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The New Hampshire Extended Learning Opportunities Evaluation Final Report of Evaluation Findings

Final formative and summative feedback to inform the continuing implementation of Extended Learning Opportunities in New Hampshire

May 2011



New Hampshire Extended Learning Opportunities

Final Report of Evaluation Findings

May 2011

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Report Information

This research project was conducted under contract with the Nellie Mae Education Foundation of Quincy, Massachusetts. The purpose of this report is to present final formative and summative feedback to inform the continuing implementation of Extended Learning Opportunities in New Hampshire.

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Acknowledgements

It is with great appreciation that the University of Massachusetts Donahue Institute acknowledges the support and cooperation of a large cast of individuals and organizations working to implement the New Hampshire Extended Learning Opportunities (ELO) Initiative. In particular, we owe thanks to the New Hampshire Department of Education (NH DOE), the Nellie Mae Education Foundation (NMEF), implementing ELO pilot and network schools, and a host of partner organizations that provided training and consultation to the Initiative.

Acknowledging the contributions of specific individuals, it is our pleasure to thank Paul Leather, Deputy Commissioner of the NH DOE, for sharing his vision of Extended Learning Opportunities and High School Redesign, and for placing value on our research efforts. We recognize the work of Mariane Gfroerer, NH DOE's director for the ELO Initiative. She served as a tireless and accessible source of information and support to the evaluation, actively facilitating the research process. Similarly, Jessica Spohn and Beth Miller of NMEF played a vital role in shaping the study, providing methodological and other practical input and support to ensure the quality of our research.

Our thanks also extend to district and school leaders, staff, and students who cooperated with the study. In particular, those associated with the four ELO pilot schools, that were so generous in sharing their time, knowledge, and experiences to ensure a well informed evaluation. These include:

- The Franklin Public School District and Franklin High School. With special thanks to ELO coordinators Donna Dusell and Virginia Doyle.
- The Laconia Public School District and Laconia High School. With special thanks to ELO coordinators David Rea and Bob Ewell.
- The Manchester Public School District and Manchester Central High School. With special thanks to ELO coordinators Claudette Knieriem and Kathleen Dunn.
- The Newfound Regional School District and Newfound Regional High School. With special thanks to Beth Colby.
- The leaders and ELO coordinators of each of five ELO networks schools, including Mascenic Regional High School, Monadnock Regional High School, Nute High School, Raymond High School, and Mascoma High School.

Finally, we wish to thank key partners who supported the evaluation while providing technical assistance to the ELO Initiative, including:

- Janice Hastings, Melissa Gallagher and other staff of PlusTime New Hampshire.
- Rose Colby and Rob Lukasiak of the Capital Area Center for Educational Support (CACES).
- Kim Carter of the Q.E.D. Foundation (QED).
- Joe DiMartino of the Center for Secondary School Redesign (CSSR).
- Keith Burke, independent consultant for ELO Database design and maintenance.



Executive Summary

Extended Learning Opportunities (ELOs) are a central component of the NH Department of Education's (NH DOE) strategy to provide New Hampshire high school students with engaging and rigorous learning experiences not typically found in the traditional classroom. With support from the Nellie Mae Education Foundation (NMEF), NH DOE implemented a three-year ELO Initiative, which remains ongoing. The Initiative provided substantial financial support and technical assistance to four ELO pilot sites, facilitating development of school-level systems to provide students of all types with the opportunity to experience an ELO project. The pilot sites included Franklin, Laconia, Manchester Central, and Newfound Regional high schools.

Overall, NH DOE estimates 1,218 ELO projects were completed between January 1, 2009 and December 31, 2010. A large subset of these projects was examined by the University of Massachusetts Donahue Institute as one aspect of a comprehensive 18-month evaluation of the Initiative. In addition to analysis of the characteristics of ELO projects and student participants, the evaluation featured extensive engagement with the Initiative's leaders and technical assistance partners through interviews and events. Most importantly, it included substantive engagement through surveys and on-site interviews of participating district and school leaders, faculty, students, and community partners, including observation of ELOs in action.

In its prototypical form, an ELO project is developed in response to a specific student interest, and is a wellplanned and robust educational experience occurring outside the traditional classroom with support from a community partner, and with facilitation and oversight from a qualified teacher. The project must reflect established curriculum standards, and required course competencies must be met for academic credit to be awarded. The evaluation found that many, though not all, ELOs meet these criteria, and that all four schools generated a significant volume of ELO projects that were widely embraced by a diverse array of participating students, teachers, and community partners. Overall, student, faculty, school administrator, and community partner sentiment suggests that ELOs provide value to students and should continue to be offered.

Following are selected evaluation findings resulting from exploration of the key research questions that guided the NH ELO Initiative evaluation. Findings reflect an intense focus on generating formative feedback to support the Initiative's ongoing refinement, as well as preliminary indicators of its sustainability and its impact on participating students, teachers, and schools.

ELO Development and Implementation

New Hampshire's ELO Initiative provided an opportunity to see what ELO implementation would look like at scale within four high schools that represent both the urban and rural character of the state's communities. Examination of the development and implementation of ELOs in these schools led to the following observations:

- ✓ Initially, ELO pilot schools lacked key infrastructure, tools, and experience required to implement highquality ELOs. The ELO Initiative built a foundation for success through targeted support. Absent this support, ELOs may not be well implemented or successful.
- ✓ The ELO coordinator is central to ELO system development, implementation, and quality assurance. ELOs require new systems, community partnerships, training, and extensive facilitation. Lacking a designated coordinator, these tasks are unlikely to be accomplished.



- ✓ ELO activity demonstrates a tremendous emphasis on the use of ELOs for elective credit. Pursuit of core credit through an ELO appears to be a more complex undertaking. In fact, strategies to meet the requirements of core classes in academic subject areas through ELOs remain in a formative stage.
- ✓ Practice shows fluidity in the roles of ELO coordinator, community partner, and overseeing teacher. This often appears to facilitate implementation and allows schools to capitalize on limited resources. The flexibility to customize the role of adults in the ELO to the context of the individual project is essential, but appropriate only insofar as standards for a rigorous learning experience are met.
- \checkmark Schools have adopted different models for ELO implementation, particularly in relation to the role and time afforded to teachers to support ELO implementation. These models reflect differing school-based resources and approaches to the use of teacher and student time. While no one model has proven most effective, those that integrate ELOs closely into teaching practice may have the most potential for sustainability.
- \checkmark Internal and external constraints may complicate ELO implementation and should be carefully considered in the development of ELO implementation strategies. Specifically, the lack of foundation conditions required to implement ELOs, leadership discontinuity, and limited community partner options should be identified and accounted for in the implementation planning phase.

ELO Student Characteristics

The ELO Initiative came with a mandate that ELOs be accessible to students of all backgrounds, abilities, and academic histories. This included "underserved" youth, a group defined to include students with academic, discipline or attendance issues, students living in economically disadvantaged households, and students who are racial or ethnic minorities or for whom English is a second language. While service to this population was emphasized, the overall emphasis was on service to all students. Surveys, interviews, ELO observation, and analysis of 789 validated project records (the "ELO dataset") provide insight into student participation, leading to the following observations:

- ✓ The vision of ELOs as tools capable of engaging students of widely varying personal and academic characteristics appears to have been realized. Participants ranged from schools' highest-achieving students to students who were struggling academically, with many students who characterized themselves as average. Participants also included students with special needs and students with limited English proficiency.
- ✓ Over a third of ELO participants met one or more of the criteria for an underserved learner. Overall these students exhibited ELO completion rates similar to other participants; however, the students who are most atrisk were observed to require significant support to ensure ELO success. Underserved students were somewhat more likely to complete a group ELO than an individual ELO project.
- ✓ Student interests are the primary motivator for ELO development and participation, but ELOs also serve an important student support role and have been used to strengthen existing programs. Three typologies emerged:
 - $\sqrt{}$ Interest-driven ELOs creative, highly personalized, beyond-the-classroom experiences.
 - $\sqrt{}$ Student-support-driven ELOs flexible responses to students' academic *or social* support needs.
 - $\sqrt{}$ Integration-driven ELOs bringing existing programming under the ELO tent.



ELO Project Characteristics

Definitions of the specific types of experiences that may be considered an ELO are purposefully broad. As a result, at the outset of the Initiative there was some uncertainty as to what forms ELOs would take (e.g., student internships, performing groups, online courses) when implemented at scale within the four pilot schools. Further, the evaluation sought to clarify the time and location of ELO activity, the types of credit students were awarded, and the participation of teachers and community partners. Interviews, surveys, and analysis of the ELO dataset lead to the following observations:

- ✓ ELOs can be used to address virtually any subject area. Although survey data highlight a high frequency of English/journalism ELOs, the prevalence of ELOs related to physical education/health, career technical education, and the arts serves to highlight the adaptability of those hands-on, product or performance-based subjects to ELOs. This is in contrast to mathematics, which was commonly described as more difficult to adapt to ELOs.
- ✓ ELOs allowed students to earn credit for non-traditional educational experiences, with most students receiving less than one full credit. Although primarily used to gain elective credit, many ELOs provided credit that students needed in order to graduate.
- ✓ Just over half of student ELO participants are engaged through a group project—an experience shared by one or more students. A resource-efficient vehicle for engaging students, particularly those engaged in student clubs or activities who desire a rigorous, credit-bearing experience, the proportion of students served through group ELOs rose substantially over the final two years of the grant.
- ✓ Most, but not all, ELOs offered students a departure from traditional courses in terms of both the location of learning and the schedule for learning and project completion. Nearly two-thirds occurred outside of school and the traditional classroom and three-fourths took place after school hours. These trends may be influenced greatly by local context, with more rural schools' ELOs less likely to demonstrate these characteristics.
- ✓ ELOs typically engage students, teachers, and community partners, but are viable even in school districts that lack a critical mass of local businesses and organizations to serve as community partners. Community partners represent a great range of institutions and individuals, serving in roles ranging from mentor, to provider of needed resources, to beneficiaries of a product or service.

ELO Assessment

Assessment policies and practices in many ways serve to define the student learning experience, establishing what content teachers must convey, what students must learn, and how learning will be measured. The ELO Initiative sought to shift established grading practice in relation to the assessment of ELOs. Its emphasis on assessing performance through measurement of four specific components of the learning experience—research, reflection, product and presentation—differs from traditional assessment practice. The Initiative sought to focus assessment squarely on determining what a student can demonstrate s/he knows and is able to do at the conclusion of the project, de-emphasizing inputs such as "seat time" and homework compliance. Interviews, surveys, ELO observation and review of project documentation lead to the following observations:

✓ ELO assessment was shown to differ substantively from traditional grading practice, emphasizing student reflection and demonstration of learning, with little reliance on traditional tests or attendance. The need to enhance assessment through additional teacher training and the development of reliable rubrics is an ongoing focus of NMEF and NH DOE support.



- ✓ The ELO Initiative leveraged the developing expertise of ELO technical assistance providers and ELO pilot school staff to develop common rubrics for assessment, which were piloted in the closing months of the grant. Concurrently, the state made progress in the development and implementation of a new Competency Validation Rubric.
- $\sqrt{}$ The ELO Initiative built new assessment capacity amongst both the pilot schools and technical assistance providers, helping to develop a process to support the development of competency-based assessment systems within schools.

ELO Quality and Rigor

ELO are an innovative approach to teaching and learning that may challenge traditional conceptions of how learning takes place. Positioned in this way, the Initiative was undertaken with an understanding that potentially skeptical local communities and educators would need to see evidence of the quality and rigor or ELOs. NH DOE deployed a cadre of technical assistance providers to facilitate the rapid development of quality ELOs in each of the pilot schools. The goal was to implement and rigorously assess student ELOs using valid and reliable competencies and assessment tools, which would frame the standards for ELO quality. Although development of those consistent, valid, and reliable assessments remains ongoing, a range of evaluation data led to the following observations:

- ✓ Student, teacher, and community partner survey results suggest that most ELOs are characterized by high expectations, rigor, and learning that is relevant to student goals. However, rigor was observed to vary widely, signaling a need to further define and maintain high standards for ELO quality and rigor.
- \checkmark A wide majority of ELOs require students to engage in project-related reflection, product, and presentation which constitute three of the four components NH DOE considers necessary for a quality ELO. Integration of the fourth component, topic research, appears to be rising, but remains less common. The value placed on these four components is reflected in the recently piloted ELO common assessment system.
- ✓ Group ELOs offer apparent resource efficiencies, leveraging the efforts of teachers and community partners in service to a greater number of students. They may also reinforce the success of underserved students by providing greater structure and peer support than is found in a typical individual student ELO. However, group ELOs are also somewhat less likely to include each of the four components of a quality ELO.

ELO Initiative Outcomes

While primarily focused on formative questions, the ELO evaluation also sought to ascertain the Initiative's effectiveness in generating benefits to participating students, teachers, and pilot schools. Given that the Initiative was being piloted during the course of the NMEF grant, and as such is in a relatively early phase of implementation, the evaluation focuses largely on short-term (immediate) outcomes. In the long-term, student-level impact analysis is highly recommended. Impacts were identified through an analysis of extensive survey and interview data, and offer very positive indications regarding the impact of ELOs, as follow:

Student Outcomes

✓ Most students believe that they learned more through their ELO project than they would have through a typical class in the same subject area. In addition, All-Faculty Web Survey results indicate that ELOs are widely perceived to have a positive impact on students' academic interest



- ✓ Results suggest positive effects, particularly in relation to students' awareness of skills they will need for the future, self-confidence, work readiness, and clarity about interests and goals. Students with moderate- and high-baseline ratings reported more positive outcomes than low-baseline students.
- ✓ ELOs were successful in imparting new knowledge and skills. Both students and teachers highlighted the relevance of real-world ELO experiences, as well as the new knowledge and transferable skills ELOs imparted to students.

Teacher and Community Partner Outcomes

- $\sqrt{}$ Teachers report positive outcomes stemming from their participation in ELOs, including more personalized relationships with students and improved ability to use competency-based assessment techniques.
- $\sqrt{}$ Community partners offer a positive view of ELOs and their effects on their organizations. ELOs led to mentoring relationships with students, and were rewarding, both personally and for their organization.

