everyday situations. "Giftedness is as much a well-managed balance of these

three abilities as it is a high score on any one or more of them. I sometimes refer to a gifted person as a good 'mental self-manager'" (Sternberg, p. 44).

Believing that fully realized talent is found only in adults, Abraham Tannenbaum (1997) proposes a definition that stresses performing. Tannenbaum then frames this potential into eight realms. A brief description is included with each category.

- 1. The producer of thoughts creatively. This is the philosopher, not the professor of other people's philosophies.
- 2. The producer of thoughts proficiently. This is the expert who can solve complex problems with insight rather than innovation.
- 3. The producer of tangibles creatively. This is the inventor or artist who produces new products that are either aesthetically or functionally appreciated.
- 4. The producer of tangibles proficiently. This is the precision worker whose strength is meticulousness, rather than originality.
- 5. The performer of staged artistry creatively. This is the interpreter or re-creator.
- 6. The performer of staged artistry proficiently. These are dancers, musicians, actors who faithfully follow the creator's art.
- 7. The performer of human services creatively. These are the innovative leaders in fields that serve human condition.
- 8. The performer of human services proficiently. These teachers, doctors, administrators demonstrate superior management skills rather than designing the original plan. (p. 28)

In his description of how children can grow into adults who demonstrate the above, Tannenbaum (1997) states very few of these talents are demonstrated in childhood. Tannenbaum cites these as the factors that are important linkages from promise to fulfillment:

(1) superior general intellect, (2) distinctive special aptitudes, (3) a supportive array of nonintellective traits, (4) a challenging and facilitative environment, and (5) chance – the smile of good fortune at critical periods of life. (p. 38)

Tannenbaum goes on to say:

But children can grow up to be gifted in the way adults are if they are made of the right stuff in ability and personality and can make the most of mediated enriching experiences punctuated by timely strokes of luck as they grow older. Until maturation and wise nurturance are allowed to run their courses, all that can be said for precocious children, even the prodigies among them, is that they are potentially gifted. Whether, and in what ways, early promise will be fulfilled, only time can tell. (p. 38)

Federal and State Definitions

Having described current philosophy and several well-accepted variations on definitions of giftedness, the following is a review of federal and state definitions that can be used to identify children for special funding and services. All, except Vermont, refer to the need for identification and provision of appropriate services.

The Education Consolidation and Improvement Act, passed by Congress in 1981 stated:

Gifted and talented children are now referred to as children who give evidence of high performance capability in areas such as intellectual, creative, artistic, leadership capacity, or specific academic fields, and who require services or activities not ordinarily provided by the school in order to fully develop such capabilities. (Clark, 1988, p. 6)

More recently, based on the evolving understanding of the nature of intelligence and a growing number of ways to identify and develop talent in children, the following definition was created and is used in the federal Javits Gifted and Talented Education Act:

Children and youth with outstanding talent perform or show the potential for performing at remarkably high levels of accomplishment when compared with others of their age, experience, or environment. These children and youth exhibit high performance capability in intellectual, creative, and/or artistic areas, possess an unusual leadership capacity, or excel in specific academic fields. They require services or activities not ordinarily provided by the schools. Outstanding talents are present in children and youth from all cultural groups, across all economic strata, and in all areas of human endeavor. (Ross, 1993, p. 26)

Vermont's definition contrasts with earlier definitions in that it does not specify the need for appropriate services. In Vermont, the definition of gifted states:

(a) 'Gifted and talented children' means children identified by professionally qualified persons who, when compared to others of their age, experience or environment, exhibit capability of high performance in intellectual, creative or artistic areas, possess an unusual capacity for leadership or excel in specific academic fields. (Sec.1.16 V.S.A., 13)

Identification

The identification of gifted children and youth is an area of ongoing discussion in the literature. As our views about intelligence change, so must the means for identifying high-potential students. When we believed that intelligence was hereditary and fixed, a single test could document the capacity of the test-taker. Intelligence is currently thought of as a combination of genetics and environment and student intellectual performance can be elevated by providing an academic environment in which students can flourish (Gallagher, 1985, p. 9).

As cited in Gallagher (1985), Hagan says, "It should be remembered that giftedness is relative, not absolute. We identify an individual as gifted or potentially gifted because he or she possesses more of a certain characteristic or characteristics than do others" (p. 10). It is not that certain characteristics are unique, but when they are in combination and demonstrated at an early age, it is remarkable and sets a child apart. Ellen Winner (1996) uses graphic language to describe observable characteristics of giftedness that are identifiable at an early age; namely, precocity, need to march to a different drummer, and rage to master.

Given the recent research on brain development and the current discussion about different kinds of intelligences, not simply those few measured by intelligence testing, Clark (1988) defines intelligence as "total and integrated brain function, which includes cognition, emotion, intuition, and physical sensing" (p. 6). She states that how giftedness is demonstrated depends on both genetics and environment. "The growth of intelligence depends on the interaction between our biological inheritance and our environmental opportunities to use that inheritance" (Clark, p. 6).

This leads to the question of how to measure this growth of intelligence. Even while there is recognition that IQ tests are limited, there is evidence that:

The IQ score actually yields two different kinds of measures, both of importance to educators. First, it gives some indication of the current mental level of the child in comparison with her own age group; second, it makes a prediction as to the rate of the child's mental growth in the future.

... they do measure much of what is necessary to current academic success. (Gallagher, 1985, p. 12)

If we agree that IQ tests do serve a useful if limited function, then the question becomes how to measure other skills or traits that are in what we consider the creative realm, noted as important in earlier definitions. As cited in Gallagher (1985), "One of the most widely used measures of creativity in children are the Torrance Tests of Creative Thinking" (p. 14). Particularly focused on divergent thinking, "These tests yield scores for important dimensions of creative behavior, such as fluency, flexibility, originality, and elaboration" (Gallagher, p. 14).

Another testing approach regards creative thinking as an associative process "which assumes that, for any stimulus, a series of associated ideas will be produced" (Coleman & Cross, 2001, p. 246). These ideas are then organized in a hierarchical rating with more unique responses developing as the process continues. "The Wallach-Kogan Test (1965) has a significant place in the literature on creativity" (Crockenberg, 1972; Howieson, 1981; Wallach & Wing, 1969 as cited in Coleman & Cross, 2001, p. 246).

Regardless of what testing is used, there are issues of what is really being measured. It is difficult to separate creativity from general intelligence. When test protocols are compared to the description of the creative process, it is highly probable that these tests measure only one aspect of the creative process: fluent responses. Other aspects of the creative process, such as sustained commitment, attention to real problems and products, and aesthetic judgment, are neglected (Kirschenbaum, 1998). Using Guilford's terminology, these tests are most accurately called tests of divergent thinking, rather than tests of creativity (Coleman & Cross, 2001, p. 248).

Other means of identification include teacher nomination and parent judgment.

According to Gallagher (1985), Pegnato and Birch found that teachers untrained in current identification techniques were likely to misidentify gifted students (p. 17). Citing several studies (Ciha, Harris, Hoffman, & Potter, 1974; Cornish, 1968; Jacobs, 1972;

Borland, 1978), Gallagher alleges parental identification was not much better (p. 17).

Silverman (1993), on the other hand, finds that parents are strong identifiers and states, "Most parents begin to notice signs of giftedness in their children in the first five years" (p. 152).

In Kaufmann and Sexton's (1983) study, 83 percent of the 98 parents were aware of their children's abilities prior to school age. Gogel, McCumsey, & Hewett (1985) had similar findings two years later with 1,039 parents of identified gifted children: 87 percent recognized their children's abilities by the age of five. Seven percent suspected that their children were gifted before their infants were six months of age; 15 percent between six and 12 months, 23 percent between one and two years; and 25 percent between two and three years. Both studies consisted of samples drawn from parent groups throughout the country. (Silverman, 1993, p. 152)

Gear (1974) found that specially trained teachers were twice as effective in identifying gifted students as untrained teachers, without over-identifying (cited in Gallagher, 1985, p. 17). "The important message from this study is that it is possible to provide systematic training that will bring the teachers to a level of effectiveness that is impressive and functional for a school system" (Gallagher, p. 17). This is critical for Vermont, because it highlights the need, as noted in the state definition, for those who are professionally qualified to participate in the identification of students. Further, it supports the reasoning that if teachers are simply looking for those students who are surpassing others in their classes, they will miss those gifted students who are underachieving for any reason.

Currently, the approach to identification involves the use of multiple sources, "which may include a measure of intellectual aptitude, some achievement measures, teacher ratings, peer nominations and so forth" (Gallagher, 1985, p. 18). This approach is

appealing to many educators who feel gifted students will emerge within a fuller picture, through using multiple measures. Further, those populations which are currently underidentified or less apt to score high on verbal tests might be revealed when other considerations are taken into account (Gallagher, p. 15).

While a number of writers discussed the shortcomings and challenges to identifying gifted students, E. Susanne Richert suggested that the gifted education movement is vulnerable to criticism unless educators create models of excellence that do not violate equity (Colangelo & Davis, 1997, p. 75). She writes:

Beginning with the National Report on Identification (Richert, 1985, 1987; Richert, Alvino, & McDonnel, 1982), I have been criticizing the following elitist practices that continue to jeopardize support for gifted programs: (1) elitist and distorted definitions of giftedness, (2) confusion about the purpose of identification, (3) violation of educational equity, (4) misuse and abuse of tests and test results, (5) cosmetic and improper use of multiple criteria, and (6) elitist program design. (Richert cited in Colangelo & Davis, 1997, p. 75)

Richert states, "Many districts and states still use elitist definitions of giftedness that result in the inclusion of only certain kinds of gifted students, most often those who are white, middle class, and academically achieving" (Richert cited in Colangelo & Davis, 1997, p. 76). She acknowledges the Marland definition was intended to broaden the concept of gifted as being more than IQ, but claims that more limited definitions are

still being used, "especially in states where *gifted* is a special education category and relies on special education funding" (cited in Colangelo & Davis, p. 76).

Richert's description of the state and local distortions of the federal definitions by discriminating between *gifted* and *talented* students is intriguing. She cites the New York Department of Education's method of using the Renzulli model (the previously described intersection of above average ability, creativity, and motivation) to identify students. If a student performs well in all three categories, that student is deemed gifted, while the student who performs well in only two is labeled talented. Language in gifted education is difficult with varying interpretations of the terms gifted and talented.

Another hierarchy that Richert refers to includes using the language of "highly," "profoundly," and "severely" as adverbs. She claims this language not only excludes many students, but "such hierarchies also ignore the fact that giftedness emerges as Renzulli (1978), Richert (1985, 1986), Richert et al. (1982), Tannenbaum (1983), and others assert through the interaction of innate abilities and learning or experience" (cited in Colangelo & Davis, 1997, p. 76).

Coleman and Cross (2001) propose a seemingly reasonable approach. While acknowledging that there are risks of too many, or too few, students who are identified as gifted, "a good identification system follows procedures that are ongoing, comprehensive, and inclusive; uses appropriate screening devices; and is carried out by a team" (p. 135). They also express caution by saying that a strong identification process does not necessarily mean there is a program to meet the needs of these students (p. 135).

Implications of Race and Poverty in Identification and Provision of Appropriate Services

The issues of race and poverty in relationship to gifted education nationwide have been studied and discussed, generally pushed by a concern that underprivileged or minority students may be under identified for gifted programming (Council, Donovan, & Cross, 2002). In Vermont, these two issues are of less importance, not because of lower numbers of either population, but because there is no mandate to identify or serve any high performing students regardless of their demographics. In Vermont, during 2001-2002, with a K-12 population of approximately 100,000 students, 1,037 were identified as gifted (http://www.geniusdenied.com/policies/StatePolicyDetail). This number, about one percent, is too small to have any meaning in terms of inclusion or exclusion of any particular segment of the population.

To take the questions of race and poverty to the national level, the National Research Council Report (Council) (2002) focused on both ends of the learning continuum by studying the confluence of race and achievement as they impact students who either struggle academically or who achieve so easily that they become frustrated and bored in typical classrooms. In their report, the Council stated their interest in researching the overrepresentation of minorities in special education, along with the inverse of too few minorities in gifted programs. While their findings are more informative than what we can determine locally, the Council noted it was difficult to find adequate research for gifted education as it is far less examined than special education (p. 19).

The Council found that minorities are disproportionately represented when using measures for proficient or advanced levels of academic achievement. The group identified that key factors were related more to poverty than race as reasons for lower performance. These included health factors beginning before birth as a result of family stressors aligned with poverty, such as unemployment, poor or no housing, and maternal depression (Council, 2002).

To help clarify in order to better understand Vermont's minority populations, the federal government uses five categories for reporting race/ethnicity for educational purposes: (1) American Indian/Alaskan Natives; (2) Pacific Islander; (3) Hispanics; (4) Blacks; and (5) non-Hispanic Whites with Hispanics as an all-inclusive category, including no breakout of smaller groups within the large group (i.e., Cuban or Mexican). Each student must be in one category only with no possibility for identification as a mixed ethnicity (Council, 2002, p. 36). While Vermont's ethnic diversity appears to be growing according to recent print and TV media reports, the U.S. Census Bureau determined in its 2000 Census that Vermont's total population of 608,827 was comprised of 1.1 percent American Indian/Alaskan Natives, 0.1 percent Pacific Islander, 0.9 percent Hispanic, 0.7 percent Black, and 97.9 percent non-Hispanic White. If Vermont's ethnic diversity continues to increase, and if Vermont begins to identify high performing students for services, then Vermont may struggle as other parts of the country already do to ensure that students representing a variety of cultures and races are appropriately served. One positive implication of facing these issues later than some other parts of the country is that there can be the hope there will be more research about diversity and

giftedness on which to base identification and delivery of appropriate services. Currently, there is very little (Neihart, Reis, Robinson, & Moon, 2002).

Writing about issues of class, gender, and race, Mara Sapon-Shevin, in Beyond Silenced Voices (Weis & Fine, 1993), describes the difficulty of community discourse focused on gifted education by saying the discussion forces members "to consider the role of schools in selecting and sorting children according to certain features and inevitably lead(s) to painful examinations of the inequitable ways in which various school outcomes are related to social class, race, ethnicity, and economic level" (p. 36). Margolin (1994) takes this thought one step further by suggesting that ". . . discourse on the gifted only occurs alongside an implied (or explicit) discourse on the nongifted" (p. 36). Sapon-Shevin notes that parents of students who are labeled, whether it is a special education or gifted label, could work together to change inequities in education; however, in her opinion, they do not take that opportunity (Weis & Fine, p. 43). Sapon-Shevin places great power and responsibility in the hands of families and educators involved in gifted education when she claims that "terminating gifted programs will not inevitably and automatically lead to improvements in general education, but challenging such programs could mobilize the power of those parents who would not tolerate a poor education for their children" (Weis & Fine, p. 43).

Nancy Robinson, Professor Emerita of Psychiatry and Behavioral Sciences at the University of Washington in Seattle, argues that the disproportion of minorities and children living in poverty in programs for gifted students is due to longstanding social inequities and this circumstance should not be used as rationale to deny all deserving

students of appropriate educational services (Robinson, 2003). While in her opinion race is typically the political focus, it is actually socioeconomic conditions that present the greatest avenue to inequality and are more closely related to student achievement (Robinson). To deny students appropriate education, even if there are injustices, becomes another form of injustice which then hurts even more students.

Poverty is an issue that currently colors Vermont more deeply than ethnicity.

According to the 2000 U.S. Census, 9.7 percent of families with children under age 18 were living below the federal poverty level. That percentage grew to 12.9 percent for families with children under age five. While those numbers cause concern, they grow exponentially when the head of household is female with no husband present. The percent of families with related children under 18 years living below the federal poverty level is 31.0 percent and that figure leaps to 49.4 percent for single mothers with children under age five.

The Council stated in its 2002 report that poverty is detrimental because of the number of stressors typically associated with it. It substantiated earlier research findings by Bronfenbrenner (1979) and others that the "number of risk factors that children face is more important than the impact of any single factor" (Council, p. 129). The Council agreed with the data from the National Center for Education Statistics on children entering kindergarten which "demonstrate how striking are the accumulated differences in knowledge and skill development across socioeconomic status [SES] groups by the time children reach the schoolhouse door" (p. 130). Additionally, they note the difference in social and emotional skills by SES.

In a graphic phrase, Robinson (2003) notes that "in many ways, children of poverty are behind the eight ball from the moment of conception onward, as their parents struggle...". We know this dynamic in Vermont and despite many organized efforts to change the lives of poor families, it is easy to see in news reports and elsewhere that state testing results reflect different outcomes for differing SES groups. While Vermont works hard to improve the lives of our impoverished citizens, Robinson would urge that appropriate education should be provided high performing students regardless of their backgrounds.

Characteristics

The definitions cited earlier are useful and interesting, yet they can leave some wondering about the specific qualities that are noted in the research. Tables 1 and 2 outline characteristics that can be signs of giftedness.

"Regardless of the talent domain in which giftedness expresses itself, gifted and talented individuals share certain intellectual and personality traits, which appear early in life and tend to remain throughout the life span" (Silverman, 1993, p. 51). The characteristics displayed in Table 2 are fairly typical of a wide spectrum in the gifted population.

Table 1: Early Signs of Giftedness

Unusual alertness in infancy	Extraordinary memory
Less need for sleep in infancy	Enjoyment and speed of learning
Long attention span	Early and extensive language development
High activity level	Fascination with books
Smiling or recognizing caretakers early	Curiosity, asks many questions
Preference for novelty	Excellent sense of humor
Intense reactions to noise, pain, frustration	Keen powers of observation
Advanced progression through the	Abstract reasoning, problem-solving skills,
developmental milestones	ability to generalize
	Early interest in time

(Silverman, 1993, p. 154)

Table 2: Intellectual and Personality Characteristics in the Gifted Population

Intellectual Characteristics	Personality Characteristics
Exceptional reasoning ability	Insightfulness
Intellectual curiosity	Need to understand
Rapid learning rate	Need for mental stimulation
Facility with abstraction	Perfectionism
Complex thought processes	Need for precision/logic
Vivid imagination	Excellent sense of humor
Early moral concern	Sensitivity/empathy
Passion for learning	Intensity
Powers of concentration	Perseverance
Analytical thinking	Acute self-awareness
Divergent thinking/creativity	Nonconformity
Keen sense of justice	Questioning of rules/authority
Capacity for reflection	Tendency toward introversion
(Silverman, 2000, p. 52)	

Identification Issues

While current thinking supports the need for talent development programming, to enhance student talents at every age and level of potential, there is also general agreement that "the earlier gifted children are identified, the more favorable their development (Hollingworth, 1942; Witty, 1958 as cited in Silverman, 1993, p. 154). Early

identification can help families and schools better understand the child's needs at a time when growth in personality and learning is extensive. Testing can be used to answer questions about obvious asynchrony without equally obvious reason; i.e., why can five-year-old Susie read chapter books, discuss global climate change, and create complex solutions to questions while her behavior can be at a two-year-old level one minute and 14-year-old the next?

For those states that mandate identification and services for gifted students, the issues of identification can be controversial. Who gets served, and who gets left out, are political questions in local districts. There are charges made that identification processes are biased in various directions such as: not enough minorities; too many boys (or girls); or perhaps too many middle and upper class students.

The process of identification can also be controversial. Is it based on formal IQ testing only? Are informal, subjective scales and checklists included? Are parent, teacher, and self-nominations considered as part of the process? If using narrow IQ testing only, there are many potentially qualified students who may be overlooked. Some of those overlooked may be bright but slow processors, more reflective learners, and culturally different students, especially when tests are time-related.

In an attempt to address issues related to identification, Davis and Rimm (1998) state some principles that should underlie the process:

 Advocacy. Identification should be designed in the best interests of all students.

- 2. Defensibility. Procedures should be based on the best available research and recommendations.
- 3. Equity. Procedures should guarantee that no one is overlooked (e.g., disadvantaged children).
- 4. Pluralism. The broadest defensible definition of giftedness should be adopted.
- 5. Comprehensiveness. As many gifted children as possible should be identified and served. (p. 72)

Questions about who should be identified, which students are we seeking, further complicate the issue. The range of student ability for inclusion in programming varies from districts which seek to identify and serve the top 3-5 percent to the Renzulli talent pool strategy which seeks to identify 15-20 percent of the school population. One key to the Renzulli model is that it not only includes more students but that it also offers opportunity to creative students and others whose gifts may not be measurable by our current testing (Davis & Rimm, 1998).

Now that the Renzulli talent pool model is so popular worldwide, and now that Howard Gardner's multiple intelligences are well known and accepted, the figure of fifteen to twenty percent for identification purposes is often used. For programs seeking students with an IQ of 145+, the Davidson Institute cites they are in the population at a ratio of 1 in 1,000 (which could mean almost 100 students in the Vermont school system), those with an IQ of 160+ appear at a ratio of fewer than 1 in 10,000 (which

could mean 9 – 10 students in the Vermont school system) and those with an IQ of 180+ appear in the population at a ratio of few than 1 in a million (Davidson, 2004).

