Invested in Inquiry

John H. Clarke

Through a personalized program in this rural high school, students develop their own curriculum.

During the past two years, students in the Pathways program at Mount Abraham Union Middle/High School in Bristol, Vermont, have pursued a wide-ranging curriculum, including automotive repair, rock-band management, boat building, and artificial intelligence. One 8th grade student is developing a new hog-raising operation on his family's failed dairy farm. A 9th grader expanded his interest in metalwork into a small-scale blacksmithing business. An 11th grader compared surrealist, cubist, and Dadaist art through essays and illustrations that showed understanding of each style.

Working closely with advisors, teachers, and community mentors, students in the Pathways program design their work around personal interests, strengths, and aspirations. Such work must meet the school's regular high graduation standards. Mentors introduce and clarify these standards and gradually help learners apply them to a semester's work—whether that work is studying Dante's *Inferno* or showing up at dawn to work in a bakery.

Students at the Center

At Mount Abraham Union, students can earn all their credits at Pathways, or they can mix Pathways experiences with traditional classes or other forms of student-designed learning to create a personalized program that evolves from vague curiosity to deeper inquiry. Students enroll in Pathways for a single semester, several semesters, or for their whole high school experience. Students arrange with their advisors to schedule time in work settings, internships, or learning at home. Students from across the spectrum of achievement may enroll, and students who qualify may receive special education services while in Pathways. Virtually all those who choose this path express dissatisfaction with classroom learning.

Two years into the program, more than 40 of the 560 students at Mount Abraham Union have enrolled in Pathways for all their credits; an additional 19 students are using this process to earn independent core credits. Nine Mount Abraham Union students who did Pathways full time have graduated since spring 2010, and most of those who join the program stay in it. Although students often talk about dropping out when they first apply to the program, only two students from this program have left Mount Abraham Union before graduating.

More than 100 students are enrolled for credit in the district's personalized learning department, which includes Pathways participants and others who enroll as full- or part-time students. The department's home base at Mount Abraham Union houses computers, multimedia equipment, and space for advisors and students to work on project development.

As a community mentor with Pathways, I've observed this program unfold and interviewed many involved students and staff. I've seen how Pathways engages even indifferent teenagers. Pathways puts the student at the center of the learning process but uses standards relevant for work in the 21st century to assess the products students develop for their final exhibitions and
Pathways curriculum doesn't convey a particular body of knowledge. Instead, through a well-developed inquiry process, students explore their interests. These interests always come first. Learners then develop projects that sharpen and demonstrate skills they'll need to pursue dreams connected to those passions into their adult lives. They practice such skills through firsthand involvement in their community, and they create products that are assessed through standards-based rubrics.

**Why Students Take This Path**

Many Pathways students were uncomfortable in a traditional high school program. James, for instance, had problems with organization and focus; he found himself scrambling madly to pass at the end of every semester. Pathways, he says, transformed his habits:

> When I got in [to Pathways], it really clicked. I got everything together and started busting out. I guess I have done about four years of high school in one year in Pathways. I had a huge passion for fire and rescue, without knowing whether I could take the stress … Once I got into it, running calls, my passion for rescue became more powerful than for firefighting. I'm actually talking to Vermont Technical College about the paramedics program.

James devised a project studying the history of firefighting. He also did a community mentorship with a local rescue organization, Vergennes Rescue, and wrote stories about his experiences. In one year, James earned certifications as a firefighter and a first responder (an emergency medical technician qualification); he now volunteers in a fire department and in a rescue department, where he has been recognized as "Rookie of the Year."

James wrote a history of firefighting while studying for his certification examinations, on which he earned scores of 80 percent or higher on all components. Like most Pathways students, he took a math course at the school. Together, the written history, certifications, and math coursework earned him credit for coursework in English, science, social studies, and math.

Some Pathways students choose a personalized approach because they prefer working in depth on a single project to diffusing their effort over six classes. Others are bored in typical academic classrooms. Some are rebellious students who have struggled in the past with teachers, peers, and administrators; attended behavioral change programs; or spent hours in detention.

As struggling students connect schoolwork to their strengths, change happens. Working on projects with a community mentor, many students see broader possibilities. Students who never dreamed of going to college take college classes as part of their projects, enjoy virtual classes, or attend a vocational program at the county's career center.

