

7-1-2018

Personalization And Increased Engagement Through Extended Learning Opportunities

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PERSONALIZATION AND INCREASED ENGAGEMENT
THROUGH EXTENDED LEARNING OPPORTUNITIES

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A DISSERTATION

Presented to the Affiliated Faculty of

The College of Graduate and Professional Studies

At the University of New England

In Partial Fulfillment of Requirements

For the Degree of Doctor of Education

Portland & Biddeford, Maine

July, 2018

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ABSTRACT

This qualitative intrinsic case study of a bounded system examined student perceptions of their experiences with the Extended Learning Opportunities (ELO) program at Hillsboro-Deering High School. The study data derived from interviews with nine individuals who had participated in the ELO program. The study participants were both current students and alumni. The study explored the ELO program as a means of personalization and engaging students in their learning. Five main themes emerged from the data: Personal Interest, Relationships, Motivation, Self-directed and Self-paced, and Program Awareness. The study shows that students valued their experiences in the ELO program and felt that it was well aligned to the school's core values and articulated mission. The data also showed that study participants do not believe that the majority of students have adequate awareness and understanding of the ELO program to take advantage of it. Further study is recommended to explore student perception of the relationship of grades to learning. Further study is also recommended to examine why some students who enroll in the ELO program do not complete their projects. The study produced several concrete suggestions for how to develop greater awareness and understanding of the program for students. The study provides solid support for the growth and expansion of the ELO program at Hillsboro-Deering High School.

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Doctor of Education
Educational Leadership

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ACKNOWLEDGEMENTS

This journey of both personal and professional development would not have been possible without a great deal of support and guidance from many people.

The University of New England faculty and this program provided a solid foundation for my growth and development over the past three years.

I am particularly grateful to Dr. Michelle Collay and Dr. Kim Roberts-Morandi for their consistent and extremely high quality support and feedback throughout the dissertation process. I have learned a tremendous amount from you and I am forever grateful.

Thank-you to Robert Hassett, Superintendent of Schools for New Hampshire SAU #34, for believing that this undertaking was valuable and for providing support, encouragement, and constructive feedback from the beginning of the program through to serving as the affiliated member of my committee. I truly appreciate all that you have done for me.

The stalwart confidence and support of my parents, Nancy and Jack Crawford, are a constant in my life. They have undertaken a great many family responsibilities to provide me with the time and space to complete this work. There is no way to adequately thank them for all that they have done. They are the reason I have the courage and will to create and pursue lofty goals. Thank-you.

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION	1
Statement of the Problem	4
Purpose of the Study	6
Research Questions	8
Conceptual Framework	9
Assumptions and Limitations	10
Significance	10
Definitions	11
Conclusion	12
CHAPTER 2: REVIEW OF THE LITERATURE	13
Defining Personalized Learning	14
Types of Personalized Learning	15
Using Personalization to Increase and Sustain Student Engagement	16
The Purpose of Personalized Learning	17
Moving Education into the Information Age	18
Preparing Students for Future Success	19
Fostering Community Connections Through Personalized Educational Experiences	20

Measures of Effectiveness	21
Assessing Student Learning in Non-Traditional Situations	22
Conclusions	24
CHAPTER 3: METHODOLOGY	25
Setting	26
Participants/Sample	27
Data	28
Analysis	29
Participants' Rights	30
Potential Limitations	31
CHAPTER 4: RESULTS	33
Data Analysis Methods	34
Presentations of Results	34
Participant Experiences.....	35
Interview Themes	38
Personal Interest	40
Relationships	43
Motivation	47
Self-paced, Self-directed	49
Program Awareness	51

Summary	52
CHAPTER 5: CONCLUSION	54
Interpretation of Findings	55
RQ1: What do students describe as their most influential experiences within the ELO program?	56
RQ2: How do students characterize their learning within non-traditional and/or community-based settings in the ELO program?	57
RQ3: What aspects of the ELO program do students perceive as useful to their development as learners and how do they align to the stated core values and vision??	60
Reflections on Findings	61
Limitations of the Study	63
Implications	64
Recommendations for Action	65
Recommendations for Further Study	65
Conclusions	66
REFERENCES	68
APPENDICES	73

LIST OF TABLES

1.1 District Enrollment Overview	2
4.1 Organization of Major Themes and Sub-themes	39

CHAPTER 1

INTRODUCTION

The Nellie Mae Education Foundation (2015) states “young people learn best when they feel positive about the learning process, experience strong connections with others, perceive value in the task at hand, believe their efforts will pay off, and have the skills to be successful” (p. 3). Engaging students in both the process of learning and the selection of content provides the foundation for students to develop into lifelong learners who are prepared for the future. Traditional school structure is rooted in the social and economic constructions of the previous century (Collins & Halverson, 2009). In order to successfully meet the needs of all learners and develop productive 21st century citizenship, schools should leverage personalization and experiential learning to foster the desire to learn and explore, coupled with a sense of inclusion in the larger community.

The articulated vision of Hillsboro-Deering High School is to create a caring and challenging 21st century learning environment that allows all students to reach their full potential academically, socially and emotionally. This aligns with the school’s four core values: Community, Purpose, Progress, and Personalization (Hillsboro-Deering High School, 2018). The Nellie Mae Education Foundation (2015) presents clear evidence that personalized, student-centered practices provide students with the skills they need for success. This study investigated Hillsboro-Deering High School students’ perceptions of their experiences with Extended Learning Opportunities (ELOs). The study explored whether students perceive ELOs as a valuable means of personalization and as a means of increasing student engagement in both their own education and the larger community.

The Hillsboro-Deering Cooperative School District was formed in 1954. It is a rural district in central New Hampshire that serves the communities of Hillsboro, Deering, Washington, and Windsor. The district is comprised of four schools, three of which are housed on the main campus in Hillsboro. The fourth is an elementary school in Washington, NH, which was built in 1992. Total district enrollment is currently under 1200. A breakdown of the enrollment as of the 2017 Beginning of Year Report is seen in Table 1.1 below.

Table 1.1 *District Enrollment Overview*

District Enrollment Overview (as of the 2017 Beginning of Year Report)	
Washington Elementary School	45
Hillsboro-Deering Elementary School	487
Hillsboro-Deering Middle School	310
Hillsboro-Deering High School	342 (includes part-time and Alternative Plan Students)

Roughly 41% of students qualify for free or reduced lunch. Approximately 22% of students are identified as in need of special education services. Hillsboro-Deering High School is a comprehensive public high school, serving students in grades 9 through 12. Career and Technical Education (CTE) opportunities are available to 11th and 12th grade students through a cooperation agreement with the Concord Regional Career and Technical Education Center (CRTEC).

Following an eight-year period of constant administrative turnover and poor performance on all measures of accountability, the district and school administrative team stabilized during the 2011-2012 school year. The interim principal was appointed permanent principal and this researcher was named associate principal. A new superintendent was hired at the end of that

year and the longtime director of student services was named assistant superintendent. This leadership team remains in place. Beginning with the 2011-2012 school year the administrative team was able to foster the eight stages of the change process Kotter (2012) names necessary to create real and sustainable change: urgency, a guiding coalition, vision, communication, empowerment, short-term wins, consolidation of gains, and institutionalization of new approaches (location 316). Due to this purposeful approach the school has seen a dramatic cultural and academic turnaround over the last seven years.

In 2013, Hillsboro-Deering High School earned the New Hampshire Department of Education Commissioner's Circle of Excellence award in recognition of the significant improvement being made. During the 2014 – 2015 school year, Hillsboro-Deering High School successfully completed its ten-year reaccreditation cycle with the New England Association of Schools and Colleges (NEASC) earning full accreditation. In 2016, US News and World Report expanded their ranking criteria to include teacher to student ratios and the gap between socially and economically disadvantaged students and their same aged peers. Using this updated criteria Hillsboro-Deering high school ranked 11th of 86 high schools. Just five years previously, the New Hampshire Department of Education, using the now discontinued New England Common Assessment Program (NECAP) scores, rated the school as 81st of 86.

The construction of a stable administrative team committed to collaboration and positive culture is the cornerstone of the progress made at H-DHS. Marion and Gonzales (2014) as well as Kouzes and Posner (2006) emphasize that effective leadership utilizes group decision making resulting in commitment from stakeholders. Over the course of the past twenty-four months the high school administrative team, in conjunction with the faculty Team Leaders, and the faculty as a whole, developed and began implementation of a five-year plan for the high school. The

plan details the following five goals: full Google Classroom implementation, increase existing capacity to support a 1:1 technology device structure, ensure all students are college and career ready upon completion, implement a tiered diploma system to meet the needs of all learners, and reconfigure the physical plant to better serve the needs of all community members. The collaboration at the heart Hillsboro-Deering High School's recent success is an essential component of all future planning.

Statement of the Problem

As a school community it is important to examine which students are best served and which need alternative programming. Hillsboro-Deering High School's 4-year graduation rate for 2017 was 83% with a drop-out rate of 0.08%. The articulated five-year goal is to increase the graduation rate to 90% while maintaining the near zero percent drop-out rate. Graduation rates in the state of New Hampshire are calculated by student cohort and a four-year time frame and reflect the percentage of students who enter the school as ninth graders and graduate in four years. Students graduating after more than four years or completing through an alternative means count against the percentage. The school currently sees nearly 15% of each cohort complete high school requirements through alternative means, such as enrollment in a neighboring night school program or taking the High School Equivalency Test (HiSET) Exam (the national high school equivalency exam adopted by the state of New Hampshire). The available programming within the curriculum must increase to better serve the needs of all students.

Senge, Lucas, Cambron-McCabe, Smith, and Dutton (2012) emphasize the importance of "not thinking of the school as an isolated entity but as an interconnected set of processes and practices, linked by its nature to the community around it and to the classrooms and individual

learning experiences within it. It means fostering open dialogue and public engagement of the sort that makes the perspectives and underlying assumptions of various factions clear” (location 418). The research cited raises the need for greater student engagement with the larger community and greater individual engagement with the process of education. The intent of personalization is to meet the unique needs of each student and ensure their engagement, while providing opportunities for students to demonstrate their progress to authentic audiences. This sense of fitting into the larger community and developing connections for learning is an essential aspect of Hillsboro-Deering High School’s core values. Kirkland (2010) makes a clear case that educational systems should prepare individuals to contribute to society as a whole. Partnering with members of the larger community to develop educational opportunities for students is a way to provide increased access to programming.

Wheatley (2006) states that open organizations are looking for information that will help them grow. Hillsboro-Deering High School is an open and reflective organization, committed to the growth and development of innovative educational practices designed to serve the needs of each learner. Traditional high school programming does not serve the needs of all students. Traditional programming is rooted in the past, preparing students for a world that no longer exists. To this end, Hillsboro-Deering High School is in the early stages of personalization. Personalized educational programming allows students to explore their interests and develop functional skills in settings outside the traditional classroom.

Collins and Halverson (2009) state “student work in schools has always faced the artificial barrier of being legitimate only within the confines of the classroom. When student work is seen only by teachers, students do not experience the authentic feedback that results from exposing their work to a real audience” (p. 25). According to Shyman (2010) “Both Dewey and

Freire take issue with the ‘formality’ that traditional schooling often imposes, resulting in a devaluing of the individual experience and its connection to critical awareness” (p. 1040). ELOs provide an avenue to authentic audiences providing the opportunity for students to practice skills and demonstrate knowledge in settings that model real-world, post-secondary environments. ELOs create a natural bridge between the school and the larger community, benefiting both. Allowing students the freedom to explore their own interests and passions while engaging with mentors outside of the confines of the traditional school provides multiple opportunities for the open dialogue and public engagement Senge et al. (2012) identify as so important. In short, ELOs provide benefits to all stakeholders.

Purpose of the Study

This study investigated personalization through the process of ELOs in a rural New Hampshire High School. The purpose of the study is to investigate student perceptions of their experiences with the ELO program at Hillsboro-Deering High School and to identify how students’ perceptions of their experiences align with the stated objectives of the school. A clear line is drawn from The Nellie Mae Foundation’s (2015) assertion that students need to both see value in their work and believe that they can be successful to the ELO program. Student interest drives the ELO process. Through an examination of student perception of the ELO program the study sought to determine if the ELO program was addressing the needs of students seeking opportunities outside of the traditional high school structure.

The development of ELOs tailored to individual interests is a relatively new and exciting opportunity for students across all grade levels at Hillsboro-Deering High School. Abbott (2017) states “research and theory on middle school student engagement suggests that students are likely to capitalize on learning when new information is introduced within a context students

consider valuable” (p. 34). This is not applicable only to middle school students. The Nellie Mae Foundation (2015) research firmly states that “young people learn best when they feel positive about the learning process, experience strong connections with others, perceive value in the task at hand, believe their efforts will pay off, and have the skills to be successful” (p. 3). ELOs are a vehicle to make learning student driven and personalized.

ELOs frequently involve mentors from the wider community, an element that develops the link Senge, et al. (2012) identify as so important. This is a reason that building and maintaining positive relationships with the community is a key aspect of the school’s five year plan. ELOs are a method of developing community relations and providing students with authentic audiences for their work. Deans (1999) discusses a similar program at the college level stating “the character of the projects, almost like mini-internships at non-profits,” resonates with Dewey’s advocacy for experiential education and his contention that teachers should utilize “the factors of industry to make school life more active, more full of immediate meaning, more connected with out of school experience” (p. 23).

