

LEADERSHIP IN ACTION

a briefing series for new england's educational leaders

I Want to Know More

A *Leadership in Action* Supplement

I Want to Know More is a selection of information and resources for education leaders, parents, and community members who want to learn more about the teaching and learning strategies taking place in today's most innovative high schools.

What Are Personalized Learning Pathways?

For decades, high schools have offered students more or less the same traditional selection of choices: this class or that class, a higher-level course or a lower-level course, an academic program or a technical program. All of these learning choices combine to become a particular student's **pathway** to a high school diploma. Yet because high schools tend to offer only a narrow range of potential pathways, student learning has largely been limited to the handful of educational options provided by the school. But should learning be limited to a small selection of predetermined options or a ninety-minute class? Or should learning be customized to individual needs, interests, and aspirations of students?

Personalized learning pathways empower students to pursue their passions while encouraging them to take more responsibility for their education. Students work with their teachers to blend a variety of educational experiences that satisfy graduation requirements and meet state-required standards, including career-and-technical, college-level, and online courses, in addition to internships, apprenticeships, and volunteer opportunities that are intentionally designed to integrate with a student's academic learning.

The foundation of every personalized learning pathway is an education system that requires students to demonstrate proficiency (see the *Leadership in Action* briefing [What Is a Proficiency-Based Diploma?](#)). Without consistent learning standards in place, and consistent ways to determine if students have met those high expectations, schools cannot offer alternative pathways while making sure that students are learning what they need to learn. One reason why high schools have been slow to expand learning options is that the classroom allows for greater quality control—teachers know what has been taught and can utilize established methods for assessing it. But if schools embrace a true proficiency-based approach to learning, students can show that they have met learning standards in a variety of ways, including maintaining a portfolio of work or creating an “exhibition” of learning that demonstrates what knowledge and skills they have acquired. When options such as portfolios or student exhibitions are used, teachers use assessment instruments, often called “rubrics,” to consistently evaluate and score these academic products. So it doesn't matter if one student writes a research paper and gives a slide show, while another student creates a video documentary and conducts a question-and-answer session following a public viewing—both students are evaluated against the same high standards for research, creativity, communication, and public speaking, for example.

Another common strategy that schools use when offering multiple learning pathways is an option called the “personalized learning plan.” In a nutshell, students create, in collaboration with their teachers and parents, a detailed plan that maps the learning pathway they intend to pursue. Every student is required to show how his or her plan meets expected learning standards before it is approved, and teachers and guidance counselors track progress and help students revise their plans as needed. One of the great benefits of a personalized learning plan is that it forces students to sit down, think deeply about their education, and make choices about what they want to learn and how they want to learn it. It also encourages students to plan ahead; in many cases, personalized learning plans take into consideration the student's collegiate and career aspirations, thereby helping the student to select courses, internships, and other learning experiences that will prepare them for success in college, careers, and life.

Something to Think About

Did you know that the basic structure of the modern high school course of study was created by a group of ten people in 1892? The Committee of Ten, as it came to be known, was a group of ten college presidents, college professors, and secondary administrators who were tasked with developing recommendations for standardizing secondary education in the United States. Following a series of nine subject-area conferences—which included educators and experts in English, Latin, natural history, mathematics, and other disciplines—the Committee of Ten compiled the recommendations from these working groups and produced the *Report of the Committee of Ten on Secondary School Studies: With the Reports of the Conferences Arranged By Committee*. In their final report, the Committee recommended a four-year high school curriculum that included English, math, social studies, and civics every year (in addition to Latin!), and three years of science: biology, chemistry, and physics, in that order. Do these recommendations look familiar? They should, since American public high schools have largely followed this same general course of study for more than a century. Despite countless world-changing innovations in technology, communications, political systems, and human knowledge, many of which have radically changed the way we live, think, and work, the standard high school curriculum has remained largely intact, just like the basic configuration of the typical classroom—the iconic room filled with rows of desks arrayed before a chalkboard can be seen in today’s high schools and in archival photos of the one-room schoolhouses of the 19th century. Perhaps the time has come to reconsider and redesign how students learn and where they learn it? The table below is the actual Committee of Ten recommendations from a second printing of the report in 1894.

Table II. exhibits the total amount of instruction (estimated by the number of weekly periods assigned to each subject) to be given in a secondary school during each year of a four years' course, on the supposition that the recommendations of the Conferences are all carried out.

TABLE II.

