#### INTRODUCTION:

#### All Learning is Personal

When I was teaching high school English, I began to see a distressing pattern in my seating chart; similar students seemed to cluster in the same sectors of the room, like neighborhoods in a very small city. The "Class Map." (Figure I.1) shows the general pattern. From my lonely vigil at the front, I could hear the socialites droning like bees in the center of the room. As much as I may have wanted to expunge their joyful chatter, the waving hands of a few overachievers in the front row usually prevented me from making much contact, almost as if the socialites had planned it that way. Over by the windows sat the poets, entranced by their private visions. Behind them, a huddle of dreamers gazed mournfully out the windows, traveling in their heads to foreign shores. A crew of cynics glowered from behind the socialites, perhaps hiding their math homework behind our huge literature textbook, which I tried not to notice. Outcasts scattered themselves in lonely isolation on the darker side of the room. I learned not to worry about the outcasts, who would probably not risk making a public display of their uneasy status. The escapists entered the room last, and left as soon as possible. I could barely see the underachievers slumped down in their seats -- out of view -- which was part of their plan, anyway. Leaning against the back wall, a squad of snipers lay waiting for the appearance of some laughable frailty. And the outlaws, well they didn't show up often enough to make a difference – except in short, often dramatic bursts. All learning is personal, and my students were personally distinctive.

These tiny neighborhoods offered their citizens protection – from other neighborhoods, and from me. Entrenched at their customary desks they faced the same assignments, took the same tests— and arranged themselves smoothly on the same grading scale, but they were wildly different people. Most high school classes, even in English, have been designed to convey a defined body of knowledge and an array of skills to all students at once, as if they were passive receptacles identical in their interests, talents and aspirations. What galvanizing challenge can any teacher cook up to engage them all at once?

# Fig I.1) CLASS MAP ABOUT HERE

Struggling to avoid shameful incidents, most of my students worked hard to open a gulf of impersonal distance between themselves and English literature – and me -- the same strategy they had adopted more generally to survive throughout a large, impersonal school. But, learning cannot be impersonal. It occurs through personal effort. It requires personal energy. We commit personal effort only to tasks we believe are important. Responding to a challenge we regard as personally important, we ask questions, gather information, acquire skills, envision good results, and try lots of tactics to get closer to results we desire. When we face a real challenge to our hopes and beliefs, learning helps reduce tension and promises some satisfaction. Learning engages our attention and even offers moments of personal joy. It is always purposeful. Since high school students are indeed unique unto themselves, broadcasting information across roomful of young faces produces uneven results. Students organize themselves into patterns that better support acquiescence rather than engagement. Learning requires action; high schools reward passivity.

## Standards without Standardization:

Moving all students through the same sequence of years, each about 180 days in length and through 4-9 class periods each day, we aim to engender uniformity in the results we achieve – high levels proficiency for all. But, we don't get uniform results, at least in test scores. Instead, we get a pattern of achievement that resembles the bell curve to an alarming degree. After 20 years of standardized reform, we have not changed the curve. If all the inputs have been similar, but we get a predictable pattern of achievement in the results, it may be that students decide whether they want to achieve at high levels – or not.. They are not at all uniform so they do not respond the same way. Each one is uniquely oriented to the pursuit of personal interests -- so they do. Tests ignore personal interests, and achievements that cannot be put on a comparative scale, one student against another.

Despite an enormous investment in testing since <u>A Nation at Risk</u> (1983), some students score high – because they have always scored high. Some students "hold down the tail" of the bell curve, and they have always scored at that level. A great bulge of students in the murky middle seems to defy our understanding. They respond idiosyncratically to tasks and tests. If you look at quiz scores -- or semester grade reports, or international TIMMS scores, SATs or statewide proficiency tests -- the same pattern persists -- high, middle and low. In the early Sixties, Benjamin Bloom showed that he could predict 12th grade subject area "mastery" in the 2d grade, with about 95% accuracy. Stated crudely, when we cast the same body-of-knowledge across a great, diverse pool of talent, interest and aspiration we get the same distribution of results and that distribution means that we have not succeeded in reaching all the kids. Test scores have shown over decades is that a standardized approach does not affect all students equally, no matter how long or hard we push. Apparently, test scores do not serve the purpose of helping students improve their performance.