My interviews with students conducting a wide array of projects reveal three central things students sought from Pathways.

**Individuality**

Pathways students want to be recognized as individuals. Some want action. Others like expression. Some enjoy struggling with ideas or grasping a technology. Some savor the relationships that develop in a work setting. Most don't want to spend their days moving from one academic discipline to another, like unwilling travelers hopping from one country to the next, each with a separate language and laws. Some just want to learn in their own way and will seek out high-level content if given independence. An 11th grade student who studied the Renaissance and the physics of propulsion explained that he used a book to learn trigonometry because he needed to work with angles and functions to design a potato gun.

**Independence**

Pathways students want adults and peers to celebrate their unique accomplishments. Community mentorships give students a chance to be recognized by adult practitioners as well as by teachers, parents, and friends. One learner expressed surprise at the trust he and fellow students were granted at their mentorship:

> [We put] five cars on a trailer and took them to the junkyard. Then we all got to work with one another … I learned how to use the tractor and the forklift. It was weird how much trust they put in us. Why would they give us the keys to a truck and 11,000 pounds of junk metal and set us off on our own?

**Personalized Timing**

The chance to begin where they are and progress toward standards at their own pace motivates learners. One student who had accumulated no credits for his first projects (or for any conventional high school classes) began learning as his passions pushed him toward wanting knowledge:

> I realized that with all this freedom, I could not make myself learn. I couldn't have anyone else make me learn. I had to fall in love with knowledge and change my entire view of what a school system is.
Pathways students are held to a high standard; they must earn at least a $B-$, measured on standards-based rubrics, to add credits to their transcripts for Pathways work. Not earning credit for a project is a major setback.

**Creative Projects and Essential Adults**

Guidance from adults who are connected to both the individual teenager and that teen's community is a key part of this personalized learning.

**Advisors**

A student's advisor—who helps that student design projects and products to earn academic credits—plays the most important adult role in the success of Pathways participants. Unlike most academic advising, Pathways advising starts with each student, rather than with standards and curriculum requirements. Advisors, whether Mount Abraham Union teachers or community members, serve full-time Pathways students as well as students earning just one or two credits through personalized learning. Advising tends to progress through seven stages:

1. **Focusing a project.** The advisor helps the student identify personal interests that can be converted to serious inquiry over four months or more. Initial reading, reflective writing, some community engagement, and hours of conversation begin to reveal questions a student wants to answer.
2. **Exploration.** Advisors and students note resource material and community experiences that might become part of serious study. Most students start by searching the Internet, returning with materials that adults help them assess for bias and reliability.
3. **Project planning.** Although project planning occurs within a set format, students and their guides continue to revise throughout the semester as new ideas and opportunities for reading, writing, and community experience appear. Some discoveries lead to dead ends. Advisors then help students locate other avenues—often with a community mentor or a parent.
4. **Producing evidence.** While gathering information, conducting interviews, and doing community mentorships, students gather evidence of their learning that they can include in exhibitions of their work. Reflective writing assignments based on the standards punctuate each semester, creating the foundation for exhibitions.
5. **Preparing to demonstrate proficiency.** As students study and work in community settings, advisors expend a great deal of energy helping them revise and refine their work so it becomes worthy of academic credit. Lists connected to program standards define specific tasks students should complete. Intensity marks this part of the process because students' exhibitions can earn them a full semester of credit, more than a semester's credit—or no credit. Not all Pathways students are ready to demonstrate mastery in one or two semesters, so projects may carry over to a new semester.
6. **Exhibitions.** During exhibitions, each student presents a project for one hour, gathering feedback from program advisors, community mentors, friends, parents, and teachers.
7. **Revision.** Drawing on this feedback, a student's advisor creates a final list of changes necessary to earn credit. For the last two weeks of the semester, advisors work with each student to make sure the student's work meets the standards.

The Pathways team has found that as they've improved the program and as the steps for earning credit grow increasingly clear, student culture has grown more serious and energetic.

**Community Mentors**

Working with a community mentor shows students how understanding ideas and processes or mastering skills can make a real difference in adult success. One of the Pathways program advisors, the community liaison, focuses on connecting students with community members who have expertise in students' areas of interest. This liaison, who drives endless miles to and from mentorship sites, plays a crucial role in making sure that students' experiences in the field translate into products that earn credit. She also prepares community mentors to play a new role as educators for students who may lack experience in adult careers or roles. Community mentors often attend student exhibitions and participate in assessment.