While the numbers of individuals with IQs of 160 and higher appear to be rather small, the numbers can be misleading. One element that may mislead is that the ceiling of most commonly used IQ tests is 159 making it difficult to accurately identify those with higher IQs. Secondly, some researchers (including Lewis Terman, author of the first Stanford-Binet Intelligence Scale and a major longitudinal study in the 1920s), found many more individuals with IQs above 170 than he expected and others agree, citing the necessity to seek out these individuals using the formal and informal means that we have since developed (Davidson, http://www.gt-

cybersource.org/Record.aspx?NavID=2_0&rid=14087).

While IQ is not the only desirable measure for student potential, it continues to be one valuable piece of the puzzle, especially when used in conjunction with other information. As such, it is meaningful to understand how IQ relates to educational needs. The following is a brief description of IQ levels and their implications for educational needs.

The mean, or average, IQ is 100. Standard deviations, in most cases, are 15 points.

The majority of the population, 68.26 percent, falls within one standard deviation of the mean (IQ 85-115). This is the intellectual ability range addressed by the standard school age/grade-based curriculum.

13.59 percent of the population is within the second standard deviation below the mean (IO 84-70), and 13.59 percent is within the second standard deviation above the mean (IQ 116-130). Students on both sides of the curve require a modification to the curriculum from that provided to mainstream students to address their needs.

- 2.14 percent of the population is within the third standard deviation below the mean (IQ 69-55), and 2.14 percent is within the third standard deviation above the mean (IQ 131-145). These exceptional students on both sides of the curve require an individualized curriculum to address their individual needs.
- 0.13 percent of the population is within the fourth standard deviation below the mean (IQ<56) and 0.13 percent of the population is within the fourth standard deviation above the mean (IQ 146-160). These students on both sides of the curve are very exceptional and require individualized accommodations to address their needs.

One out of 30,000 individuals (.003 percent) is more than four standard deviations above the mean. These students with an IQ of 160 and above require extremely exceptional educational accommodations to meet their needs.

The implication for identification and accommodation is that for students below the average range, educational accommodations are mandated at the federal and state levels with some funding attached. For students with abilities above the average range, there is no federal mandate for accommodations and, according to the Davidson Institute, extremely limited funding. (http://presskit.ditd.org/Davidson_Institute_Press_Kit, Statistical information from Guiding the Gifted Child, 2002)

Emotional Aspects of Giftedness

While some people may regard giftedness as something special, perhaps enviable, there are also difficulties involved. As noted earlier in this paper, "It is painful to be different in a society that derides differences (Silverman, 1993, p. 3). Coleman and Cross (2001) highlight that point by stating that a major task for gifted children as they mature is to manage their differentness (p. 228). Silverman points out that pain may also come "from a finely tuned psychological structure that experiences all of life more intensely". . that "giftedness has an emotional as well as a cognitive substructure: cognitive complexity gives rise to emotional depth" (p. 3).

Piechowski (2006) agrees using terms such as overexcitabilities and sensitivities.

In his opinion, one of the basic characteristics of the gifted is their intensity and an

expanded field of their subjective experience. The intensity, in particular, must be understood as a distinct characteristic. It is not a matter of degree but of a different quality of experiencing. Piechowski says: "When people experience in a higher key, their intensities and sensitivities, or shall I say, acuities, pulse at higher levels of personal energy, and emerge as boundless imagination, sensuous ecstasies and raptures, or intellectual probing and searching" (p. 266).

Roeper (1982) includes emotion in her definition of giftedness: "Giftedness is a greater awareness, a greater sensitivity, and a greater ability to understand and transform perceptions into intellectual and emotional experiences" (p. 21).

Another definition focuses on development in its language as it describes a different view of the internal experience or process:

Giftedness is *asynchronous development* in which advanced cognitive abilities and heightened intensity combine to create inner experiences and awareness that are qualitatively different from the norm. This asynchrony increases with higher intellectual capacity. The uniqueness of the gifted renders them particularly vulnerable and requires modifications in parenting, teaching and counseling in order for them to develop optimally. (The Columbus Group, 1991)

Asynchrony is an important concept because, though all children do not mature evenly, it causes greater tension in gifted children, particularly for those with an IQ over 145 (Schetky, 1981, as cited in Silverman, 1993, p. 4). Asynchrony is essentially feeling out of sync, out of place, out of step, both within and with others. When considering how

important it is for adolescents to feel they belong, asynchrony can be a threat to their well being unless they understand what it is and what it means.

Dabrowski's Theory

From his personal history as a Polish psychiatrist and psychologist who survived two world wars, was imprisoned, tortured and forbidden to practice his profession, Kazimierz Dabrowski (1902-1980) studied gifted individuals seeking an understanding of a higher level of human development. From his experience, his private counseling practice, and voluminous reading of biographies of eminent people, he developed his "Theory of Positive Disintegration" (now called Dabrowski's Theory of Emotional Development) in which he proposes that advanced personality development requires a breakdown of existing psychological structures in order to form higher, more evolved structures (Dabrowski, 1964). If his theory is valid for at least some individuals, it speaks to the need for qualified, professional counseling and trained educators to be aware of these issues.

In her writing, Silverman (1993) argues for the inclusion of "deepening of the personality, the strengthening of one's value system, the creation of greater and greater challenges for oneself, and the development of broader avenues for expressing compassion" (p. 22) as markers of advanced development. While she is speaking primarily of adult development in this description, I believe it relates to adolescent development and, for me, it definitely relates to the models that I believe should surround all adolescents. I agree with Silverman when she writes: "There has to be room in our conceptions of giftedness for the attainment of moral, emotional, spiritual, and nurturant

goals – so that parents, counselors, and teachers are not perceived as 'less gifted' than those who attain eminence" (p. 23).

Social Development

The social development of the gifted is paradoxical. On the one hand, the research unequivocally indicates that gifted children have excellent social adjustment (Janos & Robinson, 1985; Robinson & Noble, 1991). On the other hand, clinical experience reveals that many of these well-adjusted young people suffer great loneliness and endure inner conflicts between their desire to fit in and their ideals. (Silverman, 1993, p. 291)

Silverman (1993) suggests the vulnerability of gifted children in general has not been researched well enough, in part because the studies that exist are based on how well gifted children relate to other children. Her argument is that as a concern: adapting to group norms, gifted students, particularly girls, who frequently demonstrate excellent social skills, will give themselves up to be in relationships. This then damages their own inner lives and their striving to attain inner ideals. Further, she states that the road to self-actualization may actually involve choosing solitude over social activity (Dabrowski, 1972; Kerr, 1985; Maslow, 1968; as cited in Silverman, 1993, p. 291). Schools play a significant role in confusing real issues of socialization as "not only do they not challenge their gifted students, they push them back toward the middle, lauding doctrines of "socialization ..." (Davidson & Davidson, 2004).

Overall, I was interested to read Silverman's thinking about the social and emotional development of the gifted. In particular, she encouraged me to think about

leadership development. Silverman (1993) states, "Leadership ability appears to be a natural component of giftedness" (p. 291). This is a widely held belief reflected by the inclusion of leadership capability in both federal and state definitions of gifted.

Silverman lists several qualifiers for her statement, including: This leadership ability may only appear in appropriate situations or within a group of equals, boys are more likely to have their leadership qualities nurtured, and childhood popularity may be a predictor of some kinds of leadership, but not others.

Silverman (1993) believes:

Good leaders have highly developed ethical judgment and responsibility; they are people of integrity. Such leaders combine high intelligence with deep feelings of emotional connectedness with others. They understand the complexities of the human condition and devote their lives to helping others. Many gifted children have the developmental potential to become this type of humanitarian leader. (Dabrowski, 1972; Piechowski, 1986, 1991, as cited in Silverman, p. 292)

As a result of this belief, Silverman argues it is short sighted that work with the social development of gifted students is to help them fit in with their peers. Rather, she proposes we work with broader goals in mind of "wholeness of the individual, humanitarian values, and moral integrity" (p. 292).

"In the nineteenth and early twentieth century, it was believed that brilliant children were doomed to social isolation and alienation" (Alger, 1867; Hirsch, 1931, as cited in Silverman, 1993, p. 292). Researchers such as Terman (1925) and Hollingworth

(1926) worked to disprove these myths. Terman, in his famous longitudinal study with more than 1,500 children with above 140 IQ, concluded that the gifted "are above average in many respects, including emotional stability, social adjustment, and moral character" (Terman, 1925).

Terman and Hollingworth's original research has been replicated by more recent studies:

... when gifted young people are compared with average students, the research indicates that they have more positive self-concepts, more maturity in interactions with others, and better social relations (Lehman & Erdwins, 1981); more positive personality characteristics, values, and interests (Pollin, 1983); greater social competence and less delinquency (Ludwig & Cullinan, 1984); more sophisticated play interests (Wright, 1990); lower levels of anxiety (Davis & Connell, 1985; Schlowinski & Reynolds, 1985); more independence, intrinsic motivation flexibility, and self-acceptance, as well as early psychological maturity (Olszewski-Kubilius & Kulieke, 1989), and better adjustment with fewer indications of psychological problems (Monks & Ferguson, 1983; Olszewski-Kubilius, Kulieke, & Krasney, 1988). (cited in Silverman, 1993, p. 293)

However, "The rose loses some of its luster in adolescence, particularly in relation to girls, many of whom begin to doubt their abilities or feel that they pay too high a social price for their giftedness" (L. Bell, 1989; Buescher & Higham, 1989; Kelly & Colangelo, 1984; Reis & Callahan, 1989, as cited in Silverman, 1993, p. 292). The issues are also

more complex for culturally diverse students and there is some evidence that suggests "the greater the difference between the child's abilities and the abilities of others in his or her social group, the greater the potential for loneliness and problems in social adjustment" (Dauber & Benbow, 1990; Hollingworth, 1939; Kerr, 1991a; Kline & Meckstroth, 1985; Roedell, 1985, as cited in Silverman, p. 294).

Studies have demonstrated that the discrepancy between cognitive and social self-concept increases with IQ. Moderately and highly gifted children (above 132 and 148 IQ, respectively) had significantly less social than academic self-confidence, whereas less capable children showed no discrepancies between these domains. Similar findings were reported by Freeman (1979), Ross and Parker (1980), and Katz (1981) (as cited in Silverman, 1993, p. 294). The research appears to confirm that children, regardless of their IQ, can be socially well adjusted when they find others like themselves.

Reasons for gender differences include differences in gender stereotypes and actual popularity. Academically talented females may have a greater self-regard than males because the behaviors associated with high achievement, such as conscientiousness and obedience, are congruent with social stereotypes of the female ideal (Loeb & Jay, 1987, as cited in Ablard, 1997, p. 110). Reis (1987) stated that teachers and peers are more likely to approve of a bright boy who questions and debates ideas than a bright girl who does the same. The boy is seen as assertive, but the girl is viewed as aggressive or obnoxious. Therefore, talented males are viewed more favorably because they do not deviate from gender stereotypes. Contrary to these research studies, academically talented males may have reason for higher social self-conceptions than females.

According to class ratings of popularity, gifted males were the most popular and gifted females were the least popular, with nongifted students rated between the two groups (Luftig & Nichols, 1990; 1991, as cited in Ablard, 1997, p. 100).

I found Silverman's thinking about socialization issues interesting, particularly as it relates to gender. She claims that one rationale for cooperative learning is to help with social issues. Instead of helping, she points out, gifted students suffer and gifted girls suffer the most. Following her earlier argument that girls, gifted girls in particular, will lose self-confidence when they help others rather than take on their own new challenges, she points out that gender equity and gifted children are both low priority agendas in schools. We in America are more concerned that children learn to get along well with others. Silverman (1993) argues the data shows gifted students are already well adjusted and we should concentrate on their learning needs.

Girls, including gifted girls, are socially adept.

Because of their enhanced ability to perceive social cues (Levy, 1982) and their early conditioning about the critical importance of social acceptance, gifted girls are much more adept than gifted boys at imitation. They fit in by pretending to be less capable than they really are, disappearing into the crowd. (Silverman, 1993, p. 296)

Gifted boys, however, are either less socially adept or perhaps unwilling to participate, and are more likely to keep their individuality in the process (Silverman).

Silverman (1993) states that equal numbers of gifted girls and gifted boys start out in life.

But as they get older, gifted girls mysteriously disappear; there is a gradual, relentless decline in the number of gifted girls and women identified on all indices. Although some theorize that boys' abilities are more real than girls because they correlate with adult achievement, there is strong reason to believe that the progressive loss of talent in girls can be traced to socialization practices that steadily erode gifted girls' self-confidence and undermine their aspirations. (p. 299)

Finding gifted girls is difficult, in part, because the identification process is biased against girls. One issue is that of timed tests which rate speed rather than performance. Another is change in the test themselves. "Intelligence tests that de-emphasize verbal skills and emphasize performance, that is, spatial-visual activities, may also be biased against girls who received much less practice than boys at puzzles and assembly" (Kerr, 1991, as cited in Silverman, 1993, p. 300). "Perhaps the most insidious form of sex discrimination is the wholesale discounting of early indicators of giftedness; for example, rapid advancement through the developmental milestones, high IQ scores achieved during the preschool years and early reading ability" (Silverman, p. 300). "The majority of individuals who 'used to be gifted' are female" (Silverman, 1986, as cited in Silverman, p. 300).

"Without the encouragement of family, teachers, and an appropriate social group to develop their talents, much of gifted girls' talents may be permanently lost" (Borland, 1986; Buescher, 1991, as cited in Silverman, 1993, p. 304). Silverman suggests societal support should include resisting all practices that denigrate girls' abilities, sexist terms

such as "bossy" or "overachiever," and disparaging or disregarding girls' early achievements such as reading or IQ scores. Concepts of giftedness should be evaluated for gender bias. The emphasis on speed in standardized tests should be removed. Inclusive language should replace sexist language in every classroom. "Funding should be allocated for assistance with mathematics for adolescent girls in similar proportions to the allocations for remedial reading instruction that primarily targets boys" (Callahan, 1991, as cited in Silverman, p. 307).

Parent counseling, nonsexist childrearing and teaching practices, early identification of abilities, opportunities for early entrance and acceleration, grouping gifted girls for instruction and counseling, tutorial assistance with mathematics, untimed standardized tests, and special counseling assistance to build self-esteem and guide girls in life planning are all needed if we are to gain equity for gifted girls. (Silverman, 1993, p. 307)

"It has been apparent ever since gifted children were first studied that they select friends who are their *mental age* rather than their chronological age" (Gross, 1989; Hollingworth, 1931; Mann, 1957; O'Shea, 1960; N. Robinson & Noble, 1991; Terman, 1925, as cited in Silverman, 1993, p. 307). The term "peer" refers to the same mental, rather than chronological age. Roedell (1985, as cited in Silverman, p. 307) found that gifted children develop their social skills more easily when they interact with their true peers who are in similar developmental stages.

It appears, according to studies, that children choose leaders who are slightly above the average intelligence of their group (Rinch & Carroll, 1932; Hollingworth, 1926; McCuen, 1929; Pasternak & Silvey, 1969; Warner, 1923, as cited in Silverman, p. 308). If there is too great a gap, then communication is problematic. Given this, gifted students develop their leadership skills when they are placed with students of similar ability.

Effective Characteristics of Teachers of High Potential Students

Given the characteristics of high potential learners, it is critical to ask the question of who are the most effective teachers of these students. The National Association for Gifted Children (NAGC) published a position paper in 1994 to describe their criteria for effective teachers of high potential students. In their opinion, "Gifted and talented students present a particular challenge and often experience inadequate and inappropriate education" (NAGC, 1994).

To provide appropriate learning experiences for gifted and talented students, teachers need to possess:

- a knowledge and valuing of the origins and nature of high levels of intelligence, including creative expressions of intelligence;
- a knowledge and understanding of the cognitive, social, and emotional characteristics, needs, and potential problems experienced by gifted and talented students from diverse populations;
- a knowledge of and access to advanced content and ideas;

- an ability to develop a differentiated curriculum appropriate to meeting the unique intellectual and emotional needs and interests of gifted and talented students; and
- an ability to create an environment in which gifted and talented students can
 feel challenged and safe to explore and express their uniqueness. (NAGC)
 NAGC believes that these competencies, in addition to those required for good teaching
 in general, such as modeling openness, curiosity, and enthusiasm, are necessary to be
 effective and they also underscore that teachers must receive training in order to
 accomplish these competencies (NAGC).

These competencies align with those described in Heath's (1997) literature review of studies to determine the personal, professional, and teaching characteristics of effective teachers of gifted students. In agreement with the NAGC statement, Heath states that standards for teacher training should be established, teachers of the gifted should have certification or an endorsement in gifted education and the teacher should have "high intelligence, an understanding of giftedness, originality, and self-confidence (p. 1)." Among the other desirable qualities identified in the studies he reviewed are: "enthusiasm, achievement, drive, promotion of student independence, and a preference for teaching gifted children (Heath, p. 1)."

CHAPTER 3: DESIGN & METHODOLOGY

Logic and Rationale of Qualitative Method

In determining the methodological approach to this study, two considerations were at the core. First, I chose a qualitative approach because of its compatibility with the descriptive and analytic purposes of this research. Qualitative methods are well-suited for studies aimed at "(u)nderstanding the *meaning* for participants in the study, of the events, situations, and actions they are involved with. . .and understanding the *process* by which events and actions take place" (Maxwell, 1996, p. 17). Second, as Patton (2002) states, qualitative research "illuminates the people behind the numbers and puts faces on the statistics" (p. 10).

The type of qualitative research I used is a narrative research design approach. I believed this methodology was appropriate because I hoped to better understand the educational stories of the participants and learn from their perspectives.

At least in the beginning stage of reflection, I felt two important issues for me were boredom and loss of potential for students who might be motivated and challenged to perform their best. Both of these trigger an emotional reaction, which was likely, without intentional awareness, to impact my listening and interpretive experiences and which I worked to better understand before engaging in actual research.

Csikszentmihalyi and Larson's (1984) work with adolescents in the area of "flow," and its dark side, entropy, was particularly relevant and meaningful to me. In the area of loss, having grown up female, I was drawn to the literature about girls' development and ongoing discovery regarding girls' loss of early potential. Because I did not intend for

this study to be gender specific, Gilligan's work was useful in understanding optimal development for both girls and boys. Articles, such as Reis' on internal barriers experienced by some females, were also illuminating (Reis, 2002).

Implications of Earlier Studies

Two phases of earlier research studies helped to inform this proposal. The first was conducted in 2001 when I interviewed four high school students who had attended a Governor's Institute of Vermont (GIV). I asked them to describe the difference, if any, between their GIV experience and their local high school experience. Responding to open-ended questions in a semi-structured format, the students shared information that began to shape my interest in their educational experiences outside GIV. I followed these in-depth interviews with shorter open-ended interviews with 20 adolescents who had also attended GIV. I asked them, once again, to compare GIV with their local school educational experience. The primary outcome of this first phase was my increased awareness and growing interest in the mismatch between the needs of high performing students and their current educational experiences.

The second earlier study occurred in the spring of 2005. Data collection methods included individual interviews with three adult Vermont educators, one of whom has a background in gifted education and two who did not; a group interview with three educators all of whom have expertise and experience in gifted education in Vermont; and a survey conducted at a local high school which asked educators' perceptions of the school culture and policies, as well as their identification methods and services for students with exceptional talents and abilities.

In terms of methodology, these studies helped to shape my focus, research questions, and method of inquiry. Analysis of the data demonstrated patterns among both the educators and among the students. The most compelling, for me, was the description of a mismatch between what is currently offered and what both students and educators feel is needed to more effectively engage and meet the needs of high performing adolescents. While the interviews noted above varied in length, from 10 minutes to one and one-half hours, there was a distinct narrative thread to each.

Sample, Participant, and Site Selection

The research sample for this study consisted of six adolescents, six parents/guardians of these students, and six Vermont educators who were identified by the students as having made a significant, positive contribution to their education.

Because there is limited testing and identification of high performing students in Vermont, the students were located through contacts including school administrators and educators. I contacted principals at four Vermont high schools. These principals placed Institutional Review Board (IRB) approved Consent Forms in the mailboxes of their faculty. The teachers sent IRB approved Consent Forms home to parents of students who qualified for the study. Interested parents mailed signed Consent Forms directly to me for consideration.

Students were selected based on their area of giftedness; i.e., exhibiting high potential in areas such as leadership, arts, academics, or athletics. Diversity was addressed through gender, geographic location, and domain of talent. The primary focus was on domain and gender. A key criteria and focus was on students who were moving

toward completion of high school or were in college and appeared to be headed toward graduation in the future. While the subjects of underachievement and dropping out, as related to high performing students, are interesting to me, this study focused on those students who appear to be successful in our educational system.

The selected students each nominated an educator to participate in an interview. It was the student nomination, after consideration of the question of which educator has made positive and significant contributions to their education, that qualified the educator for this study. A further criterion was that, if at all possible, the teacher be in the school system in which the student is, or was, enrolled.

Data Collection

I conducted in-depth individual interviews with each student and also individual interviews with at least one parent/guardian and one specified educator.

Interviews

I used a standardized open-ended interview format to begin the interview process and then moved into a conversational strategy. This combined approach supported the recognition of themes, encouraged interviewees to share what is important to them even if not asked directly by the researcher, and also allowed for further inquiry into unanticipated areas (Patton, 2002).