School-Level Outcomes

- $\sqrt{}$ Findings suggest that ELOs can bring rigor, as well as credit potential, to existing after-school clubs, established programs, and course offerings. This is the result of the clearer standards and expectations of quality that accompanied the ELO Initiative.
- $\sqrt{}$ ELOs expand schools' existing course offerings, and give new voice to teachers and students as they explore themes that extend beyond the traditional school curriculum. In this way, ELOs allow for small schools, in particular, to provide students with a greater diversity of learning opportunities.
- ✓ ELO implementation has catalyzed school action with regard to defining course competencies and competency-based assessment practices. In one school in particular, core aspects of ELOs are now being integrated at the classroom- and school-level.
- $\sqrt{}$ The ELO Initiative was successful in building credibility and establishing momentum for ELO adoption, both within the pilot and network schools, as well as regionally.

ELO Sustainability and Scale-up: Lessons Learned

Given the importance of sustainability and NH DOE's strategic decision to scale-up ELO implementation throughout the state, researchers first sought to confirm support among ELO pilot and network schools for continued implementation of ELOs, and then to identify crucial lessons learned for ongoing implementation at the pilot and network sites, and on the expansion of ELOs to other schools.

Based on extensive survey, interview, and observation data, it became evident that the desire to sustain ELOs exists and is relatively strong among all stakeholder groups. A vast majority of school faculty indicated that ELOs have value and that they should be continued at their respective schools. Students and community partners expressed a similar sentiment. School leaders and ELO coordinators from ELO pilot and network schools alike voiced their commitment to maintaining ELOs, and highlighted the value of ELOs in terms of specific observable school- and student-level outcomes. It is important to note however, that while school leaders and ELO coordinators were highly invested in ELOs, they also shared some concerns—to varying degrees—regarding their ability to sustain ELOs given the current economic challenges facing their respective districts.



Key lessons that offer perspective on factors that may influence sustainability and facilitate successful scale-up of ELOs throughout New Hampshire include:

- $\sqrt{}$ The role of the ELO coordinator as recruiter, facilitator, trainer, and champion is critical to the development and implementation of high quality ELOs.
- $\sqrt{}$ Schools need to create opportunities and structures that support teachers' ongoing work and collaboration with students as they perform their ELOs.
- ✓ Districts and schools can significantly enhance their prospects for a successful launch of ELOs if they establish conditions that serve as a foundation for their implementation. Such foundation conditions for ELO success might include: approved local district policies; validated course competencies; committed district and school leadership as well as a core of teachers willing to "pioneer" ELOs; an ELO coordinator who is well-networked and/or positioned to collaborate with school faculty and with community organizations; engagement with established NH DOE network resources; awareness of "best current practice models" for ELO planning, implementation, and assessment; and willingness to invest in teacher professional development.
- $\sqrt{}$ Acknowledging imbalances in the availability of community partner resources to rural districts, flexibility, external support, and continuing innovation may be required to ensure access to ELOs for these districts.
- ✓ New Hampshire's varied community profile and deeply rooted "home rule" tradition require flexibility in the implementation of ELOs. Flexibility serves a beneficial role, enabling innovation, provided that the core goals and rigor of ELO learning experiences are maintained.
- $\sqrt{}$ ELOs should not be viewed as an educational option tailored exclusively to underserved or high achieving students, but promoted as a learning opportunity intended to benefit *all* students.
- ✓ Support for ongoing documentation and tracking of ELO activity and characteristics should be maintained. This information, along with student-level outcomes research, would serve an important formative purpose and could also secure both political and financial support for continuation or expansion of ELOs as a route to credit in New Hampshire and beyond.



Contents

Introduction1
I. State and Local Context for ELO Implementation4
II. ELO Development and Implementation7
III. ELO Student Characteristics12
IV. ELO Project Characteristics18
V. ELO Assessment
VI. ELO Quality and Rigor
VII. ELO Initiative Outcomes
VIII. ELO Sustainability and Scale-up: Lessons Learned45
References
Appendix A52



Introduction

Contained within this report are the findings of an evaluation of the New Hampshire Extended Learning Opportunities (NH ELO) Initiative, which was conducted by the University of Massachusetts Donahue Institute's Applied Social Science Research and Evaluation Group (the Institute). NH ELO is an initiative of the New Hampshire Department of Education (NH DOE) funded by the Nellie Mae Education Foundation (NMEF) and implemented with the support of a variety of organizations, each with a distinct technical consulting and/or training role. Chief among these were PlusTime New Hampshire, the Capital Area Center for Educational Support (CACES), the Q.E.D. Foundation (QED), and the Center for Secondary School Redesign (CSSR).

Evaluation findings reflect a focus on providing constructive information, in order to guide ongoing support for the Initiative as it is scaled up across New Hampshire. As such, the findings demonstrate a strong formative component designed not only to accurately describe ELO project participants and characteristics at each of the four pilot high schools—Franklin, Laconia, Manchester Central, and Newfound—but also to explore preliminary measures of student impact and critical considerations for ELO sustainability and scale-up.

Report Content and Organization

The eight research questions that guided the inquiry for this evaluation serve as the organizing framework for this report. The first six of these reflect the evaluation's distinctly formative focus, while the latter two reflect an interest in understanding how the NH ELO pilot has affected participating schools, teachers, and students.

- 1. What is the context for ELO implementation?
- 2. How are ELOs developed and implemented?
- 3. Who is served by ELOs?
- 4. What are the characteristics of ELOs?
- 5. How are ELOs assessed for credit?
- 6. What is the quality of ELOs?
- 7. What are the Initiative's effects and short-term outcomes?
- 8. What have we learned about supporting ELO implementation, impact, and sustainability?

As answers to these questions are considered, it is important to bear in mind that NH ELO was at once both a pilot initiative and a leading edge in New Hampshire's strategic implementation of comprehensive high school redesign. Accordingly, findings reflect the Initiative at what remains an early moment, both for ELOs and for the state's migration to competency-based education standards. In this context, the future of ELOs in New Hampshire appears not to be a question of whether, but rather of when and how well ELOs will be implemented across its 276 LEAs.¹

¹ The number of LEAs was taken from *Numbers and Types of Public Elementary and Secondary Education Agencies From the Common Core of Data: School Year 2008–09*, National Center of Education Statistics (2010).



In this light, these evaluation findings—along with the tools and knowledge developed at the state and local level—represent a tremendous opportunity to leverage the ELO pilot, such that statewide scale-up of ELOs might be more efficient and productive, to the benefit both of the state's students and the educators who serve them.

Key Data Sources

The Institute's evaluation of NH ELO began in September 2009, approximately 20 months after the start of the implementation of the Initiative in January 2008.² Data collection was extensive, including substantive engagement with leaders, staff, and students of each of the four pilot schools and limited engagement with leaders and key staff of five "network" schools.³ In addition to this primary data collection, the evaluation utilized a variety of relevant source documents and data, including project data entered by school-based ELO coordinators into a central, web-based database. Finally, the evaluators engaged in extensive observation of ELO-related activity at the school level, at ELO networking events, and at statewide conferences. Following is additional detail related to each of these data collection efforts, with further information presented in the report appendix or available upon request.

- Three rounds of site visit interviews were conducted with district and school personnel at each of the pilot high schools. These site visits provided time for individual and small group interviews with a variety of stakeholders, including district and school administrators, ELO coordinators, teachers, student support staff, students (including underserved learner groups), and community partners. A total of 147 interviews were completed (see Table 1, Appendix A). ELO coordinators also participated in a group interview in January 2011.
- The Spring 2010 school site visits also allowed time for the researchers to meet with ELO community partners at their respective organizations or places of business, to observe student ELOs in action, to attend student presentations and exhibits, and to witness the ELO assessment process. ELO observation also occurred during other site visits, where activity was ongoing at the time of the school visit.
- A web-based ELO survey was administered to teachers, students, and community partners from each of the four pilot schools. These surveys were used to obtain feedback from individuals who directly participated in ELOs. The survey was designed to understand reasons for student participation in ELOs, to describe the characteristics of student participants and their respective ELOs, as well as to explore the effects of ELOs on student engagement and academic interest. The survey was administered in Fall 2009 and Summer/Fall 2010. A total of 376 surveys were completed, with an overall response rate of 58% for the three groups across both rounds of survey administration. Teachers had the highest rate of return (67%), followed by community partners (58%) and students (55%) (see Table 2, Appendix A).
- Phone interviews were conducted with principals and ELO coordinators at the five ELO network sites that were most deeply engaged in the Initiative as of Spring 2010 (Mascenic Regional, Monadnock Regional, Nute, Raymond, and Mascoma High Schools). Follow-up interviews were conducted with network school principals in February 2011, and with ELO coordinators in a group interview format in January 2011. A total of 10 principal interviews and 10 ELO coordinator interviews were conducted.
- Initial and closing interviews were conducted with NH DOE ELO program leaders and key technical assistance providers from PlusTime NH, CACES, QED, and CSSR. Evaluators also consulted in an ongoing fashion with NH DOE leaders and key assistance providers.

³ These network schools received access to a less robust set of supports than the pilots and were not the focus of this study.



² The Initiative's implementation was preceded by a three-month planning phase beginning in October 2007 at each of the four ELO pilot schools.

- Observation and participation in monthly ELO All-Site meetings, led by NH DOE and its ELO partners, as well as ELO coordinators' meetings, and the Annual ELO Summer Institute.
- A final All-Faculty Web Survey of administrators, teachers, and student support staff at each of the four pilot schools was administered from December 2010 through January 2011. The goal of this survey was to collect a wider representation of educators' experience with, and perspectives on, the rigor, impact, and value of student ELOs in their school. All faculty members and administrators were targeted by this survey, regardless of whether or not they had participated in ELOs. A total of 228 surveys were completed across the four schools, with a return rate of 64% (see Table 3, Appendix A).
- Analysis of the "ELO dataset," which contains a subset of the project data stored in the NH DOE ELO project database. Records in the ELO dataset are the most reliable source available for those interested in exploring the characteristics of ELO projects and participating students. Records in the ELO dataset were verified by school-based ELO coordinators in November 2011 and include 789 ELO projects, of which 629 (80%) were fully completed—this is roughly half of the total 1,218 completed ELOs reported by NH DOE.



I. State and Local Context for ELO Implementation

The NH Department of Education (NH DOE) is advancing multiple education pathways as a means of serving its student population, in recognition of the broad diversity among students' needs, learning styles, and the communities and contexts in which they live. As demonstrated by a consistent stream of policy decisions, resultant regulations, and initiatives, it is apparent that ELOs are broadly representative of New Hampshire's innovative and emergent approach to education—which has introduced changes in the use of time, place and format for learning, curriculum development, instruction, and the assessment of student learning.

State-Level Policy and Regulation

In 2005, the New Hampshire State Board of Education completed a rulemaking process that significantly altered expectations of public high schools by introducing the notion of 'real world learning' as an essential part of the student experience. This ruling created the opportunity for school districts to be more flexible in their use of time and the places in which learning could occur. Additionally, the state's new *Minimum Standards for School Approval* required that all high school courses be assessed through demonstration of student mastery of course-level competencies⁴ by the 2008-2009 school year. In conjunction with this, new policy allowed for the voluntary use of ELOs to obtain high school course credit. In interviews with NH DOE leadership and its partners, it was noted that these state-level changes combined to provide fertile ground for implementing ELOs in the state of New Hampshire.

While the NH DOE required school boards interested in implementing ELOs to adopt and implement written policies and procedures— and provided the necessary guidance to do so— the requirement permitted great flexibility in order to allow for "creativity in the ways that schools award credits to students in a variety of settings" (<u>http://www.education.nh.gov/innovations/elo/index.htm</u>). For instance, the state allowed local school boards to define:

- the extent of ELO offerings (whether in wide variety, in limited options, or not at all);
- what course areas these could be offered in (with no restrictions indicated); and
- how much (full or partial core course credit) and what type of credit could be awarded.

The definition of "extended learning" is similarly broad and characterizes ELOs "as the primary acquisition of knowledge and skills through instruction or study outside of the traditional classroom methodology, including, but not limited, to: independent study, private instruction, performing groups, internships, community service, apprenticeships and online courses" (<u>http://www.education.nh.gov/innovations/elo/index.htm</u>). However, it is significant that the new policy came with two explicit requirements:

- 1) ELO credit was to be based on the demonstration of standards as defined in course competencies, and
- 2) certified school personnel were to authorize, oversee, and award credit for the ELO.

⁴ The NH DOE defines course-level competencies as "the expected content, concepts, and skills to be mastered in a course" (http://www.education.nh.gov/standards/documents/advisory20.pdf).



District-Level Policy and Regulation

The flexibility in state guidelines translated into what might be described as adaptable, broadly-written local school board policies in each of the four districts. However, these local policies did, in a few instances, display variation in their articulation of specific parameters governing ELOs. For example, while three districts' policies did not restrict high school student participation, one limited ELO eligibility to students who successfully completed their sophomore year. Additionally, one district specified that only elective credit could be obtained through ELOs, while other district's policies omitted this restriction or specifically stated that either core or elective credit could be awarded. Finally, two district's policies capped the maximum level of credits that could be obtained through ELOs at four, while the others made no reference to a cap in their policy.

While the above are specific and meaningful differences in policy, it is important to note that overall, district rules reflected state law by being fairly broad with regard to what actually constitutes an ELO. Policies in three of the four districts stated that ELOs could be, but were not limited to: independent study, private instruction, performing groups, internships, community service, apprenticeships, and online courses. The remaining school had a similar list, but it added team sports and work study, and omitted language pertaining to online courses and apprenticeships. These lists left school-level implementers broad latitude in designing ELOs to respond to student needs and school/community resources, which, along with principals' discretionary power to authorize ELOs, provided the flexibility necessary to adapt written policy in order to meet students' needs on a case-by-case basis.

Programmatic Support

In January 2008, the four ELO schools began piloting ELOs with funding provided by the NMEF. From the outset, the NH DOE and its partners supported implementation through a variety of strategies, including: on-site technical assistance and professional development; networking events (that served as both a forum for staff from different schools to exchange ideas and as a way to provide guidance and training); and larger-scale statewide institutes and conferences. The five additional "network schools"—those schools receiving reduced grant funding and more limited access to ELO implementation support—were allowed to put ELOs into practice at their own pace. These network schools were not the focus of this study.

The NH DOE provided the strategic vision and direction for the ELO pilot, while also doing tactical work intended to assist schools as they launched the ELO Initiative. Partners contributed to strategic planning and provided technical assistance in support of school-level implementation and regional scale-up of ELOs. Among these partners, PlusTime NH served in a coordinating role, managing grants and contracts, organizing events, assisting in community partner recruitment, and focusing on ELO resource development. Three other partners—CACES, QED, and CSSR—provided crucial expertise to facilitate effective implementation of ELOs.