Personalization gets to the heart of the educational mission: developing lifelong learners who are able to make meaningful contributions to society. The increase in technology integration allows for greater differentiation, a direct link with ELOs. Hillsboro-Deering High School is working to increase technology integration across the curriculum as a means of personalization. Beginning in the Fall of the 2017-2018 school year, each student had a dedicated Chromebook for their academic use, supporting personalized opportunities. The previous school year saw the successful rollout of Google Classroom. The increase in technology integration promotes methods of independent learning and provides students with universal access to resources, both of which can be leveraged to successfully support ELOs.

This study examined student perceptions of the efficacy of ELOs as a method of personalization through an investigation of how students perceive their experience with the ELO program.

Research Questions

McGarvey's (2012) premise is traditional educational systems were designed to meet the needs of industrialization, and they did so successfully. These systems for educational delivery have remained fairly stagnant for the last century (McGarvey, 2012, Collins & Halverson, 2009). Jarrett (2013) makes the case that it is time for a change, stating that employers are noting college graduates are not well prepared in "global knowledge, self-direction, writing, and critical thinking" (p. 4). As McGarvey states in her webinar "education must shift from a paradigm where selection of talent is the goal to one where fostering talent in all learners is the expectation." Internships and apprenticeships have long been seen as applicable only to the trades and vocational programs. The overwhelming majority of high school curriculum design centers on the format of a teacher delivering knowledge to a room of students. As new systems for educational delivery emerge secondary schools must evaluate the effectiveness of non-traditional instructional approaches and adapt curriculum to meet the needs of students. Dewey, as quoted by Shyman (2010), states "education is not a process of 'telling' and 'being told', but rather an active and constructive process involving both the teacher and the student" (pp. 1038-1039).

The problem identified above describes a disconnect between traditional high school curriculum and applied, community-based learning. Specifically, this study examined the lack of student engagement in educational opportunities as an impediment to graduation, resulting in 15% of each cohort not completing through a standard course of study. Personalization increases student engagement. This study investigated student perceptions of their experiences with the

ELO program at Hillsboro-Deering High School. This investigation provides data to help evaluate the ELO program as a means of educational delivery. The research addressed the following questions:

- What do students describe as their most influential experiences within the ELO program?
- How do students characterize their learning within non-traditional and/or community-based settings in the ELO program?
- What aspects of the ELO program do students perceive as useful to their development as learners and how do they align to the stated core values and vision of Hillsboro-Deering High School?

Conceptual Framework

One dimension of social justice theory, as applied to education, states that it is imperative that all individuals are able to develop their unique talents and skills so that they can contribute to the betterment of society as a whole (Kirkland, 2010). “The purpose of education from the perspectives of both Dewey and Freire is to create and preserve a society based on a truly democratic ideal in which there is no division of power based on access to knowledge and in which the members refer consistently to one another’s well-being as a standard for their own actions” (Shyman, 2010, p. 1041). ELOs are uniquely positioned to expand opportunities for educational access for students. The small, rural nature of Hillsboro-Deering High School limits the available scope of the program of studies. ELOs are a method of increasing access for all students. Hyslop & Mead (2015) state that in order for methods of personalized learning to grow there must be evidence it benefits students. The Nellie Mae Foundation (2015) states that five factors need to be present for quality learning are: the student feels positive about the experience, the student experiences strong connections with others, the student perceives value in the task,

the student believes their efforts will create results, and the student has the necessary skills to succeed. This study examined Hillsboro-Deering High School students' perceptions about their participation in the ELO program, and its value as a learning opportunity.

Assumptions and Limitations

The ELO program at Hillsboro-Deering High School is relatively new, limiting the number of student participants despite being available to students across all grade levels. The study relied heavily on interviews which assumed the participants understood the questions and their intent. The researcher is an administrator at the study site, and while this role provides a wealth of institutional and community history and knowledge, it has the potential to limit impartiality and create a potential, real or perceived, conflict of interest. Multiple safeguards were implemented to mitigate any potential conflict of interest. Participants were given multiple opportunities to decide to participate in and or exit the study. Participants could decline to answer questions. Participants, and in the case of minors, their families, were provided information regarding their rights to privacy and confidentiality and they were given multiple opportunities to seek and receive clarification. A formal informed assent and consent process was utilized. The researcher's personal motivation for the study was to explore and promote successful personalization methods across the curriculum. The study was not intended to provide support to individual students, but rather to gather information on the perception of the program as a whole.

Significance

Successful student engagement is the cornerstone of effective educational programming. High quality educational programming is often tied to active community partnerships. The dual problems of student apathy and lack of community engagement are not unique to Hillsboro-

Deering High School. By investigating the use of Extended Learning Opportunities this study investigates non-traditional avenues for preparing students to be contributing members of their community in the 21st century. Current educational programming was designed for life in the 19th and 20th centuries. To truly meet the needs of both students and the community, the educational process must adapt and adjust to new realities. Wheatley (2006) states that for progress and innovation to happen institutions must let go of outmoded practices. Student and educator compliance does not build effective educational frameworks; rather interest, engagement and content mastery create strong learning environments. It is time to create an educational delivery model designed for exploration and innovation that prepares 21st century learners.

Definitions

Extended Learning Opportunity: “Extended learning means: the primary acquisition of knowledge and skills through instruction or study outside of the traditional classroom methodology, including, but not limited, to: Apprenticeships, Community service, Independent study, Online courses, Internships, Performing groups, Private instruction” (New Hampshire Department of Education, n.d.).

HiSET (High School Equivalency Test): An examination offered to out of school youth and adults without a high school diploma to demonstrate skills equivalent to a high school diploma and earn a state issued high school equivalency credential (Educational Testing Service, 2017).

Personalization: Recognition that students are individuals who have unique interests and needs and learn at differing paces. Assessment begins with current levels and sets goals for acquisition of skills and knowledge (The Nellie Mae Foundations, 2015).

Scaffolding: “Temporary and responsive support that enables a student to engage with a task that he or she would not otherwise be able to complete” (Calder, 2015, p. 1122).

Conclusion

Whitaker (2012) places great emphasis on people and relationships over programs. An essential element to any successful change or initiative is the people involved and their willingness and opportunity to engage. The development of ELOs and the increase in personalization throughout the curriculum at Hillsboro-Deering High School derive from the deeply rooted belief of the faculty that students need to be active decision makers in their learning. Providing students with the opportunity to explore and develop their personal areas of interest develops their sense of inquiry and involvement. Utilizing community mentors as part of the ELO program creates an authentic audience for student work, imbuing it with deeper meaning. Chapter Two reviews the current literature on student engagement and personalization at the secondary and post-secondary levels. ELOs (or similar programs) as a method of personalization were explored through the lens of how personalization leads to increased student engagement in learning.

CHAPTER 2

LITERATURE REVIEW

Successful student engagement is the cornerstone of effective educational programming. The Nellie Mae Education Foundation (2015) presents clear evidence that personalized, student-centered practices provide students with the supports needed for success. The design of traditional educational programming aligned with industries' purposes in the 19th and 20th centuries (McGarvey, 2012). In order to meet the 21st century needs of both students and the community, the educational process must adapt and adjust to new realities. Wheatley (2006) states "to be responsible inventors and discoverers, we need the courage to let go of the old world, to relinquish most of what we have cherished, to abandon our interpretations of what does and does not work" (location 330). For progress and innovation to happen institutions must let go of outmoded practices. "Dewey is such a compelling figure because his pragmatic philosophy ties knowledge to experience, his progressive political vision connects individuals to society, his student-centered educational theory combines reflection with action, and his ethical writing emphasizes democracy and community" (Deans, 1999, p. 15). Traditional educational frameworks built around compliance are outmoded. An educational model centered in exploration and innovation designed to engage students and connect them to their larger community is demanded.

"Both Dewey and Freire take issue with the 'formality' that traditional schooling imposes, resulting in a devaluing of individual experience and its connection to critical awareness through curricular and pedagogical experiences" (Shyman, 2010, p. 1040). Extended Learning Opportunities (ELOs) are credit-earning experiences which take place outside the traditional classroom (New Hampshire Department of Education, n.d.). ELOs are designed by

students with the support of faculty advisors and community mentors. Student interest drives both the content and the process of the ELO, creating a personalized educational opportunity.

Systems for educational delivery have remained fairly stagnant for the last century (McGarvey, 2012). Internships and apprenticeships have long been seen as applicable only to the trades and vocational programs. The overwhelming majority of traditional curriculum has been designed around the format of a teacher delivering knowledge to a room of students. This literature review explores the emerging work of personalized learning and how it is evaluated for effectiveness and potential pitfalls. As new systems for educational delivery emerge, secondary schools must evaluate the effectiveness of non-traditional instructional approaches. Effective non-traditional instruction is a tool to adapt curriculum to meet the individual needs of students and promote student engagement in learning.

Defining Personalized Learning

Hyslop and Mead (2015) define personalized learning as an innovation “which involves transforming students’ daily experiences so that they are customized to their individual needs and strengths” (p. 8). This is a very broad definition that covers a wide range of formats and strategies. Personalization can occur within the traditional classroom structure, it can be implemented as part of the overall structure of a school, and, in the case of ELOs, it can move beyond the confines of traditional schooling. The Nellie Mae Foundation (2015) states that personalization is the recognition that students are individuals who have unique interests and needs and learn at different paces, with assessment being driven by a growth mindset.

Examining student baseline levels and setting goals for knowledge and skill acquisition allows for assessment to be as personalized as the learning itself.

Types of Personalized Learning

Tapps, Passmore, Lindenmeier and Kensinger (2014) present an overview of a service learning project where students went into the larger community and taught others the content and skills they had learned in their physical education course. Solberg, Phelps, Haakenson, Durham, and Timmons (2012) evaluated the effectiveness of Individualized Learning Plans (ILPs) in successfully supporting students in academic planning, and career development. Roth, van Eijck, Hsu, Marshall, and Mazumder (2009), explored the benefits of providing students with authentic science experiences in the life sciences, specifically through laboratory internships for high school students. The Nellie Mae Foundation (2015) explored the effectiveness of blended learning in high school Science, Technology, Engineering, and Math (STEM) courses and the use of student-centered instruction in high school math classes. In 2009, Guy, Sitlington, Larsen, and Frank conducted a survey of the employment training offered in Iowa high schools that investigated programing from traditional classroom instruction to job shadowing to service learning. Calder (2015) described the central idea of student-centered inquiry learning where students are encouraged to focus on areas of genuine interest to them on a personal level. The study looks at how scaffolding is utilized to develop student skills to a level of independent inquiry. Calder (2015) identifies scaffolding as “temporary and responsive support that enables a student to engage with a task that she or he would not otherwise be able to complete” (p. 1122). “Scaffolding takes many different forms, which enables learners to carry out tasks that are beyond their capabilities. In the best designed systems, scaffolding fades naturally, as students need less support and are able to do tasks on their own” (Collins & Halverson, 2009, p. 20).

Using Personalization to Increase and Sustain Student Engagement

A key element of Calder's (2015) analysis is that the scaffolding utilized in student-centered inquiry learning differs from the scaffolding in traditional instructional techniques. The findings emphasize that the purpose of the scaffolding is the development of the skills students need to engage in independent inquiry. The process of tapping into the individualized interests of students supports the promotion of freedom of choice, private/individualized responsibility, and personal dimensions of knowledge (Beach & Dovemark, 2009, p. 690). It is this sense of individual responsibility and choice that builds student engagement with learning.

Rutledge, Cohen-Vogel, Osborne-Lampkin, and Roberts (2015) explored the factors that make a high school effective. They found significant indications that an overall belief in personalization as part of the culture of a school was an indicator of success. In the more successful schools studied, the researchers saw a commitment from the school staff, both instructional and administrative, to connecting with individual students. "Adults at the higher performing schools identified personalization as an explicit goal, and students there were more likely to describe teachers as "caring" and "involved" than students in lower performing schools" (Rutledge et al, 2015, p. 1069). As a counterpoint, they noted that "In the lower performing schools, adults were less likely to name personal connections as a priority and instead talked about barriers to those connections" (Rutledge et al., 2015, p. 1069).

According to Collins and Halverson (2009) technology allows students to pursue their own areas of interest and passion without the need to rely on the teacher in the traditional role of sage and dispenser of information. The use of technology is an essential part of the blended learning model chronicled by the Nellie Mae Foundation (2015) within high school STEM classes. The integration of technology is also a valuable tool for inquiry based learning. The

teacher is no longer confined to the role of sage and dispenser of information; they are freed to become a coach and a guide on the journey of learning (Collins and Halverson, 2009). They also point out “people will need to develop skills to find the information they are looking for, to evaluate its usefulness and quality, and to synthesize the information they glean from the different sources they locate” (p. 10). This shift in focus is necessary to prepare students to be active participants in 21st century life. The very nature of technology integration makes personalizing student learning more universally accessible.

Perhaps one of the most compelling pieces of evidence showing personalization leads to increased student engagement comes from Solberg, et al., 2012 finding that parents, teachers, and students all reported that the use of ILPs resulted in students selecting more rigorous course work. They are careful to state that the impact and effectiveness of ILPs need additional study, but the universal report by all three stakeholder groups is certainly noteworthy. Students who self-selected these courses indicated being highly engaged in their learning. They discuss the fact that “this power-sharing pedagogy can evoke student ownership and accentuate the purpose of the learning for students, as they are fully involved from the initial planning stage through the assessment” (p. 1122). ELOs intend to provide this level of ownership for students.