The same format was used to elicit the greatest range of responses with the selected educators. All interviews were tape-recorded and abbreviated notes were kept throughout each interview.

Data Analysis

Patton (2002) suggests that: "Raw field notes and verbatim transcripts constitute the undigested complexity of reality. Simplifying and making sense out of that complexity constitutes the challenge of content analysis" (p. 463). Because I expected themes to emerge and because I wanted a foundation from which to begin to analyze interview narratives, I started with a coding framework that was based on my interests as a researcher, as well as information gained from the relevant literature on the educational needs of high performing adolescents.

I consolidated and reorganized these codes according to theme, thereby creating a final list of codes (Patton, 2002). This structure kept a focus on themes even though I expected the final product to be formatted as a series of individual vignettes. The rationale for this research project was to understand the students' educational experiences through their own voices. While each narrative was individual and evolving, I anticipated the need for a structured framework through which to coherently present the findings.

The Researcher

Trustworthiness

Qualitative researchers need to question the credibility, or trustworthiness, of their research (Glesne, 2005). Trustworthiness was addressed methodologically through using the participants' actual words, member checking, and providing personal reflections to clarify the subjectivity of the researcher. The primary threat to the trustworthiness of the data is researcher bias, which I address in the section below.

All narrative studies are co-authored in the sense there is a researcher and there is the story-teller (Riessman, 1993). Because I agree with Riessman's thinking, and I also sought to maintain appropriate boundaries on my subjectivity, I wanted to include member checking in the methodology of this study. To ensure that I captured the words and perspectives of my interviewees, I initiated a member check with each of the interviewees. To accomplish this, I reviewed transcripts of the interviews of each participant to assess accuracy and intent. Subjects then had an opportunity to review the transcripts and, if necessary, revise as appropriate. I asked student, parent, and educator interviewees to call me by a certain date if there were any questions or concerns.

Personal Bias/Subjectivity

I sought to understand and acknowledge my personal bias throughout this study through reflective practice and member checking with other professionals. The most valuable process was to ask a professional colleague for full-disclosure dialogues about my responses, as well as the material itself. I committed to authentically revealing information and stories from interviewees through use of their own language and their intent, to my best understanding.

Ethical and Political Situations

As students, parents, and educators were willing to share their narratives with me, I had the highest obligation as a researcher, educator, and fellow human being to ethically deal with the research. I practiced thoughtful informed consent, protection of privacy and confidentiality, as well as representing the original storytellers to the best of my ability.

Overall Student Synopsis

This section is an overall analysis of key student themes. This analysis begins with a description of the six students in the study and then expands into the key themes extracted from the student interviews. The key themes are based on the research questions and are then used as the basis of the subsequent Findings and Recommendations section.

Who Are The Students?

The six students involved in this study are white, middle-class, and residents of Vermont. During their K-12 education, they all attended Vermont public schools, then some attended Vermont private schools, and one was home schooled for a period of time. All have graduated from high school.

One student, David, is a musician and one student, Lily, exhibits strong leadership skills in addition to excellent academic skills. The other four, and Lily, were academically ahead of their age-peers starting at a young age. While they each have multiple areas of strength, their primary learning styles, using the students' personal perspective and Gardner's (1993) multiple intelligences as a basic frame, are: Alan and Emma - Linguistic intelligence ("word smart"); Betty - Logical-mathematical intelligence ("number/reasoning smart"); David - Musical intelligence ("music smart"); Eric - Spatial intelligence ("picture smart"); and Lily - Interpersonal intelligence ("people smart").

All these students are much more variable than the quick label above. It is, though, interesting to get a sense of their learning styles as we move into their personal educational stories.

Alan

Alan attends a well-known small liberal arts college in the Midwest. His current passion is creative writing and he sees his future as a writer. One of his greatest fortunes is to have been born the youngest of three very bright sons to calm, experienced, and educated parents. His educator called Alan the brightest student he had ever encountered and suggested he could become President if he chose. "He's that smart, that personable."

As a creative writing major in college, Alan says he finds the process complementary to how he likes to learn because he can follow his curiosity until he has what he thinks is a satisfactory amount of background information to write his piece on a topic. His interest and ability in writing aligns with the fact that he does not generally like to work in groups, at least in an academic setting. He says, "I am not a big fan of collaboration. I don't want to be judged with a lumping of other people. I don't have any problems working with other people when it is not something creative or academic, but I feel very stifled by that often and I think that overall, I won't say the overall quality suffers, but my input suffers a lot of the time."

Betty

Betty currently has a three-year Fellowship to study Computer Science, particularly robotics and artificial intelligence. She was a National Merit Finalist and won a Fulbright Award.

Betty says she likes pictures and diagrams. She likes concrete examples when she is first learning about something and adds that once she has got the concept, abstract

things are more accessible. She says that she will get around to the bigger picture eventually, but she likes the details better.

Betty is not a strong auditory processor and she notes that verbal instructions were difficult. "If people tell me things, I will remember a lot of it, but it doesn't get processed as quickly. If I read it, I'll have a much better understanding of what is going on."

Knowing herself as a learner, Betty says, "I figured out something pretty early on, something that was useful for tests. If I didn't know the answer almost right away, I probably didn't know it at all."

David

David attended a public school K-12. He is currently working as a para educator in a small elementary school. He works one-on-one with students and now thinks his professional path may be education. His dream was to attend one of the top music colleges in the country and he was devastated to learn that his inability to read music denied his dream. At the time of his interview he was putting together a band.

As a learner, David notes his biggest challenge is reading and says, "I have never been a reader, but I think I can write pretty well." Now a young adult, David reads literature for pleasure and still does not read music.

David says that before high school he always performed to his potential. "Then I had a hiccup in 9th and 10th grades and I don't know why. It was a difficult time period. It was probably some laziness with more desire to play music or watch TV. I'd always want to play music at home and not study. So music might have gotten in the way of my academics because I spent so much time on it. But I don't regret it."

Emma

Emma attended a public school until middle school, a private school through 10th grade, and then enrolled in courses at Community College of Vermont and the University of Vermont. She was named a Presidential Scholar and a National Merit Finalist. Emma graduated from a small liberal arts college for women in the northeast. She now lives and works for a nonprofit organization in New York City where she is happy and busy with activities and friends.

When asked to describe herself as a learner, Emma responded by saying, "I guess I would say that is sort of changing over time. It really depends in how interested I am in what I am learning. When I was younger, I think I was just universally a very quick learner. I still am to some extent."

Eric

Eric attended a small public school K-12. His schooling included moving ahead several grades, taking advantage of learning opportunities outside school, and enrolling in college courses while in public school. He is now attending a small liberal arts college in the northeast and considering a major in neuroscience.

Eric says he thinks he is a visual, spatial learner. He is interested in many topics all the time and claims the evidence is the tall stack of books near his bedside. His preference is to learn as quickly and as deeply as possible.

Lily

Lily attended public school K-12 and then attended a small liberal arts college in the midwest. She is currently working for a nonprofit organization in the city where she attended college.

Lily's preferred learning style is experiential. She says that she got to do that in school through projects that gave her more flexibility, more freedom to choose and allowed her to focus on something that was maybe more important to her than to somebody else.

How Do Students Perceive Themselves As Learners?

Self-motivated, Intrinsic Learners

All six students named themselves as *self-motivated*, *intrinsic learners*. Each one was able to find and follow one or more passions, either inside or outside of school.

Alan takes responsibility for his own learning. This attitude may be a key personal trait, though it may also have developed from following two brothers, reputedly academically intelligent, who needed to access information in addition to the typical classroom in order to thrive. Alan says "I did what it takes to get the grade, but if I want to truly learn something I feel it is kind of more on my shoulders to really know it and understand it to the level that I want. To really do something outside of school is how I'd learn things best."

Betty found that when home schooled she "got to do things when I wanted, as I wanted. I could go through a week's worth of one subject in a few hours instead of doing 40 minutes one day and 40 minutes tomorrow and 40 minutes the next day. I could do it

all at once." She sounded happy about making her learning work for her and said, "For that matter, I could go through an entire month's worth all at once and get it all done and then move on to something else. I like to work in larger blocks."

David's primary passions are music and soccer. Both talents have been a growing piece of his life since mid-elementary school. He says, "I am motivated and determined and I like to succeed in anything whether it's academic or non-academic." David does not spend one day without playing music.

Emma is a curious, intrinsic learner. Even as a baby she would not sleep so that she would not miss anything. When she decided to leave the formal school system after 10th grade she was excited to be able to choose her courses at the University of Vermont and Community College of Vermont. She admits that she did not choose only what she wanted to learn because her goal was to attend college. She chose courses she thought might be required to apply to the colleges she was interested in attending.

Eric displays an energy and fascination for learning. He says, "I don't think that I was just that much more talented. I was just more interested than anybody else. People weren't interested in physics and I was thinking this is really cool, I want to get into this."

Lily is clear about her favorite learning style. She knows she learns through and enjoys experiential learning opportunities. She consciously sought them out. She says, "Learning is something that I've always been invested in. I'm more of a hands-on learner, so just sitting there reading a textbook was not what I wanted to be doing."

Curious

None of the students used the term "curious" about themselves though they described situations that illuminated that quality. Both parents and educators added to the descriptions. Alan's educator, for example, said, "Alan asked such high-level questions in our AP class that I carried a notepad to every class." Betty's mother talked about Betty as a younger child and said, "It's wonderful to watch her. She wants to investigate things, try to figure out how it works, how it is put together." Emma's mother says, "I don't know how you would name that characteristic, but what keeps her going is that she is just fascinated by everything."

Alan, Betty, Emma, and Eric all describe asking questions in class. As noted above, Alan's teacher took notes on these questions and then reached out to UVM professors for assistance. The other three were not so fortunate. Both Betty and Emma were silenced for a period of time by both classroom teachers and other students because of their ongoing curiosity and motivation to ask questions.

Eric says, "One of my most frequent questions is 'why? Why should we do that?' And my teachers' most frequent answer would be that we are not learning about that now, we will learn about that later. And I would ask 'well, can you give me a book so I could look it up and the answer would be 'we are not learning about that now.' You could drive me absolutely nuts."

Neither David nor Lily refers specifically to curiosity as a personal trait.

Independent Learner

All six students noted that *independent learning* was a key trait. Not only did they find areas to study, they then followed them whether or not they were the only student doing it at the time. Emma, in particular, articulated her joy at "making her own education" though the sentiment seems common across all students.

Alan was aware that, as a learner, he wanted to work on his own though he acknowledged the teacher and school as able to provide resources he valued as a starting place. "I guess I found it was a little bit more valuable, the whole kind of synthesizing yourself; you need to break it down, you need to play with it a little bit and that always helps build better understanding of it."

He appeared to appreciate the basic structure of a class that he would then use to go into the depth he wanted at the tempo he needed. "I think the best times I had were when the resources were available to me but it was up to me. Here is the intro, here is the primer, here is an outline of what is going on, here are the resources and then I would take the time to go through on my own and pick it apart a little more."

Betty found occasional good learning opportunities in school though she came to understand that learning on her own through home schooling was going to be the best fit for her. Without any preconceived notions about home schooling, Betty describes how she became acquainted with the idea: "My mom heard about the Hollingworth Conference in Boston for families of highly gifted students where I met with a group for young adults ages 13-30. I was barely 13. Everyone was talking about how they were

home schooled and they got to do everything at their own pace and got to choose what they wanted to learn. I thought this sounded like a good idea."

David is the musician in this study. According to him, he played by ear and "I'd play the written chords, but make them my own voicing. I didn't exactly play what was written note for note, but I stuck to the chord voicing. I added my own knowledge and skill to what was written out." Even though there are musical rules, particularly in written composition, David still found a way to play independently within the group.

Emma notes her delight when after 10th grade she was able to choose what and how she wanted to learn. She says, "Choosing my own education was great; independence was always something I wanted. It was incredible." She was careful to make choices that might be compatible with keeping future college choices open. She says, "I was taking those classes and taking Driver Education at a local high school and I got a job working at the New England Culinary Institute and I went to drama class so I was very busy, but it was nice to have that degree of independence in what I was choosing to do. I felt like I was making my own education for the first time."

Eric is clear about his learning styles. He notes he likes to study "things backwards and mis-matched and not really logically because I was really bored with just straight forward." And he says, "I still do that in college, which is really hard."

Lily is highly able to accomplish strong academic work, though her preference is to learn independently "through projects that gave me more flexibility, more freedom to choose, that allowed me to focus on something that was maybe more important to me than to somebody else." She continued this style in college by repeatedly enrolling in different internships.

Learns Quickly

The four academically focused students all refer to themselves as *quick learners* and they describe the need for a faster pace. It is valuable for individual learners to be able to identify and understand their personal learning preferences and "there is some research to support that gifted student's learning styles and preferences should be considered when developing educationally sound curriculum and program policy for these students" (Shore, CoNedell, Robinson & Ward, 1991, as cited in Rogers, 2001). Keys to learning are motivation and engagement which both would be supported by working at an appropriate pace.

Alan notes he is "a pretty quick learner." He says, "I could learn fast on my own, but I wouldn't have the motivation to necessarily gather all the resources or design some kind of curriculum or a step by step process; whereas, in school, if the teachers were doing their work, it was there for me to learn as much as possible within that framework." It sounds as though he was seeking a meeting place through the resources of the school where both his interests and what the school has to offer are compatible.

Betty describes a common event among five of the students: "The pace wasn't working for me. We had reading groups where we would read a book and discuss it, but we would only read a chapter a time so I'd read that chapter in five minutes while the rest of the class would take a day and a half. I'd finish it in five minutes, practically before we were done being given the assignment."

Emma echoes Betty's sentiment by saying, "I wish I had been in a situation where hard work was presented to me a lot earlier. I mean in a challenging way. You can't put a smart kid in a normal classroom, let them realize they could do the work in one hour that takes everyone else a week to do and then say 'OK, I guess we'll give you extra work, too, so that it takes you a week."

Eric suffered through slow pacing as well. He says, "I knew four weeks in that this was just not going to work. I'd look at a syllabus and think 'sweet, this is what we're going to do this week' and the teacher would say 'no, that is for the year.' It was so ridiculously slow."

David does not refer to the pace of learning in school. It appears David's need for musical and athletic engagement was met. Lily references her wish for more experiential opportunities, but did not describe any impact from the pace of her classroom learning.

Able to Possess a Large Amount of Information, Has a Good Memory

Four of the students, Alan, Betty, Emma, and Eric, illustrate their interest and ability to access *large amounts of information*. David and Emma describe their *strong memorization* skills. Eric's mother notes his ability to retain everything he reads.

Alan describes a recent writing assignment where he decides he needs some background information in order to write. He says, "I was just surfing the Internet and jumping from Wikipedia page to page looking for something to spark my interest. I found something about the fourth dimension which led me to something about this kind of crazy conspiracy theorist who believes in a time cube theory thing which got me started on thinking about books I've read like *Wrinkle in Time*. I just used that as a

jumping off point, brought it all together and tried to research fourth dimension and the theories behind it and found as many images as I could to bring it all together and then write a poem about it."

Betty's first day of home schooling echoes this same process of finding a starting place and then following where their interests lead. Betty was able to satisfy her need to explore and gather information as she created more questions to follow.

David and his father both recount David's strength in memorization. His father wonders whether this skill was a barrier to learning to read because, as a younger student, David could memorize well enough to compensate for his lack of reading skill. This may carry over into David's musical experiences as he plays by ear and most likely remembers various parts.

Emma left formal schooling after 10th grade. She was then free to make her own personal choices for what to study. In a description of what is arguably a large amount of information, she says, "In the fall of what would have been my 11th grade year, I took four classes at UVM: Philosophy, Political Theory, Physics with a lab, and a senior level choice seminar. Those were all amazing classes. I learned so much that semester. I was working, too."

Eric describes endless reading. His mother includes a description of stacks of books by his bedside that run a wide gamut of material from biographies to science. He notes his interest and ability in accessing volumes of information in a fast-paced, not necessarily linear way.

Is Interested in Many Things

Emma and Eric are *interested in many things*. Both note the difficulty of picking one interest on which to focus. Alan is also interested in many things and these subjects appear to be the material about which he will write. Betty and David are more narrowly focused on their areas of interest, computers and music or soccer. Lily is interested in experiencing life through activity and she expresses her intention to work on behalf of others, while not necessarily stating in what area.

Emma laments, "I wish that I had focused more on one thing. It is a danger when you're gifted because you feel like you are good at so many things and you'll always be good at so many things, so why pick one."

Eric echoes her sense and says, "I like everything. I can't pick a major in college. It's going to be really, really tough. I want to major in intro classes, actually. That is my goal. Make a liberal arts major with a little of everything. I am in danger of being undereducated, but I think it would be a good idea."

Enjoys a Challenge

Four students refer to *enjoying academic challenge*: Alan, Betty, Emma, and Eric. In addition to yearning for challenge during their public school experience, Emma and Eric note, in particular, the enormous hurdle of going to top-tier colleges where other students have been challenged throughout their earlier education and have, therefore, learned the study skills needed, which they do not have.

Alan appears to challenge himself to learn what he wants, as he chooses. He says, "I think it also has to do with really wanting to learn things independently. We could

touch on things in school and I could go home and to the library to really learn more."

He does not expect the school to challenge him as an individual. He says, "It's public education so there has to be a concession. It has to be regimented to some degree. It has to give a kind of equality of education for it to be fair." He has the internal, and family, resources to challenge himself.

Betty did not find appropriate challenge until she began home schooling. She gives an example of earlier lost opportunities by saying when she entered 8th grade, she was in the highest-level math book the teacher had. She finished it in January but the teacher had not ordered the next book even though he knew for at least a couple of months that she was going to finish soon. She had to wait for months for the next book to arrive.

Betty notes this as an instance where her parents successfully intervened. "When the book came in, we could work at our own pace and I was going through boring geometry, which I actually knew a lot of. Finally I said I am doing a lot of busy work here and I am tired of doing all the problems in the book. So, my parents worked out with them that if I took the chapter tests and got better than an 85 then I could pass the chapter and not have to do all the work. Which I did up until chapter 14."

Emma echoes the sentiments of the other three students when she says, "I wish that starting very early on I had been in an education situation where I could meet more peers. I really wish I had been in a gifted program or some kind of track with people at my level so that starting in Kindergarten I was taught how to work on things that were challenging to me." When she finally could choose her own education, in 11th grade, she

deliberately chose multiple challenging courses at the University of Vermont and Community College of Vermont.

Eric appears to thrive on challenge. He notes repeatedly the times when he wants to learn an area of interest and will decide to jump in by reading the prerequisite coursework at the same time he is enrolled in the higher-level course. He says, "I am taking chemistry now in college. I hated science in high school. When I got to college it was really cool, mostly because everyone is ahead of me in preparation, like years ahead of me."

It seems that part of the learning energy for Eric derives from the challenge of a faster pace. In this story, he has to work to catch up and stay on target at the same time. He describes what seems to be an ongoing element for him when he says, "For everyone else it was a review class, for me it was all new, very theoretical. I loved it."

Neither David nor Lily referred specifically to academic challenge. David appears to thrive on musical and athletic challenge and Lily on the challenge of leadership among her age-peers.

Readers

Five of the students talk in depth about the *importance of reading* in their lives.

Four of them read at young ages and continue to read from personal interest. One, David, struggled with reading skills in his earlier years and now reads for pleasure as a young adult.

Alan uses school as a starter resource and enlarges on his interests by accessing information outside school. In a description that appears to be his ongoing learning

pattern he says, "Back in elementary school I started out being pretty fascinated by history. The books I took out of the library in 2nd, 3rd, and 4th grades were primarily about ancient civilizations such as Greece, China, and Rome. It was something that I was exposed to somewhere else, I might have seen something on TV that I was drawn towards and that I wanted to find out about." He continues to work in this fashion in college today.

Betty relied on reading as an antidote to boredom in school. She says, "I did OK in the public schools the first couple of years, 1st and 2nd grades. That was what made me into a reader because I had so much down time and I got bored. I realized that if I started reading instead of just memorizing the books and pretending I could read, then I could actually do something with my time and learn at the same time."

Both Betty and Emma lament the loss of opportunities for appropriate reading material. Betty yearned for books at her level and notes that she missed out once when the assignments were not suitable either because they were too low-level or assigned in small sections when she could finish the entire book the same day. She missed out again "when it was time to discuss the reading, they were mostly books that weren't actually at the level I was reading so I really wasn't interested in discussing them either, which wasn't so great."

Betty worked to make her school days palatable. She says, "By the time I was 10 years old, I had figured out that if I had free time I was supposed to read. I went through all the books in the 4th grade classroom. Fortunately, our classroom was right next to the library. We had a door right into the library so I would just wander off into the library. I

came back with an encyclopedia one day because it was the most interesting thing left. I don't think the rest of the class was too happy with me about that."

David is the only student in this study to note difficulties with reading skills that persisted through public school. In his first year post-high school he now reads for pleasure.

