Student Driven Learning
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GUIDING PRINCIPLES

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Each student has the opportunity to learn through flexible times and opportunities; the development of extended learning opportunities (ELO) begins with student passions and desires. Performance assessments are at the core of putting students at the center of their own learning. At the heart of this work are projects that are student-generated. The learning in and out of the classroom is collaborative in nature and includes regularly structured opportunities for reflection, feedback, and refinement. Moderation of student scores is the vehicle to insure that the deepest learning possible is occurring; a vehicle for demonstration of knowledge.

The learning is deeper, as students demonstrate mastery through a competency-based approach. Personalized exhibitions, portfolios, and other gateways require students to initiate, design, conduct, analyze, revise and present their work in multiple ways; there is common scoring for uncommon learning tasks.

ALLISON’S JOURNEY: A VISION FOR WHAT’S POSSIBLE
BY JOSH GOULD, SITE COORDINATOR, NOBLE HIGH SCHOOL

The night before the first day of freshman year, Allison lay awake fretting about fitting in, forming new friendships, defining a role on a soccer team, and auditioning for the fall musical. What she didn’t consider was just how different her educational experience at Noble (ME) High School would be.
On the first day of classes, her Earth science instructor asked a question: “Where do we get our water?” The teacher probed further by asking, “Is all water quality similar? Will we have enough quality water?” Ten minutes later Allison was collecting water samples from three sources: a local stream, a retention pond on the campus, and the water fountains located inside the school. She worked with three other students to conduct tests on the three samples before analyzing the data and drawing conclusions from their findings. The teacher brought the groups back together using a collaborative discussion protocol where each student was required to share part of their findings. Ten months later Allison prepared for her end of year Roundtable discussion. Before her parents, her math teacher, and two of her soccer teammates, Allison presented the story of her freshman year and answered three simple questions: 1) Who am I? 2) Where am I going? 3) How will I get there?

Little did Allison know that while the questions would become more rigorous, and the inquiry more sophisticated, the same experiences would manifest during her sophomore year. Her English, math, social studies, and biology teachers began the year by asking all 80 heterogeneously grouped students assigned to Sophomore Team 1: “What is community?” Within the first month of school she examined the essential question through the lens of each subject area. Her English class incorporated an analysis of community while reading George Orwell’s text Animal Farm, while her Social Studies class began analyzing the community envisioned during the writing of the United States Constitution. At her student led conference in June, she had a much better idea of who she was and where she was going. She spoke with passion about what strategies she would use during grade 11 and 12 to help prepare her for college.

At the start of junior year she was working with the Community Engagement Center at Noble to locate authentic learning opportunities related to her potential career interests. She worked with a local technician at a science laboratory and parlayed her job shadows into a summer internship. Real-world experiences gained during the summer served as a springboard for her senior project, which explored the relationship between pesticide use and a waning fish population in Maine’s lakes and rivers. Her exhibition, delivered to a panel of teachers, students, and experts earned her a designation of Accept with Distinction.

Allison had teachers who understood competencies and authentic, inquiry-based performance assessment. By the close of high school she, like many of her peers, had engaged in four end-of-year student-led conferences, delivered numerous presentations, and engaged in several inquiry-based research projects. Most fundamentally, she was allowed to define what she needed from school. As a result, Allison’s high school experience served the dual purpose of building critical 21st century skills and exposing her to enough real-world experiences that she left high school understanding how she could fit into a changing world.
THE STUDENT DRIVEN APPROACH

Student driven learning represents the deepest and most engaging kind of learning and is at the heart of personalized learning and teaching. Students bring their unique life experiences and interests into the learning environment. In most schools, where the emphasis is on covering content, those experiences and interests are seldom called upon. A student-driven learning environment begins with the development of trusting relationships and solid structures that allow all students the opportunity to plan and develop their own personalized pathways. Students take ownership and responsibility for what, how, and sometimes where they learn. It offers students the chance to make meaning and connect with the world through rigorous academic experiences – both in and out of school – in a way that builds on their interests as well as their learning needs.