The Purpose of Personalized Learning

McGarvey’s (2012) Webinar *Mass Customized Learning* presents a thorough overview of her thesis that the field of education must shift from a paradigm where selection of talent is the goal to one where fostering talent in all learners is the expectation. Beach and Dovemark (2009) give a wonderful explanation of the need for personalization in learning. They state there is a shift in the “root metaphor of schooling from transmission to construction” and that the purpose of education is to “develop a lust for life-long learning” (p. 690). Providing students the

opportunity to construct the scope and sequence of their learning creates the platform for the transition. The more personal investment in the work, the more value it has beyond merely fulfilling requirements for completion. Beach and Dovemark (2009) correctly identify the value of development a life-long interest in learning and growth. By focusing on student interests and involving community members, ELOs are uniquely suited to the development of life-long learning traits.

Moving Education into the Information Age

McGarvey's (2012) research centered on the notion that the current system of education was designed to meet the challenges of industrialization, and did so with great success; but the world has shifted and education must shift with it to meet the needs of society in the Information Age Global Economy. The coaching and mentoring models frequently utilized in the ELOs process provide real world opportunities for the process of fostering talent as McGarvey (2012) describes. ELOs frequently involve students working with a mentor who guides them toward greater understanding. Working with a student in a real-world setting, providing individualized support and instruction, followed by the opportunity to practice new skills for an authentic audience is a system that follows McGarvey's vision of improvement.

Sir Ken Robinson (2010) delivered a TedTalk entitled *Bring on the Revolution*. His main premise is that the traditional model of schooling and education is based on an industrial model and that industrialization controls for quality through the process of standardization. He calls the standardization of education the fast food model; a system that creates a vast number of identical products. He proposes that it is time for the change to an organic process, one which does not have a proscribed outcome and allows individuals to explore and develop their passions and talents. He says "it is about creating a movement in education in which people develop their

own solutions, but with external support based on personalized curriculum” (Robinson, 2010). This is precisely the type of learning ELOs are designed to promote. ELOs are opportunities for individual students to pursue an idea or topic that they are interested in, in a way that gives them personal and specific experience, while under the guidance of an expert.

According to Collins and Halverson (2009) education is both undergoing a revolution due to technology driven learning and shifting from the search for answers to the crafting of better questions. These two factors combine to create the ideal conditions for utilizing the vast resources available through technology to promote the growth and advancement of personalized learning practices. Jarrett (2013) examined the work of Carol Twigg and the National Center of Academic Transformation’s (NCAT) work in the redesign of math sequencing in 32 two-year colleges utilizing software instruction. The results showed clear improvement in student performance. The ability to utilize technology to give students resources to explore personalized interests and develop individualized skills fits faithfully into Robinson’s (2010) and MacGarvey’s (2012) visions of postindustrial education that is personalized and interest driven.

Preparing Students for Future Success

Walkington, Sherman, & Howell (2014) published an article in *The Mathematics Teacher* that provides concrete examples and strategies for personalizing algebra for high school students. Among the valuable information provided are a series of questions designed to solicit information from students regarding their personal interests and how those interests may relate to learning about algebra. The focus of the study is personalization within an algebra classroom, but the results of the study have wider application to the implementation of ELOs and other forms of personalized learning. Student engagement in mathematics is frequently a stumbling block in both the delivery of high school curriculum and preparing students for future academic

success. Jarrett (2013) makes a further case for change stating that employers often assert college graduates are not well prepared in “global knowledge, self-direction, writing, and critical thinking” (p. 4). Widespread implementation of personalized learning at the high school level has great potential to provide students with a better foundation for further skill development in post-secondary settings. When students move beyond the walls of traditional high school programming and enter the community they have the opportunity to apply their skills and talents in authentic settings. Placing students in authentic settings while they are developing the skills Jarrett (2013) states employers desire benefits both the student and the employer. Authentic application under the tutelage of an experienced mentor creates skills that can transfer to other post-secondary settings.

Fostering Community Connections Through Personalized Educational Experiences

“Like Dewey, Freire discusses how individuals learn through the active, collaborative tackling of complex and experiential problems, and how individuals and schools should function in society to promote a more participatory, curious and critically aware citizenry” (Deans, 1999, p, 20). This concept of school in society is evident in community-based educational practices such as service learning projects, internships, and Extended Learning Opportunities. Kirkland (2010) states that social justice theory, as applied to education, makes it imperative that all individuals are able to develop their unique skills and talents so that they can contribute to the betterment of society as a whole. Personalization linked intricately to community resources, is an effective way of ensuring valuable educational opportunities to all students.

Tapps et al. (2014) details the use of a service learning model as part of a class assignment for physical education students. Through partnerships with community organizations high school physical education students were able to apply skills and knowledge learned in class

in a community setting for the benefit of community members. Tapp et al. (2014) focused on the adaptation of the service learning model for experiential learning purposes. The students went into the community and taught the skills they learned in the classroom setting to an authentic audience. Some students applied their skills in an afterschool program with younger children, while others applied their skills in a community center with older adults. These are specific examples of the development of a community connection that could easily be replicated in a variety of service learning projects across any number of disciplines. Risner (2015) details a similar program with in a post-secondary dance curriculum. This shows the concept found in Tapp, et al (2014) expanded upon for the post-secondary level. The service learning evolves into an internship requirement as part of the degree program. Risner (2015) is clear that the sample is very small and that the concept requires further scholarly investigation; however, the anecdotal evidence shows a clear benefit from relationship building with the community partners, both for the individual students and for the educational institution as a whole.

Rutledge et al (2015) found that the one of the higher performing high schools in their study had purposeful partnerships with more than 50 community organizations and businesses. The relationships ran the gamut of bringing community members into the school for guest speaking events to providing opportunities for the high school students to participate in authentic assessments by doing things such as having culinary students cater local events. These examples of partnerships are easily fostered through the ELO process.

Measures of Effectiveness

Hyslop and Mead (2015) conclude that personalized learning and accountability systems can “not only coexist but also reinforce and improve each other” (p. 43). They further state that “personalized learning cannot grow to scale without evidence that it works and improves student

outcomes” (Hyslop and Mead, 2015, p. 43). The current research demonstrates an effort to show the effectiveness of various types of educational personalization, but there is no concrete measure found across programs. ELOs and other methods of personalization need a new measure of effectiveness, one that is not tied to standardization, but rather can illustrate the individual strengths and skills of the student.

Sir Ken Robinson (2010) is a proponent of moving away from the standardization of education. He states that standardization does not allow for individual growth and exploration based in personal interests and passions. A stumbling block in the search of measures of effectiveness is that assessments have become so standardized that there is no existing system to measure the effectiveness of personalization. John Abbott (2015) in *Battling for the Soul of Education: Moving beyond School Reform to Educational Transformation*, discusses the idea of cognitive apprenticeship. He states “The definition of success over countless ages in the past was when the novice learner/apprentice could demonstrate that they were as good as their master, and maybe even better” (Abbott, 2015, p. 103). Making this shift away from standardization to individual performance may well provide educators with for more effective measures of success.

Assessing Student Learning in Non-Traditional Situations

The Beach and Dovemark (2009) study provides cautionary information for those looking to work with students using alternative means of instruction and assessment. Developing student-centered, personalized learning pathways means that educators must be willing to dispense with traditional measures of achievement and work with students to truly develop what the authors term students own knowledge as learning partners (Beach & Dovemark, 2009). Beach and Dovemark (2009) present some evidence that teacher perceptions

of students' capabilities within the realm of personalized learning and self-directed study is dictated by their ability to demonstrate traditionally valued study habits and assessment performance.

Roth et al. (2009) discuss the difficulties of assessing student internship work within a traditional high school grading framework. They state that the evaluation within traditional grading context is often perceived by students as devaluing what they have seen as real contributions to actual, real-world work (p. 494). The findings are clear that the experience was valuable both in the sense of skills and knowledge acquisition as well as to the students personally as an academic undertaking (Roth et al., 2009). The challenge becomes devising methods of evaluation that students find as valuable as the internship experience itself. Tapp et al. (2012) find some success in the evaluation process through the utilization of post-experience reflections. They go on to suggest that pre- and post-experience surveys may be a valuable tool to assess the effectiveness of community-based service learning projects (p. 11). Tapp et al. (2009) suggest the surveys should cover the area of comfort, competency, safety, and experience (p. 11).

Waldrip, Cox, Deed, Dorman, Edwards, Farrelly, and Yager (2014) evaluated students' perceptions of personalized learning as implemented in secondary schools in Australia. The purpose of the study was to develop and validate a questionnaire that evaluates the outcomes of the Personal Learning Plans (PLP) Initiative. While Risner's (2015) work focused on internships in a post-secondary setting, it is reasonable to see a connection to similar programs at the secondary level. Risner (2015) states today's academic internships rely heavily on the principle of experiential learning, giving students a concrete setting to practice their skills. The Nellie Mae (2015) study specifically examined the college readiness of students by tracking success

rates in the first years of college after participation in high school programming which emphasized personalization and 21st century skills. The study found a strong correlation between personalized, 21st century-based skills development and readiness for college-level coursework and expectations.

Solberg et al (2012) state that ILPs support students in both academic planning and career development. They are clear that the use of ILPs help students become aware of how current courses are relevant to their self-defined career goals (p. 510). This level of self-actualization is in itself a measure of the effectiveness of personalized learning. “ILPs increase the relevance of coursework, positive relationships between teachers and students, and between parents and the school” (Solberg et al., 2012, p. 510).

Conclusions

It is clear that personalization has the ability to leverage the tools described by Collins and Halverson (2009) to pursue student centered, non-traditional learning experiences. As Guy et al. (2009) so aptly state, it is now important to investigate the ways to make the combination of rigorous academic work and workplace preparedness more beneficial to students. The current research lacks clear and universal methods to assess both the experience itself on the individual student level, as well as the method of personalization on a programmatic level. It is possible that a study of students’ post-secondary outcomes could provide a clearer picture.

Student engagement in learning is the hallmark of successful academic programming. As personalized learning is further developed through the use of technology tools and community involvement it is essential that clear criteria are in place to assure that rigorous academic standards are met at the same time individual student interests are supported and pursued.

CHAPTER 3

METHODOLOGY

The research design was a qualitative intrinsic case study of a bounded system examining student perceptions of their experience with the Extended Learning Opportunity (ELO) program at Hillsboro-Deering High School. A case study “seeks to investigate participants’ experiences in a particular bounded context” (Bloomberg & Volpe, 2012, p. 151). Using the case study design provided the opportunity to specifically examine the impact of ELOs for the students of Hillsboro-Deering High School as identified by the students. Creswell (2012) states “a ‘case’ may be a single individual, several individuals separately or in a group, a program, event or activities” (p. 465). For the purposes of this study, the case was the ELO Program, available to all students at Hillsboro-Deering High School.

The research addressed the following questions: What do students describe as their most influential experiences within the ELO program? How do students characterize their learning within non-traditional and/or community-based settings in the ELO program? What aspects of the ELO program do students perceive as useful to their development as learners and how do they align to the stated core values and vision of Hillsboro-Deering High School?

The articulated vision of Hillsboro-Deering High School is to create a caring and challenging 21st century learning environment that allows all students to reach their full potential academically, socially and emotionally. The articulated vision aligns with the school’s four core values: Community, Purpose, Progress, and Personalization (Hillsboro-Deering High School, 2018). The Nellie Mae Education Foundation (2015) presents clear evidence that personalized, student-centered practices provide students with the skills they need for success. “Like Dewey, Freire discusses how individuals learn through the active, collaborative tackling of complex and

experiential problems, and how individuals and schools should function in society to promote more curious and critically aware citizenry” (Deans, 1999, p. 20). Wheatley (2006) states that open organizations are looking for information that will help them grow; by contrast a closed system is working toward a state of equilibrium. Effective schools are open organizations, never looking to be done changing; rather they should always be searching for innovation and expansion. As a school community it is important to examine which students are best served and which are underserved by the current structure. In 2017, Hillsboro-Deering High School’s graduation rate was 83% and the drop-out rate was .08%. The articulated five-year goal is to increase the graduation rate to 90% while maintaining a drop-out rate of zero. Graduation rate in the state of New Hampshire is calculated by a student cohort within a four-year time frame, reflecting the percentage of students who enter the school as ninth graders and graduate in four years. Students graduating after more than four years or completing through an alternative means count against the percentage. The school currently sees nearly 15% of each cohort complete through alternative means, such as enrollment in a neighboring night school program or taking the High School Equivalency Test (HiSET). The purpose of this study is to determine the extent to which the use of ELOs increase student engagement and thereby student success. ELOs provide students with increased opportunities for ownership and personalization, both essential elements for student engagement identified by the Nellie Mae Foundation (2015). It is possible that an increased utilization of ELOs will result in an increased graduation rate.

Setting

The purpose of the study was to examine student perceptions of their experiences with the ELO program at Hillsboro-Deering High School. Maxwell (2008) identifies “understanding the particular context within which participants act and the influence this context has on their

actions” (p. 221) as one of the primary reasons for qualitative research. This study used the specific focus of this setting to examine student perceptions of the ELO program. The study site was a rural New Hampshire high school with an enrollment of approximately 350 students. The researcher has been an administrator at the site for seven years, and prior to that was a member of the faculty since 1999. The other members of the administrative team for both the school and the district were supportive of the research efforts. Hillsboro-Deering High School students come from the towns of Washington, Windsor, Hillsboro, and Deering, New Hampshire. Approximately 37% of Hillsboro-Deering High School students qualify for free or reduced meals and 20% are identified as in need of special services. “Census data from 2011 estimates the population of Hillsboro at 6,026 (65% of the school district), Deering at 1,926 (21%), Washington at 1, 115 (12%), and Windsor at 225 (2%). The communities are economically, racially, culturally, and ethnically similar. No identifiable minority group comprises more than 0.6% of the population. The median household income is \$59,152” (Hillsboro-Deering High School, 2015, p. 4).