Emma describes her struggles to find appropriate reading material. Like Betty, she used reading as a vehicle to get through some of her school days. Even as she started school she says, "I got the feeling they wanted to put me where I would not bother people, or where I would be the least hassle. I was probably a pain in the ass in Kindergarten because I knew how to read and what was I going to do while other people were learning the alphabet? I was with an aide for a while; we would read books together."

Emma talks at length about the mis-match between her reading ability, intellectual interests, and available reading material. She says, "I do think I feel like I wasted a lot of time reading. I know my parents always complained about this. But you can't complain about something and not give helpful suggestions. I did a lot of reading that was way below my level, like the Babysitter's Club books through 6th and 7th grade. I was tested at being able to read at a college level, so they were way below my potential."

While both Emma and her parents appear to have desired more appropriate material, it was a struggle. Emma says, "I wish that someone had recognized that I really enjoyed books at an advanced level. I just kept reading frivolous books. Well, not really frivolous because they made me happy. I feel if books with more adult themes that I later

discovered for myself, such as 1984, the Ray Bradbury books, and Fahrenheit 451, were recommended to me a little earlier in my life, I would have been able to read things that were more appropriate to my level. As it was, when I was 12 I read all those books and Catch 22 in one summer. I finally discovered books at my level that I enjoyed and that were stimulating and that brought up issues that I cared about and thought about."

Emma relates a story about one school librarian's efforts to help. She says, "I was miserable in school so I was pretty depressed and the librarians would suggest really depressing books. Like this one book we'd read over and over. It was a children's classic, but I never read it. It was called *My Brother Sam Is Dead*. Why, when I am so miserable at school, would I want to read a book called *My Brother Sam Is Dead*? That just struck me as insane."

Eric, like Alan, describes reading outside school as important to him. He says, "We read a lot. I read a lot of books outside school, like fantasy books or classic novels." As a college student he continues to be a strong reader in a wide range of areas. Eric says throughout school he "had a good friend, Ned, who is still a good friend of mine, much more brilliant than I am. He would push me to compete with him. He read *Moby Dick* so I read *Robinson Crusoe* and we'd have a competition about who could read more pages." He related this story with delight as it combines two of his most sought after elements in learning, peers and reading.

Lily does not refer to reading as important in her life.

Creative Skills in Drama/Art/Music

Four students describe the *importance of the arts* in their lives. Their talents and interests include drawing, theater, music, and singing.

Alan started drawing as a young child and was well supported by his parents.

"My parents from day one saw that I had an interest in drawing and they were always willing to let me draw, to give me the time, to give me the materials, give me the space.

My parents were always encouraging us and always willing to spend money to take us to museums and stuff like that."

David has been a musician since 4th grade. He started by playing the recorder and moved to piano by his freshman year in high school. Music is his passion, his emotional outlet and part of his daily routine.

Emma and Eric both describe theater, writing plays, and acting in plays as important in their younger lives. Emma says she started going to drama camps in 5th grade and it was an atmosphere where everybody could be good at something. She says it provided a "good social foundation" and it was something she returned to each year with the same people.

Alan and Emma both noted memorable experiences of writing and producing plays that involved classmates in elementary school. They appeared to thrive on the open-ended nature of the activity along with the ability to produce their plays.

Eric notes the importance of athletics and singing in his last two years of high school. He says, "I had good friends and I played a lot of varsity sports and I was in the high school musical. I was really into singing and sports."

Neither Betty nor Lily refers to arts as important to them.

Desire for True Peers

Four of the students lament the lack of *intellectual peers* in school. All four note the lack of social as well as intellectual companionship. "With true peers, gifted children can be themselves, laugh at the same jokes, play games at the same level, share the depth of their sensitivity, and develop more complex values" (Silverman, 1993, p. 308). Because chronological age is not the determinant of peers for these students, some may have one set of peers for intellectual activities and another for physical activities. Finding these peers allows the student to benefit from social interaction on similar levels (Silverman)

Alan, like the other three students, says, "I found more intellectual peers in college, people who are interested in talking about what they are learning about. I think that socially it's pretty important for me to be surrounded by people who are similarly driven. In high school, I had friends who were interested in certain things, but I was always kind of the odd man out."

Betty experienced her first moment of peer validation at a two-day conference in Boston. She remembers clearly the feelings she had and says, "For me, being in this group of other gifted young adults at the Hollingworth Conference was validating. OK, there are other people like me. It's OK to be like that, but it's only OK to be like that with them. That is what I came away with. If I am with other people like this, then it's OK to be smart. But for the majority of the time you can't be smart."

Emma, like Alan and Eric, eventually found many peers in college. She also found peers in middle school when she attended a small, private school grades 7 through 10. She remembers, "The kids were all kind of gifted and it was such an interesting place because we were pushed to do interesting things. I always feel that everything useful I know I learned before I was 16, academically speaking, because we were exposed to interesting ideas and a heavy-duty curriculum. I was very engaged, which is good." She comments, "I feel like the other students were my peers because they were all very smart. Most of them were definitely as smart as I was. I made good friends there."

Emma and Eric both would have also valued healthy competition among peers.

Emma says, "I wish that starting very early on I had been in an educational situation where I could meet more peers. I really wish I had been in a gifted program or some kind of track with people at my level so that starting in Kindergarten I was taught how to work on things that were challenging to me." She highlights, "I would have liked to be around people at my level so there would have been an element of competition. Not cut-throat competition, but the sense that I got at my private Vermont school where it felt like we all came pretty much from the same background and same level."

Eric, like Emma, had peers who were older. He notes, "My friends in the higher grades were two years above me." He yearned for intellectual peers and says, "I remember hating high school, a lot. I think if you had the social part and you had other people around who were really into it that would have made a big difference."

He suggested that his friends who were smart "could do school because they could just tune out in class and just hang out with their friends and they would do just the

exact amount of work that was needed. No more, no less." He appears to have noticed the difference in his learning style. He says his friends "would just hang out with friends all the time. So, they would hang out in class and talk, but I couldn't do it. It was way too boring."

David and Lily had peer experiences that were different from the other four students. David is a musician and an athlete, a valuable talent when "a boy is surrounded by a peer culture in which the ideal boy is an athletic boy" (Kerr & Cohn, 2001, p. 134). Both talents were enjoyed with and acknowledged by his peers in public school. He describes the validation he received from performing by saying, "Stage fright doesn't affect me at all. It's interesting how some people are so afraid to go on a stage, but for me it's what drives me, it's what brings me back. I love the idea of being up in front of my peers, the whole student body, adults, people I don't know, being able to express my emotion in this very creative way. And the response I get from it, the applause, it just lifts me up."

Lily possesses a set of interpersonal, academic, and personality skills that supported her to grow into a leader of her peers. Gardner's (1993) theory of interpersonal intelligence is the basis for including leadership as a type of giftedness. Leadership is also included in Vermont's definition of giftedness (Vermont Laws Regarding Gifted Students, 1996). Through understanding the needs and feelings of her age-peers, Lily was elected to class offices starting in middle school and given the trust of her classmates.

In What Ways Do These Students Feel Their Talent Influences Their Intellectual, Emotional and Social Lives?

While David and Lily appear to have fit in with their peers and been able to create satisfying social lives while in school, this is not the case for the other four students.

Alan, Betty, Emma, and Eric all describe both feeling and being out of step. All four were bullied and ostracized by their age-peers in school. They yearned for intellectual peers to share their excitement for learning. Alan and Eric describe having friends along the way, even though they were not as motivated as they were to learn. Eric is able to name one good friend with whom he shared an interest in reading. Betty and Emma struggled to find and keep friends beginning in elementary school. At points in high school, Emma had no friends to name and Betty found her social life with elderly women in a knitting group. This dissonance resolved for three of the four students when they reached college. Betty does not talk about friends or her social life.

Alan points out a dynamic that is still stronger for boys than girls, the pressure for boys to be good athletes. He says, "A lot of my friends were pretty big into athletics and I never really was. I was on some teams, but that wasn't really something that I was interested in. It was just something I did to be in shape." Fortunately, Alan was interested and able to figure out how to be "one of the guys" as he matured. He had role models and says, "For some reason I was still able to be one of the guys essentially because I had gone to summer camps and I had two older brothers." He also learned social skills and notes, "If you can use your smarts to outwit people and make people

laugh, you are going to be accepted. That is something I was always comfortable with, poking fun at people."

Though his mother describes social difficulties at an even younger age, Alan starts by describing middle school, which he says, "was a tough patch for me socially but it was kind of my own doing. I wasn't on sports teams, I was a slob, and I didn't really care what people thought of me. That's fine; it's kind of good to be your own person.

But I was miserable for a lot of it, especially in the beginning, until I realized the reasons I was doing those things weren't really the right reasons."

On his way to understanding how to fit in with other students at school, Alan talks about his anger at the discrimination and bullying he faced. He describes his feelings by saying, "It wasn't because it was comfortable being that person, it was just kind of lashing out at this perceived difference. Like you are a stupid jock and I am above you. I was being judgmental; I was putting myself on a pedestal. By being that kind of pariah, that lower caste was saying, 'Well I may be untouchable but somehow I am more righteous than you are.' I think that attitude resolved and that was the key to my success, I guess." His struggle and his success are remarkable and may have played a part in developing his strong empathy for others.

Betty struggled to find friends and, while the other three students describe finding many friends in college, Betty does not. About elementary school she says, "Socially, it didn't go well. I didn't get along with any of the girls in the 4th grade class. I always figured part of it was the fact that I just moved in so they already had their group of

friends. There were four of them and everybody else was afraid of them. They were sort of in charge and they hated me."

Third and fourth grades are a critical point in peer acceptance and "woe to the girl who is 'different' in any shape or form" (Silverman, 1993, p. 302). Betty had a terrible time and retreated into silence. Describing that period, she says, "I don't remember how I chose to deal with it. I sort of blocked out that 4th grade year. Nobody really talked about it. I stopped being talkative at some point. I really just didn't talk about it much at all in 4th grade that I recall."

"If giftedness survives the middle years, the worst is yet to come. Junior high school has proved to be the most vulnerable time for gifted girls" (Silverman, 1993, p. 303). Betty follows this pattern and says, "I had a bit of a repeat in 8th grade, though part of it was my fault and not understanding how things actually work socially. I made some social mistakes that then spiraled out of control. As a result, I stopped talking for a couple of months. My mother said she was going to charge me a quarter for every time I grunted."

It appears that Betty's teachers allowed her silence. "My science teacher worked out a system where I could raise my hand and blink my eyes if I wanted to answer. In English class, I would sit next to my teacher so that if I had the answer, I would point to my notes. The teacher would know I always had the answer but I would not say it. That was the end of 8th grade."

There is no mention of counseling for Betty, or for any of the other students.

David struggles academically and thrives both on stage and on the soccer field. He describes having many friends and feeling exuberant about his two talents, which bring him recognition and satisfaction. He says, "When I'm backstage, I can't wait to get on there. It's just this feeling and it's indescribable. It's being in the moment and knowing that all eyes and ears are on me at that one time and I am sharing what is totally mine if it's an original tune that I've created. I am sharing this with all those people and they are going to remember. The response and the adrenalin rush keep bringing me back. It's definitely what I love."

Described by his father as a very sensitive child, David is aware he uses music to display and modify his emotions. He says, "I just play really what I feel. It's very much tied to my emotional and social life, I guess. If I were ever stressed out, I'd always sit down at the piano or guitar for a little while and play. It sort of soothed my soul and eased the stress and it would work. I can always go back to that. It gives me energy or cools me down. It helps in a number of ways."

Along with his socially endorsed talents, he is able to use humor to his advantage. He says, "Verbally, I like to be funny. I had a lot of friends. I get along with a lot of my teachers and it's easy to talk to people. I am not sure if music has influenced that or helped that."

Emma's story mirrors Alan's and Eric's in finding her true peers at college after a hard struggle through school. She says, "At Wellesley I have trillions of friends and it's a serious problem. It's so amazing and I hardly have time to get any schoolwork done.

Everyone at Wellesley is smart, that is not even a thing. I found such interesting and

amazing people to be friends with. Now I know I can find those people at any school, at UVM, definitely, now that they've bolstered their admissions policy. I mean, that's really just been amazing." Defiantly, and somewhat proudly, she says, "Now I feel like my social skills with my peers are fine. I know some people who could use social skills more than I could."

Like Betty, Emma describes her school life by saying, "Socially, through 3rd grade was fine. Starting in 4th or 5th grade, kids start to focus on differences and everyone gets really insecure, so once that became the climate, I was really miserable because being smart is just not part of what is cool to display." She continued struggling with school both academically and socially, and says, "I was so miserable in 6th grade because not only was being smart so uncool that it was a factor in isolation, but I wasn't even being challenged in school. There really just wasn't anything to keep me interested in school at all."

With her parent's support, Emma says, "Starting in 5th grade, I went to a lot of drama camps and those activities helped. I met a lot of people from the area through those activities because it was something I was good at that they were also good at and that provided a nice social foundation. I could go back to camp each year and see the same people." Theater appears to be an important creative and social outlet for Emma as she highlighted the experience of writing and producing a play in her 5th grade classroom.

In a story that aligns with Alan's and Betty's reactions to social marginalization,
Emma says, "After I left school in 10th grade, I only had a few friends. I spent so much

time alone. It didn't really bother me because I felt it was better. I just kind of disdained everyone." Each of these students came to feel that finding friends and true peers was too difficult. It was not worth the struggle at some point, at least for some period of time.

As with Betty, Emma found her comfort zone was to "spend so much time with people who were older than me starting in 11th grade." After she left formal public school, she was taking college classes and working part- to full-time with people who were in college and older. She says, "I feel that I have very good adult social skills. Interacting with my peers was harder for me because that age is so weird and I didn't really entertain a lot of the conventions that are established at that point."

Emma is thrilled now to have true peers. She says, "Because having friends is not something I had, that feels more important to me. It is something I am getting out of Wellesley that I couldn't get earlier. It's really just been amazing."

Eric found older friends in school. He says, "My friends in the higher grades were two years above me. My friends in the lower grades were first miffed that I had left them behind and then they just kind of like you know whatever. No one was 'really, yeah, go for it, do it' except my mom and dad." He wanted friends and intellectual peers and was aware of, but unable, to do it the same way as some of the other students. He says, "Yeah, I was smart, but I wasn't so smart that I didn't want to be with other people. I wanted to do it with my friends and have fun."

He notes, "I think my friends who are smart could do school because they could just tune out in class and just hang out with their friends and they would do just the exact amount of work that was needed. No more, no less. They would just hang out with

friends all the time. So, they would hang out in class and talk, but I couldn't do it. It was way too boring."

Ahead of his age-peers, he was ready to do high school in 7th and 8th grades and his friends were not. He says, "Then, in high school I was really ready to go to college and my friends weren't."

Bullied in a school environment that his mother calls "brutal," Eric says, "It was a risk to put myself out as smart." He notes one reason is, "People who weren't really close friends would be kind of intimidated to talk to me so they wouldn't sometimes. Sometimes that would be a great thing. Because they'd be big jerks and they wouldn't even approach me because they didn't want to get trashed. It didn't matter to the people who really knew me, but for the people who sort of knew me, it was kind of like he thinks he's better than everybody. He's a genius."

A second reason, his empathy toward other people, is highlighted when he says he did not want to act smart "because it would be kind of a jerky thing to do. 'Oh, yeah, I am going to get this award and I am going to go to this higher thing' when one of your friends is going home to an empty kitchen that doesn't have electricity and the parents are alcoholics and they are sleeping on a mattress on the floor. You know, what a jerk. I didn't want to be an asshole."

Lily had a different social experience throughout public school. Beginning in middle school, she was elected to a class office with a great deal of real responsibility. Later she was elected to be senior class president, both an honor and recognition of her talents. Her peers valued her and she notes no social difficulties.

What Were Their Memorable Learning Experiences, In and Out of School?

Alan remembers a pivotal event clearly and describes one of his most memorable educational experiences at a summer camp where "I had a really great counselor who taught drawing classes and went to art school. At one point, his brother, who is also an artist, stopped by and he pulled me out of an activity so I could meet his brother. He showed me these colored pencil drawings that were photo-realistic. It kind of blew my mind. I was pretty young at the time, maybe 7th grade or so. Moments like that really stick with me."

Betty considers her elementary school experience and says, "One of my classes was nice. For 2nd grade, we had three different teachers and the classes would rotate between their classrooms because it was easier to pick up and move the students than all the materials. In the reading class, we had these little booklets with stories and questions we had to answer. You could go through on your own pace. I liked that because I was never bored and I was always on task. I went through 10 of them in a day." It was a rare experience for her to move at her own pace.

She remembers an open-ended experiment in 4th grade where in a program sponsored by Ben and Jerry's she did a science project on solar power. She describes the event by saying, "It was in the spring so we had the sun back. It was actually kind of warm out and there wasn't snow on the ground. We got to build solar cookers and put a thermometer in there and see who could get theirs up to the highest temperature. I had fun with that because they gave us all the tools and all the information and then said, 'have fun'. I won that one." From her other descriptions, it is probable the experience

was primary and the winning was nice, but secondary to the opportunity the day provided for learning that met her needs.

David recounts his early music by saying, "I was big on the recorder all through elementary school. Two girls and I played in the advanced group. Our little recorder recitals were pretty cool. We'd play Irish drinking songs and it was really good. We'd always get compliments after the show." This description aligns with his other statements about the importance of music, playing with others and the positive attention it gained him.

Emma remembers being "very frustrated with my classes in elementary school. I was very frustrated with the fact that we learned the same things year after year. They called it 'spiral curriculum' and it seemed so stupid to me when I was younger because I was 'well, we learned this last year, why do we need to learn it again? I remember it."

Emma "got things the first time they were presented. I didn't need an explanation. When I was younger I thought it was just ridiculous to need a concept presented more than one time."

Eric remembers his best learning was mostly out of school. Yearning for peers, he recalls, "In elementary school I had some good friends who were just as smart as I was so it was pretty competitive. It was a lot of fun." It was the last time he had intellectual peers in his educational life until college.

Eric, along with all the other students, credits his parents often with his ability to stay engaged in learning. He remembers, "In elementary school, my mom would come in and teach us pre-algebra math. It was just me and a couple of friends who wanted to do

it." He notes also, "We read a lot. I read a lot of books outside school, like fantasy books or classic novels." His parents were able, as they struggled to understand Eric as a learner, to support him with resources, time, and caring.

Lily remembers the active learning that was rarely available to her. She remembers, "One of my better teachers was in 3rd and 4th grades. He had a lot of projects that we would work on. That was when the school started getting computers so we would learn stuff on computers." Even though the majority of the projects did not actually happen, Lily still remembers he *wanted* to do certain things outside reading and writing.

Educational Experiences Where These Students Felt Engaged and Why

While all students recounted times of disappointment and frustration in their educational experience, they also offer descriptions of times when they felt engaged. In particular, these experiences reveal *personal interactions with teachers or other interested adults* and *freedom of choice to learn independently*.

Alan recounts meeting two artists at a summer camp who further ignited his interest in art and creative activities. Thinking about his public school education, he says, "I had a really great English teacher who got me interested in speech and debate and that fed my interest in writing."

Betty describes learning what she wanted as a time of engagement. She says, "So, 6th grade was a good year. I got to take all sorts of things that I wanted to do. I got to take Latin. That was cool."

David reveals the depth of his passion for music and performing saying, "When I'm backstage, I can't wait to get on there. It's just this feeling and it's indescribable."

He cites the adrenalin rush of performing and receiving accolades from the audience.

Emma remembers an engaging assignment where she was set loose to accomplish the same task as the other 5th graders, but allowed to do it her way "because I was so bored in her class, she [the teacher] said 'fine, you can write your own play'."

In the best years of her K-12 education, Emma describes going to a small, private school grades 7 through 10. She notes, in particular, the presence of intellectual peers in that environment. "I feel like the other students were my peers because they were all very smart. Most of them were definitely as smart as I was. I made good friends there."

Eric struggled for many years bouncing between middle school and high school and found more positive experiences during his last two years of high school when he was able to tap into some of his many talents. He says, "I had a great English teacher and some good history teachers. I took classes at two local colleges. In my last two years of high school, I read a lot of books. I had good friends and I played a lot of varsity sports and I was in the high school musical. I was really into singing and sports."

Lily experienced her strongest engagement in college and says, "Once I got to college I did a lot of internships. It was wonderful because doing an internship allows you to replace a class each semester with an internship of your choosing." She was able to connect with an advisor who helped her write reflections on her experience and then connect her experience to academic literature. Lily says, "That was really important to

me in learning what I want to do and what I don't want to do. And we really didn't have that experience in high school."

What Could Have Made Their Educational Experiences Better

There is a range among the students in the study in terms of what they expected or sought from their schools. Alan and Eric are independent learners who wanted peers, but did not expect schools to promote their learning. They wanted help and support from schools but felt they needed to be responsible for their own learning and tried to figure out how. Both seemed willing to accept the notion that students with bigger needs overburden schools and school personnel leaving these two students to excuse the system for abandoning them.

Betty and Emma suffered torturous social lives combined with few moments of exciting learning. They tried to fit and could not. In a poignant example of keeping hope the public system could work for her, Betty and her family interviewed five high schools before choosing home schooling. They wanted to keep going in the system until it became unavoidably clear it would not work.