# **Celebrating Diversity**

Over the millennia, our burgeoning species has accumulated an enormous range of capabilities that we may or may not need to meet a variety of challenges that could assail our culture over the long haul. Learning within a culture must be wide and broad enough to ensure that groups of us are ready for unforeseeable changes, both threats and opportunities. A wider array of uniquely accomplished individuals– including artists, mechanics, engineers, teagrowers, birders, bikers, and ball-players – can ensure that humanity can adapt to constant flux in the environment. Clearly, standardized tests of any kind are not designed to highlight the special talents and aspiration that unique individuals bring to the fluidity of social need. For a society to thrive, continuous adaptation is the key. Freezing all secondary schools into a single model restricts adaptive change and practically guarantees obsolescence. Demanding the same results for all students in a school restricts their growth as well.

We are fortunate in not producing graduates who with identical skills and knowledge, because our society could not employ that many engineers, auto mechanics, designers or marketing specialists. The health of the society depends on maintaining a steady flow of uniquely talented young people into an enormous array of career and life options that demand different kinds of educational preparation and experience – and which are changing much faster than our education system. Limiting the purpose of secondary schools to high math, science, social studies and English test scores –cannot generate the range of skills and knowledge we need to thrive as a society or as a species. Standardized testing simply masks the unique capabilities that we should actually recognize, develop and celebrate. Expecting uniform results among people who are simply not the same and who plan to remain distinctive guarantees their frustration and ours. As a species, we have to adapt to survive. But we have to learn,, one of us at a time, to convert individual interests, hopes and talents into distinctive strengths. Personalized high school learning allows those strengths to develop from within the local and global communities that need them.

Rather than seeking high test scores on a few scales, we would do better by teaching the skills of successful adaptation to ongoing change - gathering and organizing information, resolving complex problems, communicating, or creating novel products useful to ourselves and others – and working with others from a diverse population to improve our condition. Early civilizations, we hear in 9th grade world history courses, nurtured four social roles: farming to produce food for the group, soldiering to protect it, priesthood to predict and guide its future – with fatherhood and motherhood to produce the future. For most of human history educating the young for these roles occurred via "internship", hands-on practice with a skilled adult. Now we have innumerable roles to fill, with more appearing daily, and we are still treating students as if they preparing for the same future- and should aim to be the same. To succeed with all students, we need to start with the interests each one brings to school, and then direct some of their personal energy toward a few common goals, enabling all of them to work together to shape a culture we cannot even imagine from where we sit, caught in this brief moment between past and future. We have to learn, one of us at a time, to convert our individual interests, hopes and talents into distinctive strengths and commitments that serve ourselves and the communities where we live.

## **Personalized Learning**

"Personalized Learning is a blended approach to learning that combines the delivery of education both within and beyond the traditional classroom environment.

The Personalized Learning model fosters a collaborative partnership between the teacher, parent, student and school that designs a tailored learning program for each student according to the needs and interests of each individual student."

### Personalized Learning Foundation

Personalized learning is certainly not new to the educational scene. Individual education plans (IEPs) became the law for special education students decades ago, based on student needs identified through testing. Personalization is not the same as individualization. Personal learning requires the active direction of the student; individualization lets adults tailor the curriculum to scaled assessments of interest and abilities. The difference between individualization and personalization lies in control. We can individualize education by imposing it, but students choose to personalize their own learning. Their volition drives their inquiry. Personal Learning Plans (PLPs), unlike IEPs are based on individual strengths and directed by student choice. Personalized secondary schools use PLPs as an organizing framework that can then incorporate project-based learning, inquiry learning, collaborative learning, tutoring, advisories and writing to learn and other strategies that promote personal engagement. A personalized high school is accountable for building an coherent and effective process of support for personal inquiry; students are accountable for doing the work and producing results demonstrating their competency in a few crucial areas. The learning is personal but assessment is public Personalized learning lets us and our students seize opportunities for growth that fit both individual interests and trends in the flow of societal change.

Personalized learning is essentially active learning, organized so students learn to answer questions they see as important to their lives. Because students learn to gather information to solve problems they recognize in their own experience, personalized learning is often called "authentic", mirroring the processes adults use to solve problems at work, at home, or in community. Guided by skilled teachers, students look carefully at what they know, generate questions or set goals, gather more information, then use critical thinking skills to propose solutions and present new ideas to an audience of adults and peers. In all these activities, the student is the center of the action, winning praise and eliciting advice from the students, teachers, parents, and community members who witness demonstrations of competency. Personalized learning prepares students to dig deeply into information, so they become increasingly adept at managing their minds and their work.