Participants/Sample

The study participants were either current students or alumni of Hillsboro-Deering High School who participated in the ELO program while in high school. Creswell (2012) states that qualitative researchers use the technique of purposeful sampling to “intentionally select individuals and sites to learn or understand the central phenomenon” (p. 206). The participants and site for this study met the criteria for a purposeful sample as they were selected specifically to provide insight into student perceptions of their experience with the ELO program at Hillsboro-Deering High School. Maxwell (2008) further states that studying a small number of individuals allows the researcher to preserve the individuality of each during analysis.

ELO program participants and their parents/guardians (for those who are minors) were invited to participate via an introductory letter and informed consent detailing the purpose of the research and that all participation is voluntary. The letters also stated that study participants are able to withdraw at any time and that there would be no penalty for either non-participation or withdrawal. The introductory letters are included as Appendices A, B, and C. The pool of potential study participants was comprised of individuals who participated in the ELO program between the fall of 2015 and the spring of 2018. Purposeful sampling was utilized to ensure a cross section of participants. The researcher chose not to invite students who unique needs would have made participating in the study unduly burdensome. Contact information was not readily available for all alumni who met the criteria for participation. The nine study participants comprised a deliberate sample that provides a cross-section of students across the areas of academic achievement, age, areas of interest, and engagement with traditional programming.

Data

Data collection came from interviews with current students participating in or having participated in the ELO program, as well as alumni who participated while enrolled at Hillsboro-Deering High School. Interviews were conducted by the researcher and most often at Hillsboro-Deering High School. One interview was conducted via Facetime because geographical and time constraints prevented an in person meeting. All interviews were semi-structured, using a set of standard questions (see Appendix D). The standard questions were provided to the study participants in writing prior to the interview to allow for thoughtful and complete responses. The semi-structured interview format was purposefully chosen so the data collected could inform the research questions, while also allowing the researcher and participants to explore related thematic trends that emerged over the course of the study. The data regarding the program itself,

such as overall number of ELOs begun versus completed and the demographic data of the program participants was reviewed as well for potential trends. These data, as part of the enrollment data of the school, were public information, readily available to the researcher and non-confidential in nature.

Analysis

Participant interviews were analyzed and coded to identify common themes and identify program elements related to student engagement in learning and high school completion. Participant names were not used while analyzing the data. Participants were assigned pseudonyms, and those pseudonyms were the only means of identification used throughout the data analysis process.

The data was coded by the researcher to identify themes and key ideas. All data was coded using the pseudonyms for cross-referencing purposes. Participant interviews were transcribed in order to facilitate the process of coding and to give the participants the opportunity to review the data for accuracy. The researcher conducted a hand analysis of the data. Hand analysis was selected as the sample size was small and hand analysis helped ensure that connections among the data were not missed.

Using a similar process to that described in Creswell (2012) the researcher was able to develop themes from the data to answer the questions driving the research. Creswell (2012) provides five steps in the coding process: “initially read through text data, divide the text into segments of information, label the segments of information with codes, reduce overlap and redundancy of codes, and collapse codes into themes” (p. 244). The primary function of the coding was to “look for relationships that connect statements and events within a particular context into a coherent whole” (Maxwell, 2008, p. 238). “The researcher strives to describe the

meaning of the findings from the perspective of the research participants” (Bloomberg & Volpe, 2012, location 1333). The five major themes were clearly evident from the first read through of the transcript data. Each of the nine study participants addressed all five of the major themes throughout the course of their interview. The sub-themes emerged from the first and second rounds of coding, with at least several participants, if not all addressing each sub-theme. While it is more common for coding to begin by identifying a large number of codes that are then organized into larger categories or themes, in this case the major themes were plainly evident from the first reading.

Participant Rights

All study participation was strictly voluntary. Careful and deliberate measures were consistently taken to ensure that all participants and their parents/guardians (for those under the age of 18) understood that all participation was voluntary and that there were no penalties for choosing not to participate. The voluntary nature of participation was clearly spelled out in the initial letters (see Appendices A, B, and C) soliciting study participants. It was also clearly articulated at the beginning of each interview that study participants were free to discontinue their participation at any time with absolutely no penalties.

Due to the small sample size careful attention was paid to protecting the participants’ identity. The individualized nature of ELOs, coupled with the small size of the study site, increases the possibility that a participant could be identifiable. Information gathered was included in the study without corresponding identifiers. Participant names were not disclosed in the results of the study. Participant names were not used while analyzing the data. Participants were assigned pseudonyms. All data was coded with the same pseudonym for cross-referencing purposes. Only the researcher knows the identity of all the study participants. Interviews were

recorded to allow for transcription and the recordings were erased once transcription was completed and verified. All interview transcripts and participant data were stored in a locked filing cabinet in the researcher's office and all electronic files were stored on a secured device in password protected files. The raw data was destroyed upon completion of the study. All participants were offered the opportunity to review their interview transcripts for accuracy and will have access to the final study.

Potential Limitations

The benefits of the research design were that it focused specifically on the site school and the needs of the learners of the Hillsboro-Deering community. The research is intended to guide the community's future efforts to meet the needs of all learners. Because the ELO program is relatively new there is not a great deal of historical data. The case study approach also limits the applicability of the results to a wider population.

The small size and rural nature of the community are a limitation as there are fewer opportunities for community-based opportunities in the setting. Student access to community-based programming is hampered by the limits inherent in a rural community; there is a finite number of community members who are willing and able to mentor students. The geographical location of the community makes student access to other areas difficult, but not impossible. The lack of any public transportation limits most students to the immediate community and to their personal resources to get to and from the location. While the ELO program is open to all students in grades 9 – 12, older students with access to their own transportation are more likely to participate in community-based experiences.

As an administrator at the study site the researcher has a vested interest in the quality and efficacy of all programming. The researcher is actively looking for ways to expand

personalization for students and efficiently utilize available resources. The researcher's position within the school community also had the potential to influence study participants during the interview process. Careful measures were instituted to ensure that all participants were comfortable and understood that they were under no obligation to participate in the study. The researcher was also careful to inform each participant that there was no correct or expected answer to any of the interview questions.

CHAPTER 4

RESULTS

The purpose of this qualitative intrinsic case study of a bounded system was to investigate student perceptions of their experiences with the Extended Learning Opportunities (ELO) program at Hillsboro-Deering High School and to identify how students' perceptions of their experiences align with the stated objectives of the school. The focus of the study was to answer three research questions:

- What do students describe as their most influential experiences within the ELO program?
- How do students characterize their learning within non-traditional and/or community-based settings in the ELO program?
- What aspects of the ELO program do students perceive as useful to their development as learners and how do they align to the stated core values and vision of Hillsboro-Deering High School?

The data that informed the study were interviews with nine ELO program participants.

Participants were selected using purposeful sampling, as detailed in Chapter 3. The purposeful sampling ensured a cross-section of study participants. The study participants ranged in age from 15 to 20 years old, covering a wide array of academic profiles, from students at the very top of their class to those who consistently struggle to engage in traditional academic programming.

The similarities and differences in the participant perceptions were examined and are presented in this chapter.

Data Analysis Methods

Qualitative data, consisting of interviews with ELO program participants, was collected for this study. The interviews utilized a semi-structured format. Participants were provided the list of standard questions (See Appendix D) prior to the beginning of the interview. Further questions and topics were explored as each interview evolved.

The interviews were recorded using a voice recorder app on an iPad and then transcribed using Trint.com, an on-line transcription resource. The transcripts were then edited by the researcher for accuracy. Each participant was offered the opportunity to review their transcript for accuracy. Eight of the nine interviews were conducted in person, with the ninth conducted using Facetime as the study participant was not living in the community.

After transcription, the interviews were read, reviewed, and coded for themes. Due to the relatively small sample size the researcher was able to conduct a thorough and detailed hand analysis of the data in both first and second round coding. The coding process began with a preliminary exploratory analysis through a full review of all transcript data. This review yielded five major themes in the data from all participants. Each transcript was coded into those five themes using color-coding for easy visualization. After the themes were identified the data was reorganized into charts by theme to enable the researcher to identify trends and points of commonality and difference. Reorganizing the data allowed sub-themes to emerge more specifically. Each of the sub-themes was addressed by several, if not all, of the study participants. The data was then further organized into a logical sequence for presentation.

Presentation of Results

The participants' experiences with the ELO program are described individually to provide context to the interview data. The description provides a brief summary of each

participant's ELO project and their status at both the time of the interview and when they participated in the ELO program. The names used here are pseudonyms. After the participant descriptions the five themes that emerged from the interviews are presented. Details from each interview are used to develop the themes and highlight the students' perceptions of the ELO program and how the program aligns with the core values and vision of Hillsboro-Deering High School.

Participant Experiences

Dave was a senior student in the process of completing his ELO project at the time of his interview. In the intervening time he has successfully earned his ELO credit and graduated from Hillsboro-Deering High School. Dave spent two years participating in the Fire Explorers program at a nearby fire department. The program consisted of sessions scheduled at the fire station, outside of regular school hours. Program participants learn and practice the basic skills of firefighting and do ride-alongs for both fire and EMS calls. The student's mentor was provided through the structure of the program and is a member of the fire department.

Laura is a graduate of Hillsboro-Deering High School who has just completed her second year in college. She completed her ELO project while she was a senior at H-DHS. Laura's project was the study of neuroscience. She utilized open format online lectures and other course materials from MIT, developed a reading list, and job shadowed a neuroscientist at a lab at Boston University. She selected a member of the H-DHS faculty as her mentor for the project. Her project culminated in a presentation of her experience and learning to an Advanced Placement Psychology class at H-DHS.

Jessica was a junior student in the process of completing her ELO at the time of her interview. In the intervening time she successfully earned her ELO credit and is scheduled to

begin her senior year at Hillsboro-Deering High School in the fall of 2018. Jessica's ELO project was an independent study in drawing. Jessica elected to have a member of the H-DHS faculty serve as her mentor and completed the overwhelming majority of her ELO work in independent studio time during the regular school day.

John was a sophomore student at the time of his interview. He had earned one ELO credit as a freshman and was in the process of earning a second. His first ELO project was a Hunter Safety course that he completed through the Fish and Game Department. The second ELO project was participation in the Fire Explorers program at a nearby fire department. In both cases mentors were provided by the programs themselves. In both cases John signed up for (and in the case of Hunter Safety, completed) the programs prior to knowing that he could earn credit toward graduation for the experience.

Alan was a junior at Hillsboro-Deering High School at the time of his interview. He is in the process of completing an ELO in Bike Repair. Alan works with a community mentor who has a bike repair business. Alan works with his mentor at his shop and also at community collaborative in a neighboring city. The collaborative provides bikes and bike repairs services to area children in need. Alan had previously purchased a bike from his mentor and had the help of the school's ELO Coordinator to set up the ELO experience.

Marta was a senior at the time of her interview and had previously completed two ELO projects. She has since graduated from Hillsboro-Deering High School. Marta enrolled in and completed two art experiences outside of H-DHS. One was a summer painting course for high school students offered by the Rhode Island School of Design (RISD) and the other was an on-line art course offered by an artist whose work she admired. Marta sought out both of these

programs and completed them before knowing that she could use them to earn credit toward graduation. Mentors were part of the design of both programs.

Suzy was a junior at the time of her interview, and in the process of completing an ELO in graphic design. She has since earned her ELO credit and is scheduled to begin her senior year at H-DHS in the fall of 2018. Suzy selected a member of the H-DHS faculty to serve as her mentor for an independent study in graphic design. After completing a regularly offered introductory course she approached the teacher and the ELO Coordinator to ask if she could continue on with the subject as an ELO. She completed her ELO during the course of the school day in independent studio time.

Julia was a third year student with senior status at the time of her interview. She has since graduated from Hillsboro-Deering High School after completing all requirements in three years. She earned credit for her ELO project during her second year. Julia's project was an independent physical education experience, designed to meet her unique physical and medical needs. She chose to have her mother work with her and act as her mentor during the experience. She and her mother utilized the pool facilities at a hospital affiliated wellness center located about 30 miles from Hillsboro-Deering High School. The wellness center also had trained personnel available for assistance and support.

Margaret had just completed her first year of college at the time of her interview. She is a graduate of Hillsboro-Deering High School who completed her ELO experience during her junior year. Margaret participated in the Girls Rock the Capitol Program. The program is sponsored by the Girl Scouts of the Green and White Mountains. During the course of the program participants attended a three day training session and then spent one day a month for six to seven months shadowing a member of their state legislature. Margaret's mentor was the

liaison provided by the program, but she was also responsible for approaching legislators to ask them to allow her to job shadow. She coordinated her credit for the experience with the school's ELO Coordinator.

Interview Themes

As the researcher read, reviewed, and coded the interview transcripts, five themes emerged. These five themes are a reflection of the study participants' perceptions of their experiences with the ELO program at Hillsboro-Deering High School. Table 4.1 details the five themes and 23 sub-themes derived from the data.