All students, except David, were bored. Some of what they address in this section could have helped alleviate this boredom. David and Lily seem to have suffered less and succeeded because of interpersonal skills and publicly acknowledged talents. In the following section, I review thoughts from the students on what could have made their educational experiences better.

Alan says, "I think that I am pretty comfortable with the way my education has turned out in general. I think a lot of it had to do with the atmosphere of my home life. I

always knew the opportunity was there if I wanted to change my education and it was an opportunity that I was blessed to have." Alan feels he has received "a lot of positive support and very few instances of negative interaction." He credits his parents for always encouraging his interests. He did not look to the school for much and says his education was positive because "it has to do with really wanting to learn things independently. We could touch on things in school and I could go home and to the library to really learn more."

Betty says, "I think home schooling was best for me. I knew I didn't want to deal with people anymore after my 8th grade social failures." While Betty cites her "8th grade social failures", these form only the tipping point for an educational and social life that had been going downhill since 3rd grade when the family moved to rural Vermont.

Emma wishes "that starting very early on I had been in an educational situation where I could meet more peers. I really wish I had been in a gifted program or some kind of track with people at my level so that starting in Kindergarten I was taught how to work on things that were challenging to me." It may be that Emma was always aware of her yearning for intellectual peers and intellectual challenge earlier, but these needs became crystal clear when she found them met at college.

Reflecting on her earlier education, Emma has three more wishes: (1) "I really wish I had been in a situation where I didn't realize, didn't associate myself as being at the higher end of things or with things coming easily to me." (2) "I wish that I had focused more on one thing. It is a danger when you're gifted because you feel like you are good at so many things and you'll always be good at so many things, so why pick

one", and (3) "I wish that someone had recognized that I really enjoyed books at an advanced level. I just kept reading frivolous books."

Eric, like Alan, credits his parents for helping him graduate from high school. "If I didn't have my parents, I would have dropped out or I would have gotten really bad grades. That is huge." He wishes "there had been a class or two where the teacher said that we are going to start at the beginning and it is going to be very basic but we are going to move through very fast, that would have been great. The problem is that I couldn't get through my basic classes fast enough and then I'd get to the higher classes and it would be really tough because I hadn't had the basics." Like Alan and Emma, he wanted more intellectual peers and says, "If I had some friends doing it with me, that would have been great too."

Eric reflects on some of his frustration in school and says, "If the teachers had just answered my questions, that would have been great. Or if they had just given me books instead of saying you can't talk about that here. If I said something, they would say we can't talk about it here because I am trying to get everyone on the same page. But if they had said if you want to come talk to me after class and I can give you a book to read where you can find this information, that would have been great. But it was a total cut off. We aren't going to talk about that now."

Lily is the one student in the study to specifically request more hands-on activities. Finding successful opportunities in college, she says, "I think high schools should work on experiential opportunities for students. Especially if kids work to earn it, earn this time away from the classroom. I think kids who go to the Tech Center get the

experience they want hands-on. Why can't those kids going to be in the valedictory group get the same opportunity?"

David acknowledges the importance of his parents and his guidance counselor in supporting him with his musical and athletic opportunities. He does not offer recommendations that might have improved his educational experience.

The key question after uncovering these narratives is how to use them to make changes for the better. Findings and Recommendations based on these students' stories are in the next section.

Overall Parent Synopsis

This section is an overall analysis of key parent themes. This analysis begins with a description of the six parents in the study and then expands into the key themes extracted from the parent interviews. The key themes are based on the research questions and are then used as the basis of the subsequent Findings and Recommendations section.

Who Are These Parents?

The six families involved in this study are all white, middle-class, educated with two parents. In each family, it appears that one parent took the primary responsibility for their child's education. Two parents chose to leave their jobs to give the time and energy required to support their son or daughter. In both cases, this involved significant financial sacrifice.

Three parents went back to college to assist their son or daughter in providing academic support and encouragement for their learning. They were concerned about their child's emotional and academic lives. All three studied education and two of those

concentrated in gifted education. One considered studying counseling but said she chose gifted education because of her children's' needs. A fourth parent tried to keep working and at the same time researched gifted learners through conferences and informal networks. When her son's 7th grade teacher affirmed the parents' concerns, she then chose to leave work in order to better support her child. None of the families were high-income so there was additional financial sacrifice to pay to educate the parent at the same time there were educational costs for their children, on top of their taxes to support local schools.

Every parent spoke knowingly about their child and their stories closely aligned with their children's perspective on both themselves and their education. The parents seemed to understand their children's interests, strengths, and challenges. This understanding was, for the most part, hard earned. Three parents in particular described the financial and other stressors on their families as they sought to understand and support their students. As noted above, some parents gave up their employment and some parents went back to college to help ensure they were doing their best for their child. While this may appear to be a function of privilege, also apparent is the determination and persistence of families to do what is right for their child, even in the face of barriers that could derail some.

Most children in this study are first-born and their parents describe their uncertainties about where their children fit on the scale of development for age-peers.

One parent has two older children who had taught her a great deal about their development as well as the process of interacting with the local school system. Of the

other parents, all but David's father were interviewed about their oldest child. David has one older sister. One parent said, "Because Betty was my oldest child, I didn't know that other children weren't there yet" and this sense was a common theme.

All but one parent noted they felt something was different about their child but they did not have the experience to validate their concerns. They recount looking to the school to help understand and all describe a lack of appropriate response, which they then attributed to their inability to ask the right questions, to use the right language. One parent relates the story of her daughter's 2nd grade teacher who repeatedly told the parents their daughter was "an average second grader" and any difficulties would "iron themselves out." Unconvinced, but still concerned, the parents had their daughter tested with the school's cooperation and found she had the reasoning ability of a 32-year old. While the parents of the academically talented students moved on to charging the schools with insufficient training in the area of high potential learners, they started by blaming themselves.

'Most parents of gifted children who have legitimate and valid reasons for demanding curriculum alteration for their children *do not* ever approach the school for fear of being labeled pushy or because they feel that since their child has exceptional ability, they should simply be grateful,' says Nicholas Colangelo, a professor of gifted education at the University of Iowa. (Davidson & Davidson, 2004, p. 87)

Five parents describe their students as leading the way, knowing what they needed to learn. Experience at the Davidson Institute has shown that more often it is the

students pushing the parents (Davidson & Davidson, 2004). This was illustrated to a large degree by the student descriptions and contradicts a common myth that parents of bright learners are "pushy" or "elitist," terms about which several parents describe their anxiety. Part of keeping these parents quiet was the fear they would become known as "pushy." Combined with insecurity about what their students really needed, the peer pressure for the adults to be like all the other parents was difficult. One parent says she felt she could not talk honestly with other parents because the conversations were often about falling behind. She worried about what to say, how to say it, and whether it was safe to talk about a child who was far ahead in some areas. She feels fortunate to have met one or two other families with high potential learners with whom she could have honest discussions. She said she felt very lonely.

How Parents Described Their Children

All parents interviewed were able to describe their children in language that was echoed by the educators and the students themselves. Alan's mother said, "Outside of school he was always creative" and she goes on to describe how they needed to stop during car trips when he was a young child if he ran out of paper to draw. She notes, "He is very well rounded and likes and excels in everything."

She is one of two parents of boys who refer to their sons being bullied in school and links their empathy for others, in part, to that experience. She is also one of the two parents of boys who they described as "sensitive, introspective, or introverted." Sensitive and compassionate gifted children are likely to be highly empathic (Silverman, 1993) and both boys are described in this way by their parents.

Betty's mother says Betty was a motivated child, a curious child, a child of contradictions. "She is still very young and yet so mature," a reference to the asynchrony that other parents and educators also referenced. Developmental asynchrony (e.g., disparity among intellectual, physical, social, and emotional development levels) is routinely associated with giftedness (Silverman, 1993). Betty's mother notes, "Things still fascinate her like they do a younger child. Yet, she carries herself very well and interfaces remarkably well with adults and always has. She always has had that sort of difference. She still loves playing with Legos."

David's father describes David as "fairly complex because he has a lot of talent and yet is often not driven to excel unless he's enjoying himself. When he's gotten to a place in activities where the learning becomes difficult, he pulls back. That can be socially, academically, or sports. When he excels, he's really engaged." David remains engaged in his first passion, music, and though he and his father both acknowledge the hurdle of not reading music, David has found a way around this barrier by claiming education as his profession and music as his avocation.

Emma's mom says, "I think the first word that comes to mind is intelligent. And confident would be the second. She is also very creative and witty. She is very sharp and has a very good sense of humor. She's always wanted to stretch herself. She's what I call a heads-up person. She always knows what's going on, wanting to be part of it, not wanting to miss anything. She's also very motivated and strong-willed. She's quite self-centered at times. She likes to argue and be argumentative and she loves a rip-roaring discussion/argument about something."

Eric's mom begins with his emotional intelligence: "Right off the top of my head, he is an incredibly empathic child. He really gets how other people feel. He's almost too empathic." His educator, who noted Eric's ability to work with all the students in the 4th/5th grade class and be aware of their feelings at the same time, also highlighted Eric's empathy and compassion.

She then notes the asynchrony of his development, which is also noted about the other students by four parents and one educator. "Eric always seemed older than his age. Not mature, but he gets concepts earlier than other people." While all children vary in their rates of development in different areas of growth, development in gifted children can be more uneven (Silverman, 1993). There is the description of Emma as a second grader with the reasoning ability of a 32-year old. Emma's mother says, "She was always three going on 30." Alan's educator notes that Alan could act 17 years old one minute and 30 years old the next. What is different and potentially taxing about their uneven development is the unusually rapid development in some areas and the breadth of the continuum of their development (Silverman, 1993). It is another reason why uninformed, or inexperienced, parents have more difficulty understanding their children.

Lily's mom also starts with asynchrony and says Lily "has always been old beyond her years. From the beginning, she started talking very young. She was doing things around the house, participating in the household from an incredible young age. She's open and loving and very much of a doer. She likes to be active. She absorbs things quickly when she's working on them so it became clear from an early age that she

could achieve a lot as long as she was in the right environment." Lily's mother noticed early key traits, which Lily also describes as a young adult.

Commonalities and Differences Described By Parents

The parents in this study described several characteristics held in common by all the students. These included: early abilities; intrinsic motivation; persistence; independence; self-confidence; and curiosity.

Ellen Winner describes gifted children as precocious (Winner, 1996, p. 3) and notes their early abilities and drive to learn, to master what interests them as a key trait. Many of these children learn to read early and can move on to chapter books quickly (Davidson & Davidson, 2004). When parents in this study describe their children's early abilities, they also talk about their own participation in providing drawing materials or playing math games. They talk with enthusiasm about their children's growing capabilities and their parental nurturance of their interests.

Early Abilities

Alan was always creative, drawing and writing stories and books even as a young child. As a pre-schooler, Betty was playing math games on car trips with her parents. She could understand and participate in science experiments that were way beyond her age-peers. Emma was such an engaged infant that she refused to sleep in case she might miss something. When she entered kindergarten she was already reading chapter books. Lily was talking at a very young age and her mother notes that she was an active participant in the household from an incredibly young age. Eric's mother notes his

ability to grasp concepts at a much younger age than his peers. She used his understanding and use of irony by age nine as an example.

David, the musically talented student, does not fit this picture of early intellectual or creative ability, at least as described by his father.

Intrinsic Motivation, Persistence

Parents noted that motivation and persistence are apparent when their children are interested in the subject or activity. For all the children, their level of interest is one part of determining their motivation. These are critical qualities because in order to pursue higher-level interests, motivation and persistence are required and typically important for success as adults (Davis & Rimm, 1998).

All parents and students describe their children's intrinsic motivation and persistence. Alan describes using school as the starting place and then branching out on his own to follow his passions. His mother cites his determination as one of his greatest strengths. She says he has the ability to "decide he's going to do something and then see it through." She notes, "that might sound simple but I don't think a lot of people have that necessarily at such a young age."

When asked to describe her child, Betty's mother's first comment was that "she is a motivated child, she wants to figure things out." David's musical motivation and persistence began to show up in 4th grade and continue through to the present where he plays music daily and has exhibited the leadership and commitment to pull together a band.

Emma's motivation and persistence are exemplified by her actions following her public and private "formal schooling" years. Supported only by her parents, aware that the Vermont school system required nothing further from her, she still chose to challenge her intellectual abilities by taking numerous college-level courses at the University of Vermont and Community College of Vermont as well as working many hours per week.

Eric's mother describes him as a "sponge." She says, "He self-feeds and if he couldn't, he would self-medicate with drugs or alcohol or by getting into trouble." His drive to learn is so strong that "even when he's having down times, he's teaching himself the banjo or he's always doing something."

Lily's mother describes her daughter's leadership qualities in part as a quest to "get things done." She sees the big picture, makes connections, and then is able to persist to finish, even when others drop the ball.

Independence, Self Confidence

High potential learners are typically able to build on their successes which can lead to a sense of independence and self-confidence (Davis & Rimm, 1998). They tend to have an independent learning style that often favors unstructured, learner-driven activities (Davis & Rimm). Five parents spoke about their children's sense of independence and self-confidence.

Betty's mother described Betty as a motivated learner and notes that she was pretty much self-directed, especially through her years of home schooling. "She knew what she wanted to do and she would tell us."

David's father noted David's confidence in both his musical and his athletic abilities.

Emma's mother said, "Her preference for learning is to teach herself. That was true, definitely, at home."

Both Alan's and Eric's mothers noted their son's interest in self-directed learning.

Both sons demonstrate confidence that they know the learning style which best suits them.

Lily's mother did not directly reference independence or self confidence using those terms, though she does describe high-level responsibilities, both elected and self-chosen, which would necessitate those qualities to be successful.

Differences/Artistic Interests

"Creative persons differ from one another in a variety of ways, but, in one respect they are unanimous: They all love what they do" (Csikszentmihalyi, 1996, p. 107). The concepts of flow and creativity and their potential for human enjoyment are important for their own sake and the parents describe their children, even at very young ages, as being deeply engaged in their art. As Csikszentmihalyi states, "It is difficult to imagine a richer life" (p. 106). We heard from four parents about artistic interests which started early and which continue in some form throughout their young adulthood.

Alan's mother says "outside of school he was always creative" and named some of his favorite activities as drawing, sculpting out of found objects, writing books, making flipbooks, and writing stories. She says he started drawing when he was very young.

David's artistic interest is music. He started in 4th grade in his elementary school and continued through school, as well as adding jazz piano lessons in his freshman year.

Emma's mother referred to her creativity generally and said that Emma loved to be constantly reading, writing, drawing, creating plays, books, whatever, and did not sit around twiddling her thumbs.

Eric, like Alan, loved to draw. His mother describes finding a computer class for Eric in cartoon animation. She says it was a combination of art, science, and math that he liked.

At least two of these children are planning to work professionally in their creative fields and the third, Eric, is likely to continue to incorporate his love of creativity into his life.

Neither Becky's nor Lily's parents described creative artistic interests,

Sense of Humor

A frequent trait of creative and high potential learners is a good sense of humor. "Humor is first cousin to the ability to take fresh, childlike, and playful approaches to problems. Carl Rogers and Sigmund Freud agree, among others, that the ability to revert to childlike wonder is valuable and necessary in creative problem solving" (Davis & Rimm, 1998, p. 36).

According to Abraham Maslow, the fullest aspect of human development is self-actualization. Important in this process is a sense of humor. "Self-actualization basically means living up to one's potential" (Ambrose & Cross, 2009, p. 267). Maslow's theory of an individual's perception of the world and society focused on the emergence of self,

the search for identity, and the individual's relationship with others throughout a lifetime. In a listing of Maslow's characteristics of self-actualization, humor and creativity are numbers 13 and 14 on a list of 15 items (Ambrose & Cross, p. 267).

Four parents described their children as having a strong sense of humor. Alan's mother talked about his ability to diffuse difficult social situations with humor. She said, "He has a great sense of humor that he learned to use wisely and to his advantage." She was referencing, in particular, situations where Alan was targeted and needed his wits to escape.

Emma's mother highlighted her creativity and her humor. She said Emma is "very creative and witty. She is very sharp and has a very good sense of humor."

Eric's mother noted that while he did not appear especially mature, he got concepts earlier than other people. She says, "I remember when he was about nine and he understood irony. He understood it from a Calvin and Hobbes cartoon. I asked if he knew what that means and he said 'yeah, of course'. "Like Alan, he could also use humor to his benefit in social situations.

Lily's mother says, "She's got, maturity, definitely, but that's made up of so many components. Resilience in some areas, not so resilient in others. I think she's realistic and that's part of her humor, being able to see the funny side and the unfortunate sometimes. I think essentially her gift is seeing things, understanding them."

Two parents, Betty's and David's, did not refer to humor as a key trait for their children.

Curiosity

"The creative person has strong curiosity, a childlike sense of wonder and intrigue" (Davis & Rimm, 1998, p. 36). "The type of curiosity that evokes the expression of creativity is seen in a persistent reluctance to take things for granted, a deep desire for explanations, and skepticism of 'obvious' explanations" (Sternberg, 1999, p. 410).

"Whether or not it is possible to stimulate or enhance curiosity, squelching it appears all too easy to do" (Csikszentmihalyi, 1996, p. 11). "If too few opportunities for curiosity are available, if too many obstacles are placed in the way of risk and exploration, the motivation to engage in creative behavior is easily extinguished" (Csikszentmihalyi, p. 11).

Alan's mother says he was very curious. He really liked to learn and know a lot of facts and information.

Betty's mother describes her as, "A curious child, a child of contradictions. She's contradictory because I think, mostly, she is still very young and yet so mature. She has definitely not forgotten how to be a child." This description of curiosity fits with the trait of creative people keeping child-like wonder alive as they mature.

Emma's mother says that what keeps Emma going is that "she is just fascinated by everything." She cites Emma's need for little sleep as an infant, she believes, because Emma was so curious and interested.

Eric's mother describes him as "a sponge." She says, "He's very busy, he's always busy, he's thinking about stuff." She noted there is always a stack of books at his bedside, with widely ranging topics he wants to know about.

Neither David's nor Lily's parents referenced curiosity as a strong trait though Lily's mother said she likes to figure out how the world works.

Empathy, Sensitivity

Empathy and sensitivity are related though they do not necessarily occur together. Empathy is the ability to understand the feelings of others while sensitivity relates to the emotional response of the individual (Silverman, 1993). While three parents of boys describe their children as sensitive and/or empathic, none of them use the term "overly-sensitive" which denigrates the value of sensitivity in the world.

Alan's mother describes him as "very sensitive" and wondered whether his sense of being picked on in school was real or whether it related to his heightened sensitivity. She perceived him as having friends and sensed that other children did like him. At the same time, she notes his strong capacity for empathy and thinks it may be related to his sense of being bullied in school.

David's father notes that David is "emotional, very emotional and extremely sensitive." As an example, he related a moment when David's pet had died and David was feeling overwhelmed by the loss.

Like Alan, Eric was bullied in school. According to his mother, "Eric is not bad-looking, he's very athletic, he played soccer all through high school and he had a girlfriend who was stunning. He still got incredible bullying. School was brutal."

These three boys were fighting some of the many myths about boys, including The Boy Code. The Boy Code, as defined by William Pollack, is a "type of straightjacket for boys, cruelly restricting their emotions and behaviors" (Kerr & Cohn, 2001, p. 83). The

fourth restriction in the Code is: "No Sissy Stuff; males must never show dependence, warmth or sympathy" (Kerr & Cohn, p. 83). In talking with boys outside this study, one of them noted that if a boy is good-looking, athletic, and has a girlfriend who is a "10," then he can afford to be smart. It appears from two of the three boys in this study that those characteristics are not foolproof.

None of the three girls in this study described themselves or were referred to as sensitive or empathic.

What Parents See as Their Child's Greatest Strengths

This group of parents named a range of strengths in their children. They appear to have noted these ongoing traits from an early age. Alan's mother says, "One of his greatest strengths is his determination. I think he really has an ability to decide that he is going to do something and then see it through. That might sound simple. But I think a lot of people don't have that necessarily or at such a young age."

Betty's mother notes, "She's much better with physical things and understanding how things are put together than with how people fit together and work together. But, she's maturing into that strength also."

David's father says, "David likes challenge when he gets acceptance out of it and that was from a very early age. He has been a kid who needs acceptance. Having two children you get to see the difference and, being the second child, you have that comparison. He is a talented kid. He's coordinated and he is creative."

Emma's mother says, "Creativity is a big one. I hope that whatever work she chooses, that piece will be included. I think if it's not she will not be happy. She wants to be on the cutting edge."

She adds, "One of the difficult things about being so bright is you have so many interests, so many talents, that to find your life's work to include as many of those as possible will be important for her. Her writing skills, her language skills, her love of travel, her creativity, that she is knowledgeable about the world, that she is a synthesizer and analyzer . . . I just hope she can use all that."

Eric's mother notes, "He loves synthesizing things, sort of pulling things together and making a broader picture." An additional strength is his ability to retain everything he reads, not necessarily a photographic memory, but strong retention.