- CACES' site-based work involved providing training and information related to competencies and their use, working with teachers to develop or refine competencies, supporting the establishment of competency-based grading systems, and working with school administrators on leadership strategies to help schools navigate these changes.
- QED facilitated Professional Learning Groups that served as a school-level venue for teachers to discuss ELO planning and implementation, as well as related topics such as personalized learning, competencybased instruction, and assessment development. In Spring 2010, QED led a cross-school, expertfacilitated working group—the Assessment Moderation Team (AMT)—that developed four firstgeneration common assessment tools for evaluating process skills (e.g. student presentation, performance, research and reflection), which were field-tested in Fall 2010.
- CSSR assisted school leadership teams in building the structures (e.g. advisories) that would serve as venues for students to discuss and learn about ELOs, and in developing school-level sustainability plans.



CSSR's role also involved providing the venues (e.g. regional conferences) by which schools could disseminate some of their successes within the network.

School and Community Characteristics

Exhibit 1 displays demographic and locational data for each of the four pilot schools, which suggest the varied community character and resources available to these districts.

Exhibit 1

NH Hampshire ELO Pilot High Schools							
District	High School	Location	Percent Minority ⁵	Percent Poverty	ELL District Percent		
Franklin	Franklin	Town, distant	3	40	< 1		
Laconia	Laconia	Town, distant	5	33	3		
Manchester	Manchester Central	City, midsize	23	30	9		
Newfound Area	Newfound Regional	Rural, distant	3	28	< 1		

The relative size and location of the four schools has important implications for access to community resources that could be leveraged to support the development and implementation of ELOs. Manchester Central High School is located in Manchester, the largest city in the state of New Hampshire, with a population of 107, 219, as per the 2000 U.S Census. This city is home to a variety of large and small businesses, with health care, utilities, education and banking being the major service industries. By sharp contrast, Newfound (a rural area with a population of 3,033) and Franklin (a small town with a population of 8,414) both have a relative dearth of businesses and community organizations, with the school district itself representing the first and third largest employer, respectively. Laconia's population is close to double that of Franklin's, exceeding 16,000, and by comparison with Franklin and Newfound, has a larger base of businesses and non-profit organizations within its reach.

⁵ Minority, poverty (as measured by free and reduced lunch rates), and ELL data were taken from the National Center for Education Statistics Common Core of Data (CCD) database and refer to the 2008-2009 school year. Data were downloaded from <u>http://nces.ed.gov/ccd/schoolsearch/</u> on 03/23/2011. It is important to note that free and reduced lunch rates are often under-reported at the high school level, and as such, may represent an undercount of the actual school-level poverty rates.



II. ELO Development and Implementation

As a pilot effort, the ELO Initiative's evaluation posed such fundamental questions as "how are ELOs developed and implemented?" This was necessary because New Hampshire had not previously integrated ELOs into public high school settings outside of specialized contexts, such as at the Monadnock Community Connections School (MC2), which served as a model for aspects of the Initiative. As this section outlines, a general model for ELO development and implementation has emerged. Systems and processes that support this model are generally robust, if not entirely complete, but there is substantial variability in the model at both the system (across schools) and project (across ELOs, even within the same school) levels.

1. Initially, ELO pilot schools lacked key infrastructure, tools, and experience required to implement high-quality ELOs. The ELO Initiative built a foundation for success through targeted support.

With targeted support from the NH DOE and its partners, all four ELO pilot schools were successful in their efforts to develop and implement not only a tremendous number of student ELOs, but also the systems to support the development and implementation of those ELO projects. NH DOE estimates indicate that a total of 1,218 ELOs were completed between January 1, 2009 and December 31, 2011, with numbers ranging from 239 (Manchester Central) to 359 (Laconia) across the four schools. Further, each of the four has implemented specific, if flexible, procedures governing the development and implementation of ELOs.

The importance of targeted support from NH DOE and its partners cannot be overstated, and absent this support, ELOs may not be well implemented or successful. Leader and staff interviews revealed that each of the four pilot schools initially lacked key infrastructure (policies, procedures, scheduling plans), tools (effective course competencies, assessment rubrics), and staff experience (facilitative teaching practice, managing experiential learning, competency-based assessment) required to support effective implementation of ELOs at a school-wide scale. Support was focused on each of these vulnerabilities and was widely regarded as effective, notwithstanding that some tools, such as common assessment rubrics, remained under development as of the close of the full-scale grant funding period, and that some teachers did not take full advantage of the job-embedded professional development opportunities afforded to them.⁶

2. The ELO coordinator is central to ELO system development, implementation, and quality assurance.

ELO coordinators were viewed as indispensable to laying the groundwork for, launching, and maintaining the ELO Initiative at each of the four pilot sites. Although their roles varied somewhat, common aspects of their work included ongoing development of ELO processes and related management tools, and the proactive recruitment and facilitation of linkages between community partners, teachers, and students. Additionally, coordinators facilitated the planning and implementation of ELOs, and monitored project implementation and quality. Coordinators also provided logistical support and job-embedded professional development to teachers as they planned and implemented ELOs, although the extent of this support varied by school.

As previously noted, only 53% of ELO Teacher Survey respondents indicated that they received professional development, and of this group of teachers, 40% indicated that they received this professional development from their ELO coordinator. This is approximately double the percentage of teachers who responded that they received professional development from networking meetings/professional development events/workshops—the second

⁶ Overall, only 53% of ELO Teacher Survey respondents reported receiving professional development in some form; the remaining 47% reported they did not receive any form of professional development to help implement their ELO.



most common form of training for teachers. It is important to note that, as indicated earlier, there were differences among the four pilot schools in terms of the extent to which ELO coordinators provided in-school training, with school-level numbers ranging from 47% in Newfound to 28% in Franklin.

As ELO systems and key relationships developed over the course of the Initiative, coordinators continued to support both process improvement and the integration of new teachers, students, and community partners. Interviews and survey data left a distinct impression that coordinators are central to the Initiative; they are viewed as the keepers of the vision and the process, and as providing the energy that ensures ongoing identification of student ELO opportunities and facilitates the collaboration that is so indispensable to ELO development and implementation. When asked, school leaders and staff suggested there is little prospect for widespread adoption and sustainability of ELOs in the absence of a designated ELO coordinator.

3. Outreach is central to the ELO coordinator role. With general outreach strategies underway, ELO coordinators, teachers, students, and guidance staff each play a vital role in recruitment for ELOs.

Outreach— a central role of the ELO coordinator, focusing on building awareness and disseminating information about ELO opportunities— was essential to the launch and growth of the Initiative. ELO coordinators used a variety of print materials, including newsletters, course catalogues, and larger banners, to build ELO awareness. Coordinators also reported use of established school events to build awareness and understanding of ELOs, with specific mention of presentations to students during fall orientation programs and school assemblies, and grade-level presentations at the beginning of a new semester.

While these efforts targeted broad student groups, additional steps were taken—such as visits to ELL classrooms, or meetings and communication with special education teachers—to engage academically vulnerable student subgroups. Interviews also suggest that ELO coordinators have extensive contact with guidance counselors, who are often familiar with student interests and needs as related to credit toward graduation. Guidance counselors were a noted source of referrals for underserved students, among other student groups. Finally, some ELO coordinators leveraged 21C programs, and career- and community-service-focused programs, in order to connect with students, teachers, and community partners that might be interested in an ELO in their area of focus.

ELO survey data suggest that coordinators, teachers, guidance staff, and students each played important roles in recruiting participants. Overall, 55% of community partners reported that they were recruited by an ELO coordinator and 68% identified the coordinator as their key point of contact for the project. By contrast, students most commonly (55%) reported that they were recruited by a teacher and teachers most commonly reported (42%) that they were recruited by a student. This underscores the importance of teacher-student relationships to ELO development. Students less frequently reported that they were recruited by a coordinator (16%) or guidance staff (13%).

4. ELO activity suggests a great emphasis on the use of ELOs for elective credit. Pursuit of core credit through an ELO appears to be a more complex undertaking and remains in a formative stage.

Overall, 85% of ELO Teacher Survey respondents indicated that their last completed ELO was taken for elective credit, as opposed to a credit for a core academic course required for graduation. These data are consistent with an earlier evaluation finding that the pursuit of credit for core academic courses through ELOs poses a significant challenge to schools. Interviews suggest that meeting all of the content and competencies associated with core credit classes through an ELO can be daunting. Specific reasons cited include: the quantity and breadth of competencies to be covered in core courses; ensuring community partners' understanding of competencies and proficiency levels for said courses; and the timing and sequencing of competencies within a given time frame, that is, from one school year to the next (e.g. students must meet all competencies in ELA 9 to take ELA 10).

Numerous interview respondents suggested that many math and science teachers were particularly reluctant or uncertain as to how to adapt their core courses to an ELO format, attributing this to those subjects' focus on



"sequential content," as well as the wide array of subjects to be addressed through each course. Further, some respondents expressed frustration that larger assessment systems (such as NECAP and SAT exams) remain as benchmarks, but are driven by an emphasis on content recall that does not align well with ELO methods. The end result is that teachers of courses that align closely with (what is often core) content covered by these standardized tests may not feel comfortable entrusting the teaching of that content to an ELO experience.

Beyond the fact that ELOs were most often taken for elective credit, ELO Teacher Survey data further revealed that ELOs frequently occur in subject areas that traditionally have lent themselves to project-based learning. For example, when teachers were asked about the subject area of their ELO, the most common responses included: Career Technical/Vocational Education (30%), English/Journalism (30%), Art/Music/Drama/Photography (24%), and, perhaps surprisingly, Science⁷ (20%). Student survey data reveal a high incidence of projects related to these same areas, with the addition of Physical Education/Health.

5. Practice shows fluidity in the roles of ELO coordinator, community partner, and overseeing teacher. This often appears to facilitate implementation and allows schools to capitalize on limited resources.

The role of overseeing teachers was observed to vary from intense involvement—the teacher serving as primary provider of ELO content knowledge and direction to the student (such as in a teacher-led after-school club)—to very limited involvement, including teachers with little direct knowledge of, or engagement with, an ELO until it is time for final assessment. In fact, in some instances, the ELO coordinator may even assume the overseeing teacher role.⁸ Similarly, data suggest that community partners may have widely differing levels of engagement with a student ELO project. During interviews, partners related a range of roles, from a highly engaged content expert or mentor, to a work supervisor, to the recipient of a product or service, to a provider of space or resources.

As noted in the *NH ELO Evaluation Mid-course Management Briefing*, released in September 2010, the assignment of roles generally appears to be a matter of practicality and a function of available expertise and time. Identifying community partners and overseeing teachers with relevant expertise and resources is a crucial step in the ELO development process. In some instances it will not only define the student experience, but also the role and engagement of both the community partner and the overseeing teacher. In a primarily teacher-facilitated ELO, the community partner role may be diminished or eliminated, and where a strong community partner is available, the teacher role in day-to-day implementation and supervision of a student may also be diminished. Accordingly, rigid conceptualizations of community partner and teacher roles do not reflect the fluidity that exists, nor do they reflect understanding of the very broad roles ELO coordinators may play in implementation. It is a given, however, that this flexibility is appropriate only insofar as standards for a rigorous learning experience are met.

6. Schools have adopted different models for ELO implementation, particularly in relation to the role and time afforded to teachers to support ELO implementation.

In the third year of the Initiative, two of the four pilot schools had created structures that allowed for time to be allotted for ELOs during the school day. More specifically, Laconia High School modified its schedule to facilitate ELO implementation, allowing one period to be dedicated to ELOs. ⁹ This change was implemented in the 2010-2011 school year. In the first semester, this new "ELO period" was assigned to one teacher in each of the following subject areas: English, math, science, and social studies. In the second semester, however, the math subject area was no longer assigned an ELO period. Franklin High School combined the ELO coordinator and

⁹ This period was also to be used for remedial support.



⁷ This is not a contradiction of the prior point that pursuit of core credit in math and science, through the ELO format, is challenging. In fact, all but one of the ELOs identified by survey respondents as focusing on science were pursued for elective credit.

⁸ In fact, in an effort to enhance the sustainability of ELOs, Franklin High School changed the role of ELO coordinator to include serving as the overseeing teacher for all ELOs, beginning in the summer of 2010, limiting the teacher role to ELO planning and assessment.

overseeing teacher positions for the 2010-2011 school year. This change was undertaken in part to address the need for more in-school ELO time—a need that persisted in spite of the school's addition of a ten-minute advisory period, which could be used for ELO check-ins, in 2009-2010.¹⁰ The plan for this combined position was that the ELO coordinator/teacher was to work absent of the typical teaching load of teachers.

While the combined ELO coordinator position at Franklin High is a practical solution that reportedly introduced certain efficiencies— centralized ELO management and quality control, a reduction in stipend expenditures, and a decrease in the amount of training provided to teachers with limited participation—interviews also reflected concerns from some school- and state-level staff. Concerns included the possibility that this approach will: limit the breadth of ELOs undertaken, lessen the integration of ELOs into the core practice of the school at a system level, and reduce the likelihood that teachers would be as proactive in their recruitment of students.

While it may be too early to determine the effects of this model for ELO implementation, some studies have shown that these concerns may not be unfounded. For example, Rizkahallah and Bone (1998), who have studied the topic of implementation and sustainability, purport that "vertical' (i.e. stand-alone or self-contained) programs are less likely to be sustained than programs that are well integrated into existing systems or into the standard operating practices of their host organizations," and "that a vertical approach seems to help initial implementation but not long-term sustainability."

7. Internal and external constraints may complicate ELO implementation and should be carefully considered in the development of ELO implementation strategies.

Interviews of district and school leaders, teachers, and ELO partners illuminated both internal and external constraints that complicate ELO implementation at the individual project, school, and system levels. Specifically, three factors were noted to have slowed implementation, all of which should be identified and accounted for in the implementation planning phase. First is the question of staff readiness to implement ELOs. Extensive interviews consistently pointed to low teacher readiness to implement ELOs, for a variety of reasons. Schools did not universally have effective course competencies that could be adapted for use with ELOs, nor did teachers have experience conducting competency-based assessment. Equally important, ELOs that feature a robust community partner role fundamentally change the role of the teacher, from providing content to facilitating learning that is occurring outside of the classroom.