At its best, student driven learning is authentic, open-ended, problem based, and requires application of skills with clear standards of mastery set in advance. It is thoughtful and reflective—requiring students to synthesize, analyze, and evaluate information toward the creation of new knowledge. This approach is not entirely new, but its efficacy has been fully validated over the past decade by cutting edge neuroscience. This large and growing body of research points to the importance of intrinsic motivation in learning. In other words, when a student is provided an opportunity to make choices about what they want to learn, they are more engaged in the learning experience. Greater engagement, in turn, leads to better learning outcomes. In a student-driven learning environment, students develop skills that will prepare them for the demands of a rapidly changing society: the capacity to integrate knowledge, to communicate clearly, to see the relationships and connections among phenomena, and to be responsive to new challenges and ever-changing conditions.
For over two decades the Center for Secondary School Redesign team has focused on creating personalized learning environments in high schools. This vision preceded the advent of both blended learning and competency based education as options to help secondary schools create the personalized culture that allows the goodness and genius of each and every student to thrive. As one of the early technical assistance providers focused on assisting existing schools to incorporate student driven learning as the central element to school change, CSSR, through the New England i3 Network, has provided intense support to existing high schools to made dramatic changes in their practices that have resulted in significant progress toward that goal.

The model for personalized learning and performance assessment used in the i3 New England Network is grounded in the Five Standards of Authentic Instruction: 1) Higher Order Thinking; 2) Depth of Knowledge; 3) Connectedness to the World Beyond the Classroom; 4) Substantive Conversation; and 5) Social Support for Student Achievement.[1] Connectedness to the world beyond the classroom provides authenticity and relevance to a student’s learning. When completed, the work provides meaning to students beyond complying with the teacher’s criteria for evaluation. Student-driven learning depends on the free exchange of substantive dialogue between students and adults, including through student choice in learning and student voice in school governance.

PERFORMANCE ASSESSMENT

We believe that performance assessments are at the core of putting students at the center of their own learning. Research and best practice show that when a student's mind is actively engaged in novel work requiring critical thinking and problem solving, they are more motivated to learn and they learn more effectively. Performance assessment provides an opportunity for a student to demonstrate their skills and knowledge by working on a task that is derived from authentic work, rather than a prescribed single answer. Students demonstrate their learning by:

- Designing and carrying out experiments
- Building a model
- Interpreting and analyzing content
- Designing and creating an interactive product
- Synthesizing large volumes of information for an authentic audience
- Proving an idea or concept is true or untrue
- Demonstrating understanding of different people or cultures through role play
- Connecting separate works or disciplines to each other

Typically, students are intrigued by the real world activities that many performance assessments parallel. Additionally, quality performance assessments typically have an audience that extends beyond the schoolhouse door. Parents and community members can see evidence of student learning, which often compels students to work harder because the work is not an isolated exercise, but something that has enduring value and can be shared with others.

Currently, the vast majority of data about student achievement comes in the form of standardized test scores and in-class exams. With a single percentage or letter grade, it is very difficult to determine what, precisely, a student may not understand. Quality performance assessments enable schools and teachers to get a far more detailed and nuanced account of what their students know and are able to do. With that information in hand, they can more easily support their students with targeted learning strategies.
An effective performance assessment:

- Drives students to engage in higher level thinking (Depth of Knowledge)
- Comes with clear indicators of competency or lack thereof
- Takes students beyond the basic expectation and challenges them to explore more deeply and make connections they may not have made before
- Allows students to evaluate their own performance (meta-cognition)
- Demonstrates competence in a novel situation or before a novel audience

Schools employing performance assessments must build structures to ensure the assessments are valid and reliable. At the New York Performance Standards Consortium, a moderation study allows the school to validate assessments and determine the level of reliability of teacher scoring. Taking the time to validate and calibrate assessments allows schools to clearly delineate student ability. During the 2014 Network Summer Institute representatives from all 13 schools partnered with coaches from C.S.S.R and the Performance Assessment Review (PAR) Board to engage in a moderation study of performance assessments brought forth by the Performance Assessment Work Group (PAWG). The experience was designed to introduce the concept of moderation to all 13 schools so that each school could build structures within their own school to ensure performance assessments are valid and reliable stories of student learning. A veteran teacher remarked that she learned more about student writing in one day of calibrating a written performance assessment than in any other professional endeavor.