Lily's mother says Lily is very practical and pragmatic. She adds "competent" and says, "The word competent is such a broad word, but she is pretty competent.

Whatever you give her can be done in an efficient and timely thorough manner."

What Parents See as Their Child's Greatest Challenges in School

Parents describe their children as having serious challenges in school. These include boredom, bullying, lack of appropriate challenge, learning struggles, and peer struggles.

Boredom

Boredom can be a serious condition. American parents are more likely to be familiar with the "I don't know what to do, go find something to do" syndrome than the soul-destroying aspects of boredom every day in an environment where the students are

forced to be for a certain number of hours. Csikszentmihalyi, the creator of the term "flow" which describes the enriching essence of deep engagement, also describes its opposite, entropy (Csikszentmihalyi, 1990). He claims that psychic entropy is often felt as frustration, anxiety, alienation, guilt, or boredom and while it does not feel good, in the short-term, it has some positive effects when adolescents struggle and gain a foothold to move on to the next level of understanding (Csikszentmihalyi & Larson, 1984, p. 22).

It is the long-term, however, a repeated state of entropy that may be permanently damaging and may eventually even destroy an interest in living (Csikszentmihalyi & Larson, 1984). "If a teenager is *always* bored in school and nowhere learns habits of mental discipline, it is unlikely that he later will be able to tackle complex tasks requiring the use of thought" (Csikszentmihalyi & Larson, p. 23). Emma and Eric, in particular, describe the huge hurdles they faced when they reached their colleges because they were not familiar with effective study skills, having never needed them. They describe looking around at other college students who had to work to meet the challenges in their high school environments and they realized, for the first time, the importance of this work.

Boredom as part of school was a challenge noted by all students and parents, except David (the musician). Alan's mother says, "In the beginning he was a very frustrated learner at school because he felt school didn't fit." Alan told his mother "that school would be OK if it was just recess and library." His mother says he caught on quickly so there was boredom. Betty highlights the importance of lunch and recess in her early elementary years and had worked out a formula for herself that the other five hours of the school day were spent reading. Lily's mother recounts that Lily already knew

many of the lessons provided in 1st and 2nd grade. She was often asked to help other students, rather than accelerating her own learning.

Bullying

In a research study funded by the Supporting Emotional Needs of Gifted Foundation (SENG), the researchers sought to document the prevalence and impact that bullying has on gifted students. While they were focused on the gifted population, in their review of the literature, they found that anywhere from about 60 percent to 90 percent of students in the general population had been bullied, and around 20 percent of students were bullies (Peterson & Ray, 2006). In their description of boys who are more consistently likely to be bullied, Kerr and Cohn (2001) used the terms, "Sissies, Fat Boys, and Nerds" (p. 231). These boys are typically outsiders and are easy targets.

One path that Kerr and Cohn (2001) suggest to transcend the pain of being negatively labeled and bullied is for boys to value their creativity, learning, and achievement. Another is to "re-invent oneself as a positive, beloved type that others will value" (Kerr & Cohn, p. 230). We will see in the parent descriptions that the two boys who were bullied took both these paths.

In addition, both boys were able to talk easily with their families. In one case, there was an extended family within the small town and the small local school, so there were always caring eyes and ears in the boy's environment. Peterson and Ray (2006) found one of the most important keys to protecting bullied children is to improve communication between students and parents and schools.

Alan's mother spoke at length about the bullying he received and said, "I think schools in general don't do a good enough job with the bullying issue. I am not sure I see a lot of change from when I was a kid." She noted his family's strong support and offered that perhaps having two older brothers helped him learn to fit in better socially over time. She says, "In the long run, being bullied made him more empathetic for other people."

Eric's mother noted his empathy first when describing her son's key characteristics, but she does not make the direct link that Alan's mother noted for the possibility that bullying may have helped him become more empathic. Eric's mother says that school was brutal and that he was the object of incredible bullying throughout high school. One bully would call him 'faggot' all the time. A study by the Gay, Lesbian, Straight Education Network in 1999 found that elementary school children hear the epithet "gay" an average of 25 times a day (Kerr & Cohn, 2001, p. 233). "It is considered the strongest and most hurtful epithet that one can hurl at another. It speaks of nothing other than the fact that its target is inferior" (Kerr & Cohn, p. 233). Peterson notes that verbal bullying is no less harmful than physical bullying (Peterson & Ray, 2006).

Bullying among girls can look different from boys who tend to act more physically or overtly than girls. In her book *Reviving Ophelia: Saving the Selves of Adolescent Girls*, Mary Pipher named bullying among girls "relational aggression" (Pipher, 1994, p. 67).

In their newspaper article for The National Association of School Psychologists on relational aggression, several school psychologists defined it as:

Acts of relational aggression are common among girls in American schools.

These acts can include rumor spreading, secret-divulging, alliance-building, backstabbing, ignoring, excluding from social groups and activities, verbally insulting, and using hostile body language (i.e., eye-rolling and smirking).

Other behaviors include making fun of someone's clothes or appearance and bumping into someone on purpose. Many of these behaviors are quite common in girls' friendships, but when they occur repeatedly to one particular victim, they constitute bullying. (Skowronski, Weaver, & Sachs Wise, 2005)

The parents of the two girls who faced hurtful social exclusion did not call this bullying.

Betty's mother does not go into detail when she says, "There were social issues; middle school was really a horrible time." She went on to say, "Betty did not have any close friends during high school, with the possible exception of one on the soccer team and one

Emma's mother relates an experience with relational aggression in Emma's 5th grade classroom by saying, "In fifth grade they were studying Greek plays and all the other kids were reading plays and acting them so they would take different parts. My daughter wrote her own play and was the star. It didn't make her any friends. That year

on the softball team, but the friendships were only during those seasons. There was no

interaction outside the season." Betty described the social exclusion she suffered and its

effect on her in her interview. While it was painful for her, she acknowledges, "no one

was tough. I am sure this happened to a lot of girls, but people who she thought were her

friends would come up to her and say, 'we don't like you anymore.' That was tough."

Emma describes more about her social exclusion in her interview.

Neither David's nor Lily's parents describe acts of bullying against their children.

Lack of Appropriate Challenge

"Quite simply, schools do not challenge their most intelligent students. And not only do they not challenge their gifted students, they push them back toward the middle, lauding doctrines of 'socialization' and radical egalitarianism, which deny that some children learn faster than others" (Davidson & Davidson, 2004, p. 17). The Davidsons go on to say, "In America today the educational system - which is focused on the lowest common denominator - is more likely to crush a bright child's spirit than nurture her intellect" (p. 15). The Davidsons are not just describing some small percentage of the population who feel they were not appropriately challenged, but as many as 41 percent of college freshmen in the Higher Education Research Institute's 2001 survey reported being frequently bored in high school (p. 17).

All parents, except David's father, cite the lack of appropriate challenge as a critical missing piece of their education. Alan's mother says she thinks he could have been challenged more even though he took all the advanced courses. She says, "It seems like a drawn out process for someone like him who can do it in a shorter amount of time or for whom it could have more depth or be a richer experience."

Betty's mother said Betty was definitely a motivated learner and that is why they ended up pulling her out of public school in 4th grade. "We felt she was losing her interest in learning and we weren't going to let that happen." Betty's mother described

their experience with appropriate academic challenge in both her private school and home schooling experiences. She expressed doubt that public schools, in the current environment, can appropriately challenge high-end learners.

Emma's mother stated, "That my children were not appropriately served, not adequately served, makes me really angry. I had to dedicate years of my life just to my children when I could maybe have been helping all kinds of kids." With her mother's support, Emma found more challenge in private school and then moved into college courses in her junior year.

Eric's mother described the public school system as unable to recognize differences in their students. "Even though I know he's different and other people say he's different, the school just refused to acknowledge that he needed anything different than anybody else." She went on to say, "They are teaching to the middle, they have to. Teachers are under duress. You have kids with severe disabilities on one hand and you have bright kids and they are trying to go down the middle."

Lily's mother, like the other parents, recognized her public school was not appropriately challenging Lily beginning in 2nd grade. She said, "Things weren't moving along very fast, but she was very useful in helping the kids who weren't getting things and I remember feeling at that point, even in first grade, but certainly in second grade that she wasn't learning. She was just watching other kids learn, which in a sense was good for her." She rationalizes the value of Lily "helping" though she acknowledges at a different point in her interview that this time was a loss that might not have been made up.

David's father did not describe difficulties with appropriate challenge in school.

*Learning Struggles**

Three students and their parents reported learning challenges. David's challenges were academic and his father focused his comments on David's difficulty with reading and how he was tested in early grades. It appears the testing revealed that David's reading skills lagged behind his other skills, but the father did not mention any specific learning disabilities nor mention any special tutoring. While David's father recounts David's musical successes, he also notes beginning in 8th, 9th, 10th grades, reading music also became a significant issue. David did not learn to read music even though his school music teacher pointed out the barrier that this would become.

Two of the three parents, Betty's and Emma's parents, reported auditory processing issues which one parent says confused the classroom teachers. When Emma was tested in 3rd grade, the results revealed she is not a good auditory processor and her mother thinks this discrepancy in her skill levels supported the lack of understanding about how smart Emma is.

What Parents See as Their Child's Successes In and Out of School

Parents also described their students' successes. These successes came in many and varied ways. Success is an interesting category for these students. While they noted external validations the students received, in the interviews it sounded as though the students and their parents were more concerned with the students' learning and their personal responses to acknowledged successes. For example, Eric's interest in taking 400 level courses before he had taken the prerequisite classes most likely lessens the

possibility of getting high grades, but that is not his motivation. Success, for him, is in the learning.

Alan's mother noted the most exciting success for him in high school was to win second place in the UVM writing contest because it was a validation of his ability as a creative writer. Other highlights were when he scored a perfect score on the national Latin exam and when he was named Valedictorian of his class. She pointed out that these things were visible outside validation that helped him realize that he is very capable. Statewide and national competitions also gave him a different perspective than his local school on where he fit and what he could do. Helping him to understand his capacity, within a frame larger than his small school, was the success.

Betty currently has a three-year fellowship to study Computer Science, particularly robotics and artificial intelligence. She was a National Merit Finalist and won a Fulbright Award. None of these were noted as particularly important to the student or her parent in the interview. More important was the success of discovering the value of home schooling for Betty. It is when she notes her real learning was supported.

David won two state championships with the varsity soccer team, was captain in his last year and most valuable player. He says, "Soccer is so important." He was also lead piano in the high school jazz band. He sounded happy with these awards but did not highlight them during his interview.

Emma was named a National Merit Finalist and a Presidential Scholar. Both she and her mother felt validated by these awards as they signaled the struggle for appropriate education was worth it and they also helped, as in Alan's case, for Emma to understand

where she stands in a field of her intellectual peers. With these recognitions, Emma's mother also noted that her husband seemed better able to understand the worth of the years of financial and other struggles to further Emma's education.

Lily's successes were named as her role as senior class president and the acknowledgements she is receiving in her first post-college job where she is recognized as a "go to person" who can get a job done well. Neither she, nor her mother, noted any other awards. Both seemed to value Lily's process and the reward of doing something well.

How Parents Describe Their Child's Educational Experience

With the exception of David's father, the other parents recounted stories of ongoing frustration on behalf of their students. The exception is David's father who could fault his music teachers for failing to teach him to read music, but he does not. He says that David can do it, he just chooses not to.

Some parents noted at least one educator who tried to make a difference for their students. One was a classroom teacher with optimistic hands-on ideas that were too grand to complete, another was a 7th grade teacher who noticed a student is "disappearing" and alerted the parents even though she admitted she did not know what to do, and yet another connected with Betty in middle school, one of the few to do so in Betty's K-12 education. One mentioned that their school principal "loved Eric, but didn't know what to do with him."

Alan, David, and Lily followed along a more typical K-12 path. Even with bumps and frustrations, they and their parents adapted to the "normal path." Alan, David,

and Lily were able to conform. Betty, Emma, and Eric could not. These three skipped grades, moved from public school to private school to college courses or to home school in search of where they could fit and thrive. All three needed some form of acceleration.

In a 2004 study, researchers found:

America's schools routinely avoid academic acceleration, the easiest and most effective way to help highly capable students. While the popular perception is that a child who skips a grade will be socially stunted, fifty years of research shows that moving bright students ahead often makes them happy.

Acceleration means moving through the traditional curriculum at rates faster than typical. The 18 forms of acceleration include grade-skipping, early-entrance to school, and Advanced Placement (AP) courses. It is appropriate educational planning. It means matching the level and complexity of the curriculum with the readiness and motivation of the student. (Colangelo, Assouline, & Gross, 2004, p. 53)

Alan's mother thinks her son was fortunate that he was their third child. "Had he been our first child, it would probably have been more difficult for us. I think we would have struggled a whole lot more if I had a child who was so frustrated in school."

She thinks he could have been challenged more. Like his educator, she notes that Alan took advantage of whatever his small school had to offer. He took as many AP classes as he could. He took advantage of everything he could have including the Young Writers' Conference at Champlain College and Governor's Institutes. He did art during

study halls and even won the Best Ceramic Student Award just because he went in on his own during free time and did ceramics.

Alan's mother is the only parent with a longer overview by virtue of having three children participate in the same school system. She said the high school had made some improvements since her two older boys were there, for example more AP courses, but there was still something lacking. "It seems like a drawn out process for someone like Alan who can do it in a shorter amount of time or for whom it could have more depth or be a richer experience."

Betty's mother recounts that what convinced them to move Betty from the public school (after 4th grade) was the time she was working on a book report. "When we asked her why it was so short, it was about one minute long, she told me that if it's any longer the kids won't sit still and the teacher won't listen. She knew the public school wasn't working, but she didn't know how to tell us and didn't realize there was another option."

The private middle school was different in that they recognized kids *can* learn. Her public school was not providing anything that was anywhere near challenging. Betty told us in 4th grade that, out of an entire day of class, she would have maybe an hour of something other than sitting and reading a book. She would finish her work that rapidly. There was nothing the teacher was saying that she needed to listen to, so she just read books.

When Betty moved into middle school, she skipped a grade. Middle school in a private school was definitely a better experience than public school. By the middle of her third year, it was clear she had outgrown that school. There were other issues also. A

teacher who had really meant a lot to her had left so there was change in the program.

There were social issues; middle school was a horrible time.

Then when she was going into high school, she said she needed to be home schooled. She laid it out and spent the summer convincing her parents she was right. She had matured in that period of time into knowing what she needed. She pretty much self-directed her own home school for the three years she was in high school.

David, unlike the other students in this study, seemed to find both challenges and successes in his local public school. His challenges were academic, including a reading problem that triggered testing which found, as his father describes, that David's reading simply lagged behind some of his other abilities. As a young adult, David now says he reads for pleasure.

While David's academic work was a struggle to the end, both David and his father describe the importance of three outstanding influential teachers in the fields of music and performance. In addition, David created a close bond with his guidance counselor who understood David's emotional and academic roller coaster.

Emma's mother wanted public school to appropriately challenge her daughter. She tried communicating with the school, she went back to college to study gifted education, she volunteered in the school, and she supported her daughter at home. In 6th grade Emma came home from school one day and said, "Mom, somebody asked a really good question in class today and they wouldn't let us talk about it." Her mother says, "That is when I knew that public school was no longer working for her. We moved her to a small, private school in our area."

Eric's mother, unlike some other parents in this study, does not talk about his early school years. He is her first child and she was hoping that his education would work out well as he had some good experiences in 4th and 5th grades, which are also described in this study by his educator. However, she says in 7th grade they got a call from the teacher three weeks into the semester. She said, "This is not working, your child is disappearing." Eric's mother suspected his growing disengagement might be the case and needed this affirmation to fully face the issues this raised.

The teacher said she had found him in the back of the classroom reading all the time and not engaged. This 7th grade teacher called Eric's parents to come in for a meeting. She had two or three garbage bags of books and said, "I don't know what we are going to do with him, but here are some books he might enjoy reading." She had two gifted kids of her own; she was an ESL teacher as well as a 7th grade teacher. Eric's mother says, "She recognized my son. She saw him. She didn't have an answer and she wasn't a very powerful teacher within the school system but she helped cobble something together."

Lily's mother felt stymied by Lily's early public school experiences and noted that Lily was held back in order to wait for her classmates to catch up. Not only were her learning needs shortchanged, but also she was asked repeatedly to help other students in the class. Lily's mother said, "It was a fairly closed minded classroom in many ways.

There weren't opportunities to say, hey, could you help move things along here." Both Lily and her mother described an exciting classroom in middle school but, in the end, the

teacher and Lily ended up disappointed by not being able to fulfill the potential learning projects.

Memorable Learning Experiences

Betty's parents were not originally mentally or emotionally prepared for home schooling her. When Betty raised the idea, her parents asked her to advocate for the option and help them understand what it could mean for her. Now, both Betty and her mom agree that home schooling was the best option available. Betty thrived academically and was able to avoid the social challenges that were difficult for her.

David was fortunate to have three teachers who influenced his interest greatly.

Two were elementary music teachers and one was a performance poet who came to his elementary school for a weeklong residency. He credits them, along with family support, for his ongoing interest in music.

Emma's mother says, "When we moved her to the small, private school it turned out to be a good choice. Their classes are around a table so everybody can see each other and discussion is the basis for what they do. That was a really good match." After the first couple of days, Emma came home and said, "mom, they all read books. We're going to have a library; we're going to have our own library and we're going to trade books." Another day she came home and said, "mom, they laugh at the same things I do." She had never, up to that point, had a friend who was anything like her. She did not fit in.

Eric's mother recounts that when the 7th grade teacher sent him to 10th grade, he made some connections with some very skillful, mature teachers who had been there a long time and who had "had Eric's before." There were two of them that he bonded with.

Eric also cites this as a memorably successful time when he could be engaged in public school classes.

In their search for opportunities outside the public school, Eric's parents signed him up for cartoon animation, which was a fairly successful experience. The other students were much older but that was not a problem for Eric. Then Eric took some courses at a local small college and was very disappointed because it is not a high-powered school. He took 8:00 a.m. classes and a lot of the college students were asleep. Eric's mother says, "He was not impressed." She says the even now, "One professor remembers him asking great questions. He took another class in poetry where the teacher said he was the only person who ever spoke in class." Once again, the age of the students was not a big deal for him.

Recommendations and Final Thoughts

It would have been great if we didn't have to fight with the school. If they had said, 'ah, this is a gifted child, we know what to do.' We fought with the school the whole time about their thinking that all kids have gifts and this kid is not different. It's very frustrating to me that schools don't in any way acknowledge that smart kids or gifted kids, or whatever the phrase is, these kids that get things 100 times faster than anybody else. It makes life difficult and different for them. Eric's Mother

With the exception of David's father (the musician), the other five parents said their student's education would have been better with more challenge, and more in-depth and more enriching curriculum. They noted their desire for teachers to nurture individual

areas of strength and interest with both depth and breadth earlier and throughout the K-12 school experience.

This fits with the overall need for better-trained teachers with knowledge of the needs of gifted learners. All but David's parent looked to the school to understand their students and help to meet their needs, but found the teachers as uninformed as the parents. Emma's mother, along with four other parents, thinks things would have been better if educators in Vermont were given training on the needs of our brightest students. "Teachers and administrators who understand the needs of gifted kids would have made things better."

Emma's mother goes on to say that it would have been easier if Vermont educators knew how difficult it is to be a parent of a gifted child and if they had the knowledge and skills to help. She suggested that it's mostly "an attitude shift. That's huge." She also noted that what is needed is training to help change attitudes. She states the specific courses she would recommend for pre-service teachers: Introduction to Gifted Education, Curriculum for Gifted Education, Social and Emotional Development for Gifted Education, as well as Creativity and Creative Problem Solving. "But, that's not very realistic," she admits and retreats to the idea that every teacher should have at least one full course in the Definition and Characteristics of Giftedness.

Emma's mother suggests that Vermont incorporate gifted education in Special Education classes which pre-service teachers are required to take. Some states do include both ends of the learning spectrum because "both have special needs" but Vermont does not.

In addition, she offered a suggestion for school choice. "I think the schools are not accountable for what they do and they need competition for their students." She also challenged teacher unions and questions whether they represent children at all.

Four of these students are described as independent learners. Their parents describe the value of learning with a facilitator, someone who both understands gifted learners and the curriculum well enough to make the curriculum fit the student. As Alan's parent describes it, "A free-flowing experience, an exploration. Not in a cookiecutter way where all students read the same 10 poems at the same time." Eric's mother says he was able to work with a facilitator briefly, but the facilitator was so directive that the plan failed.

Parents noted that acceleration would have been an effective key for five of these students. They all would have thrived in an atmosphere where they could move at their own pace, whether that was on-grade or several grades ahead. Several parents noticed this as soon as their students entered school. Math was the subject most mentioned for acceleration. Betty's mother describes the inability of her local school system to fathom and accommodate a faster tempo in math. Before accepting the home schooling option, Betty and her parents researched five local high schools. One school, even though Betty already out-scored most of their high school students in math, would have required that Betty repeat two years of math.

Alan's mother noted that he would have liked intellectual peers with similar interests and teachers with a passion in that area. Betty's mother says Betty did not have peers in school so the fear of the loss of peers while home schooling was irrelevant.