A second internal challenge to ELO implementation —continuity of leadership—was brought to light through the experience of Franklin High School, in particular. July 2010 was a time of great change in leadership at Franklin, as the district welcomed a new superintendent, a new high school principal, and a new ELO coordinator. ELO partner interviews suggest that these sudden changes in leadership posed a challenge to the ELO Initiative, as key understandings and habits of communication were disrupted. Fortunately, Franklin's new ELO coordinator was already a member of the school staff and had experience with ELOs in that role, but the school also lost a VISTA volunteer that same June who had supported the previous ELO coordinator. To the extent that ELOs are envisioned as an aspect of high school redesign, the uncertainty of leadership turnover and the loss of key operational relationships can surface as a significant obstacle to ELO implementation. In the case of Franklin, ELO activity appears to have been maintained, but the model for implementation changed, as previously described, to a potentially less integrated approach.

¹⁰ A ten-minute advisory period was added to the end of the school day and was to be dedicated, as needed, to ELO-related tasks. The amount of time proved insufficient for the monitoring of ELOs and was further complicated by early dismissal allowances for seniors.



A third challenge to implementation is primarily a matter of external context. As related previously, two of the pilot schools (Newfound and Franklin) are broadly reflective of the state of New Hampshire in that they feature a very rural setting and a limited quantity and range of potential community partners. Interviews with ELO coordinators suggest that the dearth of businesses and non-profit organizations that characterized their local context sometimes made it difficult to identify needed expertise or facilities in support of student ELOs. In response to this, grant funds were sometimes used for transportation to qualified partner sites; a practice that may not be sustainable in the present context of fiscal uncertainty at the state and local levels. Another solution was to utilize online courses, thereby engaging online course instructors as community partners in a virtual environment, but this option was acknowledged as being qualitatively different from the notion of community partner involvement as originally envisioned.



III. ELO Student Characteristics

Another fundamental question driving the ELO evaluation related to the profile of students participating in ELO projects. Participation of "underserved" students was of particular concern to NMEF, which provided funding for the Initiative, as well as NH DOE. In fact, each school's ELO pilot grant Memorandum of Understanding (MOU) made specific reference to the priority of serving this student subgroup. The MOUs contained consistent language defining an underserved learner as:

"A student characterized by one or more of the following: Having low socio-economic status, is a member of a racial minority, is an English language learner, is delayed in expected year of graduation for age, has failed one or more high school level courses, has had excessive absences or tardiness affecting class attendance, or has had excessive disciplinary referrals."

This section addresses the question, "who is served by ELOs?" It addresses the question through multiple lenses, exploring available student profile data (academic and demographic), assessing underserved learners' participation and relative success in ELOs, and exploring the motivations of student ELO participants. Primary sources include interviews with students, teachers, ELO coordinators, and school administrators, and analysis of the "ELO dataset," a subset of the data contained in the NH DOE ELO project database. This dataset includes 789 records that were reviewed and verified line-by-line by school-based ELO coordinators, including 629 completed ELOs—roughly half of the total 1,218 completed projects reported by NH DOE."¹¹

1. The vision of ELOs as tools capable of engaging students of widely varying personal and academic characteristics appears to have been realized.

A range of data sources suggest that students of all types have participated in ELOs at each of the four pilot school sites. These include students who are at different chronological stages of their high school careers, who display differing demographic characteristics, and who have experienced differing levels of success in their past academic work. This finding is supported by analyses of the validated ELO dataset, by extensive on-site educator, community partner, and student interviews, and through observation of selected student ELOs by the researchers.

As presented in Exhibit 2, ELO participants' grade levels ranged from freshman to senior, with participation of upperclassmen (juniors, seniors) roughly double that of younger students. Distributions ranged across school by grade level, but only marginally when looked at in terms of the balance of upper- to lower-class participation. Students of all grades participated at each of the schools, including at Manchester Central High School, where 11% of ELOs were completed by freshmen, despite a policy suggesting freshmen were not to participate in ELOs.

The ELO Initiative was launched with the goal of deepening the engagement of all students with their high school learning experience, but with a particular interest in leveraging ELOs to engage underserved students. Accordingly, securing the participation of members of this broadly defined population was of great concern to program leaders, and substantial efforts were made to recruit underserved students into ELOs. Analysis of the

¹¹ With regard to the 589 completed projects not included in this analysis, NH DOE records and accounting are NOT in dispute. An unspecified number of project records previously reported as aggregate data in NH DOE reports were reportedly lost during database migration in early 2010, and ELO projects initiated during the summer and fall of 2010 were not entered into the system in time to be included in the ELO coordinators' data verification process, which was completed in November 2010. Comparison of schools' verified ELO activity to unverified total activity counts shows only a modest underrepresentation of projects associated with Newfound and Laconia (5% and 4%, respectively), and an overrepresentation of projects from Franklin (8%) and Laconia (1%).



ELO dataset suggests high rates of participation among these students, as displayed in Exhibit 3. Over one-third of these ELOs engaged an underserved student, with the highest proportions observed in schools with the highest combined rates of poverty (Franklin), English language learners, and racial/ethnic minorities (Manchester).¹²



Privacy regulations limit the specificity of student profile data made available to the research team; however, the underlying reason for members of this student subgroup's designation as "underserved" can be addressed in broad terms. Exhibits 4 and 5 present the proportions of student ELO participants who were identified as underserved based on their match to one or more demographic criteria (race/ethnicity, low-income status, limited English proficiency) and based on their match to one or more specific academic concerns. These concerns included course failures, excessive absence, excessive disciplinary referrals, and delayed year of graduation. Note that some students met both the demographic and academic criteria for characterization as underserved.



2. Underserved students participated in ELOs in substantial numbers, with completion rates similar to other students. However, students who are most at-risk often require significant support.

As shown in Exhibit 6, ELO completion rates among underserved students (80%) and all other students (84%) were generally comparable, with an additional 2% to 3% of both student groups earning partial credit. ELO completion rates varied by school, ranging from 92% (Franklin) to 64% (Newfound). However, anecdotal evidence suggests that this may be influenced by variations in the reporting of newly initiated ELOs across

¹² See Exhibit 1 for additional demographic data.

districts, pointing to the need for explicit processes and criteria to guide reporting in the next phase of implementation.¹³

The similarity of underserved learners' completion rates to those of other students is notable, particularly in light of increased academic risk factors associated with the criteria for underserved-learner status. While this finding may suggest that underserved learners find ELOs to be more engaging than regular courses, variations in reporting of initiated projects, as well as a lack of data pertaining to the amount and type of student support provided and the relative difficulty/rigor of each ELO, limit the strength of this finding. In fact, interviews with teachers who worked on underserved students' ELOs highlighted the need for significant scaffolding to ensure success. Not surprisingly, the need for "wrap-around" support services is reportedly greatest among highly disaffected or disengaged students, as is the challenge of finding community partners to work with these students.

Exhibit 6

Exhibit 7 presents findings of an All-Faculty Web Survey conducted at the four pilot schools in January 2011. As this chart suggests, educators' opinions of the suitability of ELOs to students who are "struggling academically and/or at risk of dropping out" are generally positive, but mixed. Overall, 21% of respondents strongly agreed and another 45% somewhat agreed. Subgroup analyses show this is similar to the opinions of teachers who reported they had overseen an ELO, among whom 20% strongly agreed and 39% somewhat agreed. Finally, the greatest skepticism was evident at Manchester Central and Laconia High Schools. It is unclear whether these results are influenced by the more urban characteristics of these two districts or by some other factor.

¹³ As completion rates are considered, it is important to note that failure to complete an ELO does NOT constitute course failure. Due to the unique nature of ELOs, all four pilot schools allowed students to begin ELOs without fear of a penalty for withdrawal or nonperformance. In instances where a student started but did not complete an ELO, no credit was awarded and no entry was made to the student's transcript.

Group ELOs are projects that engage more than one student, creating a shared, if not uniform, ELO experience. Use of group projects is commonly suggested as a positive support to underserved students' ELO success, because such projects more commonly include a regular meeting structure and a sense of shared experience.

Exhibit 8 displays ELO completion rates for underserved students and for all other students, by individual and group format. While analysis of these data may offer preliminary support for this theory, the effect appears to be modest, at best. Overall completion rates for underserved students in group ELOs were higher (87%) than for underserved students in individual ELOs (76%) and tests revealed that these differences were indeed statistically significant (p<.01). On the other hand, there was little difference in group vs. individual ELO completion rates among all other students. Additionally, differences for underserved learners' completion rates in these two formats were this was not the case for all other students. Even in light of this promising finding, interview data suggest that for ELOs to work for the most difficult-to-engage students, a more robust model of support must be in place. This model would include wrap-around services designed to support the student's ongoing engagement and success in the ELO project.

Exhibit 8

3. Student interests are the primary motivator for ELO development and participation, but ELOs also serve an important student support role and have been used to strengthen existing programs.

The common assumption that ELOs are initiated in direct response to student interests, leveraging enthusiasm for specific topics or for hands-on approaches to learning that may not be accessible in a traditional classroom setting, is generally true. However, the Initiative highlighted other important motivations driving ELO development and participation. Interview and survey data suggest that at least three models of development have emerged, as presented below, with each having a likely impact on student participation patterns.

A. Interest-driven ELOs – creative, highly personalized, beyond-the-classroom experiences.

Student-interest-driven ELOs are characterized by creative, highly personalized experiences that often reach beyond the traditional classroom setting. These are commonly built upon student (or teacher/community partner) interest or knowledge. These are often individual ELOs that include field-based career exploration, hands-on projects, and internship experiences.

Student survey data (Exhibit 9) show that students' desire to explore a topic of interest (51%), learn outside the regular classroom (45%), and do hands-on work (38%) were the most common motivations for participating in an ELO. Student interviews showed that students of widely varying characteristics engaged in such projects, with high-achieving students most consistently engaged in ELOs of this type.

Exhibit 9

Student Motivation: Why did you do this ELO?	N = 226
Explore a topic of interest	51%
Learn outside regular classroom	45%
Do hands-on work	38%
Looks good on transcript/resume	35%
Find out more about career	27%
Catch up on credits needed	12%
Maintain full time status	8%
Take class that did not fit schedule	8%
Make up a credit for failed class	3%

B. Student-support-driven ELOs – flexible responses to student problems and support needs.

Student-support-driven ELOs are projects that emerge from a desire to help a struggling student overcome an obstacle to credit attainment or academic success. The specific need may be to help a student recover credit needed for graduation, or to find an alternative means for a student to meet the requirements of a course that will not otherwise fit into her schedule. These ELOs are often initiated at the urging of guidance counselors or teachers, and are driven by the goal of ensuring student success in obtaining needed/desired credit. Student-support-driven ELOs are usually—but not exclusively—individual projects. They were often noted to include independent studies, online courses, and ELOs that respond to a need for a specific type of content or credit, not necessarily of the student's choosing.

Student survey data (Exhibit 9) show a variety of support needs motivating participation. The need to catch up on credits (12%), maintain full time student status (8%), take courses that did not fit the student's schedule (8%), and

make up credit for a failed class (3%) were all cited as motivations, though less frequently than personal interestdriven motivations. Student-support-driven ELOs may most commonly engage underserved learners. In fact, analysis of the ELO dataset showed that underserved learners were far more likely than other students to take an ELO for credit that was required for graduation (67% to 19%), but interviews suggest that many other students also appreciate the flexibility to earn credit outside the existing school schedule.

C. Integration-driven ELOs – bringing existing programming under the ELO tent.

Integration-driven ELOs typically build from and seek to enhance extant programs or clubs. The motivation on the part of students, educators, or schools themselves is the opportunity to formalize existing activities, create credit opportunities, and, in some instances, enhance aspects of the program or club experience such that they meet ELO standards of rigor. Integration-driven ELOs typically provide group project opportunities for students sharing a common interest area and a preference for working with peers. Integration-driven ELOs commonly offer more longer-term program continuity as compared with typical interest-driven ELO projects, expanding school course offerings in a more stable and predictable manner. These ELOs may offer significant resource efficiencies and may or may not include vigorous roles for a community partner.

IV. ELO Project Characteristics

Section 1, "What is the Context for ELO Implementation?," described the broad parameters that govern ELO characteristics, at both the state- and local-school-board levels. Because definitions of what specific experiences might comprise an ELO are purposefully broad, there was uncertainty as to what forms ELOs would take (e.g., internships, performing groups, online courses) when implemented at scale within the four pilot schools. Further, the evaluation sought to clarify the time and location of ELO activity, the types of credit students were awarded, and the participation of teachers and community partners.

This section will explore the characteristics of ELOs and show them to be a flexible tool. Primary data sources cited in this section include: annual surveys of students, teachers, and community partners who participated in ELOs; the previously described ELO dataset; source documents provided by NH DOE, its partners, and schools; and interviews of students, teachers, school administrators, and community partners. Please note that discussion of the presence of the four components of a quality ELO—research, reflection, product, and presentation— appears in a subsequent section.

1. ELOs cover a wide range of topics, activities, and formats. Some subjects adapt more easily to ELOs than others, most focus on hands-on work, and group ELOs are increasingly common.

The diversity of activity enacted through ELOs is remarkable in terms of the breadth of subjects addressed, the types of activity engaged in, and the format of the learning experience. With regard to the specific subject being pursued, course title data were not complete or fully standardized within the ELO dataset. However, the ELO Student Survey (N = 226) requested that respondents code their ELO into whichever given subject area description they felt best described the topic area of their ELO. Results are summarized in Exhibit 10.

	Frequency	Percent
ELA/Journalism	39	17%
PE/Health	37	16%
CTE/Vocational	35	15%
Arts/Music/Drama/Photography	29	13%
Science	19	8%
World Languages	9	4%
Social Studies/History	7	3%
Economics	7	3%
Math	4	2%
Civics/Government	4	2%
Other	36	16%

Exhibit 10

Survey data reveal a high incidence of projects related to English, physical education/health, career vocational studies, the arts, and science. Civics, history, and economics projects—initially target subjects for ELOs—were less commonly reported. A closer look at project descriptions highlights the range of subjects addressed. ELOs

included projects related to building catapults, web design, cooking, tax preparation, agricultural production, robotics, nursing, journalism, and preparing students for their transition to high school, among many others.

It is notable that subject area teachers most commonly referred to mathematics ELO projects as challenging to develop, citing the sequential nature of content as a particular challenge. In comparison, physical education, arts, and vocational subjects were commonly identified as ripe for ELO opportunities, as teachers in those subjects were already focused on performance and product development.