1ST SECONDARY SCHOOL YEAR.	2ND SECONDARY SCHOOL YEAR.
Latin 5 p.	Latin 5 p.
English Literature, 3 p. } . . . 5 p.	Greek 5 p.
“ Composition, 2 p. } . . . 5 p.	English Literature, 3 p. } . . . 5 p.
German or French 4 p.	“ Composition, 2 p. } . . . 5 p.
Algebra 5 p.	German 4 p.
History 3 p.	French 4 p.
	Algebra,* 2½ p. } 5 p.
	Geometry, 2½ p. } 5 p.
	Astronomy (12 weeks) 5 p.
	Botany or Zoölogy 5 p.
	History 3 p.
	37½ p.
	* Option of book-keeping and commercial arithmetic.
3RD SECONDARY SCHOOL YEAR.	4TH SECONDARY SCHOOL YEAR.
Latin 5 p.	Latin 5 p.
Greek 4 p.	Greek 4 p.
English Literature, 3 p. } . . . 5 p.	English Literature, 3 p. } . . . 5 p.
“ Composition, 1 p. } . . . 5 p.	“ Composition, 1 p. } . . . 5 p.
Rhetoric, 1 p. } . . . 5 p.	“ Grammar, 1 p. } . . . 5 p.
German 4 p.	German 4 p.
French 4 p.	French 4 p.
Algebra* 2½ p.	Trigonometry, 2 p. ½ yr. } . . . 2 p.
Geometry 2½ p.	Higher Algebra, 2 p. ½ yr. } . . . 2 p.
Chemistry 5 p.	Physics 5 p.
History 3 p.	Anatomy, Physiology, and Hy- giene, ½ yr. 5 p.
	History 3 p.
	Geol. or Physiography, 3 p. ½ yr. } . . . 3 p.
	Meteorology, 3 p. ½ yr. } . . . 3 p.
	37½ p.
	* Option of book-keeping and commercial arithmetic.

Comparing Learning Experiences: Then and Now

The table below presents some of the major differences between the traditional ways in which students are taught in a typical American high school and a personalized, student-centered system. Since each system can be remarkably complex (particularly when you compare unique, homegrown systems from school to school), the comparisons below have simplified certain concepts to make them more accessible and understandable. Several elements in the table were adapted from a similar chart featured in *Innovate to Educate: System [Re]Design for Personalized Learning* (p. 13), a report on the [2010 Innovate to Educate symposium](#).

Traditional Education System	Personalized Learning System
<p>Mass production: schools are based on an industrial-age, assembly line model and all students move through the same series of learning experiences at the same pace.</p>	<p>Mass customization: schools are organized to prepare students for a knowledge-based economy that demands ingenuity, creativity, and high levels of education and skill; students pursue a variety of customized learning experiences while working at their own pace.</p>
<p>One-size-fits-all instruction: the school determines in advance what is taught, when it will be taught, and how it will be taught, and only minor modifications are made throughout the school year.</p>	<p>Personalized instruction: students and teachers make decisions throughout the school year about what standards need to be met, how they will be met, and where they will be met in response to learning needs and academic progress as measured against the same high standards that are applied to every student.</p>
<p>Time is constant and learning is variable: all students attend high school for roughly four years, but they graduate with different levels of knowledge and skill.</p>	<p>Time is variable and learning is constant: all students are expected to meet the same challenging learning expectations, but how they achieve standards is variable; all students graduate having demonstrated attainment of the same demanding learning standards.</p>
<p>Institution-centered education: schools are organized to facilitate non-learning needs, such as scheduling, staffing, and operating concerns.</p>	<p>Student-centered learning: schools are organized to facilitate student learning first and foremost, and major decisions, programs, and expenditures prioritize student-learning needs above other concerns.</p>
<p>Subjects taught in isolation: learning largely occurs in the classroom using printed texts, videos, and teacher-directed instruction and lectures.</p>	<p>Concepts and skills learned in context: learning occurs in school-based and real-world contexts using a variety of resources, from interactive digital applications to first-hand observations of the world to long-term projects, and students design learning experiences in collaboration with teachers.</p>
<p>Informal learning disconnected from formal learning: outside-of-school learning is not connected to the formal learning that occurs in classrooms.</p>	<p>Informal learning integrated with formal learning: outside-of-school learning—whether it takes the form of an online course, internship, community-service project, college course, or apprenticeship—is connected to classroom lessons and established learning expectations.</p>
<p>End-of-course assessment: learning is typically assessed at the end of lessons, projects, courses, or semesters, and information on student learning is rarely used to modify lessons or instruction.</p>	<p>Ongoing assessment: learning is continually assessed throughout the school year, and student progress toward meeting required standards is monitored so that teachers can modify lessons and teaching strategies, and provide extra help to make sure every student succeeds.</p>

State Programs Supporting Personalized Learning Pathways

Many states across the country—including the five Consortium states—have recently adopted legislation or created state programs to enable and support personalized learning options in public high schools. Below are brief descriptions of state legislation and programs from the Consortium partner states:

Connecticut

In Public Act No. 10-111, An Act Concerning Education Reform in Connecticut, recent legislative revisions allow for more flexibility at the local level when awarding academic credits that satisfy high school graduation requirements. In addition to explicitly adding online courses and credit-recovery options as alternatives to more traditional learning pathways, the revised act allows for “board examinations,” a system by which students may opt to complete a series of examinations to satisfy graduation requirements and demonstrate mastery of state-required learning standards. Other provisions, such as the expansion of Advance Placement accessibility across the state, also seek to multiply available pathways options for students.