Emma says by 4th or 5th grade she was "really miserable because being smart was just not part of what is cool to display." She is one of the students in this study who describes a deep loneliness in school. Alan, Betty, and Eric also referenced a longing for peers.

Emma's mother highlights the value of cluster grouping and differentiated instruction for gifted learners. The cluster grouping would provide an opportunity for students to be with their intellectual peers for part of the day. Presumably, the curriculum and the tempo could then be better tailored to meet the students' needs.

Alan's mother says school just took too long and it took too long to get to the richer material. "It would have been better to have some of the challenges available in the last two years of high school available to him earlier on." And then to have more valuable experiences in junior and senior years of high school in a more in-depth and enriching way.

"My son's experience might have been better if there were a dedicated, regular time to nurture his areas of strength and interest in a way that is not just an add-on but that really has depth and breadth to it," Alan's mother notes. She reacts to the structure that he endured and says it would have been better to give him a chance to be with other students who have the same interest and a teacher who also has a passion for that area.

While several parents offered the idea that more effective training for teachers and administrators could result in better education for bright learners, Betty's mother said, "The reality in rural Vermont, it ain't going to happen. We are struggling to meet No Child Left Behind for all the wrong reasons and we are leaving the gifted kids behind. I think it's a worthless piece of legislation."

Betty's mother goes on to say, "What I am seeing in our public school is that the gifted kids are leaving because all they are doing is reading and math and when that's all you do, how boring is it? You can do reading without just doing reading – you can read science, history, and all sorts of stuff. But, when it's just reading and you are reading fiction there is rarely any content."

Eric's educator and his parents and Betty's parents described a lock-step nature of mathematics education. Betty's mother says, "In math, students are typically constrained by their grade. It's because of the teachers. I have a master's in elementary education. To get that degree and my license, I had to pass a math test. It was a 6th grade math test and 25-35% of the students couldn't pass it on one go. They allowed two hours. I was out in 20 minutes. That's the problem."

She continues by saying, "These teachers do not feel comfortable teaching 6th grade math. Even the new teachers don't feel comfortable teaching 6th grade math. The other thing I saw when I was teaching is teachers who seem comfortable teaching multiple reading groups who don't understand that math is the same. You might have more than one math group."

David's father blames himself for placing too much pressure on David and does not fault the school for David's difficulties with reading, which was the largest academic hurdle mentioned. He does refer to the big transition from middle to high school where he feels the parents are no longer kept in close contact with student progress, or lack thereof. He notes that perhaps David could have been spared some of the difficulties he faced in 9th and 10th grades if the parents had been better informed sooner.

Emma's mother is concerned about what she feels is meant to be fair and equitable treatment for students. She says, "I don't know what it is about the schools in Vermont. I am not just talking about the schools my kids went to because I've now worked with teachers in other schools. It goes back to egalitarianism and what is fair and equitable. Sometimes that is what is fair for teachers and not the kids and that really bothers me."

She goes on to say, "I know that when they are making up classrooms, for example, that they say here are the high level kids, the low level kids, the medium kids, the behavior problems, here's the compulsive guy; they have all these things and they mix everybody up so the classes are fair for the teachers, but they are not what would be best for the kids."

Aligning with several students' desire for peers, Emma's mother says, "Cluster groups for the gifted kids would be so easy. It doesn't cost any money. Even when their intentions are good, I don't think most teachers have the skills and knowledge to truly differentiate."

Emma's mother struggled for years to appropriately educate her daughter. She says, "This is an important issue. These kids have so much going for them. They will not do just fine on their own. Many of them check out mentally because things are just going so slowly or they are not learning anything or they are angry because they are not learning anything." She goes on to say, "You know, some of them turn to drugs or they drop out of school or get into legal trouble or they get depressed, suicidal or are such perfectionists that they drop out."

Remembering her daughter's struggles in 2nd grade (who, when tested, was found to have the reasoning ability of a 32-year-old), she says, "These are some of the things that I have had said to me:

'They'll all catch up to her by third grade, don't worry.'

'Everyone is gifted in some way.'

It's been a ride and people are still saying these same things 10 and 15 years later. They don't know what to do. They don't understand that gifted kids have different needs."

Eric's mother echoes that the needs of high potential learners are different. She says the hardest part is when schools argue that your kid is not different than any other kid. "It's denying what is going on." She described fighting with the school the whole time about their thinking that all kids have gifts and this kid is not different. She gives as an example that, in math, Eric would have the answer and it was very frustrating for him to go back and have to show the teacher the work. "They wanted him to do things a certain way when he was already there. They wanted him to go back and do it the way that everybody else does it."

To underscore the need for better training in the identification and needs of gifted learners, Eric's mother says, "There were some good teachers who saw how bright he was, but they were frustrated with him, too, because they didn't understand. They had other bright kids in their classes, but Eric is quiet and they think he is not paying attention." She brings up an issue for introverts by saying, "There is another problem for smart kids in high schools. If you process everything inside and you don't need to process externally, it looks like you are not paying attention and you are spacing out. He

could read something really fast and totally get the concepts and then spit out in this really unique way."

Eric's mother is the only parent to say, "I am not sure he could have gotten what he needed in our school." She accepts the school's inability to work appropriately with very bright learners because she notes they are teaching to the middle; they have to. She notes that what was harder for her was the lack of acknowledgement that there are brilliant kids in the class and they are different. "I understand they are under duress, but there is a denial of my experience and Eric's experience. It was hard for me to have the principal say 'all kids are gifted, all kids have gifts.' It's the denial that your experience is different and that is the hard part."

She says that Eric was easy, but she was "always banging her head against the wall in the school." She goes on to say, "Even though I know he's different and other people say he's different, the school just refused to acknowledge that he needed anything different than anybody else." Part of the problem, she thinks (and Betty's mother raised the same issue) is that he was smarter than most of the teachers.

Like Emma's mother, Eric's mother notes the dangers inherent in the lack of appropriate challenge and education. She says, "Without my pushing, I think he would have quit school. I think he would have dropped out. I have friends with gifted kids who barely got out of high school. They score a perfect score on the SAT's and they almost flunk out of high school. I think that was the direction he was going."

She says they visited a small, private school where the kids are in charge of their own education and that is what would have worked for him. If he could have designed

the way he wanted to go and basically had a facilitator, it would have been better. Their school did try to give him one facilitator, but she was so directive that Eric was choking with this. "She was smart enough, but I think he was way smarter than she was."

One of the few times during the interviews that a parent displayed anger, rather than referring politely to it ("I really shouldn't say this", "you probably won't be able to write this"), Eric's mother says, "This whole idea of keeping these bright students in the classroom and giving them work that is deeper or any of that bullshit, I mean it's bullshit." She asks, "What was that science teacher going to do? Give him the curriculum in one week that is supposed to be for the whole semester, or maybe it was for the year. How was she going to deal with him?" She admits that she does not know how it would work for Eric. Then she reflects that Eric can understand fourth year college neuroscience if he reads the prerequisite textbook at the same time he is taking the class, as well as carrying three other classes. "He has the mental capacity to do that, so can you imagine what high school was like for him? Snail's pace."

Lily's mother highlights the lack of challenge in school for Lily and the lack of the school's ability or interest in moving students forward at their own pace. She says, "I always thought that the school system, in general, wasn't holding her to high enough standards, particularly in writing. Probably in math and science they were, but I always thought that the papers that I saw could have been a lot stricter and looked for more in terms of content and so forth." Like several students, Lily's mother says that "Lily's college did a great job in terms of bringing her up really fast, but I don't think the public school system did."

With two daughters, Lily's mother is able to compare their educational experiences. She says, "I would rather in the early years that Lily was in the situation where you're allowed to keep moving once you've passed a skill set, something which our younger daughter's teacher was brilliant at. She just managed to have one group that was moving along quickly and one group that was moving along more slowly. Some teachers can do it and some can't. Our younger daughter was never allowed to get bored."

When asked to consider experiences that might have been valuable for Lily, her mother says that more experiential learning would have been good. "Lily went to a leadership program in Washington where she did her first model United Nations and she was very charged up about that when she got back, but our high school doesn't have model United Nations or a lot of the programs that other schools have for kids who are interested in social issues and world issues."

Like Eric's educator, Lily's mother says, "Field hockey, I suppose, was fun, but I would have liked to have seen more places for her to get involved in school other than sports. There's so much emphasis on sports in this school. She was so clearly capable of doing more."

The overall resounding recommendation from these parents was said by Eric's mother:

I think more than anything, having recognition that you have these kids with these differences would be very helpful. Then you can work on strategies. But to say everyone is the same or you are going to treat

everybody in the same classroom the same, no way. One size does not fit all.

Overall Educator Synopsis

The sad thing for a student like Alan is they will always be on the back burner because they are always going to be the kids who meet the test scores. We don't really care about the kids who meet them, we have to get other kids up there first, and then we will deal with them. Alan's Educator

Who Are These Educators?

Of the six students interviewed for this study, four students named educators they felt made a positive contribution to their education. These educators included: a 4th/5th grade classroom teacher; high school guidance teacher; high school science teacher; and a high school social studies teacher. Of the other two students, even with repeated requests, neither would name an educator nor were they willing to describe why this was the case.

How Do These Students Describe Their Educators?

With the exception of the musician, the five academic students all cited the importance of educators who offered choice, independence and flexibility. They described themselves as self-motivated and nominated teachers who had an appreciation for their drive to think independently. They named these educators for their ability to accept their opinions and value the connections they were able to make. Several referred to the concept of finding the challenge themselves. They looked to their educators to

expose and structure their learning by providing ideas and resources and then allowing the individual student to explore these ideas to their fullest in their own ways.

How Do These Educators Describe Their Students?

In Vermont, there is no requirement to identify or serve students who exceed current standards of performance. There is also no requirement for any training about the characteristics or needs of this population, which is referenced by one educator as something he needed and missed. As a result, the students participating in this study were self-identified and their parents and educators confirmed their ability in their narratives.

Some of the descriptive terms used by these educators were: intrinsic learner, intelligent, interesting, a leader, challenging, genuine, willing to take risks, very very quick, good people skills, ability to see the big picture, very talented, curious, imaginative, creative, inventive, highly verbal, analytical. Only one educator, the guidance counselor who worked with the musical student (David) suggested that he is an introvert. This personality type is notable in this study because while introverts are a minority group, by three to one, they form the majority of gifted people (http://talentdevelop.com/articles/GiftIntrov.html).

What Were the Challenges in Teaching These Students?

Several classroom teachers described the challenge and importance of open-ended questioning and offering choices in their teaching to allow for these students to find their answers without them being provided. These educators conscientiously sought to meet their students' needs by offering opportunities for genuine learning. They cite the range

of ability in their classrooms and how they worked to meet all levels of need. One educator noted that even within a classroom of bright students, there was a broad range of ability. Another said that teachers "can't just teach to the middle, they have to provide for both ends."

Alan's educator noted that Alan's questions were so high level that he brought a notepad to class to record them, research the answers, provide feedback to Alan, and then include the information in future classes. Lily's educator describes Lily as a student who asked in-depth questions that required a higher level of competency and skill than other students. Both educators appear to have felt energized by the level of their students' participation and understanding.

One educator noted his student was so intelligent and so energetic that he could be "a little too much. Too much talking, too much questioning." Another said her student expected more. She expected to be able to talk and be heard and the challenge was to set up the classroom so that could occur. Considering some of the general characteristics of high potential learners, they are likely to be very curious, interested in many things, and able to retain new information quickly. All of which can easily lead to the drive for higher-level interactivity in the classroom. These two educators understood this and worked comfortably with the students.

Contrast these examples with the two students who did not nominate educators.

One girl was told to "shut up, be quiet" and the other was allowed to be effectively silenced by her classmates. One was non-vocal for a period of months and the classroom teacher never approached this student to discuss how to work with this issue together.

One educator admits his student was "way beyond him" and goes on to say that he was "totally OK with the concept of him being so bright. It is better for our country and better for him." This is a good example of the self-confidence that Heath found in his review of studies to describe the characteristics of effective teachers of high potential learners (Heath, 1997). Though the other educators in this study did not use the same language, they all seemed comfortable and excited by their students' abilities.

David's educator notes what he describes as an "antiquated curriculum" or curriculum driven by college needs. For his musically talented student, some of these requirements were not as appropriate as others might have been. Lily's and Eric's educators also wish the curriculum could fit the student, rather than vice versa. Both these educators cite instances of re-working the curriculum to fit their students. Eric's educator devoted several summers to assessing the math curriculum he was required to use and then redesigning it to be more effective for his students. The value of his efforts was recognized when one of his students, Salutatorian at her high school graduation, reported that she had not encountered such high-level math again until she was in 10th grade.

Three classroom educators, and the guidance counselor, described their concerns that neither they, nor their school system, were preparing them academically as well as they could. One educator said his student "definitely could have gone further." Another noted it was "harder to make sure I had opportunities for him" and another said she was "forced to make sure I could deliver meaningful information and ideas." All of these

comments were made with respect and a sense of delight, along with the worry that they were not doing enough.

What Would Have Helped To Support Your Teaching These Students?

One teacher reported that his only support was informal conversations with other AP teachers. He noted the potential risks of unprofessional conflicts or lack of teaching skills if this is the only support. Another said she did not need or expect more support. She said she preferred to be left alone and appreciated that, in Vermont, this was possible. She mentioned that she would have liked the principal to visit her classes; however, that did not occur.

One classroom educator referred to his principal and described his/her attitude as a barrier to what the educator felt was a valuable accomplishment. This educator is the one who revamped the math curriculum for his students and noted that "when the students took the standardized math tests, their scores were obscene, they were that good. It was incredible. It worked." When he requested options for acceleration for his most successful students, the principal denied the students the opportunity to accelerate at their own pace. His reasoning was that future teachers would not know what to do with these students if they were in different places from the rest of their class.

Recommendations and Final Thoughts from the Educators

The pool of educators for this study was three classroom teachers and one guidance teacher. As such, it is difficult to generalize from such a small sample. Yet, it was obvious in their interviews that they were proud of the way the students challenged them and they deeply cared about their students.

One educator commented, "The right thing is to have a system with all professional people, but that is just not the case so luck has a lot to do with it." He went on to say, "Can public schools be better? Absolutely. They need to be more professional." He finished his interview by saying, "I know I sound a little cynical and pessimistic and I'm just being very honest that I don't believe that our public schools are doing their jobs. I believe that we absolutely could do better."

CHAPTER 5: FINDINGS AND RECOMMENDATIONS

Findings

Student Findings

Students described the support of their parents as being the most critical component related to their learning. They recognize the support they received from their families and credit them with their continuing support and opportunities to promote their sons' and daughters' learning.

Secondly, every student named at least one teacher who had made a positive contribution. While two were unable to name an educator for this study, they did point to classroom teachers who had challenged them in some way that they appreciated.

Students used terms such as "smart," "passionate," "encouraging" to describe teachers who made a difference in their motivation and outcomes.

While four students noted obstacles and difficulties working within inflexible school systems, all six students highlighted some individual classrooms and individual teachers as being better able to provide appropriate learning opportunities. In particular, the students were not enthusiastic relative to collaborative learning, which some students suggested impeded their learning opportunities. In addition, students valued opportunities for independent learning with resources provided by the teacher, preassessment to determine the appropriate level for individual students, and testing to better understand individual student strengths and weaknesses.

The need for more challenging opportunities was cited repeatedly by the students.

They hoped for more opportunities to learn with their academic and artistic peers. Two

students mentioned competition among peers as a dynamic that would have encouraged greater motivation in their learning. Five students noted that the pace of the work was not invigorating and expansive, both of which impeded their knowledge and enthusiasm. Most of the students hoped for a more flexible schedule where they could develop higher order skills and creative opportunities that matched their interests and skills. Students also requested multiple opportunities to engage in individual projects associated with their interests.

The importance of reading was cited numerous times. Five of these students were early and voracious readers. Several described their frustration and hoped to have higher level reading experiences given their higher level of competence. They also described their frustration with having to follow at a pace that was below their competence, which frustrated most of the students. They also mentioned being held back in their reading, as in the example of the student who was asked to read one chapter a day, when she could easily finish the book in one day, in order to "not spoil the story for everyone else." In this case, it required parental intervention for the teacher to recognize the student could finish the book at her pace and simply not divulge the ending to her classmates.

Students discussed their frustration when asking questions which the teacher dismissed by saying, "We're not talking about that now." Several of the students acknowledged they would have been happy to get resources, rather than answers, to research and discover the information on their own. One student felt so stymied and frustrated that he said, "It could make me nuts." Another student was effectively silenced for several months by her teacher by being accused of talking too much.

Socially, life was hard for four of these students. The academically talented students did not fit in well with their age-level peers and all suffered through struggles that could have debilitated other students; however they persisted until they met their intellectual peers in college. Four of the students were bullied over a period of time, leading one parent to describe her son's school experience as "brutal." The musician and the leader escaped these traumas and appear to have done well socially.

The students appeared to think their school systems were overburdened and their teachers overwhelmed by the enormity of the needs they face. Even with their personal suffering, they did not expect more appropriate support. They yearned for it, but they did not expect it.

Alan describes his school system's shortcomings by saying, "It's public education so there has to be a concession. It has to be regimented to some degree." As a student who chose early on to use the school as a resource and challenge his learning potential outside the classroom, he says, "It makes sense. I was never really upset about it and I understand where that feeling arrives of the whole regimentation, control of time and speed going on."

While Eric sounds more frustrated than Alan, he also excuses the system by saying, "Schools are under a lot of pressure as well. They have to get up to a certain standard or else they don't get funding and they have kids dropping out all the time. I think the problem in the public school system is that you have to get everybody to do it and the only way to do that is to get funding for it and it is really hard to get funding."

He considers the need for schools to concentrate on other kinds of learners by saying, "You can concentrate on the upper level kid and help them out and do great programs, but that is not going to get you funding, that is not going to improve your test scores. Or you can work on the lower group and finally get funding and keep it going." He also empathizes with teachers and says, "They were dealing with abuse at home and hunger and kids not showing up for school because no one would drive them and they live 10 miles out. It's hard to concentrate on both sides of the spectrum at once."

Parent Findings

Five parents struggled with their school systems, administrators, and teachers.

These five parents had similar, ongoing experiences. The parent of the musician had a different experience because his son struggled academically at the same time succeeding as a musician and as an athlete. Ultimately, this father was devastated that his son finished school unable to read music and, therefore, unable to pursue his dream of attending a first-tier college of music.

One parent speaks for them all when she says the most painful part of their experience was having that experience denied. The school, in her opinion, refused to acknowledge that her son was a different kind of learner who needed more challenges. In her experience, once that denial was in place within the school, there was no opportunity to work together as parents and educators toward solutions to the student's challenges. Three other parents speak directly to that point as well. Five parents noted their teachers and administrators were not knowledgeable about their sons and daughters or about the needs of parents of these learners. At the same time these parents were struggling to

understand their students, they had limited support regarding how to engage the teachers and administrators to recognize the needs of these students.

Five parents spoke about the inflexibility in the school system, regarding the design of the system itself, and of the curriculum content. Their children would have been forced to fit into curriculum that made no sense, but schools just could not accommodate these students and families. Parents want deeper content, higher standards, more self-directed independent learning, and additional challenges sooner, and throughout their sons' or daughters' educational experiences. Several of the parents attempted to suggest some additional and higher level learning; however, for the most part alternatives were not provided.

The majority of parents were concerned that the inadequate teaching their sons and daughters experienced would lead to disengagement. They hoped their students would be able to move at their own pace, for their students to be assessed to better understand their learning potential, and for their students to be able to spend time with their intellectual peers. They described their fears about "losing their children" as they watched depression creep in. They knew that appropriate learning was the antidote and their struggle to find it was enormous.

Four parents watched as their children were bullied. The two parents of the boys were aware of this and talked openly about the devastation bullying caused to their self-development. Neither the two girls involved, nor their parents, described their daughters being ostracized, marginalized, and silenced by their peers as bullying. None of the students, parents, or educators discussed a need for counseling.

Educator Findings

Educators in this study appear to care deeply about these students. They all expressed concern about giving them challenging and appropriate opportunities. They spoke about what they needed to meet the challenges of teaching these students and they described some of the changes that need to be made to enhance the opportunities for the education of these children.

They all recognized the need to offer appropriate intellectual challenges and they support professional development to better understand the needs of gifted learners.

While they noted, "too much talking, too much questioning" on behalf of the students, they also appeared to be able to respond appropriately. Two educators noted the challenge of asynchrony in students who could "be 17 and then 30 years of age" within moments.

One teacher spoke passionately about his wish for schools to do a better job with talented learners. He blamed individual teachers and he blamed the school system, including the school board, as inadequate and satisfied with less than professional behaviors and results. He noted that teachers were not evaluated effectively and then held to higher standards. Others noted administrators who they believe stood in the way of better curricula. Two educators asked that the "curriculum fit the student, not vice versa."

None of the educators talked about any aspect of bullying. One teacher referred to the wish that schools would value academics to the degree they value athletics. He felt

this would help to change the culture within the school, helping to create an environment where academically talented students are valued at the same level as athletes.