The nature of ELO activity also varied (Exhibit 11). When students were asked which of five types of activity were descriptive of their ELO, 60% identified it as a "hands-on project or hands-on work," and over a third said it took place in an after-school program or club setting. A combined 21% were in the mold of internships or job shadowing, while 6% took the form of an online course. The profile of project activities does vary across schools, with Newfound and Manchester displaying the largest proportions of after-school programs or clubs (46% and 50%, respectively) and Franklin accounting for 77% of all surveyed online courses. Descriptions of "other" activities included international and domestic travel, mayoral campaigning, a variety of public performances, and a range of what appear to be more traditional academic assignments that occurred outside the standard classroom.

Exhibit 11

	Frequency	Percent
Hands-on project or hands-on work	135	60%
After-school program or club	78	35%
Internship	25	11%
Job shadowing	22	10%
Online course	13	6%
Other	39	17%

Note: Survey item was "choose all that apply."

ELOs can take the form of individual or group learning experiences, and each type played an important role at all four schools. The ELO dataset contained complete data relative to this variable. As presented in Exhibit 12, analysis revealed a modestly higher incidence (54%) of students participating in a group project than in an individual ELO (46%). Franklin (74%) and Newfound (69%) high schools displayed higher proportions of students who participated in a group project than Manchester Central (40%) or Laconia (36%). It is notable that at Franklin and Newfound the ELO Initiative was deeply engaged with resident 21st Century programs, which commonly deliver programming through after-school clubs at those schools. This was not the case at Laconia or at Manchester Central, which lacked a site-based 21st Century after-school program.

Viewing year-to-year data, from school year 2008-2009 to 2009-2010 the incidence of group ELOs rose from 46% to 59% of all ELO activity. This reflected steep increases in the use of group strategies at Manchester Central (12% to 49%) and Laconia (20% to 48%), and corresponded with a purposeful move towards group strategies to create operational efficiencies, as the end of NMEF support heightened the focus on the sustainability of ELO activity. Interviews also suggest that increased group ELO activity may reflect a prevailing sentiment that underserved learners respond better to group learning opportunities, as a result of the support of their peers.

2. Most, but not all, ELOs offered students a departure from traditional courses in terms of both the location of learning and the schedule for learning and project completion.

There is a common inclination to conceptualize the ELOs as an out-of-school experience and, to a large extent, this conceptualization is correct. However, as displayed in Exhibit 13, analysis of the ELO dataset reveals that 38% of ELOs feature student activity that is primarily centered within the school itself, ranging from 13% at Manchester Central to 64% at Newfound. Interviews suggest that Manchester Central's low incidence of in-school ELOs is due to the city's large pool of businesses and non-profits, as well as the lack of an after-school program on site at the high school. In comparison, Newfound serves a very rural region with few local venues for ELOs and significant transportation issues for students who live far from the school. Newfound has also closely integrated its after-school program and ELO work. Overall, the reported incidence of projects based out of school declined from 65% to 58% from 2008-2009 to 2009-2010.

ELOs are intended to open students to learning anywhere and at any time, freeing them of the traditional bounds of the school day. ELO dataset analyses show 75% of projects occurred primarily during after-school hours. School comparisons (Exhibit 14) show Laconia and Manchester Central with a low incidence of school-day projects (13% and 9%, respectively), with ELO projects occurring during the regular school day far more common at Franklin (35%) and Newfound (36%). This may be a function of these schools' locations in rural districts with limited community partner resources and significant travel distances for students. Teacher stipends may also be a factor. Manchester officials noted that teachers could not receive stipends for ELO work during the regular school day; whereas Newfound did not offer stipends during the regular school year.

Exhibit 14

Finally, ELOs support New Hampshire's state rule eliminating "seat time" as the basis for awarding academic credit, offering students new flexibility and the ability to learn and demonstrate knowledge at their own pace. At all four pilot schools, the start and end times associated with ELOs were indeed flexible, except in cases of a group project or special program with a set schedule. Even in these instances, completion of ELO-related tasks was noted to vary by student, in accordance with their readiness to present their learning through an end of project exhibition.

Exhibit 15 shows the distribution of ELO duration by range (in days). Note that these data are summarized in 30day increments up to the 181-240 day category, at which point the range equals 60 days. As these data show, although nearly two-thirds of all ELOs are completed within 61 to 180 days, many are quite brief and (presumably) more intense or much longer in duration. According to teacher interviews, expected ELO timelines were sometimes extended in response to student needs (such as family crises or an overload of work to be completed), but projects sometimes "stalled" due to wavering student interest, and were later restarted.

Exhibit 15

3. ELOs typically engage students, teachers, and community partners, but are viable even in school districts that lack a critical mass of local businesses and organizations.

ELOs are most commonly conceived of as projects that engage students with both a subject area teacher and a community partner. As described in section II, "*ELO Development and Implementation*," the roles of teachers and community partners are somewhat fluid, and in some instances ELOs may reasonably proceed without a community partner or without extensive involvement on the part of the teacher (outside of planning and assessment). Analysis of the ELO dataset (Exhibit 16) showed that 78% of ELO projects had an identified partner. Community partner, teacher, and student interviews clarified the roles played by these partners, which ranged from highly engaged mentor, to periodic project consultant, to client, to resource (space, materials) provider.

School-by-school analysis reveals a sharp distinction in the use of community partners by Newfound. Whereas the other three pilot schools utilized a community partner for roughly 90% of the ELOs in the ELO dataset, Newfound identified a community partner in relation to only 34% of projects included in the dataset. Reviewing the projects that had no identified community partner, the largest proportion were titled "SAT Prep," with numerous entries including the term "VLAX" (online course work), "Bridge Academy" (an orientation program that has evolved over time to feature a more explicit community partner role), and a handful of other titles that suggest independent studies or correspondences courses.

Understanding the limitations of the ELO dataset, it is possible that these projects are overrepresented in the sample of activity. However, there are contextual explanations that may help to explain this finding. Among the four pilot schools, Newfound is the most rural, with few local businesses and non-profit organizations that might serve as community partners. A second possible explanation may be found in the school's model for ELO implementation, which emphasizes collaboration with the school's 21st Century after-school program, and which reflects a particularly deep commitment to integration of ELOs into the everyday work of the school.

Exhibit 16

4. ELOs allowed students to earn credit for non-traditional educational experiences. Although primarily for elective credit, many provided credit students needed in order to graduate.

As previously related, ELO projects vary widely in their characteristics, including the amount of credit awarded for their completion. Overall, 63% of ELOs generated less than one credit, with wide majorities of ELO projects falling into this category at all schools save for Laconia, where the majority resulted in the award of a full credit (Exhibit 17). A small number of projects resulted in two or more credits. One such project was described during the site visit interview process. It was a multi-phase, interdisciplinary "farm stand" project that integrated agriculture with marketing and business management skills.

Educator interviews and discussion at All-Site ELO network meetings reflected on the challenge of developing ELOs that were broad and deep enough to meet the content requirements of required classes in core academic areas. In contrast, it was far easier to structure ELOs that were complementary to those core courses, or that expanded the menu of subjects that could be explored within a given school. In fact, many educators related their excitement at the prospect of opening students to a broader range of topics than the standard curriculum would afford; a theme that seemed to resonate with many students and may have simplified the project development process, focused on more customized sets of competencies that flowed naturally from the creative ideas behind a given ELO.

Analysis of the ELO dataset indicates that over three-fourths of ELO projects resulted in elective credit (Exhibit 18). Overall, the proportion of ELOs bearing elective credit increased from 74% to 81% from the 2008-2009 to 2009-2010 school year. Looking at individual schools, Franklin displayed the closest ratio of elective to required core course credit ELOs (57% to 43%, respectively). Notably, 74% of Franklin's ELOs that were identified as bearing credit for a required core course were for a physical education or health credit. While the ability to leverage ELOs for core credit is a laudable goal, it is important to emphasize that regardless of the type of credit gained, educator and student interviews strongly suggest that ELOs fill an important niche in engaging students.

Exhibit 18

As reported by ELO coordinators and presented in Exhibit 19, a sizable proportion of ELOs resulted in credit that students needed to earn in order to graduate, with the highest proportions reported at Manchester (60%) and Franklin (47%). This high incidence level would seem consistent with the ELO Initiative's intense interest in supporting the success of academically at-risk students and may also speak to the volume of students who are lacking in elective credits necessary to graduate (particularly at Manchester, where only 5% of students were reported to be pursuing required core course credit through their ELO).

Exhibit 19

V. ELO Assessment

Assessment policies and practices in many ways serve to define the student learning experience. That is, they establish what content teachers must convey, what students must learn, and how learning will be measured. Building upon New Hampshire's *Minimum Standards for School Approval*,¹⁴ the NH ELO Initiative sought to significantly shift established grading practice in relation to the assessment of ELOs. This section reflects on the extent to which ELO assessment has reflected an emphasis on student mastery and demonstration of competency, and on the Initiative's progress in relation to the development of valid and reliable tools to support future ELO assessment.

At the outset of the Initiative, NH DOE and its partners communicated a general blueprint for assessing ELOs in a tool titled "*Minimum Expectations for Assessment Components*." This document outlined four specific attributes (or components) of an ELO that should be considered in the assessment process. These include student research, reflection, product, and presentation; the four components of what NH DOE considers to be a quality student ELO project.

The Initiative's emphasis on assessing student performance through measurement of these components of the learning experience differs from traditional assessment practice, which commonly relies on a mixture of quizzes and tests, written reports, homework, class participation, and attendance, and only to a lesser extent on the demonstration of students' ability to apply knowledge through products, presentations, and the like. Indeed, the Initiative sought to focus assessment squarely on determining what a student can demonstrate s/he knows and is able to do at the conclusion of the project. This focus implicitly de-emphasizes inputs such as "seat time" and homework compliance, and makes a distinction between assessment used for formative and summative purposes.¹⁵

1. ELO assessment differs substantively from traditional grading practice, emphasizing student reflection and demonstration of learning, with little reliance on traditional tests or attendance. Opportunities to enhance assessment practices have been identified and are being acted upon.

The ELO Teacher Survey asked respondents to identify the formative and summative assessment measures that were factored into their decision of whether credit would be awarded—as well as the grade given—for their most recently completed ELO. The results are presented in Exhibit 20. Overall, they highlight the prominent role of summative and formative assessment practices that are promoted by the ELO Initiative. Overall, 87% of surveyed teachers reported that a student presentation, exhibition, or performance was considered as part of their grading process. A key component of the summative assessment process, these types of events were typically observed by a broader audience that commonly included other faculty, community members, family, and students.

Formative assessment practices were also considered in teachers' decisions to award ELO credit. Among the most commonly identified of these were the discussion of ongoing learning (74%), student journaling (66%), and teacher provision of feedback regarding a student's job performance, product, or service (57%). While these data do not clarify how these data were weighed in the grading process, they do correspond to three of the four required components of an ELO assessment (reflection, product, and presentation). The fourth component,

¹⁵ Formative assessment focuses on the acquisition of knowledge and understanding, whereas summative assessment represents the application of learning.

¹⁴ As described in Section I. State and Local Context for Implementation, these standards require that grades are based on a student's demonstrated mastery of established course competencies. The actual use of competencies as a basis for student grading in non-ELO courses was characterized as a work-in-progress within the four pilot schools at the inception of this study. However, school-wide implementation of this policy was not the focus of the ELO Initiative's evaluation.

research, may be most evident in the use of research papers, reports, or other documents, which was reported to contribute to grading in 41% of ELO projects.

Perhaps the most intriguing finding from the teacher survey is the very limited reliance on traditional testing as a basis for ELO grading. Only 11% of surveyed teachers used exams or tests as a basis for ELO grading, with the proportion declining from 19% in 2008-2009 to 6% in 2009-2010. Although the use of other practices was observed to vary somewhat over that same course of time, this was the most substantial change and the only one that was statistically significant ($p \le .05$).

Reviewing teacher survey results, the overall picture is one of multiple measures contributing to the grading process, with diverse and ongoing pathways through which students might express and demonstrate knowledge acquired through the ELO experience. This picture is further affirmed by student survey results, which closely paralleled teacher data, as well as the findings of ELO pilot site visits and ELO network school interviews.

Exhibit 20

Teachers (N = 90)	Frequency	Percent
Student presentation, exhibition, or performance	78	87%
Discussion of ongoing learning as part of self-reflection	67	74%
Journal writing	59	66%
Feedback on job performance, product, or provision of service	51	57%
Documentation of work	48	53%
Portfolio of student work	41	46%
Research paper, report, or other document	37	41%
Exam or test	10	11%

ELO assessment was distinct from traditional course grading in another important way – the use of feedback from other informed individuals. This point is of particular interest because, in the context of ELOs, teachers are often the facilitators of learning, rather than the sole deliverers of content, as in a traditional classroom setting. In addition, other knowledgeable adults are invited to observe the evidence of student learning through viewing of ELO products, presentations, and exhibitions. Teacher survey data suggest that the input of ELO coordinators (74%), community partners (52%), and other teachers (31%) was considered in the grading of respondents' most recent ELOs. Interviews suggest that while they consider input from these sources, overseeing teachers maintain independent authority in awarding and grading of credit for the ELO.

While these findings point to the Initiative's initial success in implementing this competency-based approach to assessment, there are also clear opportunities for improvement, which are being acted upon. For example, in Spring 2010, teachers reported that some students were not well prepared for their presentations, in terms of either delivery or content. Among the concerns was that some student presentations did not reflect a clear link to the agreed upon learning goals of the ELO. Similarly, some teachers felt that students need additional guidance and oversight in relation to reflection (journaling, blogging, etc.). In addition, there was a sentiment that teachers themselves would benefit from better and more consistent assessment protocols. In response, it was decided that common rubrics for assessing student research, reflection, product, and presentation would be developed. This process and its resulting products are detailed later in this section.

2. The Initiative built capacity among both the pilot schools and technical assistance providers, helping to develop a model for the development of competency-based assessment systems within schools.

Interviews with lead consultants working for ELO partner organizations, and with leaders and staff of the four ELO pilot schools, underscored the complexity of building school-level capacity to implement competency-based assessment. As indicated earlier in this report, staff readiness to define and use competencies in relation to their existing courses was generally quite limited at the start of the Initiative. This reality necessitated intense work on the part of the schools and the ELO partners, as they worked to establish competencies and enhance schools' understanding of how to use them. This was essential because clearly defined course competencies are the foundation upon which ELO performance assessments are implemented.