The community liaison helps students choose community mentors whose work situations and character fit students’ goals and ideals. Whereas urban schools like the MET School in Rhode Island have access to a wide array of internship sites, rural schools like ours must discover local talent. Parents often serve as mentors or recommend trusted friends who do. Mentors own businesses on our Main Street, farms in the valley, or well-known art, music, or design studios in the hills. We've found that having one designated person develop these positions helps. Our liaison networks one connection into others, so the pool of mentors continues to grow. Community mentors include

- A taxidermist who taught a student to mount wood ducks and fish.
- A music store owner who helped a student learn to manage a music recording company.
- A designer of artificial intelligence who prepared a student to "tutor" a talking head on English vocabulary and grammar.
- A day-care center owner who helped a student understand child development.
Teachers as Consultants

High schools cannot improve learning for each student unless teachers begin to take on a wider variety of professional tasks within their yearly assignments. Mount Abraham Union's teachers have added depth to the Pathways program through advising, mentoring, team leadership, and program development.

One technology teacher has a half-time assignment helping students with tasks that range from software use to welding and metal fabrication. Another half-time English teacher oversees student writing and also helps the advising team structure writing and reading assignments and assess student writing in preparation for exhibitions. Faculty consultants connect subject-area knowledge to student projects, while helping Pathways advisors guide projects toward appropriate standards. They attend student presentations to express pride in student work and also to help advisors with assessment.

Rigor in a Flexible Process

In recent years, testing has risen to prominence as a way to instill rigor in the high school curriculum. But a look at large-scale standardized test scores shows clearly that a large proportion of U.S. students have not achieved anything close to the rigorous proficiency standards adults have set for their learning. We shouldn't be surprised that test scores don't spark personal commitment to learning. High school students are not noted for their compliance with adult demands—and many students have learned over the years that they won't achieve success or receive positive recognition by sitting in a classroom, so they stop trying and grow increasingly resentful of imposed limits on their choices.

An analysis of standardized test scores also reveals deep inequality among students who differ by race, family background, wealth, geographic location, and gender. With such differences among youth, we cannot help all students reach high expectations unless we prepare each of them to use learning to manage the direction of his or her life.

Early Romans derived the word curriculum—literally a course of running—from the same root that spawned the phrase circus maximus, a public game in which runners raced around a circular track. The Pathways curriculum metaphorically retains this circular shape; but because learning is personalized, no Pathways runner starts or ends in the same place. The process is iterative, moving from fitful starts to skilled inquiry in a widening spiral. Some runners stumble; some turn back and start again. Others change course and make unplanned excursions outside the arena.

Often some random experience or book a student happens to read helps that kid separate "what has always been" from "what could be"—and experience renewed energy to continue. Pathways students tend to pick up speed as they approach their exhibitions, their celebrations of victory.

Assessments of Pathways so far indicate that even the most recalcitrant student can show improvement and begin earning high school credits as his or her skills improve and motivation increases. The majority of participants earn sufficient credits semester by semester to graduate with their peers. James, who became a good student through projects in firefighting and emergency rescue, highlighted his own growth as a learner for one of his exhibitions:

> I compared the two semesters [and showed] the growth I had gained. Going into Pathways, I had horrible organization. That was the one thing I could never do, keep myself organized … I was always late. But organization was the big one … I could never study before. I could not even do an hour. I would always zone off or go distract myself. This year, I can just sit down with a book and get the work done.

Rigorous learning at Pathways emerges through the relationships each student develops with his or her advisor, mentors, teachers, parents, friends, and other supporters who work together to help that learner master essential skills and knowledge. The initial success of the superintendents, principals, teacher/advisors, and mentors who created Pathways reveals how a committed group of educators can work with their community to engage each student.

Endnote

1 The structure of Pathways borrows from the MET School in Providence, Rhode Island; the New Country School in Henderson, Wisconsin; and other personalized high schools.

Author's note: All names are pseudonyms.

John H. Clarke works as a volunteer writing coach and community mentor with Pathways at Mount Abraham Union Middle/High School in Bristol, Vermont. He is the coauthor, with Joe DiMartino, of Personalizing the High School Experience for Each Student (ASCD, 2008); 802-453-2681.

KEYWORDS