Table 4.1 *Organization of Major Themes and Sub-Themes*

Major Theme	Sub-Themes
Theme 1: Personal Interest	<ul style="list-style-type: none"> • Career Exploration • Hobby / Skill development • Usefulness in future • Sharing what they learned • In-depth exploration • Family connection
Theme 2: Relationships	<ul style="list-style-type: none"> • With the school as a whole • Support from the ELO Coordinator • With mentor(s) • With the larger community • Development of self-advocacy skills
Theme 3: Motivation	<ul style="list-style-type: none"> • Stems from personal interest • Emphasis on learning rather than grading • Control over own learning • Setting own goals vs goals set by an instructor • Use of ELOs in areas of struggle vs for exploration
Theme 4: Self-Paced, Self-Directed	<ul style="list-style-type: none"> • Setting daily plans • Choice of projects and activities • Importance of advance planning • Learning to manage time
Theme 5: Program Awareness	<ul style="list-style-type: none"> • More students would participate if they had a better understanding of the program • Need better and wider variety of advertising • Teachers and counselors should actively steer students toward the program

Personal interest. A significant amount of the data from the interviews focused on the participants' personal interest in the topics of their ELO projects and their expression of the importance of personal interest as a means of engaging students in learning. The study participants included a wide range of student profiles. Some were academically at the top of their class, some struggled to earn credit in regular classroom settings, and others fell somewhere in the middle. A universal theme was their articulation of the idea that it is easier to learn and persist in learning with topics and tasks that are of true personal interest. The reasons for their interest in their topics varied. Six of the nine stated that part of their interest was career exploration. Three talked about developing personal skills in areas that they want to pursue outside of work, with one participant specifically focused on building skills to help maintain life-long health. All participants expressed enjoyment in learning about their chosen topic. Several made specific mention of particularly enjoying their presentation at the end of the experience. Sharing what they learned and their future plans in the given area was a key positive in the experience of several students. When asked why he enjoyed the presentation so much one participant responded with a gleeful "because it's all about me."

Three of the participants began their work prior to knowing earning credit was a possibility. John had already completed his Hunter Safety course prior to even hearing about the ELO program. After learning what an ELO was and discussing his areas of interest with the ELO Coordinator they utilized his previously completed Hunter Safety course as the basis for an ELO credit. After completing the process John returned to discuss further ELO opportunities and discovered that other students were earning ELO credit for participation in the Fire Explorers program in a nearby town. John was already a member of the program and immediately began working with the ELO Coordinator to submit the paperwork to make it an official ELO. When

asked what made him take the Hunter Safety class and join the Fire Explorer's program he stated:

Well the Hunter Safety, it's just my personality, I like the outdoors. I figured it was right up my alley for when I get my hunting license. And then the fire safety, my grandfather and my father were all firefighters. So I thought, you know what? This is a great learning opportunity to learn more about the fire service. And I want to bring it to school too. But yeah, that's why, because my family was all firefighters so I want to maybe become one later on.

Marta enrolled in and completed two art experiences prior to knowing it was possible to earn credit for her work. She stated that she enrolled in the course to grow her skills and technique and that she only learned after the fact that the experience could be documented for academic credit. Margaret was accepted into the Girls Rock the Capitol program and then, at the suggestion of the program coordinators approached the school about earning ELO credit. She also participated in the program a second year "just as an internship for my resume, not as an ELO." A cross section of students, with varying academic profiles, demonstrated a willingness to participate in individualized learning experiences outside of the typical school setting. Several chose to participate in the experience without realizing they could earn credit, which is an indicator of the power of personal interest to fuel learning.

During the second year Margaret participated in Girls Rock the Capitol she attended a conference about Extended Learning Opportunities with her legislator.

It wasn't at the Statehouse and it was with the New Hampshire Association for Business and Education Forum, or something like that. And they were actually talking about ELOs in this giant conference with microphones and stuff and so they had ELO

Counselors from across the state talking about their experiences... But the really interesting part about that was hearing other stories from the ELO Counselors and the ELOs other students were doing and you could really see that the diversity and the ways students were able to explore things that they're interested in.

Margaret had the unique experience of getting to speak at the conference and share her personal experience with ELOs and her perception of their value with a cross section of ELO Coordinators, State Legislators, and business people from across New Hampshire.

John and Alan both articulated why learning about their ELO topic was different than learning in a typical high school class. John said:

My favorite thing to do is write about what I learn. So I would read about hunting or fishing or firefighting and I do a project on that and I'd have a billion things to put on it. But we're doing a project on Shakespeare. I know nothing. I don't like it... when she tells us to write about what we want, I'm going and going, I'm writing a book.

Alan discussed why he felt differently about doing his ELO work outside of school hours as opposed to working on homework for a typical high school class.

Because this is something that pertains to my interests. Something I am really engaged in and something I feel will help me on a more personal level. And it's something that can . . . It's a skill that could potentially save me money later on by knowing how to do these things myself.

Participants diverged on the matter of within the school day or outside the school day ELO work time. Unlike Alan and John, Jessica and Suzy did not want to work on their ELOs outside of the regular school day. They both stated that having the opportunity for studio time, at the school, within the regularly scheduled school day, was very beneficial. They both spoke to

the fact that working on their art at home was difficult and that the studio environment at school allowed them to focus, free from distractions. Laura completed the majority of her ELO working independently within the school day, but she also arranged field experiences outside of the regular school setting that she found invaluable. Julia felt that completing her ELO outside of the school was a real benefit to the experience.

Dave's statement probably best sums up the feelings of all nine study participants:

Because I feel like people learn better if it's on a subject that they are really interested in and they want to learn about and it's like there's no rules on how what you have to do or how you have to do it, it's just someone teaching you and you learn.

The data really emphasizes the value these students found in being able to learn about a topic of their own choosing, in a setting that worked well for them as individual learners. A majority of the participants saw their ELO as an opportunity for career exploration, while a few focused on building skills for a personal hobby or interest. Participants universally viewed the ELO program as benefiting them in their future. Many participants valued the opportunity to bring their personal interest into school and share their knowledge with other members of the school community.

Relationships. The role of relationships was not specifically addressed in any of the interview questions, but it emerged as a dominant theme during the coding process. Participants discussed how the ELO program influenced their relationship with the school, with the ELO Coordinator, with their mentors, and with the larger community. There was also an interesting trend for some participants to talk about a development of their self-advocacy skills.

Dave stated that the ELO program shows "the school's really going out of their way for us to have other learning opportunities" and "the school really cares about our education and

helping us find alternative ways of getting credit and going out there and getting the community involved.” Laura stated:

I think this comes from Hillsboro being such a small school. I think there’s an inherent caring that goes on. But being able to just know everybody, and when you’re shaping your ELO or something, you know who to ask and people know each other, so it’s easier to make that class.

Laura, John, Julia, and Margaret all made particular mention of enjoying the experience of presenting their ELO experiences to the members of the school community. The study participants were universal in their assessment that the ELO coordinator was helpful and played a key role in the process. Julia and Margaret both suggested that some students might benefit from having more structured, regularly scheduled check-ins with the ELO Coordinator throughout their project to ensure that they remained on track and focused on the agreed upon learning outcomes.

The relationship with their mentor was of particular importance to several participants. Laura spoke about choosing her mentor because of a previous experience of having a class with him and that they had an existing connection because of that. Both Jessica and Suzy also discussed having pre-existing relationships with their mentor from taking classes with her. Jessica stated that she did not know anyone in the larger community to approach to be a mentor so it never really seemed like that was an option. Margaret stated that it might have been helpful to have a faculty mentor to discuss her topic with, in addition to her regular meetings with the ELO Coordinator after her statehouse visits. Alan was particularly clear that a good mentor was an essential part of the program. When asked what advice he would give a student interested in the program, he stated “probably to find a good mentor is the best thing to do. Someone that

knows how to get things done but is fairly laid back enough to have conversation and sort of a connection with.”

The relationship of the individual students and the school as a whole with the larger community was also a topic discussed by many of the participants. Suzy’s ELO was done within the school day, with a faculty mentor, but she made a point of stating that she also had an internship with the local police department for the Internship class. This class focuses on building job skills and career exploration. The majority of the class is done at an internship site. The class is taught and internships are monitored by the same staff member who serves as the ELO Coordinator. Suzy placed great value on the community aspect of the internship. She talked about how helpful the members of the police department were and how it afforded her an opportunity to explore her career interest in real life prior to enrolling in college. She was very clear that the experience had solidified her desire to become a police officer.

Part of Laura’s ELO involved a trip to Boston University to observe a neuroscientist in her lab. Laura found this aspect of her experience to be very significant. She felt that getting to see the things she had been studying in action had tremendous value, stating:

I had been writing down all of these neuron names and knew how to draw a neuron and all of these different concepts. But I had some idea of how it might work in the real world but didn’t really what it might look like, especially since I’ve never been to a lab. And I haven’t since. So it was definitely a neat experience. And so being able to go there and spend a day with her, I’m just seeing what her lab does. But then we also went out to lunch that afternoon. And I got to talk to her about what she does and not even just what she does, but just talking about neuroscience in general. She was wonderful in that she was so willing to talk to this high school girl interested in this and that really made a

difference. Not just in this class and knowing that I can see how things exist in the real world, but also just my own personal way of how I go about the world in terms of, If I want something, I kind of have figured out how to ask people who know something more about it.

Laura and Margaret both discussed the lasting value that they derived from the development of their self-advocacy skills. Laura described the value of cold-calling labs and then meeting with a scientist and Margaret identified a variety of ways her self-advocacy developed during the Girls Rock the Capitol program. As part of the program Margaret was responsible for researching the background of the legislators and then reaching out to ask those she was interested in to allow her to job shadow. She also found herself at the statehouse on days her legislator was unavailable and she had to learn how to make that time valuable. She was very successful in those efforts, broadening her experience by observing the state senate in action, attending committee hearings on topics of personal interest, and attending conferences and forums happen near the statehouse. Margaret identified that process as one of her biggest challenges, but also a very valuable aspect of the overall experience.

Alan and John both spoke about the community service aspect of their ELO projects. A significant chunk of the time Alan spent with his mentor is at a bike cooperative in a nearby city. The cooperative provides and services bicycles for children who could otherwise not afford them. Alan spoke about the sense of freedom he got when he first learned to ride a bike and that the bike cooperative gave him an opportunity to help other kids get that feeling. He stated he felt that the school should allow ELO projects with community service elements to count toward the community service requirement for graduation, in addition to earning the academic credit. John

stated his belief that his Fire Explorers ELO was a true reflection of the school's core value of community because "that's all community, you're helping out the community."

Other than asking how participants found their mentor, relationships were not an explicit topic of the interview questions, but the role of relationships clearly emerged as an important aspect of the ELO program. Study participants spoke about their relationships with their mentors, the ELO Coordinator, the school as a whole, and the larger community. Study participants found the relationships they developed over the course of their ELO projects valuable and identified them as an important aspect of the program.

Motivation. What motivates students to both complete school work and produce high quality work is an interesting question, with a variety of implications. The study participants all discussed their motivation for doing their ELO work. Motivation was clearly tied to the theme of personal interest. It may very well be a subset of that larger theme. John and Marta are perhaps the clearest example of personal interest being the motivator as they each completed a project before ever knowing they could also use the work to earn credit toward graduation. One of the universal aspects of the ELO program is that students do not earn a grade for their work. They either meet the agreed upon criteria to earn a credit or they do not. The discussion of how working outside a grading structure impacted their motivation provided some insight into student perceptions of grades.

Margaret has long held a unique position from her peers relative to the importance of grades in school. She stated:

I mean I started off in high school really into grades and then I decided I was more interested in my learning than the paper grade... I wasn't super grade driven in high school I was more interested in knowing that I knew. So grades are supposed to reflect

your knowledge but it gets a little more convoluted sometimes. But at least anecdotally from talking to my friends, so I think my interests in classes were a little bit different. And so I would rather have like a 'B' and really like be taking extra time to go and like learn something I was learning in the classroom than like get an 'A' and just be super focused on like making sure the essay is perfect, if that makes sense. Grades are important but they're not the end game. So I really liked the ELO and how the ELO worked for that reason because it wasn't like I had grades stifling my ability to explore outside the parameters of the learning objectives.

Margaret was unique in her articulation of the point while a high school student, and also her willingness to accept lesser grades if she felt she was learning more. It was fascinating to discover that among the study participants the view that grades interfered with learning was not unique to Margaret. Dave stated "you are out at your ELO learning, not doing assignments and worrying about grades, you are just worrying about learning." Suzy and Jessica both discussed doing work for a grade within a structured class, but being able to spend their ELO time focusing on doing their best work, improving their skills. Jessica added she was more likely to try things because there was no penalty if it did not turn out how she planned. Alan talked about how working to get good grades in traditional high school classes was stressful, but participating in the ELO felt like a privilege which motivated him to make the most of the time. Marta spoke about the difference in personal goals versus instructor goals and that in traditional classes the teachers need to cover specific material and the student's work needs to conform to those goals. She said that her motivation for undertaking the two art experiences that eventually became her ELO was to "just learn more art."

Julia's motivation was unique among the study participants. She was unable to fully participate in traditional physical education classes due to her medical conditions. She was seeking an opportunity to complete her physical education requirements away from the questions of other students. Julia also spoke to her desire to practice activities that would have life-long health benefits for her. Julia's perception of the ELO program was mainly as an option for students who struggle in a particular area of the required course of study. She did not consider an ELO project in any other area because she stated she did well in her regular classes. Her advice to students interested in the program was to choose something in which they were fully invested, so that they were be able to persist and earn their credit. Julia seemed to view participation in the ELO as a trade-off, with the student giving up the traditional classroom opportunity in exchange for completing the credit in an alternative manner.