Such a fundamental change in assessment practice also required support for teachers and administrators in a variety of areas. While the work varied from school to school, the totality of the work included helping schools to refine and validate their existing course competencies; providing training in the use of competency-based teaching and assessment; supporting the transition to competency-based grading systems (either specific to ELOs or school-wide); and assisting school leaders in developing a grading philosophy statement representing their core beliefs as they pertain to assessment. Each of these tasks may be considered a distinct and important stage in the process of building school-level capacity to implement competency-based instruction.

Interviews suggest that through the ongoing collaboration of NH DOE, ELO partners (assessment consultants), and school staff, a collective understanding of how to approach the task has emerged. Specific stages of work represent the framework for a "development model" for moving schools toward competency-based assessment. This is significant because the development of this model, and the experience thereby gained, represents a new and perhaps unexpected capacity that has resulted from the ELO Initiative. Given its importance not only to ELO implementation, but to high school redesign in New Hampshire, NH DOE may wish to solidify this model, take steps to retain the expertise required to employ it, and continue to actively disseminate to interested schools.

Despite this success, evidence points to the need to further invest in developing staff capacity to use competencybased assessment, even within the four pilot schools. In fact, more than half of ELO Teacher Survey respondents who articulated a need for continued professional development recommended/requested additional training in competency-based assessment, assessment rubrics, and grading; a finding strongly supported by interview respondents across the four schools. Demand for such training is likely to increase as pilot versions of four new assessment rubrics corresponding to research-, reflection-, product-, and presentation-related work are brought into wider use in the context of ELOs and, perhaps, other courses.

The process for developing these four pilot rubrics, another important step in the development of performance assessment capacity, is described within item 3 of this section.

3. The ELO Initiative leveraged partner and emergent pilot school staff expertise to develop common rubrics for assessment, which were piloted in the closing months of the grant. Concurrently, the state made progress in the development and implementation of a new Competency Validation Rubric.

While teachers were indeed assessing ELOs as per the general outline set forth by the NH DOE at the outset of the grant—as demonstrated by findings earlier in this section—there was a consistent call for common assessment tools and continued support for the implementation of competency-based assessment. As reported through the ELO Teacher Survey, 74% of ELOs were graded through a process that included use of a rubric, and rubrics were in many instances (35%) reported to be unique to the teacher being surveyed ("used only by me"). The appetite for common assessment tools appeared to grow over time, as the complexity of developing valid and reliable instruments became increasingly apparent.

Seizing upon interest and momentum established at monthly ELO All-Site meetings, NHDOE and its partners sought to promote greater consistency in both the rigor of ELO assessment practices and the quality of written course competencies through development of common rubrics for assessing the four components of a quality ELO and of a Competency Validation Rubric, which would assess the quality of both cross-cutting and course-specific competencies developed by local districts or schools.

In Spring 2010, the NH DOE established an expert-facilitated working group that included a CACES consultant and representation from both pilot and network schools. This "Assessment Moderation Team" (AMT) was charged with developing:

- a minimum set of consistent assessment expectations across ELOs;
- common scoring guides for shared ELO components (research, reflection, product, and presentation); and
- a moderation process to ensure the reliability and validity of performance-based assessment.

By the close of the grant period, the AMT had developed four rubrics, corresponding to the four agreed upon components of ELO quality and assessment (research, reflection, product, and presentation). These rubrics were field-tested during the first half of the 2010-2011 school year, which was also the closing months of NMEF's full scale grant to support the ELO Initiative. At that time, it was hoped that NMEF would continue to provide funding for further development and testing of these and other tools. Discussions with school and state stakeholders suggest that while the tools are a significant step forward, they may continue to evolve in significant ways, particularly in relation to their measurement of students' acquisition of specific content knowledge.

In parallel with this process, to ensure that course-level competencies have the opportunity to reach the highest level of quality and comparability across schools, a Competency Validation Rubric was also developed by a statewide committee. With support from CACES, this committee was commissioned to write and then field-test the rubric. The resulting tool makes explicit the continuum of strength of local competencies and is intended to assess the extent to which those competencies:

- align with content area standards and allow for the connection of concepts across content areas;
- reflect enduring concepts¹⁶;
- promote learning that is cognitively demanding; and
- promote opportunities for students to demonstrate evidence of their learning.

As described in the *Course-Level Competencies Validation Technical Advisory* (issued November 30, 2010) the purpose of articulating these four critical elements of a valid competency was to help schools "determine if the assessment tasks in a unit of study are measuring the appropriate demonstration of learning." To accompany this new tool, the NH DOE provided guidance and access to supporting documents and resources, including a glossary of terms for the rubric and course-level competency models and examples in a variety of courses. (http://www.education.nh.gov/standards/documents/advisory20.pdf)

In a significant move, the NH DOE now references the Competencies Validation Rubric in its School Approval Standards, for use by educators and the NH DOE in its School Approval process "to review and refine course-level competencies for use in teaching, learning, demonstration of mastery, and other assessments." While much progress has been made to date, it was acknowledged that there remained much to do with regard to the engagement of schools in the competency validation process, and in relation to the goal of effectively disseminating these resources and guidance statewide.

¹⁶ As defined in the Competency Validation Rubric, enduring concepts are those that involve skills that are transferable across content areas, are applicable to real-life situations, and require an understanding of relationships between theories, principles, and/or concepts.

VI. ELO Quality and Rigor

Extended Learning Opportunities are a core element of New Hampshire's vision for high school redesign. Positioned in this way, the ELO Initiative was undertaken with an understanding that ELOs would need to make a positive impression on potentially skeptical local communities and educators. As previously described, NH DOE used NMEF support to deploy a cadre of expert partners to facilitate development of quality ELOs in each of the pilot schools. The goal was to implement and rigorously assess student ELOs using valid and reliable course competencies and assessment tools, which would frame the standards for ELO quality and, in the case of assessments, potentially serve as an evaluation data source.

With the support of NH DOE and its partners, the pilot schools quickly scaled up their ELOs; however, the development of valid and reliable ELO assessment tools proved challenging. As related in the previous section, while the spirit and intention of the ELO assessment process was pursued with vigor at the school level, it was ultimately agreed that validated, common assessment tools were needed. An Assessment Moderation Team (see previous section for detail) developed draft rubrics corresponding to what NH DOE identified as four key components of a quality ELO—research, reflection, product, and presentation. These rubrics were piloted in fall 2010, but not at a scale, or in time, to allow them to contribute to the evaluation. However, survey and site visit data do illuminate this question, providing insight into the quality, rigor, challenge, and relevance of ELOs to student goals.

1. A wide majority of ELOs included a focus on reflection, product, and presentation. Integration of topic research, the fourth component of a quality ELO, appears to be rising, but remains less common.

Through All-Site ELO network meetings, printed materials and other mechanisms, NH DOE and its partners promoted four essential components of a quality ELO. These included research, reflection, product, and presentation. Surveys of students, teachers, and community partners who completed ELO projects asked whether these components were part of their most recent ELO. A summary view of these results appears in Exhibit 21.

These data show particular success in the integration of the reflection, product, and presentation components into ELOs, as reported by all three respondent groups (students, teachers, community partners). Integration of a fourth component of a quality ELO, research related to the topic of interest, appears to have lagged. The percentages for the research component would jump to 48%, 67% and 70% respectively, if reports of whether the student wrote a research paper, report or other document are added to the equation. However, it is possible that some written products did not require substantive research.

Exhibit 22 probes the question of whether and to what extent ELO quality, as measured by the reported presence of the four components, may have evolved over the course of the last two years of the grant. On the positive side, teacher and community partner survey responses suggest that projects completed during the 2009-2010 school year more often included a research component (increases of 17 and 10 percentage points, respectively). However, changes in the reported presence of other components trended negative. It should be noted that the sample of responding community partners was only 30 in each of the two years, making their results more susceptible to dramatic shifts. Overall, student results were quite stable across the two years.

Exhibit 22

	Change in Frequency 08-09 to 09-10 (in percentage points)					
	Student Teacher Partner					
Made a presentation or performance	-1%	-9%*	-17%*			
Engaged in reflective exercise	-3%	-3%	-30%**			
Developed a work product	3%	-9%	-7%			
Conducted topic research	1% 17%* 10%					

** Finding is statistically significant p < .01 * Finding is statistically significant p < .10

2. Overall, the four components of a quality ELO are more commonly reported to be present within individual ELOs than in group ELO experiences.

Exhibit 23 presents data from the student, teacher, and community partner ELO surveys, with the "total" column reflecting how much more or less frequently respondents reported that each component of a quality ELO was integrated into a group ELO, as compared to an individual ELO. The data are strikingly consistent, with group ELOs less likely to include each of the four components as reported by all three respondent groups. Several of these observations are statistically significant, in spite of small teacher and community partner survey N sizes. Interview data generally confirmed these findings. This finding may be particularly important, given that group projects increased from 46% to 59% of all ELO activity from the 2008-2009 to the 2009-2010 school year.

Students (N = 90)	Individual ELO	Group ELO	Total
Made a presentation or performance	86%	76%	-11%**
Engaged in reflective exercise	81%	66%	-14%**
Developed a work product	77%	63%	-13%**
Conducted topic research	46%	32%	-14%**
Teachers (N = 226)			
Made a presentation or performance	96%	92%	-4%
Engaged in reflective exercise	98%	92%	-6%
Developed a work product	96%	87%	-10%*
Conducted topic research	62%	54%	-8%
Community Partners (N = 60)			
Made a presentation or performance	88%	67%	-21%**
Engaged in reflective exercise	86%	72%	-14%
Developed a work product	81%	67%	-14%
Conducted topic research	57%	50%	-7%

** Finding is statistically significant p < .05 * Finding is statistically significant p < .10

3. Surveys suggest that ELOs are marked by high expectations, rigor, and relevant learning. The need remains to further establish and maintain universally high standards for ELO quality and rigor.

At the inception of the ELO Initiative, proponents were faced with the task of convincing sometimes skeptical faculty and community members that ELOs would offer rigorous, high-quality educational experiences on par with those found in traditional classrooms. Student and teacher survey data offer promising indications, suggesting that: ELOs usually display high expectations for student work; rigor may rival or exceed what is found in a typical classroom, and ELOs are highly relevant to student goals.

As displayed in Exhibit 24, 92% of surveyed students agreed (strongly or somewhat) that their ELO teacher set high expectations for their work, with numbers very consistent across schools. Similarly, 88% of students reported that their community partner held high expectations for their work (not displayed). Reflecting on the expectations they held for the students they worked with, 100% of teachers and 88% of community partners felt they had established high expectations for the student with whom they worked.

Did Your Teacher Hold High Expectations for Your Work by School 100% 75% 37% 50% 62% 59% 60% 58% 53% 25% All Pilot Schools Franklin Laconia Manchester Newfound strongly agree somewhat agree

Exhibit 24

The ELO Student Survey also queried students regarding the work effort associated with ELOs as compared to a typical class in the same subject area. As presented in Exhibit 25, students most often (46%) reported that their ELO required about the same amount of work as a typical class, with similar proportions feeling they required either more (32%) or less (24%) work. Distributions did vary by school, with Laconia and Manchester students most likely to feel their ELO required more work than a typical class. In keeping with these results, personal interviews and ELO observations suggested that the relative difficulty of ELOs has varied from project to project within all four schools, but that most projects fell into a middle zone of difficulty.

Exhibit 26 features teacher responses to a similar question. Overall, 83% agreed that the most recent ELO they oversaw required more work on the part of the student than a typical class in the same subject area, with this sentiment unanimous among surveyed teachers from Franklin and lowest among staff of Manchester (71%). Again, survey results notwithstanding, interviews and observations revealed an apparent range in the work effort required to complete ELOs within each of the four schools.

Exhibit 26

Exhibit 27 and Exhibit 28 show responses to two similar questions posed through two different teacher surveys. The first presents the findings of the ELO Teacher Survey, administered to teachers who had overseen an ELO. These data suggest that 92% of teachers believed the ELO they worked with was a rigorous learning experience. The second of these exhibits shows responses to a survey of all faculty and administrators at each of the pilot schools and asks them to reflect on ELOs based on their varied exposure to them. Overall, 78% of respondents viewed ELOs as offering a consistently rigorous learning experience.

Exhibit 28

There are some interesting questions underlying teacher reports of rigor. Interviews and observations revealed a subset of ELOs that might commonly be considered to be of unusually high or low rigor. Among them, the most challenging were typically undertaken by high-achieving students. Although low-rigor ELOs were not exclusively associated with low-achieving students, it is notable that some educators expressed their belief that ELO (and traditional course) rigor should be matched to the ability levels of individual students. While it is unknown whether these same individuals were surveyed, this nonetheless raises important questions of whether assessments of ELO work effort or rigor reflect flexible standards—which may be inconsistent with the goals of the Initiative.

Finally, Exhibit 29 relates student perceptions of the relevance of their ELO project to their personal goals as compared to a typical class. Overall, 93% agreed that their ELO was of greater relevance to their goals than a typical class would be, with 63% in the "strongly agree" category. Interview results provide validation for this finding, with both individual and group ELOs connecting in very direct ways with student interests.

VII. ELO Initiative Outcomes

While primarily focused on formative questions, the ELO evaluation also sought to ascertain the Initiative's effectiveness in generating benefits to participating students, teachers, and pilot schools. Given that the Initiative was being piloted during the course of the NMEF grant, and as such is in a relatively early phase of implementation, the evaluation focuses largely on short-term (immediate) outcomes. This section highlights the preliminary outcomes of the ELO Initiative at the individual—for students, teachers, and community partners— and school level. These impacts were identified through an analysis of extensive survey and interview data, and offer very positive indications regarding the impact of ELOs.

It is important to note that privacy regulations limited the specificity of individual-level data made available to the research team, and restricted researchers' ability to connect ELO or student characteristics to specific student-level academic or social outcomes. As a result, the effects of the ELO experience for students are identified in broad terms, relying primarily on self-report survey data from students and teachers. As ELO implementation reaches maturity, future allowances for outcomes research that can integrate ELO project and student characteristics will be essential to understanding how these projects can best be leveraged to positively impact student learning and engagement.

A. Student Outcomes

1. Most students believe that they learned more through their ELO project than they would have through a typical class in the same subject area.