Maine

In 2009, the Maine legislature approved changes to the state’s high school graduation requirements, which opened the door to the creation of more personalized learning pathways in the state’s public schools. Selected text from the legislation: *Elementary and secondary schools shall provide students with opportunities for learning in multiple pathways that may include the following: career and technical education, alternative education programs, apprenticeships, career academies, advanced placements, online courses, adult education, dual enrollment; or gifted and talented programs (Title 20-A, Section 4703: Instruction for Individual Students). Also: Students may demonstrate achievement of the standards through multiple pathways as set out under section 4703 and multiple opportunities. Achievement may be demonstrated by evidence documented by course and learning experiences using multiple measures, such as, but not limited to, examinations, quizzes, portfolios, performances, exhibitions and projects (Title 20-A, Section 4703: High School Diploma Standards).*

New Hampshire

The New Hampshire Department of Education supports and encourages local school districts to adopt policies that encourage “extended learning,” which can be defined as the acquisition of knowledge and skills through instruction or study outside of the traditional classroom, including apprenticeships, community service, independent study, online courses, internships, performing groups, and private instruction. Several districts and schools across the state are already creating extended learning opportunities and personalized pathways, while the state’s online charter school, the Virtual Learning Academy Charter School, has developed the [Personalized Pathways \(P2\) project](#), which helps high school create online and experiential learning opportunities for students. For more information, visit the Department of Education’s [Extended Learning Opportunities website](#).

Rhode Island

Rhode Island’s Office of Multiple Pathways is a consolidated department of education office that is developing a statewide system of personalized pathways and aligned learning opportunities designed to support all students as they work to achieve their educational and career goals. Rhode Island’s pathways include high school course work, virtual learning opportunities, career-and-technical programs, apprenticeships and internships, adult learning programs, charter schools, flexible scheduling, and other innovative strategies. The state’s secondary regulations—specifically its proficiency-based diploma system (Title L, Chapter 6, High School Design)—addresses the personalization of learning: *Every student enrolled in Rhode Island public schools has the right to an individualized and optimized opportunity to achieve proficiency for graduation...in a manner that is conducive to the future success of that student in the world of work or further education beyond the secondary level.*

Vermont

Act 176 of 2006 created Vermont's High School Completion Program (Sec. 42. 16 V.S.A. § 1049a), which requires the creation of personalized learning pathways to satisfy local and state graduation requirements. Any individual between the ages of 16 and 22, whether enrolled or unenrolled in school, can request an individual graduation plan for obtaining a high school diploma. Eligibility is determined in part based on competency levels in reading, writing, and math. Individual graduation education plans take into consideration unfulfilled graduation requirements, student skill levels, and long-term student goals. Educational services may be provided by a high school or approved provider (or a combination of the two), and school districts will award a high school diploma to students who successfully complete their approved graduation education plan. The High School Completion Program is administered through [Learning Works](#), Vermont's adult education and literacy system.

Additional Reading

Much of the available reading on personalized learning pathways takes the form of detailed professional reports, which are not always the most accessible texts for non-educators. Still, the reports listed below have a lot of information about personalized, proficiency-based learning pathways that will be interest to diverse audiences.

[When Success Is the Only Option: Designing Competency-Based Pathways for Next Generation Learning](#) (November 2010), by Chris Sturgis and Susan Patrick.

[Clearing the Path: Creating Innovation Space for Serving Over-Age, Under-Credited Students in Competency-Based Pathways](#) (December 2010), by Chris Sturgis, Bob Rath, Ephraim Weisstein, and Susan Patrick.

[Multiple Pathways to Student Success: Envisioning the New California High School](#) (2010), a report prepared for the governor and state legislature of California to support multiple pathways legislation.

[Innovate to Educate: System \[Re\]Design for Personalized Learning](#) (2010), a report on the 2010 Innovate to Educate symposium.

[The Rise of K-12 Blended Learning: Profiles of Emerging Models](#) (May 2011), by Heather Staker.

Still Want to Know More?

If you are interested in the foundational research behind many of the ideas discussed in the Leadership in Action series, we recommend our [Global Best Practices Research Summary](#), which is available on the [New England Secondary School Consortium website](#) or the engaging report [Changing the Odds for Student Success: What Matters Most](#) by McREL and the Stupski Foundation.

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is a new england secondary school consortium resource

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