Motivation to participate in the ELO program came from a variety of different sources. A common thread from all study participants was the ability to focus on learning rather than assignments and grades. Several participants also articulated the appeal of having control of their own learning being a motivator to do their best work. Both students who performed well in traditional classes and those that struggled with traditional classes spoke about grades being different than learning.

Self-paced, self-directed. The theme of self-direction and self-paced work also developed from the participant interviews. Dave talked about the ELO happening outside of the school day and that provided greater flexibility. John stated that "in a regular traditional high school class the teachers set up the way you're going to learn, but the ELO you got to set it up." Laura stated one of the differences from a regular high school class was that she was the "sole proprietor of her learning." She named that as the most valuable aspect of the program, stating:

I think it's that sense of gaining independence and taking control over my education... just being able to have that experience in high school of learning what I want to learn and having to do that on my own really helped because that was probably the first time that the whole thing was on me to learn. I had to make all the decisions about things ... what it allowed me to do was to like think about it and plan ahead, being like setting my own priorities and knowing this is what I need to do this day.”

Suzy was also very firm in her belief that the fact her ELO was self-directed and self-paced allowed her to grow and develop her skills. Jessica named setting her own agenda as both a real positive and a challenge. She felt it helped her learn how to better manage her time in a global sense, but also left her feeling like she was not producing enough work. (Something her mentor pointed out and stated was not at all true during her culminating presentation.) Julia named being able to “design her own lesson plan each day” as being one of the biggest differences from elective credit earned in a traditional class. Margaret summed it up by stating “the fact it is so open-ended and you can do so much with it is super valuable.”

ELOs being self-paced and self-directed were identified as beneficial by all study participants, with several also simultaneously identifying it as a challenge. Most participants specifically discussed learning to manage their own time as a key aspect of their ELO, with a few discussing how that skill is transferring to other aspects of their lives. Several participants spoke about the benefit of choosing their own tasks and activities. The study participants clearly felt that self-direction was an essential aspect of the ELO program.

Program awareness. The final theme developed through asking participants what changes they would suggest to the ELO program to make it the program better meet the needs of individual students. Nearly all of the participants spoke to a belief that the current advertising

for the program is not reaching enough students and that more students would participate in the program if they had a better understanding of it. They provided a wealth of suggestions of how to better market the program to the student body. The suggestions included:

- clearer flyers
- adding ELOs to the Program of Studies Fair (a practice that was implemented in the past year)
- informational class meetings
- using the school's flex block to have the ELO Coordinator and past participants share their experiences
- having school counselors help students map a path to an ELO beginning their freshmen year
- incorporating ELOs in to a senior project concept
- having classroom teachers actively encourage students to pursue ELOs in areas of personal interest

Study participants universally felt that the ELO program was of personal value and that the program is a match with most or all of the school's core values and vision. Study participants also unanimously stated that more students would participate in the program if they knew about it or had a better understanding of how it works. The participants provided a number of concrete suggestions for increasing program awareness within the school community.

Summary

The purpose of the study was to investigate student perceptions of their experiences with the ELO program at Hillsboro-Deering High School and identify how the program's impact aligns with the stated objectives of the school. The problem statement was that traditional high

school programming does not serve the needs of all students. Traditional programming is rooted in the past preparing students for a world that no longer exists. To this end Hillsboro-Deering High School is in the early stages of personalization. Personalized educational programming allows students to explore their interests and develop functional skills in settings outside of the traditional classroom.

Analysis of the data generated through participant interviews led to five themes: personal interest, relationships, motivation, self-paced and self-directed, and program awareness. The study participants universally stated that the program was valuable and generally a good fit with the schools stated core values and vision. Each student had an individual take on which values and aspects of the vision were best represented, depending on their individual project and their understanding of the values. All participants stated that the ELO Program was clearly meeting the core value of personalization.

The study participants all named personal interest as a key component of the ELO program. The ability to design a credit bearing experience around a personal area of interest was seen as very valuable. Being able to use the ELO program to for career exploration was a program benefit for the majority of the participants. Other participants felt there was a value in being able to pursue a hobby or interest they felt would be something they would continue after school. Many of the study participants also identified the opportunity to share their personal interest and the things they learned at school as a true benefit.

The role of relationships, with their mentors, the ELO Coordinator, the school as a whole, and the larger community also emerged as important aspects of the ELO program. Study participants found the relationships they developed over the course of their ELO projects valuable and identified them as an important aspect of the program. Several participants felt

their ability to experience what they were learning in a real world setting was particularly valuable.

The participants discussed what motivated them in their ELOs as they are outside of the traditional grading structure. There were several fascinating discussions about the role that grades play in learning and classes. It was particularly interesting that the feeling that grades create stress and interfere with learning was felt by a cross section of participants. Both students who performed well in traditional classes and those that struggled with traditional classes stated that grades were different than learning.

All study participants identified the fact that ELOs were self-paced and self-directed as beneficial, with several also simultaneously identifying it as a challenge. Learning to manage their time and being in control of their learning were named as positives that transferred beyond participating in the program. The final theme that emerged from the data was program awareness. Participants universally felt that the ELO program was valuable and a good fit with the school's core values and vision, while at the same time stating that more students would participate if they had a better understanding of the program and how it works.

CHAPTER 5

CONCLUSION

This study investigated student perceptions of the ELO program at Hillsboro-Deering High School as a means of personalizing learning and increasing student engagement in their education. The problem identified in the literature is that traditional high school programming does not meet the diverse needs of all students. That reality is evidenced by the fact, that while the drop-out rate at Hillsboro-Deering High School hovers around zero, the graduation rate is at about 85%. Roughly 15% of each cohort is completing their education through alternative programming such as the HiSET Exam. Through an examination of student perceptions of the ELO program this study investigated if the ELO program is a viable means of increasing student engagement through personalization of credit bearing learning opportunities and potentially increasing the graduation rate.

The conceptual framework of the study was social justice theory. One dimension of social justice theory, as applied to education, states that it is imperative that all individuals are able to develop their unique talents and skills so that they can contribute to the betterment of society as a whole (Kirkland, 2010). The potential scope of Hillsboro-Deering High School's Program of Studies is limited by both the size of the school and its rural nature. ELOs have great potential to broaden the availability of educational opportunities for students. ELOs are uniquely suited to fostering individualized talent and skill development.

The study was designed to answer three research questions:

- What do students describe as their most influential experiences within the ELO program?
- How do students characterize their learning within non-traditional and/or community-based settings in the ELO program?

- What aspects of the ELO program do students perceive as useful in their development as learners and how do they align to the stated values and vision of Hillsboro-Deering High School?

The study data derived from interviews with nine current and former students who participated in the ELO program at Hillsboro-Deering High School. The interviews were transcribed and the transcriptions reviewed and analyzed by the researcher. Coding revealed five major themes in the data: Personal Interest, Relationships, Motivation, Self-paced and self-directed, and Program Awareness. There was a thorough investigation of the similarities and differences in the student perceptions within those themes.

This chapter presents the interpretation of the study findings, including answers to the three research questions, identification of discrepancies among student perceptions, a discussion of the limitations of the study data, the implications of the research, recommendations for action, and recommendations for further areas of study.

Interpretation of Findings

The Nellie Mae Foundation's (2015) finding that young people learn best when feeling positive about the learning process, experiencing strong connections with others, perceiving value in the task, believing the effort will pay off, and having the skills to be successful, is consistently reiterated throughout the findings of this study. The five themes that developed from the study participants' interviews support those central constructs of personalization. The ELO program at Hillsboro-Deering High School has been a highly valued experience for the limited number of students who have participated. The program has been steadily expanding and should continue to do so to support the school as a whole in meeting the individual needs of all students.

RQ1: What do students describe as their most influential experiences within the ELO program?

The study participants identified numerous positive aspects of their ELO experiences, but two elements that appeared repeatedly throughout the interviews were the development of personal skills and knowledge and the ability to take ownership of their own learning. Because the ELO projects center on an area of personal interest students find a great deal of value in the specific skills and knowledge built through the experience. Each student has a unique reason for their area of interest and they were all pleased with how much they were able to personally learn in their identified area of study.

Hyslop and Mead (2015) discuss how personalization “involves transforming students’ daily experiences so they are customized to their individual needs and strengths” (p. 8). This observation is borne out by study participants identifying the ability to be in charge of what they were learning and having the time needed to work on their project as a significant positive element of their ELO experience. Setting both long-term and daily goals is the responsibility of the student engaged in the ELO. Nearly all study participants spoke about the ELO experience helping them develop their time management skills, and that those skills were something they found beneficial outside of the context of their ELO. In addition to the time management aspect of control, students also found great value in their ability to choose the content of their learning. Whether their ELO topic was for career exploration or the expansion of a hobby or personal activity the study participants universally stated that having the ability to choose their own topic and learning methods were very valuable and made their learning more meaningful. This supports the assertions of Robinson (2010) that educational systems should be shifting toward formats that allow students to explore and develop their individual talents and passions.

Beach and Dovemark (2009) discussed the premise of tapping into individual interests to “support promotion of freedom of choice, private/individual responsibility and personal dimensions of knowledge” (p. 690). These factors are clearly demonstrated within the study participants’ ELO experiences. It also appears that Solberg et al.’s (2012) finding that students using Individual Learning Plans were more likely to select rigorous course work is connected to the use of ELOs. The common factor is student-designed learning centered on common interests. Many study participants placed high value on the work done in their ELOs because they saw it as being valuable to them in the future. Solberg, et al. (2012) also stated that pedagogy which shares power and decision-making with students can lead to student ownership in their learning. By increased utilization of ELOs, Hillsboro-Deering High School leadership can provide students with significantly enhanced learning opportunities that students will perceive as having value beyond high school.

RQ2: How do students characterize their learning within non-traditional and / or community-based settings in the ELO Program?

Study participants characterized their learning in the ELO program as being self-directed, motivated by the desire to learn and improve rather than by grades, and future-driven. The study participants universally spoke about learning being easier and more valuable when they were personally interested in the topic. Because the ELO projects are designed around student interests, students were able to design their own learning opportunities including the projects objectives and setting. The value study participants placed on the self-directed nature of ELOs is clearly tied to Solberg, et al.’s (2012) findings of the connection between student decision-making and student ownership of learning.

All of the study participants felt that the non-traditional setting of their ELO was a benefit. Several participants felt that utilizing time and space within their regular school schedule was beneficial, while others felt the fact of being outside the confines of the school building and school day were positive aspects of their experience. This ability of the ELO program to be flexible in all aspects is evidence of the potential for the program to meet the needs of a wide range of students. It also aligns with the assertion of the Nellie Mae Foundation (2015) that personalization recognizes students as individuals with unique interests and needs, and who learn at different paces.

Community involvement was identified as a fundamental aspect of the ELO experience by several study participants. Senge et al. (2012) states it is imperative that schools have connections with the larger community. Students who worked on their ELOs out in the community saw their interactions with the community as a valuable part of their learning. Several participants identified the community service aspect of their project as supporting the school's core values, while others spoke about the unique value of being able to interact with community members on their topic of interest. The ELO program has the ability to benefit the larger community, beyond its investment in the education of students. By engaging in learning in the larger community students have the potential to provide service to others. Actively showing students how they fit into the fabric of the community as a whole reinforces Kirkland's (2010) position that educational systems should prepare individuals to contribute to society as a whole. On the level of individual benefit, Collins and Halverson (2009) place a great deal of emphasis on the importance of providing students with authentic audiences for their work. While Collins and Halverson (2009) focus on the use of technology to accomplish this, it is important to note that ELO work in the larger community produces similar benefits.

All study participants identified the relationships within their ELO experience as being of tremendous value. Both students who worked on their ELO projects within the school building and school day, and those that worked on their projects out in the larger community spoke about the value of the relationships they developed through the experience. For several students the individual relationship with their mentor, whether it was a member of the existing faculty or someone from the larger community, was a central aspect of their learning and growth. Again, Collins and Halverson's (2009) discussion of shifting the role of teacher from sage to coach is relevant beyond their focus on technology. The ELO program allows the mentor to assume the role of coach or guide, supporting the self-direction initiated by the student.

Unique within the context of high school curriculum, ELOs do not utilize grades as part of the assessment structure. Because each ELO project is individually designed by the student, with support from the ELO coordinator and often their mentor, the assessment criteria is built into the project itself as a list of deliverables. Nearly all of the study participants discussed how the absence of grades allowed them to focus on what they were learning, rather than simply completing assignments. Several study participants made particular mention that the absence of graded assignments allowed them to really focus on improvement and development, and also made them more comfortable trying new things, as there was no penalty for a failed attempt. This connects to Roth et al.'s (2009) finding that students in an internship program perceived traditional grading in the program as devaluing their work (p. 494).

Each of the study participants spoke to the value of their experience for their future. A couple of students worked on projects developing skills for things they anticipate doing for personal enjoyment in the future, one student used her ELO experience to develop and practice skills for maintaining a healthy life style, and many students used their ELO project as a means

of career exploration. This future-driven aspect of the ELO projects was seen across all study participants, but implemented in very individualized ways. Beach and Dovemark (2009) stated that the more personal investment a student has in the work, the more value it will have beyond merely fulfilling the requirements for completion. Seeing the work they are doing as personally relevant to their future is a significant factor in ELOs promoting student engagement with learning.

RQ3: What aspects of the ELO program do students perceive as useful to their development as learners and how do they align to the stated core values and vision of Hillsboro-Deering High School?