PERSONALIZED PERFORMANCE ASSESSMENT

In a student-driven school, the standards are rigorous and students must demonstrate competency across many subject areas and skill categories. Learning is frequently measured through personalized performance assessments that allow students to master required content while pursuing an area of interest that motivates and engages them in their learning. For example, students can demonstrate their learning by: designing and creating an interactive product; proving an idea or concept true or untrue; designing and carrying out experiments; or synthesizing large volumes of information for an authentic audience. Personalized performance assessments differ from more traditional pen and paper assessments or standardized tests in that they connect with student interests in a way that makes learning more purposeful and authentic.
Performance assessments enable teachers and parents to get a far more detailed and nuanced account of what their students know and are able to do. With that information, they can more easily support their students with targeted learning strategies. Students often report that the work is much harder in a student-driven learning environment, but that it is also far more satisfying because there is greater flexibility in meeting the standards. Performance assessments in a student-driven learning environment provide evidence of student learning, which often compels students to work harder because the work is not an isolated exercise, but something that has enduring value and can be shared with others.

Student Driven Learning provides a vision of the possibilities for student engagement leading to deep learning by exploring the various ways that the i3 New England Network schools have implemented personalized performance assessment. However, implementing personalized performance assessments alone did not and most likely would not have resulted in the progress made here. To be sure, these improvements required a much broader effort than simply suggesting that personalized performance assessment could be transformative. Without support to develop inquiry teaching in each classroom, and the development of student agency in school governance, no progress would have been made.

In the following sections we describe examples of personalized performance assessments. Each school in the i3 New England Network interpreted this work differently based on their unique school settings. The components of the assessments are similar—requiring students to drive their own learning process by selecting an area of interest and building a learning experience that includes a proposal, a portfolio of work, a product, and a presentation. What made these practices part of the everyday learning environment in each of the schools was a deep and abiding belief system and culture that embraced student-driven learning.

EXTENDED LEARNING OPPORTUNITIES: NEW PATHWAYS TO GRADUATION
Many i3 New England Network schools offer Extended Learning Opportunities as one way of demonstrating mastery of required competencies (or earning course credit.) Extended Learning Opportunities (ELOs) are a form of self-directed learning in which students access learning experiences in a field of their choice outside of the traditional classroom.
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Students are supported by a school-based ‘advisor,’ and in many cases, students also have a mentor who is based in the community and embedded in their field of interest. These ‘anywhere, anytime’ learning experiences are uniquely rigorous, and can include apprenticeships, community service, independent study, online coursework, internships, job-shadowing, performance or private instruction.

Beginning in 2007, the New Hampshire Department of Education, with funding from the Nellie Mae Education Foundation, began developing four comprehensive ELO pilot sites. Since then, the state has been a leader in the development and articulation of ELO programming. The state recognizes four components of an ELO that result in the highest levels of academic and personal learning for students: 1) Research; 2) Reflection; 3) Product; and 4) Presentation. These four components allow multiple opportunities for both formative assessment – as the ELO is occurring, and summative assessment – in the culminating product and presentation. Most ELO programs have common rubrics for assessing the uncommon activities associated with the individual experiences.

Student ownership of the planning and execution of the learning experience are critical components of an ELO. Success is measured by the ability of the students to master competencies as they relate to the chosen field of study as evidenced through the presentation at the end of the experience. This process requires students to make a connection between the competencies and the activities that led to mastery. Metacognition through reflection is a complex process that deepens students’ understanding of the work and themselves.