Among the questions of interest related to ELOs is whether they offer rigorous learning experiences, particularly as compared to the traditional classroom. The ELO Student Survey queried students regarding the learning resulting from their ELO experience, asking them to compare it to that of a typical class in the same subject area. As presented in Exhibit 30, more than 94% of students believed that they learned more through the ELO than they would have through a typical class in the same subject area. Overall 60% strongly agreed with this statement, with 35% somewhat in agreement. Findings varied somewhat, but were strong across the four pilot schools.

2. Results suggest positive effects, particularly in relation to students' awareness of skills they will need for the future, self-confidence, work readiness, and clarity about interests and goals. Students with moderate- and high-baseline ratings reported more positive outcomes than low-baseline students.

The ELO student surveys each included nine measures of the impact of ELOs on student interests, knowledge, and attitude. Students were asked the extent to which they believed they had changed as a result of the ELO in relation to each of these measures. Response options included: "greatly," "moderately," "slightly," and "no change." As displayed in Exhibit 31, over 50% of students believed that they had improved or increased their skills either greatly or moderately in relation to each of these measures as a result of their ELO experience. The areas of greatest reported impact included students': understanding of the skills needed for the future (70%), level of confidence (68%), readiness for work (67%), and clarity about their interests and goals (66%).

Exhibit 31

Measures of Impact	Students (N=226)
	Increased/Improved "greatly" or "moderately"
Understanding necessary future skills	70%
Level of confidence	68%
Readiness for work in the real world	67%
Clarity about career interests and goals	66%
Readiness for college	64%
Attitude toward learning	62%
Desire to stay in school	61%
Interest in attending college	59%
Academic performance	57%

Through a separate group of questions, students were asked to provide a baseline assessment of where they stood in relation to these measures prior to their ELO. These rankings enabled analysis of the impact of the ELO on students who began with different baselines (high, medium, and low) on each measure. With students sorted into

these baseline subgroups, mean change scores could be used to see how students' baseline status might influence changes in reported student interests, knowledge, and attitude in relation to each measure.

When comparing reported impact by baseline group, student ratings suggest that the greatest positive changes were achieved by the high-baseline group on six of the nine dimensions, most commonly followed closely by the moderate baseline group. In terms of overall positive change, the high-baseline and moderate-baseline students reported mean changes¹⁷ that fell between "slight" and "moderate," while low-baseline students typically reported positive impacts that fell just below the "slight change" threshold.¹⁸

So, while students in each of the three baseline subgroups reported positive changes on each of the nine measures, the low-baseline group appears to have been the most difficult to advance, based on student survey data. This is consistent with teacher interview findings, which often suggested that academically struggling or disengaged students require more intensive and varied forms of support to complete and fully benefit from their ELOs. In many cases, extensive supports (e.g., wrap-around services) are simply not available. This finding may suggest the need for a more robust model of support for high-risk students.

3. All-Faculty Web Survey results indicate that ELOs are widely perceived to have a positive impact on students' academic interest.

An All-Faculty Web Survey was administered in January 2011 at each of the pilot schools. This brief instrument offered all educators, including those who had not previously overseen an ELO, a chance to weigh in with regard to ELOs in their school. As displayed in Exhibit 32, this broad sampling of faculty shows substantial agreement (87%) that ELOs lead to increased academic interest on the part of students, with 38% who strongly agree and another 49% who somewhat agree. Notably, results vary widely across schools, with ratings lowest at the largest of the four institutions (Manchester). These findings suggest a widespread perception at most schools that ELOs can have at least some beneficial impact on students' academic interest.

Exhibit 32

¹⁷ Mean change was calculated by assigning values from 0 (no change) to 3 (improved/increased greatly) to student responses.

¹⁸ ANOVA tests confirmed that the difference between the low and high groups in terms of overall weighted means was statistically significant at p < .001.

4. ELOs were successful in imparting new knowledge and skills. Both students and teachers highlighted the relevance of real-world ELO experiences, as well as the new knowledge and transferable skills ELOs imparted to students.

The ELO Student, Teacher, and Community Partner Surveys also posed questions regarding new knowledge, skills, or experiences that might have been gained through each ELO. Results show that over 90% of teachers and community partners believed students became deeply knowledgeable about a specific topic area and learned new skills through their ELO, and that students were able to explain what they learned through the experience.

Students concurred, emphasizing the real-world nature and authenticity of the ELO experience and reporting that they used new skills or knowledge in the real world (94%), pursued something of personal interest (91%), and learned by studying or doing something in the real world (91%). These findings are important given that intrinsic motivation for learning is often associated with tasks that appear to offer a relevant or realistic approach to learning. In terms of application of acquired knowledge and skills, 90% or more of students, teachers, and community partners indicated that students solved a problem using the new knowledge and new skills, demonstrated what they could do, and defended their own conclusions.

Students' open-ended responses to the question concerning effects of the ELO experience highlighted that both content-specific skills, and verbal and written communication skills, were acquired through ELOs. In interviews with school leaders and teachers, it became apparent that faculty shared a similar view, elaborating that while ELOs satisfy students' intellectual interest, they also provide an opportunity to teach transferable skills such as working in a team, time and project management, self-awareness, and self-management. While these may be difficult lessons for some students, they are important lessons, nonetheless. Overall, students, school leaders, and teachers relayed a general impression that ELOs successfully imparted both content-specific and cross-cutting skills to students, with teachers and school leaders noting that this was particularly true of high-achievers.

B. Teacher and Community Partner Outcomes

1. Teachers report positive outcomes stemming from their participation in ELOs, including more personalized relationships with students and improved use of competency-based assessment.

The ELO Teacher Survey asked respondents how their involvement in ELOs affected them as teachers. Of the 61 (of 90) who offered a response, 84% indicated that it affected them positively. The two most commonly cited benefits included better and more personalized relationships with students, and improvements in specific aspects of their teaching practice, most commonly related to the use of competencies, varied assessments, and an improved ability to tailor instruction to students' diverse learning styles.

Improvements in teachers' knowledge and understanding of how to implement competency based assessment was also discussed extensively during the Fall 2009 site visit interview process, during which school leaders and teachers commented that individual and school-wide capacity to implement competency-based assessment was accelerated through ELO-related training, technical assistance, and experience. In keeping with the theme of improved teacher-student relationships, All-Faculty Web Survey results (Exhibit 33) reveal that a wide majority of faculty agree that ELOs help to strengthen teacher-student relationships. Overall, 94% of all faculty agreed, with response split evenly between the "strongly", and "somewhat agree" categories.

2. Community partners offer a positive view of ELOs and their effects on their organizations. ELOs led to mentoring relationships with students, and were rewarding to both the individual and organization.

The positive impacts of the ELO Initiative extend to community partners. Overall, surveys and interviews suggest that community partners consider their ELOs to have been a positive experience, with 88% reporting they were satisfied with the ELO experience, and 98% indicating that their organization would consider leading another ELO. In total, 97% of respondents agreed that they found the experience personally rewarding and 89% believed they had established a mentoring relationship with the student they supported. Benefits appear to have extended beyond the individual, with 87% believing the experience had benefitted their organization.

C. School-Level Outcomes

1. Findings suggest that ELOs can bring rigor, as well as credit potential, to existing after-school clubs, established programs, and course offerings.

As noted in previous evaluation reports, ELOs have potential to lead to improved quality and rigor among schools' pre-existing programs—such as clubs, summer programs, internships, and independent studies. This occurs as previously unregulated activities fall under the guidelines of ELOs, which present clearer and more detailed standards for process, student learning, and assessment. Interviews revealed that a number of clubs and programs were leveraged into the Initiative at all four schools, with positive results.

For example, one school completely overhauled its "Bridge Academy" freshman orientation program to bring it into alignment with ELO standards, resulting in what was described as a more detailed and focused program curriculum, with clearer roles for community partners. This same school also transformed its independent studies program, including use of the four components of a quality ELO (reflection, research, product, and presentation) as part of the program for all students taking such courses.

District and school leaders from another school indicated that while internships offered contact and exposure to real-world work settings prior to the ELO Initiative, the Initiative increased the rigor of internships through the

specification of defined learning goals for students, emphasis on specific assessment components, and the demonstration of learning. Based on observations of school clubs and student interviews (e.g. Robotics, Anime, the Entrepreneurial Launch Program) it became evident that club programs were integrating practices that were true to the spirit of ELOs, while connecting students' interests to what were now credit-bearing learning opportunities outside the classroom.

At least one school is planning to take the credit-bearing potential for clubs one step further. This school has interest in developing a "debate club" that would allow students to pursue core credit in either U.S. history or economics. While this club was still in the planning stages at the end of the grant period, the fact that such possibilities are being considered may represent a shift in teachers' thinking about the paradigms of teaching and learning—a shift that may continue to transform the school experience for students by offering innovative, credit-bearing opportunities for learning.

2. ELOs expand schools' existing course offerings, and give new voice to teachers and students as they explore themes that extend beyond the traditional school curriculum.

An important outcome of the ELO Initiative, as described in interviews with both the pilot and network sites, was the fact that teachers and students were able to expand the scope of their schools' curriculum through the use of ELOs. This was viewed as a particularly valuable outcome by administrators in small districts that have limited and/or declining course offerings due to small base student populations, declining enrollment and class sizes, and both past and impending budget cuts. In this way, ELOs allow for small schools, in particular, to provide students with a greater diversity of learning opportunities.

Two specific benefits were noted with respect to ELOs in this regard. First, ELOs gave students and teachers more voice in their schools' programming, allowing for learning opportunities that would, by virtue of their point of origin, connect to student and teacher interest.

Second, this expanded curriculum, which sometimes took the form of summer enrichment-based activities, was rendered affordable to all students, increasing access to expanded programming for those students from low-income households.

3. The ELO Initiative was successful in building credibility and establishing momentum for ELO adoption, both within the pilot and network schools, as well as regionally.

Over the course of the evaluation, it became clear that the ELO Initiative had accomplished the important goal of establishing credibility and momentum for the adoption of ELOs within the pilot schools. The four pilot schools were successful in their efforts to develop and implement hundreds of student ELOs and All-Faculty Web Survey data show that faculty awareness of, and participation in, ELOs is high within all four pilot schools, with 48% of surveyed teachers reporting that they had some active involvement in an ELO. A similar proportion of teachers reported that they were either familiar with or had the chance to observe an ELO.¹⁹

Beyond the pilot schools, the Initiative built momentum across a broader network of schools, throughout the state of New Hampshire and in the New England region, raising the profile of, and interest in, implementation of student ELOs significantly. Through the Initiative, experience, processes, tools, and an active ELO network have been developed, with ELO All-Site meetings and annual ELO Summer Institutes serving as a hub for sharing methods and experience. These vehicles have engaged a large number of schools, five of which became formal ELO network schools and others of which may be actively considering how ELOs would fit in their local context, with the assurance that models for implementation can now be directly observed. Outside New Hampshire, states such as Rhode Island have launched ELO pilot programs of their own, working with NMEF to determine what role ELOs can play in some of that state's most challenging urban high schools.

In an education reform context that seems to spawn an almost endless array of external solutions to meeting the diverse needs of all learners, New Hampshire seems to have developed an initiative that is proving itself from the ground level up, with student, school, and community partner experiences that are increasing interest, both locally and nationally, in ELOs.

¹⁹ Only a very small percentage of teacher respondents indicated that they were unfamiliar with ELOs. When looking at these data by school, percentages of teachers who had actively participated in an ELO ranged from 38% at Manchester to 60% at Laconia. Slightly fewer than half of teachers at Franklin and Newfound reported active involvement in an ELO. It is important to note that while Manchester had the lowest percentage of teachers indicating that they had been actively involved in ELOs, this largest of the four schools ranks second to Laconia in terms of active involvement when comparing absolute numbers.

4. ELO implementation has catalyzed school action with regard to defining course competencies and competency-based assessment practices. In one school in particular, core aspects of ELOs are in fact being integrated at the classroom and school level.

There is evidence to suggest that the ELO Initiative has catalyzed high school redesign through technical assistance and support that has helped pilot and network schools to focus on and refine course competencies and make strides in the development of more effective assessment practices. Interviews with pilot site coordinators, school and district administrators, and NH DOE partners, suggest that the Initiative has, to varying degrees, increased capacity at the school level to implement competency-based assessment systems, as described in *Section V. ELO Assessment.* That such progress has been achieved in schools that may not have been progressing in their use of competencies prior to the Initiative is promising, especially as one considers the possible value of ELOs as a lever for high school redesign throughout the state.

Newfound has seized the opportunity for high school redesign by integrating aspects of ELOs at the classroom level. For instance, this school is currently working on supporting teachers in applying inquiry-based teaching strategies and backward design in their classrooms. That is, teachers are encouraged to look at their teaching and assessment practices, and to personalize the learning experience by tailoring instruction in response to students' different learning styles, using different summative assessment to see if students are understanding competencies. At the school level, Newfound also described an eventual plan (as part of the Innovation Grant) requiring students to complete five performance assessments by graduation.

School and district leaders at Laconia also indicated that the ELO Initiative helped developed the capacity to do competency-based assessment and to look for alternative ways to measure learning. Changes at this school over the last year of the grant include a better-developed understanding and definition of what is meant by formative and summative assessment, which is being applied outside the context of ELOs. For example, the school has instituted school-wide writing expectations and rubrics to be used for grading. Laconia is also working on promoting reassessment opportunities with every summative assessment at the school level. As related through interviews, these changes were made possible through the ELO pilot.

VIII. ELO Sustainability and Scale-up: Lessons Learned

The ELO Initiative is central to New Hampshire's vision for high school redesign and the advancement of multiple education pathways as a means of improving learning outcomes for students. Given NH DOE's enduring commitment to ELOs as a means to redefine the high school learning experience to the benefit of *all* students, preparing for their sustainability and statewide scale-up was an explicit goal of the Initiative.

Like many grant-funded projects, the ELO Initiative received funding to support the implementation of ELOs for a specified number of years (three), with limited funds allocated to support ongoing statewide scale-up activities in a fourth "sunset" year. In this context, and given the centrality of ELOs to New Hampshire's vision of high school redesign, sustainability and scale-up are of paramount concern. This concern was addressed through a deliberate emphasis on sustainability planning (e.g., pilot schools were asked to produce sustainability plans as part of their memorandum of understanding for Year 3) and through assistance to schools as they refined and prepared to implement their respective plans for sustainability.