Study participants identified the development of their time management skills, career explorations, and the ability to direct their own learning as useful aspects of the ELO program in their own development as learners. They also felt that the program was a good fit for the schools core values of community, personalization, progress, and purpose (Hillsboro-Deering High School, 2015). The study participants universally identified personalization as a clear part of the ELO program, with most stating the remaining values worked as well. A few participants were unsure of how well community was reflected in their individual projects, but that was also a reflection of their understanding of the value as school community, rather than community at large. The articulated vision of Hillsboro-Deering High School (2018) is to create a caring and challenging 21st century learning environment that allows students to reach their full potential academically, socially, and emotionally. Study participants evidenced varying levels of understanding of the elements of the school's vision, but all of them felt that the ELO program helped them with reaching their full potential. Several of the participants spoke about the program as evidence of the school being a caring environment. The study provides clear

evidence that participants perceive the ELO program as fulfilling the five factors identified by the Nellie Mae Foundation (2015) as necessary for young people to learn best.

Many of the study participants specifically identified the development of their time management skills as a transferable benefit of the program. Learning to manage their time in a way that allowed them to be productive and focused on their learning outcomes was a key element of the program for the study participants. A few of the participants identified this self-direction and pacing of the work as one of the challenging aspects of the program, while at the same time stating it was a lasting benefit. Calder (2015) and Collins and Halverson (2009) point out the importance of scaffolding the development of skills that lead to independence; the experiences described by the study participants demonstrate their acquisition of a new skill (time management) and the ability to practice it as they moved toward independence.

Career exploration was a common aspect of many study participants' ELO projects. The ability to explore career opportunities in detail and with the support of either community or faculty mentors was valuable to the study participants. Career exploration was an aspect of the ELO program that several study participants identified as aligning with the core value of purpose. The fact that the topics of all the ELO projects are based on the personal interests of the students allows them to investigate career opportunities in real depth. This is a clear case of the work having value beyond fulfilling requirements (Beach and Dovemark, 2009).

Reflections on Findings

Rutledge et al. (2015) found that higher performing schools had a clear commitment to personalization as a central tenant of their school culture. They also found a connection between overall student performance and purposeful and deliberate partnerships with the larger community. The ELO program at Hillsboro-Deering High School is perceived by all study

participants as fostering personalization and supporting individual student learning. Many of the study participants also perceived the ELO program as providing a clear connection to the larger community. One study participant stated that she would not know how to find a community-based mentor for her work. There is clear evidence that the ELO program is successful in both the areas of personalization and community involvement, but it is worth noting that some students will need deliberate support and guidance to fully leverage the potential of community partnerships.

McGarvey (2012) clearly articulates the ways traditional educational programming aligned with societal and industrial focuses of 19th and 20th century society. She goes on to state that the needs of the 21st century require educational programming to shift from a model that selects talent from the pool to one that grows and develops talent in all learners. This reflects a societal shift in beliefs about who should have the tools and support to advance. As society embraces the concept of inclusion of all members, educational programming must develop into a structure that values and supports all learners. This is an idea is also present in the work of Robinson (2010) who encourages a move from an educational model based on standardization to one that develops individual talents and passions. The connection to learning through an area of personal interest helps student to grow the skills and talents that they need to contribute to society as a whole (Kirkland, 2010). Leveraging personal interest as a motivator, particularly outside the structure of traditional assessment and grading was universally viewed as positive by the study participants. Dewey and Freire both believed that “individuals learn through the active, collaborative tackling of complex and experiential problems, and individuals and schools should function in society to promote a more participatory, curious, and critically aware citizenry” (Deans, 1999, p. 20). The ELO program is positioned to provide these opportunities to

Hillsboro-Deering High School. Encouraging students to pursue areas of personal interest and develop skills they see as having life-long applications results in genuine student engagement in learning.

The inherent flexibility of the ELO program allows it to meet the needs of a diverse population of students. ELO can be used to support students who struggle with traditional programming, and are at risk for becoming part of the current 15% of students who complete their education through means other than a high school diploma. ELOs can also support the learning of academically strong students who have exhausted the course offerings in their area of interest. This study investigated the perceptions of students at both ends of that spectrum, as well as those in the middle, and found that ELOs can be designed to support all students.

Limitations of the Study

The study has several limitations. The small sample and single site do not provide broadly generalizable results. The study data relied solely on interviews with study participants. This means that the data is dependent on the participants understanding of the interview questions and their intent. The size and rural nature of the study site limits the number of potential community-based learning opportunities. This is illustrated by one of the study participants needing to go all the way to Boston, a distance of roughly a hundred miles, in order to meet with a professional working in her field of interest.

The researcher is an administrator at the study site and all of the study participants were either current or former students. This preexisting relationship provided a dynamic of the study participants wanting to be helpful and provide the researcher with useful information. Their interview responses, therefore, may be biased as they strived to be cooperative and provide positive responses. As an administrator at the site, the researcher has a vested interest in all

academic programming at Hillsboro-Deering High School and is actively seeking ways to expand the school's ability to offer personalized learning experiences.

Finally, none of the study participants failed to complete their ELO projects. This means that the data is derived from positive experiences with the program and may fail to identify program elements that present obstacles for some students. In future, it is the researcher's intention for data to be collected on those students who do not enter the program and those who enter the program but do not complete a project.

Implications

Students perceive the program as having a great deal of value. The study participants universally exhibited passion and enthusiasm while describing their ELO projects and the things they learned. The personalized nature of the projects resulted in study participants identifying various elements of experience as being most valuable, but they universally identified being able to focus on an area of personal interest as foundational. Study participants believe that personal interest is an important aspect of learning and that it is intrinsically tied to what motivates students to complete work and to do quality work. Drawing on Dewey and Freire, Deans (1999) stated "individuals learn through active, collaborative tackling of complex and experiential problems" (p. 30). ELOs are perfectly suited for supporting that type of high quality, personalized learning.

Students believe more of their peers would participate if they knew about and understood the program. The study participants universally believe that the level of program awareness and understanding within the student body is low. Several study participants stated that ELOs were not a fit for all students, but that many more than the current number of participants would be interested if they understood the possibilities inherent in the program.

Recommendations for Action

The study findings should be presented to the school community so that all stakeholders will have the opportunity to review the findings and have input into any adjustments to the ELO program. An overview of the study will be presented to the Hillsboro-Deering High School leadership team and to the Hillsboro-Deering School District leadership team. The H-DHS leadership team will determine the method in which the study information will be shared with faculty and students.

The data clearly demonstrates a need for better program marketing and out-reach. Study participants were unanimous in their belief that more students would participate in the ELO program if they had a better understanding of what the program is and how it works. The data provides a number of concrete suggestions for increasing program awareness. Creating better marketing for the program could very well be a project topic for a student interested in pursuing further opportunities in marketing as a content area.

The data from the participant interviews was valuable and informative in the context of this study, but it also is an example of the value in speaking with students about their perceptions of learning and school programming. It is recommended that interviewing students regarding their perceptions of the school and how the school's programming meets their individual needs and aligns with the larger vision of the school become a regular part of the professional practice at Hillsboro-Deering High School and across the Hillsboro-Deering School District.

Recommendations for Further Study

The study findings lead to two recommendations for further study. One is to investigate the reasons why students may enroll in, but fail to complete an ELO. This investigation has the potential to provide recommendations to make the program successful for an even broader range

of students. The second is to investigate student perceptions into the connection or lack of connection between learning and grading. Many of the study participants expressed the view that worrying about earning grades interfered with their ability to learn. An investigation into this topic could provide valuable information for programming across the curriculum, in both traditional classroom settings and in community-based experiences.

Conclusion

“Young people learn best when they feel positive about the learning process, experience strong connections with others, perceive value in the task at hand, believe their efforts will pay off, and have the skills to be successful (The Nellie Mae Education Foundation, 2015, p. 3). This study demonstrates that students perceive the ELO Program at Hillsboro-Deering High School as meeting all of the criteria set forth by the Nellie Mae Education Foundation. ELOs are uniquely positioned within the curriculum to leverage student’s interests in a way that allows them to develop as learners academically, socially, and emotionally.

This study shows the ELO program is perceived as a valuable experience by students who have successfully participated in the program. The program has a unique level of flexibility, allowing it to meet the individual needs of a student to promote their personalized educational goals and interests. Bolstering the awareness and understanding of the program among all members of the school community will increase the number of students supported through the program. The ELO program has the potential to address student needs not being met through traditional educational programming. Hillsboro-Deering High School’s commitment to personalization, as articulated in both the core values and vision, is an essential part of serving the needs of all students. Hyslop and Mead (2015) stated that “personalization cannot grow to scale without evidence that it works and improves student outcomes” (p. 43). This study

provides solid evidence that Hillsboro-Deering High School's ELO program is working. This study also provides concrete suggestions to improve the program so that it can meet the needs of a larger percentage of the student population.

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APPENDIX A

**UNIVERSITY OF NEW ENGLAND
CONSENT FOR PARTICIPATION IN RESEARCH**

(For participants aged 18 and over)

Project Title: *Personalization and Increased Engagement Through Extended Learning Opportunities*

Principal Investigator(s):

Jennifer L. Crawford, Graduate Student, University of New England

Email: jcrawford@hdsd.k12.nh.us

Phone: (603) 493-0979

Faculty Advisor: Michelle Collay, Ph.D.

Email: mcollay@une.edu

Phone: (207) 602-2010

Introduction:

- Please read this form one section at a time; we can discuss each section along the way. You may also request that the form is read to you. The purpose of this form is to provide you with information about this research study, and if you choose to participate, document your decision.
- You are encouraged to ask any questions that you may have about this study, now, during or after the project is complete. You can take as much time as you need to decide whether or not you want to participate. Your participation is voluntary.

Why is this study being done?

- The purpose of the study is to investigate student perceptions of their experiences with the ELO program at Hillsboro-Deering High School and to identify how the program's impact aligns to the stated objectives.
- The purpose of the study is to determine the effectiveness of the ELO program for Hillsboro-Deering High School students.

Who will be in this study?

- Study participants are students and alumni who have begun and/or completed an ELO (Extended Learning Opportunity) as part of their course of study at Hillsboro-Deering High School.
- There will be 6-12 participants in this study.

What will I be asked to do?

- You will participate in an interview about your experiences with the ELO Program.
- The interview will be in a semi-structured format and you will have access to the guiding questions ahead of time.
- The interview will take place at a mutually convenient time.

- The interview will take place either in the Principal Investigator's office or interviews may be conducted by phone or video conference if geographical and time constraints prevent an in person meeting.
- The interview will take approximately 45 minutes.
- The interview will be recorded to ensure accuracy.
- You may review the transcript of the interview.

What are the possible risks of taking part in this study?

- There are no foreseeable risks associated with participation in this study.
- You will not be required to answer any questions that you choose not to, and you may exit the study at any time.

What are the possible benefits of taking part in this study?

- There are no direct benefits to you for participating in this study. There may be a benefit to others, the organization, etc.

What will it cost me?

- There are no costs associated with this research.

How will my privacy be protected?

- Your name will be changed to a pseudonym in the research findings.
- Interactions with the researcher will not be outside the norm for current students and alumni of Hillsboro-Deering High School.
- Results of this research will be published in the dissertations section of the University of New England's DUNE (Digital UNE).
- The results of this research may be shared with members of the faculty and administration of the Hillsboro-Deering School District.

How will my data be kept confidential?

- Data will only be connected to you using a pseudonym.
- Research records will be kept in a locked file in the locked office of the Principal Investigator. Electronic records will be kept in password protected files.
- Data will be coded.
- No individually identifiable information will be collected.
- Data will be destroyed after the study is complete.
- A copy of your signed consent form will be maintained by the principal investigator for at least three years after the project is complete before it is destroyed. The consent forms will be stored in a secure location that only members of the research team will have access to and will not be affiliated with any data obtained during the study.
- Interviews will be documented with audio recordings. The recordings will be deleted after transcription.
- The Principal Investigator is a mandated reporter of child abuse and neglect. If evidence of either child abuse or neglect were to surface as a result of this research, then by law,

the Principal Investigator would report the evidence to the New Hampshire Department of Children, Youth, and Families.

- The Principal Investigator will access existing grade reporting data for use in this research study. Even though the Principal Investigator has access to this data for educational purposes, the data is considered protected under FERPA (Family Educational Rights and Privacy Act) for any other use, including research. This data can only be accessed and used for research purposes with written permission. By signing this consent form you are granting access to your existing grade reporting data for use in this research study by the Principal Investigator.
- There is no intent to use any of the data collected for this research in any future research.
- Research findings will be provided to the participants. Only you and the Principal Investigator will know your pseudonym.

What are my rights as a research participant?

- Your participation is voluntary. Your decision to participate will have no impact on your current or future relations with the University of New England or the Hillsboro-Deering School District. Your decision will not impact your standing as a student.
- You may skip or refuse to answer any question for any reason.
- If you choose not to participate there is no penalty to you and you will not lose any benefits that you are otherwise entitled to receive. You are free to withdraw from this research study at any time, for any reason. If you choose to withdraw from the research there will be no penalty to you and you will not lose any benefits that you are otherwise entitled to receive.

What other options do I have?

You may choose not to participate.

Whom may I contact with questions?

- The researcher conducting this study is Jennifer L. Crawford. For questions or more information concerning this research you may contact her at jcrawford@hdsd.k12.nh.us. The faculty advisor for this research is Michelle Collay, Ph.D. For questions or more information concerning this research you may contact her at mcollay@une.edu or (207) 602-2010.