Distinctive personal pathways emerge through the interaction of students, teachers, community mentors and, most prominently, advisors, who work to ensure learning remains

Flexible rather than rigid Dynamic rather than static Embedded rather than segregated Guided rather than directed Mediated rather than transmitted Distinctive rather than comparative Practical as well as abstract Organized around strengths rather than weaknesses

In personalized learning, the evidence of learning has to be valid to the audience of students, teachers, parents and community member who view it.

Personalized learning must be designed to be adaptive, flexing both to the variety of student interests and to needs and opportunities in the surrounding community. Personalized learning does not aim for a static level of achievement. Instead, it encourages continuous refinement of knowledge and skill as the individual student takes on challenges of increasing complexity. High school students do not find it easy to shift their effort from content acquisition to a self-correcting cycle of growth, but they can make the shift with the support of experienced adults and other students trying to learn the same process. They may come to school as a group, but learn to use their minds well "one kid at a time". (Littky, 2005)

In its current form, the Personalized Learning Department and Pathways serve multiple purposes:

+ Guide course selection and planning + clarify graduation requirements + Help students imagine their future + plan a path after high school + Connect families + student learning + prepare for college applications + Celebrate student achievement + explore adult roles + Connect each student with a caring adult + promote reflection and re-evaluation + Relate student learning to standards + improve learning skills + Explore non-curricular options + explore career choices + Support identity formation + demonstrate personal talents + Initiate lifelong learning + extend range of choice + Increase self-awareness + increase content acquisition + Emphasize applications of knowledge + legitimate non-school achievements + Focus on important ideas + establish "best work" portfolio

+ Challenge each student	+ engage students in inquiry
+ Link skills and knowledge to life	+ help students meet standards
+ Increase technological literacy	+ engage each student in learning
+ Improve communication skills	+ encourage reflection and adaptation
+ Teach problem solving	+ increase cooperation among students
+ Strengthen student/faculty relations	+ emphasize shared purpose
+ Reduce isolation and alienation	+ link content learning to application
+ Increase student motivation	+ reduce anonymity
Personalized learning has slowly grown to become an organizing principle for school-wide	

Personalized learning has slowly grown to become an organizing principle for school-wide transformation at Mount Abraham.

### **Designing and Redesigning Personal Pathways to Graduation**

Developing Pathways at Mount Abraham began when a design team of two teachers and two community members set out a basic framework for a pilot semester, which the current Pathways Team continues to design and refine. Quickly, ideas for redesign came from collaboration among students, teachers, advisors, administrators and members of the community working together "one kid at a time". By far, the most active collaborators have proven to be students and their advisors, who used their relationships to hammer out a detailed framework for personalized learning that creates reliable steps for a flexible process accommodating individual interests. Though the adults in the two Pathways rooms have been educated within specialties, they work as a team. Each knows all the students and all together they fashion a rich environment that make independent inquiry possible. As has become their custom, the team meets once a week to adjust their situation and talk about students who need more help, and to redesign parts of the process so all students succeed. The "Pathways Ladder" in Figure I.2 represents the basic structure of a semester as a student progresses toward graduation. Over four years, Pathways expanded to become a Personalized Learning Department and then a central focus of a whole-school transformation initiative.

### FIG I.2: PATHWAYS LADDER ABOUT HERE

Preparing students to pursue personal interests while meeting graduation standards became the purpose of Pathways, to help students design their own road to a diploma, clarifying their interests and gathering knowledge and applicable skills for the lives they begin to envision. As the program grew in the school, however, it raised a larger question, "What if all students learned to choose their way through their high school experience, not in one heroic stab, the way most college sophomores choose a major, but in incremental steps, year by year, semester by semester, week by week and day by day – with the guidance of caring adults? Pathways helped raise that question, and then open the question of personalization throughout the high school. "What if?" became, "Why not try?"