Sustainability is a critical component of the life cycle of any educational initiative or program and should be attended to for many reasons. In the context of NH ELO, these include:

- a. Following significant "start-up" investments in the development of new tools, structures, and expertise, pilot initiatives are often ended just as they become well-positioned to leverage those investments;
- b. School redesign requires tremendous energy. Support and trust can be compromised when there is a history of discontinued initiatives that were abruptly or inappropriately terminated; and
- c. Discontinuation is counterproductive when an initiative demonstrates substantial promise to meet persistent student needs (e.g. the need for more personalized, rigorous learning experiences).

Given the importance of sustainability and NH DOE's strategic decision to scale up ELO implementation throughout the state, it is fitting that this concluding section explores the key research question "*What are the lessons learned with regard to sustainability and scale-up?*" The approach in this section is first to confirm that there is support among ELO pilot and network schools for continued implementation of ELOs, and then to identify crucial lessons learned that may have bearing on ongoing implementation at the pilot and network sites, and on the expansion of ELOs to other schools.

1. The desire to sustain ELOs exists and is relatively strong among all stakeholder groups, but there is concern that key structures to support ELO sustainability may be lost absent NMEF funding.

Overwhelmingly, survey and interview data show that there is a desire to continue with the implementation of ELOs across a wide array of stakeholder groups. The All-Faculty Web Survey offered all ELO pilot school educators, including those who had not previously overseen an ELO, an opportunity to weigh in on the question of whether ELOs have shown value and should be continued in their schools. As displayed in Exhibit 34, a vast majority of faculty (92%) agreed that ELOs should indeed be sustained, with 55% indicating strong agreement. As one respondent noted, "Taking a risk beyond the traditional classroom has been of value and has helped [me] reassess what the high school diploma looks like." The sentiment that ELOs serve as an important alternate pathway for teaching and learning was commonly and consistently expressed at each of the participating schools over the course of the evaluation.

It is perhaps interesting to note that faculty of Newfound Regional High School were least positive in their overall level of agreement with this statement, as that school has taken what are widely considered the strongest steps of

the towards deep integration of ELOs and related concepts into school wide practice. Franklin showed the lowest proportion of staff in strong agreement (19%), as compared with Laconia (46%) and Manchester (43%).

Exhibit 34

During interviews and focus groups, school leaders and ELO coordinators from ELO pilot and network schools alike voiced their commitment to maintaining ELOs, and highlighted the value of ELOs in terms of specific observable school- and student-level outcomes, including:

- the expansion of the curriculum;
- the introduction of more rigorous standards to extant school offerings;
- the bolstering of competency-based teaching and assessment practices;
- the tailoring of learning opportunities to meet student interests and needs; and
- student engagement in their own learning and increased confidence among participating students.

These outcomes were consistently reported as some of the most valuable aspects of the ELO Initiative.

While school leaders and ELO coordinators were highly invested in ELOs, they also shared some concerns—to varying degrees—regarding their ability to sustain ELOs given the current economic challenges facing their respective districts. While all leaders and coordinators were optimistic for the future, many acknowledged that they had concerns about maintaining momentum post NMEF funding. One school leader framed this concern from a policy perspective and remarked that the ELO Initiative, similar to many other educational initiatives and programs, is one that is characterized by short-term support for long-term goals.

Finally, students and community partners who had participated in ELOs commonly reported that ELOs are valuable experiences that should be continued. Students emphasized the value of ELOs in terms of the possibilities for learning new knowledge and skills, often highlighting a new found confidence in their ability to produce something meaningful and of value, and to present their work to others. Through ELO observation, researchers were able to directly observe students' enthusiasm for ELOs, and the pride in ownership of their work. Community partners spoke of the value of ELOs in terms of the potential for student growth being afforded outside the traditional classroom and their involvement in that process, and the benefits they and their organizations believe they gained through participating in a student ELO.

2. Key lessons offer perspective on factors that will influence sustainability and facilitate successful scale-up of ELOs in districts throughout New Hampshire.

Several lessons emerge from this evaluation, which may serve to inform districts and schools as they seek to implement and maintain high quality ELO programming. These considerations are identified below.

a) The role of the ELO coordinator as recruiter, facilitator, trainer, and champion is critical to the development and implementation of high quality ELOs.

As previously described, ELOs require a point person to identify, recruit, and facilitate linkages between potential ELO participants, and to provide ongoing logistical support to teachers, community partners, and students alike. The presence of a qualified person who is responsible for job-embedded ELO related training is particularly important to teachers given that ELOs require them to develop new knowledge and skills, such as the use of competencies in course design and assessment, understanding of the four core components of a quality ELO (i.e. research, reflection, product, presentation), and the shift in teacher role to facilitation of the student learning process.

Additionally, coordinators serve as de facto ELO champions within their schools, working closely with school and district leadership to ensure that the resources and infrastructure required to support ELO implementation are developed and maintained.

b) Schools need to create opportunities and structures that support teachers' ongoing work and collaboration with students as they perform their ELOs.

ELO projects take place outside of the traditional classroom, but all four pilot schools' experiences point to the need for time during the school day to accommodate teacher engagement in ELO-related tasks. This need intensified as schools phased out teacher stipends, which at three schools served as an inducement for teachers to complete ELO-related tasks on their own personal time. Time during the school day is particularly beneficial to teacher-student communication regarding ELOs. Effective communication is essential to ELO planning, implementation, and assessment. Similarly, time is needed for ELO-related administrative meetings and training.

Each of the four schools crafted its own strategy to address the need for in-school ELO planning and training time:

- Laconia added an "ELO period" to its schedule, allowing one teacher from each of four core subject areas time for ELO-related work. The teachers available through this schedule rotate each semester.
- Franklin expanded the role of ELO coordinator to include some aspects of ELO project oversight, reducing the time burden on teachers. Teachers maintain a strong role in planning and assessment.
- Newfound considered stipends unsustainable from the start, instead integrating ELOs in to their broader redesign strategy, encouraging teacher participation as a matter of practice.
- Manchester, which had made scant use of group ELOs in the first two years of the Initiative, expanded their use substantially over time, adding new projects but also leveraging existing club structures to create efficiencies. This strategy is also evident at other schools.

c) Districts and schools can significantly enhance their prospects for a successful launch of ELOs if they establish conditions that serve as a foundation for their implementation.

ELOs seek to promote the acquisition of knowledge and skills through instruction or study outside of the traditional classroom methodology, and as such, emphasize a relatively innovative approach to teaching, redefining teacher roles, methods, and assessment practices. To support this significant shift, certain conditions should be in place. A list of foundation conditions for ELO success might include:

- approved local district policies authorizing and articulating the parameters governing ELOs;
- validated competencies for courses whose requirements may be met through an ELO;
- committed district and school leadership, as well as a core of teachers willing to "pioneer" ELOs;
- an ELO coordinator who is well networked and/or positioned to collaborate with school faculty and with community organizations;
- engagement with established NH DOE ELO network resources, to ensure ELO implementation is not pursued in isolation;
- awareness of "best current practice" models for ELO planning, implementation and assessment, such as those developed through the Initiative and implemented by the four ELO pilot schools; and
- willingness to invest in teacher professional development related to the use of course competencies, competency-based assessment, and strategies for facilitation of learning.

Most schools are unlikely to have established all of these conditions prior to their implementation of ELOs. Discussing this point, ELO coordinators advised schools not necessarily to wait until all conditions are in place, but to at least have clear strategies for establishing them over time.

d) Acknowledging imbalances in the availability of community partner resources to rural districts, flexibility, external support, and continuing innovation may be required to ensure access to ELOs.

As experienced by Franklin and Newfound, schools located in some of New Hampshire's more rural settings may find that the quantity and range of potential community partners is limited, making the identification of needed expertise or facilities for any given ELO, in this context, a challenge. As such, flexibility in relation to the role and presence of community partners in student ELOs may be required. This flexibility was afforded to the ELO pilot schools and enabled them to offer ELOs in which schoolbased staff served as community partners. In other instances, somewhat distant community partners provided resources that contributed to an ELO, but had little or no direct interaction with the student, with a teacher or coordinator assuming an expanded role in the project. There is no evidence to suggest that such arrangements cannot provide a high quality ELO learning experience.

Support and innovation may come in a number of forms. Culling through ideas and initiatives described by interview respondents, one might expect that in rural communities, sole proprietorships or other microbusinesses may require assistance answering questions about insurance. Additionally, districts may want help identifying and forging partnerships with community partners located outside their local area, help creating web-based access to partners, or making arrangements to facilitate travel. Managed flexibility will be essential to channeling innovation in appropriate directions.

e) New Hampshire's varied community profile and deeply rooted "home rule" tradition require flexibility in the implementation of ELOs. Flexibility serves a beneficial role, enabling innovation, provided that the core goals and rigor of ELO learning experiences are maintained.

Working within the broad and flexible state policy governing ELOs, it is important for districts and schools to specify what types of ELOs would be permissible given their respective local contexts. Studies have shown that programs that are modifiable at the local level are more likely to be sustained. Empirical studies have also demonstrated that there is a need to engage in thoughtful changes to those program components that are modifiable, without destroying the core components contributing the effectiveness of the original design (Scheirer, 2005). This would certainly be true in the context of the ELO Initiative.

That is, flexibility with regard to ELO implementation (and related types of ELO learning experiences) should be maintained so long as a focus on the goal of promoting high quality, highly personalized, competency-based learning experiences for students is not compromised. There is an inherent tension between the need for standards and for innovation in educational practice. For this reason, the use of much-needed flexibility in program implementation should be monitored at the district level, with successful innovations identified and shared at the state level, and ineffective practices discouraged.

f) **ELOs** should not be viewed as an educational option tailored exclusively to underserved or high achieving students, but promoted as a learning opportunity intended to benefit *all* students.

Leaders, ELO coordinators, and teachers from the four pilot schools strongly agreed that students of all levels of academic performance and engagement can benefit from ELO participation. The ELO Initiative, notwithstanding its emphasis on engaging underserved students, was not conceptualized as a program targeted to selected student groups, but as an almost infinite menu of learning experiences available to the benefit of *all* students. Some respondents felt that their school started with too much emphasis on one or another student subgroup (underserved learners or higher achieving students), with some negative consequence. For this reason and because ELOs are intended as an element of high school redesign, schools seeking to implement ELOs should have a balanced strategy to promote ELOs to *all* students.

g) There remains a need for ongoing documentation and tracking of ELO activity and characteristics, as well as for student-level outcomes research.

Effective tracking of ELO activity and characteristics may provide the essential information needed for both school and state level monitoring of ELOs. NH DOE is now taking important steps to integrate its ELO data into the state's broader data system. Data accessibility and quality may be expected to improve with this migration, as it is expected to better define data elements and rules for reporting, as well as be accompanied by guidance and data training to ensure accuracy of reporting.

With a complete, reliable, and up to date database of ELO activity at the state level, the opportunities for student-level outcomes research (linking student and ELO characteristics) will be tremendous. Assuming barriers to such data linkage can be resolved, results would inform the understanding of the longer-term outcomes associated with ELO participation, as well as offer insight into how various types of ELOs affect the outcomes of students of varying characteristics. This information would serve an important formative purpose and could also secure both political and financial support for continuation or expansion of ELOs as a route to credit in New Hampshire and beyond.

The aforementioned factors are critical considerations for ELO implementation, sustainability, and scale-up across the state of New Hampshire. At what remains an early juncture in the ELO Initiative, successful approaches to ELO implementation have begun to emerge. This being said, the pilot has not yielded a simple "turn key" model

for implementation, but four similar models, each defined at the local level in response to local values, opportunities, and constraints. And competency-based assessment, in particular, continues to be the area in which validated assessment rubrics and related staff development remain both under development and in greatest need.

With regard to sustainability in particular, the models for continuing ELO implementation post NMEF funding continue to evolve and are varied amongst the four pilot schools. While Newfound High School appears the site with the deepest integration of ELOs into ongoing high school redesign efforts, Franklin's sustainability model may have the least integrated approach. At this early stage in the sustainability phase of this pilot effort, no one approach is known to be more sustainable or more effective than another. For the time being, they remain simply as alternative models that continue to be implemented with great vigor and commitment by each school.

While questions remain unanswered with regard to the relative effectiveness of each of the four schools' approaches to implementation and sustainability, it is certain that this pilot initiative has created an increased base of experience with ELOs, and that this experience has been positive. The knowledge and experience gained through this pilot will be an invaluable resource *if* it is effectively shared with other districts seeking to improve student learning and engagement through ELOs. In sum, while the ELO pilot was instrumental both to establishing momentum for ELOs and demonstrating the value of ELOs, it was also crucial to beginning to develop "blueprints" that may serve other districts as they seek to adopt ELOs.

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Appendix A

Table 1. Total Number of Interviews by Role and School (Three Site Visits)

			Manchester		Total
Interviewee Role	Franklin	Laconia	Central	Newfound	Interviews
Superintendent	2	2	2	2	8
Principal	2	2	2	2	8
ELO Coordinator	3	6	5	3	17
Teachers	11	7	8	12	38
Students	8	18	11	30	67
Guidance Counselor	1	1	1	0	3
21 st Century Director/ Coordinator/Staff	1	1	1	3	6
Total	28	37	30	52	147

Table 2. Teacher, Student, and Community Partner Surveys (Fall 2009 and Summer/Fall 2010)

Teachers								
	Franklin	Laconia	Manchester	Newfound	All Schools			
Number of Completed Surveys	18	35	18	19	90			
Response Rate	75%	74%	64%	54%	67%			
	ę	Students						
	Franklin	Laconia	Manchester	Newfound	All Schools			
Number of Completed Surveys	57	75	48	46	226			
Response Rate	53%	85%	59%	34%	55%			
	Comm	unity Partners	i					
	Franklin	Laconia	Manchester	Newfound	All Schools			
Number of Completed Surveys	18	17	23	2	60			
Response Rate	56%	59%	74%	18%	58%			
	All Surve	ey Responden	ts					
	Franklin Laconia Manchester Newfound All Schools							
Number of Completed Surveys	93	127	89	67	376			
Response Rate	57%	77%	63%	37%	58%			

Table 2. All-Faculty Web Survey (December 2010 and January 2011) Survey Response Rates School						
	Franklin	Laconia	Manchester	Newfound	All Schools	
Number of Completed Surveys	35	81	74	38	228	
Response Rate	49%	74%	57%	78%	64%	