General requirement language:

- If you choose to participate in this research study and believe you may have suffered a research related injury, please contact Michelle Collay, Ph.D. at mcollay@une.edu or (207) 602-2010.
- If you have any questions or concerns about your rights as a research subject, you may call Olgun Guvench, M.D. Ph.D., Chair of the UNE Institutional Review Board at (207) 221-4171 or irb@une.edu.

Will I receive a copy of this consent form?

- You will be given a copy of this consent form.
-

Participant's Statement

I understand the above description of this research and the risks and benefits associated with my participation as a research subject. I agree to take part in the research and do so voluntarily.

Participant's signature or
Legally authorized representative

Date

Printed name

Researcher's Statement

The participant named above had sufficient time to consider the information, had an opportunity to ask questions, and voluntarily agreed to be in this study.

Researcher's signature

Date

Printed name

APPENDIX B

**UNIVERSITY OF NEW ENGLAND
CONSENT FOR PARTICIPATION IN RESEARCH**

(For participants under the age of 18)

Project Title: *Personalization and Increased Engagement Through Extended Learning Opportunities*

Principal Investigator(s):

Jennifer L. Crawford, Graduate Student, University of New England

Email: jcrawford@hdsd.k12.nh.us

Phone: (603) 493-0979

Faculty Advisor: Michelle Collay, Ph.D.

Email: mcollay@une.edu

Phone: (207) 602-2010

Introduction:

- Please read this form one section at a time; we can discuss each section along the way. You may also request that the form is read to you. The purpose of this form is to provide you with information about this research study, and if you choose to participate, document your decision.
- You are encouraged to ask any questions that you may have about this study, now, during or after the project is complete. You can take as much time as you need to decide whether or not you want to participate. Your participation is voluntary.

Why is this study being done?

- The purpose of the study is to investigate student perceptions of their experiences with the ELO program at Hillsboro-Deering High School and to identify how the program's impact aligns to the stated objectives.
- The purpose of the study is to determine the effectiveness of the ELO program for Hillsboro-Deering High School students.

Who will be in this study?

- Study participants are students and alumni who have begun and/or completed an ELO (Extended Learning Opportunity) as part of their course of study at Hillsboro-Deering High School.
- There will be 6-12 participants in this study.

What will I be asked to do?

- You will participate in an interview about your experiences with the ELO Program.
- The interview will be in a semi-structured format and you will have access to the guiding questions ahead of time.
- The interview will take place at a mutually convenient time.

- The interview will take place either in the Principal Investigator's office or interviews may be conducted by phone or video conference if geographical and time constraints prevent an in person meeting.
- The interview will take approximately 45 minutes.
- The interview will be recorded to ensure accuracy.
- You may review the transcript of the interview.

What are the possible risks of taking part in this study?

- There are no foreseeable risks associated with participation in this study.
- You will not be required to answer any questions that you choose not to, and you may exit the study at any time.

What are the possible benefits of taking part in this study?

- There are no direct benefits to you for participating in this study. There may be a benefit to others, the organization, etc.

What will it cost me?

- There are no costs associated with this research.

How will my privacy be protected?

- Your name will be changed to a pseudonym in the research findings.
- Interactions with the researcher will not be outside the norm for current students and alumni of Hillsboro-Deering High School.
- Results of this research will be published in the dissertations section of the University of New England's DUNE (Digital UNE).
- The results of this research may be shared with members of the faculty and administration of the Hillsboro-Deering School District.

How will my data be kept confidential?

- Data will only be connected to you using a pseudonym.
- Research records will be kept in a locked file in the locked office of the Principal Investigator. Electronic records will be kept in password protected files.
- Data will be coded.
- No individually identifiable information will be collected.
- Data will be destroyed after the study is complete.
- A copy of your signed consent form will be maintained by the principal investigator for at least three years after the project is complete before it is destroyed. The consent forms will be stored in a secure location that only members of the research team will have access to and will not be affiliated with any data obtained during the study.
- Interviews will be documented with audio recordings. The recordings will be deleted after transcription.
- The Principal Investigator is a mandated reporter of child abuse and neglect. If evidence of either child abuse or neglect were to surface as a result of this research, then by law,

the Principal Investigator would report the evidence to the New Hampshire Department of Children, Youth, and Families.

- The Principal Investigator will access existing grade reporting data for use in this research study. Even though the Principal Investigator has access to this data for educational purposes, the data is considered protected under FERPA (Family Educational Rights and Privacy Act) for any other use, including research. This data can only be accessed and used for research purposes with written permission. By signing this consent form you are granting access to your existing grade reporting data for use in this research study by the Principal Investigator.
- There is no intent to use any of the data collected for this research in any future research.
- Research findings will be provided to the participants. Only you and the Principal Investigator will know your pseudonym.

What are my rights as a research participant?

- Your participation is voluntary. Your decision to participate will have no impact on your current or future relations with the University of New England or the Hillsboro-Deering School District. Your decision will not impact your standing as a student.
- You may skip or refuse to answer any question for any reason.
- If you choose not to participate there is no penalty to you and you will not lose any benefits that you are otherwise entitled to receive. You are free to withdraw from this research study at any time, for any reason. If you choose to withdraw from the research there will be no penalty to you and you will not lose any benefits that you are otherwise entitled to receive.

What other options do I have?

You may choose not to participate.

Whom may I contact with questions?

- The researcher conducting this study is Jennifer L. Crawford. For questions or more information concerning this research you may contact her at jcrawford@hdsd.k12.nh.us. The faculty advisor for this research is Michelle Collay, Ph.D. For questions or more information concerning this research you may contact her at mcollay@une.edu or (207) 602-2010.

General requirement language:

- If you choose to participate in this research study and believe you may have suffered a research related injury, please contact Michelle Collay, Ph.D. at mcollay@une.edu or (207) 602-2010.
- If you have any questions or concerns about your rights as a research subject, you may call Olgun Guvench, M.D. Ph.D., Chair of the UNE Institutional Review Board at (207) 221-4171 or irb@une.edu.

Will I receive a copy of this consent form?

- You will be given a copy of this consent form.
-

Participant's Statement

I understand the above description of this research and the risks and benefits associated with my participation as a research subject. I agree to take part in the research and do so voluntarily.

Participant's signature or
Legally authorized representative

Date

Printed name

Researcher's Statement

The participant named above had sufficient time to consider the information, had an opportunity to ask questions, and voluntarily agreed to be in this study.

Researcher's signature

Date

Printed name

APPENDIX C

**UNIVERSITY OF NEW ENGLAND
CONSENT FOR PARTICIPATION IN RESEARCH**

(For parents or guardians of participants under the age of 18)

Project Title: *Personalization and Increased Engagement Through Extended Learning Opportunities*

Principal Investigator(s):

Jennifer L. Crawford, Graduate Student, University of New England

Email: jcrawford@hdsd.k12.nh.us

Phone: (603) 493-0979

Faculty Advisor: Michelle Collay, Ph.D.

Email: mcollay@une.edu

Phone: (207) 602-2010

Introduction:

- Please read this form one section at a time; we can discuss each section along the way. You may also request that the form is read to you. The purpose of this form is to provide you with information about this research study, and if you choose to have your student participate, document your decision.
- You are encouraged to ask any questions that you may have about this study, now, during or after the project is complete. You can take as much time as you need to decide whether or not you want your student to participate. Your consent to participation is voluntary.

Why is this study being done?

- The purpose of the study is to investigate student perceptions of their experiences with the ELO program at Hillsboro-Deering High School and to identify how the program's impact aligns to the stated objectives.
- The purpose of the study is to determine the effectiveness of the ELO program for Hillsboro-Deering High School students.

Who will be in this study?

- Study participants are students and alumni who have begun and/or completed an ELO (Extended Learning Opportunity) as part of their course of study at Hillsboro-Deering High School.
- There will be 6-12 participants in this study.

What will Participants be asked to do?

- Participants will be interviewed about their experiences with the ELO Program.
- The interview will be in a semi-structured format and participants will have access to the guiding questions ahead of time.
- The interview will take place at a mutually convenient time.

- The interview will take place either in the Principal Investigator's office or interviews may be conducted by phone or video conference if geographical and time constraints prevent an in person meeting.
- The interview will take approximately 45 minutes.
- The interview will be recorded to ensure accuracy.
- Participants may review the transcript of the interview.

What are the possible risks of taking part in this study?

- There are no foreseeable risks associated with participation in this study.
- Participants will not be required to answer any questions they choose not to, and they may exit the study at any time.

What are the possible benefits of taking part in this study?

- There are no direct benefits to participants for participating in this study. There may be a benefit to others, the organization, etc.

What will it cost me?

- There are no costs associated with this research.

How will participants' privacy be protected?

- Participant's name will be changed to a pseudonym in the research findings.
- Interactions with the researcher will not be outside the norm for current students and alumni of Hillsboro-Deering High School.
- Results of this research will be published in the dissertations section of the University of New England's DUNE (Digital UNE).
- The results of this research may be shared with members of the faculty and administration of the Hillsboro-Deering School District.

How will my data be kept confidential?

- Data will only be connected to participants using a pseudonym.
- Research records will be kept in a locked file in the locked office of the Principal Investigator. Electronic records will be kept in password protected files.
- Data will be coded.
- No individually identifiable information will be collected.
- Data will be destroyed after the study is complete.
- A copy of your signed consent form will be maintained by the principal investigator for at least three years after the project is complete before it is destroyed. The consent forms will be stored in a secure location that only members of the research team will have access to and will not be affiliated with any data obtained during the study.
- Interviews will be documented with audio recordings. The recordings will be deleted after transcription.
- The Principal Investigator is a mandated reporter of child abuse and neglect. If evidence of either child abuse or neglect were to surface as a result of this research, then by law,

the Principal Investigator would report the evidence to the New Hampshire Department of Children, Youth, and Families.

- The Principal Investigator will access existing grade reporting data for use in this research study. Even though the Principal Investigator has access to this data for educational purposes, the data is considered protected under FERPA (Family Educational Rights and Privacy Act) for any other use, including research. This data can only be accessed and used for research purposes with written permission. By signing this consent form you are granting access to your student's existing grade reporting data for use in this research study by the Principal Investigator.
- There is no intent to use any of the data collected for this research in any future research.
- Research findings will be provided to the participants. Only you and the Principal Investigator will know your pseudonym.

What are my rights and my student's rights as a research participant?

- Participation is voluntary. Your decision to allow your student to participate will have no impact on their current or future relations with the University of New England or the Hillsboro-Deering School District. Your decision will not impact your student's standing as a student.
- Your student may skip or refuse to answer any question for any reason.
- If you choose not to have your student participate there is no penalty to you or your student and you will not lose any benefits that you are otherwise entitled to receive. You and your student are free to withdraw from this research study at any time, for any reason. If you choose to withdraw your student from the research there will be no penalty to you and you will not lose any benefits that you are otherwise entitled to receive.

What other options do I have?

You may choose not to have your student participate.

Whom may I contact with questions?

- The researcher conducting this study is Jennifer L. Crawford. For questions or more information concerning this research you may contact her at jcrawford@hdsd.k12.nh.us The faculty advisor for this research is Michelle Collay, Ph.D. For questions or more information concerning this research you may contact her at mcollay@une.edu or (207) 602-2010.

General requirement language:

- If you choose to participate in this research study and believe you may have suffered a research related injury, please contact Michelle Collay, Ph.D. at mcollay@une.edu or (207) 602-2010.
- If you have any questions or concerns about your rights as a research subject, you may call Olgun Guvench, M.D. Ph.D., Chair of the UNE Institutional Review Board at (207) 221-4171 or irb@une.edu.

Will I receive a copy of this consent form?

- You will be given a copy of this consent form.

Participant's Statement

I understand the above description of this research and the risks and benefits associated with my participation as a research subject. I agree to take part in the research and do so voluntarily.

Participant's signature or
Legally authorized representative

Date

Printed name

Researcher's Statement

The participant named above had sufficient time to consider the information, had an opportunity to ask questions, and voluntarily agreed to be in this study.

Researcher's signature

Date

Printed name

Appendix D

Interview Protocol

Introduction: I have several questions to ask you with potential follow-up questions. These questions will investigate your perceptions of the ELO Program at Hillsboro-Deering High School. If any of the questions, or parts of the questions, is unclear you can ask for clarification of a further explanation of what is being asked. You are free to choose not to answer any question.

- How did you learn about the ELO Program?
- What made you decide to participate in the ELO Program?
- How did you go about the process of designing your ELO?
 - Did you know who you wanted to mentor you or did you have help finding someone to serve as your mentor?
- How does an ELO differ from other elective credit that you earned?
- How does working outside the classroom setting differ from a traditional high school class?
- What was the most valuable aspect of the ELO experience for you?
- What was the most challenging aspect of the ELO experience for you?
- Would you encourage other students to participate in the ELO program? Why or Why not?
 - What advice would you give to a student interested in participating in an ELO?
- Hillsboro-Deering High School's core values are Community, Personalization, Progress, and Purpose. In what ways does the ELO Program reflect the school's core value? In what ways does the ELO program not reflect the school's core values?
- The articulated vision of Hillsboro-Deering High School is to create a caring and challenging 21st century learning environment that allows all students to reach their full potential academically, socially and emotionally. In what ways does the ELO Program reflect the school's vision? In what ways does the ELO Program not reflect the school's vision?
- What changes do you recommend to the ELO Program so that it will better meet the needs of students?