Pathways students work their way toward graduation by completing projects, rather than courses. The road to graduation is unique to each student, following a track that no one can predict at the onset, but which grows increasingly clear as the student completes projects and designs new ones. The program will not isolate students from their friends or community, but serve instead as a gateway to educational opportunities throughout this small rural community. Successful projects usually depend on a network of support that connect the family, school and local community to each student's learning path, thereby enhancing the student's ability to realize dreams and achieve goals in meaningful and relevant ways. But a personalized pathways also includes formal courses to build background knowledge and skills -at the school, in local colleges, at the county's vocational center, in specialized training programs or on the internet. The mix of classes and projects changes each semester, as students learn more about themselves and their futures. The assortment of personalized student projects at Pathways and the Personalized Learning Department have been pushing back the boundaries of what the community expects of its high school and its students and how it thinks about education.

Success in Pathways depends directly on student initiative and willingness to try new things, working in concert with the surrounding community of supportive adults. Rather than sitting in classes, they have to move actively toward their interests. Instead of relying on a common schedule. They schedule their own time. Pathways depends on personal learning plans, advisors, community mentors, project-based learning, internships, the Internet, standards-based portfolios, quarterly exhibitions of progress, and five essential learning goals organized so they meet Mt Abraham's Priority Learning Expectations. These props and guides are detailed in greater depth in the sections that follow.

Students who choose to direct their own learning need a coach; at Pathways this coach is called an Advisor. A Pathways advisor helps students to follow their interests by clarifying their questions, and helping them explore their interests in books, actively work on projects in the local area, access the internet and by interacting with experts in the community. Pathways students are responsible for gathering information related to their topic of interest and presenting it orally and in writing – in an exhibition and portfolio. Advisors focus on one student at a time and prepare each student to meet Graduation Standards in ways consistent with the directions they are taking. Most important, the advisor will help students find a place in the community where they can work or design an internship, with support from their parents, friends, high school teachers and many others. Students at Pathways are learning how to manage their time productively, assume responsibility for their own progress – and take themselves seriously as emerging adults.

Pathways team continues to design and refine. Quickly, ideas for redesign came from collaboration among students, teachers, advisors, administrators and members of the community working together around "one kid at a time". By far, the most active collaborators have proven to be students and their advisors, who used, and still use, their relationships to hammer out a coherent framework for personalized learning that creates defined steps for accommodating individual interests while demonstrating competency. Gradually students began to refer to their personalized curriculum as "rubber"- a flexible process for learning that would prepare each of them to develop their strengths, interests and aspirations as they moved toward graduation. To the group had begun the process of shaping a culture for their new program. The culture would congeal only when each student had a story to tell that would help shape the evolution of ideas. Though the adults in the two Pathways rooms have been educated within specialties, they work as a team of advisors. Each knows all the students and all together they fashion a rich environment that makes independent inquiry possible. As has become their custom, the team meets once a week to adjust their situation and talk about students who need more help.

An Enriched Context for Learning:

The Personalized Learning space at Mount Abraham has no desks. Without rows that put some kids behind others or cluster small groups of friends behind defensive bulwarks, students and their advisors spread themselves around two connected classrooms to complete the tasks that mark their personal pathways to graduation. No computers stand idle, as kids search for information or devise parts of their exhibitions. The telephones get a workout, particularly as a semester opens the door to new opportunities in the surrounding community. Advisors move from student to student, checking on progress or simply talking. Open tables create flexible surfaces for projects or small discussions, often led by students. Kids flop on the couch to take a break. Community mentors, special educators, parents, counselors and district administrators move easily in and out. A Smart-board waits, ready for practice presentations or the real thing. Students come and go as classes or community mentorships draw them out into larger realms. The room has been designed to support connections between people and information.

## FIGURE I.3: PATHWAYS CLASSROOM MAP ABOUT HERE

I do not believe personalized learning will replace classroom-based learning, nor do I think it should. Most students will choose formal classes as they pursue their unique purposes. Students interested in a field of study such as literature, history, or philosophy – where discussion may be essential to learning – might include many formal courses in their plans. Mathematics and science classes will remain prerequisites for some professional studies. At Pathways, you will see that all kinds of projects have provided learning experiences for young people. But Pathways and the Personalized Learning Department do not award credit for experience; they award credit for the products students create showing they have met standards in communication, critical thinking/problem solving, global citizenship, collaboration and personal development/independent learning. Knowledge has exploded in every academic field. Recognizing the ubiquity of accessible knowledge, is time high schools prepared students to manage information to direct their own lives and improve life in their communities.