ELOs are offered for as many reasons as there are interested students. Each student brings to the experience their own story, and ELOs add to those stories by shaping students’ learning pathways and future goals. Students in the i3 New England Network successfully completed numerous ELOS, including the following sampling: job shadowing at a physical therapy office; restoration of an antique tractor; learning sign language; interning at a local newspaper; serving as an assistant DJ for a local radio station; working with the police department’s forensic division; learning tae kwon do; and learning a musical instrument.

Because of this variability of ELOs, several common structures were critical to their success. First, each school designated an “owner” of the ELO program who provided oversight for the ongoing ELO projects—coordinating the diverse ELO placements in the community; ensuring that students were accounted for and safe while working outside of the school building; planning for professional development and compensation for teachers serving as ELO advisors; and so forth. Second, each school put in place a well-vetted process for assessing ELOs and validating scores including through the calibration of rubrics and reviewing artifacts of student work in professional learning communities. Third, schools shifted their schedules to accommodate students’ placements in ELO sites without comprising their other coursework.
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Finally, an intentional system of support was created so that students practiced important life skills that would serve them beyond high school. These four structures enabled adults and students to stretch and grow through an ongoing scaffolding process.

CALEBS STORY: INVESTED IN LEARNING AGAIN
Caleb was a very bright student, but typically was not very engaged in the traditional coursework offered at his school. After becoming very interested in an online college lecture series about the brain, Caleb decided to do an ELO on brain functioning. The ELO was modeled on an independent study in which he viewed the lecture series, summarized the lectures, and met with his advisor to discuss them. His midterm product was a Claymation (a video using clay models) that demonstrated how brain synapses work. His work was very detailed, and he became very adept at using the technology to produce the short film.

Later in the year, Caleb began using his computer skills to develop a multi-level video game. He was very engaged in the problem solving needed to figure out how the code he wrote translated to the game he was building. Typically a quiet kid, Caleb would talk at length about his latest technical dilemma. He advocated to earn his required computer credit by learning code and creating software.

Caleb often felt that the traditional classroom was a waste of his time. He was failing art because he found the selection of art projects in his introductory art class too limiting. At the end of the year, he completed a required presentation of his ELO to earn credit in biology and computer science—and used these two ELOs as demonstrations of competency for the introductory art class. Given the opportunity to demonstrate competency in his own way, he successfully earned credit in three content areas, while engaged in deep learning experiences driven by his own interests.

RICHARDS STORY: PAINTING A FOUNDATION FOR COLLEGE
Richard ran his own painting business, and with the support of his father he was able to establish a limited partnership. He oversaw all of the tasks involved in running a small business: he managed customers and employees; scheduled work; figured estimates; and wrote up working contracts. He was fully committed to his work, and determined that the painting business would support his college tuition and related expenses. Richard applied the concepts and vocabulary of economics to his work and earned economics course credit through this ELO experience. The credit was valuable, but the experience was invaluable. The ELO presentation turned out to be only the beginning of a lifelong journey that was sparked by a personal interest.
DAVIDS STORY: ENGINEERING IT
David, a senior at Pittsfield High School, who was interested in a career in engineering, approached a science teacher about developing a course called Engineering It. David co-designed the course, and taught many of the classes. Under the supervision of his teacher, David created lesson plans for the yearlong course that had students designing and building their own structures. David found the experience to be so rich and satisfying that he changed his post-secondary plans by applying to Keene State College to major in secondary education rather than engineering.

THE SENIOR PROJECT: A CAPSTONE EXPERIENCE
Senior Project is a capstone experience for high school seniors to demonstrate a diploma-worthy set of skills and abilities. Many i3 New England Network schools use Senior Project as a mechanism to drive students to engage in thoughtful inquiry, and to demonstrate their abilities before an authentic audience. Projects are linked to state standards, and frequently tied to competencies. On the eve of their graduation, students are called upon to hone their academic skills, such as reading informational text, writing, research and public speaking.