Overall, it appears the students, parents, and educators can point to individual caring educators in individual classrooms but school systems, from school boards to administrators to guidance counselors to educators in general, are unaware, uneducated, and currently unable to provide appropriate education for our talented learners. While each student has found personal success, the struggles they encountered were huge, debilitating, and unnecessary.

Recommendations

In this section I explore recommendations to better support these students, families, and educators. First, I review recommendations from students, parents, and educators who participated in this study. Further, I suggest policies and implementation strategies at the state level that are critical to more appropriately supporting these students, parents, and educators. Finally, I offer suggestions for support of talented students in their schools.

Student Recommendations

While students had a variety of strengths and experienced a number of different learning situations, their recommendations were similar. While none of them used the term "differentiated instruction," a number of their ideas would come under that heading. One area of recommendations pertains to the classroom: minimal use of collaborative learning; opportunities to learn with academic and artistic peers; independent learning with resources available; encouraging, creative, smart teachers; valuing academics as

much as athletics; test for, and understand, student strengths and weaknesses; recognize and stop bullying and relational aggression; encourage questioning, respond appropriately to questions; encouragement to work at individualized pace; access to appropriate reading materials; flexible scheduling; acceleration; more challenge; opportunity to learn study skills and time management skills; choices; opportunities for experiential learning.

Some of the student recommendations pertain to the school system as well as the individual classroom. For example, creating a culture that values academics as much as athletics needs to happen school-wide and be reinforced within each classroom. Bullying is an issue for the school system to address with the rules enforced by all educators.

Offering more curriculum choices is critical within the classroom and within the school system as a whole. Offering more opportunities for experiential learning is also important for many learners. These must be offered as part of the classroom curriculum while some larger efforts, such as internships, need to be supported by the school.

Parent Recommendations

Parents were unanimous in their caring and in their determination to figure out what their children needed to succeed. Their recommendations, which involve better training for educators, system-wide changes, and providing more appropriate classroom experiences include: educate teachers and administrators about the needs of gifted learners; educate teachers and administrators about the needs of the parents of gifted learners; and incorporate gifted training into special education training for pre-service teachers.

Parent recommendations at the system level include: create school systems that acknowledge their different learners, learning styles, and interests; aspire to higher academic standards; provide passionate teachers with expertise in content areas; provide teachers who are knowledgeable about differentiated instruction; contend more effectively with bullying; provide some programming specifically for gifted learners; offer a range of curriculum choices; offer local support for appropriate education, outside the local school system, including college-level courses; and provide opportunities for school choice.

Recommendations that pertain to both the school system and the individual classroom include: create an educational process that is richer and deeper; create a flexible process with flexible content; provide rich content; provide more opportunities for self-directed, independent learning; provide more appropriate challenge earlier; provide opportunities for students to be with intellectual peers; test students for ability; test students for content knowledge to determine placements; and provide opportunities to accelerate both content and progress through grade-levels.

Educator Recommendations

Like the students and their parents, the educators in this study felt similarly about their teaching circumstances, their students, and what might be needed to make improvements. They were universally caring and struggled to meet their students' needs. Their recommendations for the school system include: offer professional development for educators in the needs of gifted learners; professionalize schools and teaching; make educators accountable from the school board to the classroom teacher; evaluate teachers;

hold teachers to higher standards; educate administrators to understand the need to support gifted learners and their teachers; design the curriculum to fit the student, not vice versa; provide funding for supplies and programming; and change the culture to stress academics as much as athletics.

In addition, the educators in this study make three important recommendations which would most likely require additional knowledge and skills to be effective: offer appropriate intellectual challenge; understand and meet the challenge of asynchrony; and understand the challenge of "too much talking, too much questioning."

Recommendations for the State of Vermont

While some of the recommendations from participants in this study can be implemented at the local level, some of them need to be initiated and supported by the state of Vermont.

In 1996, the Vermont Legislature passed into law a definition of Gifted and Talented Children, which is essentially winning and losing at the same time because while students can now be identified, there are no specific services mandated (Sec. 1. 16 V.S.A. § 13). Though the federal government has created a definition of gifted learners, it does not mandate specialized services for students meeting these criteria. Every state has enacted legislation, however, there is no national common legislation related to gifted and talented learners.

In 2006, 85 public school teachers in one Vermont high school were asked if teachers recognize the needs of all students, including those with unique gifts and abilities. In a finding that supports the educator narratives in this study, 83 percent of the

teachers in this one school agreed that teachers do recognize the needs of all students (Olson, 2006). While this might be expected, the next couple of areas are more surprising because of the relatively balanced opposing responses. In response to the 2006 survey question about whether policies are currently in place to identify and provide for these students, 53 percent agreed policies were in place and 37 percent disagreed. When asked about sufficient funding to meet the needs of exceptional students, 41 percent agreed it is available and 51 percent disagreed.

Three of the four educators interviewed for this study said they wanted additional professional development opportunities. Again, these findings echo the 2006 survey results, which demonstrated 67 percent of these educators think they are not provided appropriate professional development opportunities to better serve this student population (Olson, 2006).

Students, parents, and educators in this study all requested that teachers use differentiated instruction techniques though they were not asked to define the term. In the 2006 survey, 17 percent of the teachers did not know whether differentiated instruction was used in their school. This could reflect different meanings, including not knowing the details of differentiation or not knowing how others teach. When combined with the 21 percent who identified "don't know" when asked if they have taken a course in differentiated instruction and the 23 percent who similarly noted "don't know" when asked if they routinely use curriculum compacting, tiered assignments, and/or subject acceleration, one analysis could be these educators are unfamiliar with the terminology as well as the practices (Olson, 2006).

The educators interviewed for this study appear to feel responsibility and interest in teaching their high potential students in the most effective way possible. As validation that educators do recognize the importance of addressing the needs of these talented learners, the most heartening result of the 2006 survey was the fact that 58 percent agreed and 13 percent strongly agreed with the statement that education of students with unique talents and abilities is an important issue. This correlates with the 83 percent who agreed or strongly agreed that teachers in this school recognized the needs of all students, including those with unique gifts and abilities (Olson, 2006).

All participants in this study noted the inflexibility and negative consequences of certain school rules. In addition to policies that may need to change, administrative rules, such as school entry dates or which curriculum in which grade, can cause hardship for students for whom these are too restrictive. Several interviewees spoke passionately about the need to create policy to support personalized learning. Educators seemed aware of individual student needs and strive to meet them, while needing more support to do so.

Another important area for change is professional initiatives that include setting professional standards for endorsement and licensing for educators, including administrators and guidance counselors. Professional standards should include curriculum design and evaluation to determine performance outcomes across the curriculum. In Vermont we take pride in our high level of mainstreaming or inclusion of all learners in regular classrooms. What needs also to be considered is the capacity of educators to offer the appropriate level of services for students who excel in specific areas.

"Social policy creates the rules and standards by which scarce resources are allocated to meet almost unlimited social needs (Gallagher, 2003, p. 337)" (Gallagher, 2003). To be effective, policy for gifted education should include a definition of the target students; a definition of their educators and counselors, including their training and credentials; a description of the services to be provided; and a description of how and where these services will be provided (Gallagher).

State Mandate: Some Rules Currently in Place

In Vermont we have a state definition of "gifted" as well as Act 117, An Act to Strengthen the Capacity of Vermont's Education System to Meet the Needs of All Vermont Students. Enacted in 2000, the Act reads, in part:

(a) Within each school district's comprehensive system of educational services, each public school shall develop and maintain an educational support system for children who require additional assistance in order to succeed or be challenged in the general education environment. For each school it maintains, a school district board shall assign responsibility for developing and maintaining the educational support system to the superintendent pursuant to a contract entered into under section 267 of this title, or to the principal. The educational support system shall, at a minimum, include an educational support team and a range of support and remedial services, including instructional and behavioral interventions and accommodations. (An act to strengthen the capacity of

Vermont's education system to meet the needs of all Vermont students, 2000)

The Vermont Department of Education is governed by the State Board of Education, which has developed a Manual of Rules and Practices for Education in Vermont. The rules in this Manual are legally binding. There was a public process for the rule making. In this Manual are the School Quality Standards, where the current rules regarding advanced work for students are contained in Rule 2120.8.9. It states that each school's written curriculum shall be designed to meet the needs of all students. In (E) (2) it states:

Each school shall provide opportunities, appropriate to age and ability, for students to engage in service learning, to develop leadership skills and to participate in cultural programs. Each school offering education in grades 7-12 shall offer a variety of options such as, but not limited to, athletics, drama, music, student government, peer leadership, journalism, special interest clubs and organizations and community projects. (Vermont State Board of Education, 2006)

To address academic needs, in (E) (3) it states, "Each school shall provide supplemental learning opportunities to students in all grades who exceed these student performance standards" (Vermont State Board of Education, 2006). Rule 2120.8.9 (c) (2) (D) mandates that, "Each school shall provide students with opportunities for advanced course work such as Advanced Placement courses and college level courses" (Vermont State Board of Education). These rules are fairly non-specific about the nature of the

services for those who exceed the standards. Nonetheless, something has to be provided by each school for these students.

State Encouragement

Short of mandates, it is possible that with strong leadership and vision, the Vermont Department of Education could create a plan that encourages districts to provide services to the students who exceed standards. This would involve an attitude shift as much as funding allocation and would need to ensure that the resources were available. While the Goals 2002 Report stated, "We need a state-wide initiative to design a systemic model to build capacity" for gifted education, Vermont historically has worked through the school districts (Story & Bogue, 2002). Given the focus on local control, encouragement would seem more likely to be successful than mandates, and certainly more successful than unfunded mandates. It may be that a bottom up effort, training educators in the needs of talented learners, along with state encouragement for school boards to think strategically about these learners, could form the basis of an effective policy related to gifted and talented learners.

State Consultant for Gifted Education: In Place

Before he resigned, former Education Commissioner Richard Cate approved a position for an Enrichment Consultant in the Department of Education. Vermont had been the only state without such a position for more than 10 years. If the role is filled with a fully qualified consultant, who is politically astute and able to build alliances throughout the state, there is the potential for positive momentum.

Endorsement of Teachers of the Gifted

Currently, there are no Vermont certification or endorsement requirements in gifted for educators in the regular classroom or in gifted education.

In their Goals 2002 Report, Story and Bogue (2002) recommended support for endorsement for teachers of the gifted, with the goal of mandating licensing within five years. They further recommended the goal of having at least one fully qualified teacher per 300 of total student population. To date there is no movement on this issue within the State Licensure Board.

This model would provide expertise within each school district, if not within every school. It would allow regular classroom teachers access to local expertise and perhaps encourage the partnership model of classroom and gifted teachers working collaboratively that has been identified by Jenkins-Friedman and others as critical (Jenkins-Friedman, 2000). An added benefit might be the possibility of delivering professional development to classroom teachers through these fully qualified gifted teachers, a train the trainer model.

Professional Development for Administrators in Gifted Education Issues

Gifted education should be a collaboration of teachers, administration, parents and students. As noted by the participants in this study, the school administration has a critical role to be aware of the need for support and to act in an advocacy role for educators and their students.

Pre-Service Training in Giftedness for All Teachers

Because regular classroom teachers are often the first professionals to recognize a gifted student's potential, it is important they can identify giftedness and understand the needs of these students. Just as in their work with special education students, classroom teachers should not be expected to be the expert, but through diagnostic teaching, classroom teachers can help the talented students gain access to needed special services (Jenkins-Friedman, 2000).

Dr. Carol Story, Professor of Education at Johnson State College, states that preservice education students at Johnson routinely receive only a one-hour lecture on giftedness as part of their semester course in special education. In her opinion, if these same students were to participate in one course on giftedness, including identification as well as the nature and needs of gifted learners, and one course on differentiated instruction, they would be much better able to recognize giftedness and make referrals to appropriate resources.

Funding

In their Vermont Voices Report (2002), Story and Bogue found the top perceived need related to gifted education, from the perspectives of educators and administrators, was funding. No one in this study mentioned funding as a barrier to implementation of appropriate policies. One student in this study speculated that schools are focused on the needs of learners who do not yet meet standards because they are a source of funding. One parent stated, "If the attitude changes then there will be more money available."

Technical Assistance Funding to Determine School Needs and Then to Evaluate Programs

Story and Bogue (2002) cite this funding as their number two recommendation for state-wide initiatives.

Funding for professional development workshops and courses for educators, administrators, and guidance counselors on the nature and needs of gifted students

Two educators recommended more professional development opportunities for educators. One said he could not remember having any training in the area of gifted learners. Four parents specifically advocated for educators and administrators to get training, whether pre-service or during their tenure in schools. The parents had similar stories of approaching educators who were not able to help with identification of their students' special needs. They found also that many educators did not understand their children which further frustrated both the teachers and the students.

Potential Policies for Direct Student Support in Schools

Identification

Vermont has a definition of gifted, which is appropriately broad, but there is only vague wording for the identification process and no mandate attached. Through administrative rules, Vermont can force school districts to adopt a process through which to identify gifted students. This is the first step in providing appropriate services.

Although some might argue that a professional credentialing process is first, I suggest that once educators become more aware of their student needs, they will want to educate

themselves to respond effectively. As noted in this study, teachers view the needs of their students very seriously.

Vouchers

The state or the school district could provide vouchers for out of school experiences, including after school and summer programs. This option would require that teachers and administrators identify gifted students and that they work with parents to enroll students in voucher programs. "As a stimulus, Baker and Friedman-Nimz recommend fiscal incentives to local school districts for participation in the program" (Baker & Friedman-Nimz, 2002).

Baker and Friedman-Nimz (2002) point out the difficulty, particularly in rural areas, of providing enough choices for vouchers. They note, also, the larger impact of the lack of appropriate opportunities. Citing several sources, Baker and Friedman-Nimz state, "The literature on the dearth of advanced opportunities in small, poor, rural high schools is quite decisive" (Brent, Roelke & Monk, 1997; Monk & Hussain, 2000; Haller et al., 1990, as cited in Baker & Friedman-Nimz). They concluded that "one might argue that where advanced upper school opportunities are not available there is less motivation for teachers to differentiate curriculum in lower and middle grades" (Baker & Friedman-Nimz, p. 18). This loops back to the questions of teacher training, student identification, funding, and school responsibility.

Distance Learning

Distance learning, which would require a cost-benefit analysis, could be available through internet access or through distance education vehicles such as the Interactive

Learning Network (ILN) or Vermont Interactive Television (VIT). While advanced learners could benefit from university level courses, it is possible that many other learners in the school, both students and educators, could use this technology once it is in place.

Dual Enrollment

Students who wish to remain in high school and also be challenged by university courses may benefit from dual enrollment. Students can access the courses by physically attending on campus, or through distance learning options. Schools and families must cooperate to facilitate the arrangements. One strong benefit for the student is the ability to choose courses of interest. There is no added cost for schools as the families generally become responsible for associated costs, including tuition and transportation. A benefit of dual enrollment through distance learning is that, in addition to potentially making it available to more students, transportation is not a barrier.

Acceleration

According to their position paper on Acceleration (2004), the National Association for Gifted Children states, "Educational acceleration is one of the cornerstones of exemplary gifted education practices, with more research supporting this intervention than any other in the literature on gifted individuals" (NAGC, 2004). Highlighting current research, they note the benefit of aligning student ability with educational opportunities. Some of the research-based best practices they cite include grade skipping, telescoping, early entrance into kindergarten or college, credit by examination, and acceleration in content areas through such programs as Advanced

Placement and International Baccalaureate at the high school level. (National Association for Gifted Children, 2004)

Federal Mandate

While there is a federal definition of giftedness, there is no federal mandate to provide programming for these students. The prospect of a future federal mandate is highly unlikely, at least in this current climate of No Child Left Behind. Individual states, or districts within states, are responsible for developing programs. Currently, there are no dollars in our national or state education budgets specifically targeted to meet the needs of gifted students.

Implementation

In Vermont there has been a reluctance to fund programs for students who are gifted and talented. In order to develop policy and practice there is a need to educate teachers, school boards, and administrators to assist in development programs for advanced students. No matter which specific policies are attempted and no matter whether we proceed full-tilt or incrementally, "policymakers can't mandate what matters" (McLaughlin, 1987, p. 172). The easy issues are those which involve capacity, training, professional development, licensing, even direct student services. The harder work is to engage in a dialogue of understanding and changing attitudes and beliefs that underlie current policies (Mclaughlin). The climate in Vermont for gifted students is framed by perceptions and attitudes that must change.

CHAPTER 6: CONCLUSIONS

We can whenever and wherever we choose, successfully teach all children whose schooling is of interest to us. We already know more than we need to do that. Whether or not we do it must finally depend on how we felt about the fact that we haven't so far.

Ron Edmonds (Edmonds, 1979)

From the stories told by students, parents, and educators in this study, we are suffering a loss of potential of students who have extraordinary talents. Students describe spending their days in classrooms where their curiosity is stifled by debilitating boredom, their voices silenced by teachers who too-tightly control the classroom, their abilities squelched by inappropriate curriculum; at the same time parents relate their struggles to understand how their children are different in order to better support their needs. The caring educators in this study describe their concerns regarding the best they can for these students as they work to meet the enormous variety of needs they face each day.

This is a "quiet crisis" (Davidson & Davidson, 2004) that gets spotlighted periodically and then shelved. In the "Sputnik Era," schools, even in small towns in Vermont, accelerated their best test-takers particularly in science and math, driven by the fear the Russians would beat the Americans to the moon. Five years later the attention moved elsewhere and has never really returned to our brightest students. Resources and funding are currently focused on students who struggle to meet standards. While the legislation is named "Leave No Child Behind," our high potential students are ignored.

Some might see the loss of potential in our economic future. Joseph Renzulli (2005) discusses a meeting he had with three visitors from the Japanese Ministry of Education at his research center based at the University of Connecticut. When asked, the guests said they were here to learn what role creative productivity plays in producing American inventors, designers, entrepreneurs and innovative leaders. Renzulli notes this question spurred him to consider the current educational climate and ask: "Can we calculate the economic value, job opportunities, and contributions to social and political stability that result from investments in the young people whose potential for creativity and innovation will produce new products, find solutions to unsolved problems, and even develop entire new industries?" (Renzulli, 2005, p. 33).

Others might wonder about the source of our future world leaders. How will we solve the intricate, complex issues that compound as the world grows smaller? Who will be trained in highest-level thinking and also bring genuine self-awareness to critical problem solving?

Yet others may ask about the symphonies, sculptures, and other works of art that help inform human beings about ourselves. Who will create the powerful pieces that will stir our emotions and challenge, as well as nourish, the human spirit?

The six students in this study have the potential to meet these needs. Noting Alan's potential, his educator said Alan is the smartest student he has ever taught and has the potential to become President. Perhaps by implementing the recommendations these students offer, we can better support them to reach their fullest selves.

There are a number of shortcomings in this study. One is the small number of participants. Another is the narrow demographic of the participants. Yet another is the preponderance of veiled and partial responses that, most likely, would require repeated interviews to truly open into full honesty. While the six students are differentiated by academic or artistic ability, it would also be valuable to better understand their behaviors and feelings as this might provide information on how to facilitate optimal growth at home and at school. (Betts & Neihart, 1988)

While several high school principals expressed interest in this study and said they would distribute the written materials to teachers so they could then be distributed to eligible students, I doubt this occurred. Only one parent expressed interest through this avenue and did not follow up to participate even after several efforts to contact him.

The myths that persist about "bright students can make it on their own" or "cream rises to the top" and "if they're so smart, they'll figure it out" are illuminated in this research. While the families that did participate appear to be able to succeed, what this study reveals is the intense focus required and the pain involved. When two parents left their jobs to figure out how best to educate their students, these families were not able to function as usual; they were financially stressed. One parent describes the tension in her marriage as she announced she needed to focus on their child's education.

It may be easy to dismiss these stories because the students did succeed and they did find a level of personal, social, and academic lives that they describe as satisfying.

That would miss the point. These students are not minority students, children of low-

income single parents, gay/lesbian, school dropouts, druggies, or any of the other labels that are our current markers of "at-risk" and, yet, their struggles are huge. Their success belies their struggles to remain authentic to themselves and their true potential. Their families' ability to persist outstrips that which many families could provide. This tenacity is at the heart of the students' successes.

A challenge in this study was to encourage the participants to tell their stories. Every one of the participants at some point said, "I better not say this" or "you probably don't want to say this in your study." They were too polite; too unwilling to open the anger that was evident below the surface, at least for a few. While their resistance to full-disclosure was sometimes couched in terms of protecting this study from criticism, it appeared more likely the participants did not want to get emotional in a situation where their language was being taped.

Although gifted students possess exceptional capabilities, most cannot excel without opportunities, guidance, challenge and support. They need assistance academically, and they also need assistance emotionally — through understanding, acceptance, support, and encouragement. They need adults who understand their unique abilities, and they need advocates to help them develop those abilities. (Kerr & Cohn, 2001, p. 45)

In Vermont's public schools, every resource should be available for every child. While this study speaks directly about the needs of high potential learners, the critical point is that every student's needs be appropriately identified, *including those learners* who need more challenge.

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