Senior Projects typically require students to complete a project proposal that defines the topic, states the essential question, and outlines the learning progression – including the final product and exhibition; create a portfolio including a research paper, as well as document correspondence with project mentors, reflections, and signed agreements; develop a product that demonstrates mastery of the topic – these vary widely depending on the scope of the project for example: a musical piece; hosting a fundraiser; or a prototype; and present a final exhibition in which students answer the essential question, reflect on their experiences – both good and good, and deliver a lecture in front of a juried panel. These projects enable students—as well as teachers, peers and others—to take ownership of a substantial piece of work, thereby signaling an important coming of age milestone.

High school seniors tend to be the most vociferous advocates of the Senior Project, often commenting that the experience prepared them well for post-secondary life, as expressed by these two students:
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"I found myself learning a lot more than just my topic though. It helped me learn how I work the best, allowed me to become more confident in public speaking and how to properly research, all of which I have found extremely helpful in college."

Noble High School graduate
Rebecca Cosgrove

“The senior project allows a student to explore at least one of the possibilities they see in their future, and they’re granted access to valuable resources like teachers who can provide research help, experts in the field, and real-world experiences. High school needs more of these kinds of projects, if anything.”

Noble High School graduate
Matt Wood
In a student driven learning environment, each student develops a Personal Learning Plan (PLP) as a formal structure for reflecting on his/her academic and personal development. The PLP contains evidence of learning progress, information about personal strengths and challenges, as well as goals and dreams. Each student is paired with an adviser, who helps guide them on their path to graduation. Given the often-fluctuating interests of adolescents, the PLP does not press the student into prematurely selecting a career path, but rather, makes the space for an ongoing conversation about a student’s cognitive, social, and emotional development. The PLP also enables parents and guardians to see inside a student’s high school experience and his/her thought processes related to future endeavors.

The PLP also becomes the centerpiece of the Student Led Conference (SLC) during which time a student shares his/her PLP with a small group that includes an advisor, parent(s), and additional trusted and invested individuals (coaches, pastors, school staff, friends, etc.) The SLC experience holds students accountable to the progress they make towards their short and long-term goals. Parent attendance at the SLC is dramatically greater than for traditional Parent Teacher Conferences, a testament to the authentic meaning of the experience. Parents often express joy and surprise at what their children are able to articulate about themselves, and students assume much greater ownership for their learning when they are genuinely held accountable to their community.

CONCLUSION
Student Driven Learning presents a vision for what is possible for student engagement and deeper learning. Schools in the i3 New England Network have been working towards transforming their existing schools into student-driven learning environments over the five years of the i3-funded period, and for many schools, even longer. The rich learning experiences presented in this guide were developed over the five-year period, with deep commitment to the other areas of focus.

A Culture of Inquiry encourages students and teachers to exercise and amplify their authentic voices, and to return to what comes so naturally to very young children: asking their own questions. Student Agency ensures that students have the opportunity to govern their school beyond token contribution, and to exercise their voice as part of the day-to-day running of the school. This looks different in each school because context is all-important, but the value of full student participation is consistent across every location.
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The Power of a Network allows schools to share challenges and support each other with peer mentoring and to receive outside professional support that validates their strengths, helps manage their challenges, and helps them grow as professionals. Shared Leadership [AF4] is necessary because of the frequent turnover of those in positions of authority and because those who exercise leadership—whether students, teachers, principals, superintendents, or others—are co-owners of the change process. This assures the long-term sustainability of the change efforts.

There is a vast array of potential entry points for creating a more student-driven school and classroom environment, but many seeds must be planted before lasting change can take root. For some schools, Personal Learning Plans and Student-Led Conferencing can be a first step toward putting students in the driver’s seat of their own learning. Other schools might explore the articulation of competencies and inquiry-based teaching. Still others may be ready to move toward demonstration of mastery through personalized performance assessment. The thirteen member schools in the i3 New England Network, representing a diverse group of educators and students, across a spectrum of readiness for transformation, were all able to make progress by confronting their beliefs about traditional student and teacher roles and taking important first steps into a journey of discovery.