



## Chapter 4

# Effective Practices for Initiating Change

To establish standards-based graduation by 2005, high schools throughout Vermont are already testing and implementing exciting new approaches to teaching and learning. We have drawn from their experiences and from the body of research reviewed by the Task Force to select the effective practices described in this chapter. These practices, along with other innovative approaches, serve as models for improved student learning.

To ensure continuous evolution toward improved learning, effective practices should be customized to each school. At the same time, the Task Force urges communities to keep in mind these important concepts, supporting the Principles and the Task Force's vision of reform:

**Standards:** The learning of each student should be held to high standards that are established by the local school and district, be consistent with action plans and clearly address Vermont's *Framework*, including Fields of Knowledge and Vital Results standards.

**Multiple pathways to learning:** The means by which students reach these standards can be as diverse as the students are. Helping students determine and pursue personal learning pathways is the shared responsibility of schools, students and families. Offering diverse pathways is consistent with the *Framework*.

**Standards-based assessment:** The assessment of student progress must measure student learning against the common standards found in the *Framework*. Additionally, achievement should be assessed against individual goals and standards developed in conjunction with students' personal learning plans.

We hope that Vermont high schools will produce additional models of effective practices as more communities become engaged in school improvement discussions and action planning with the Twelve Principles.

## Personal Learning Plans

Personal learning plans (PLPs) recognize the individuality of student learning styles, histories, interests and aspirations and allow the student, in concert with school staff and family, to guide the learning experience. Because of the central role each student plays in constructing a PLP, the student's own ambitions, talents and interests become the unifying elements of his or her learning process over four years.



**“High-quality education cannot be sustained without a sound economic base any more than a sound economic base can be sustained without high-quality education. Get it onto your agendas. Work it into your budget planning, and view it as an investment in your own economic future. The education community is ready to embrace you.”**

James R. Bruce, Jr., business partner in the Addison County School-to-Work initiative, in an open letter to the business community, May 1999

Vermont secondary schools have developed several models for PLP programs, which share some common elements:

- Assignment of a teacher advisor to each student for four years
- Student participation in a small, multi-grade or single-grade peer group that works together for one to four years
- The setting and resetting of personal goals and standards for achievement
- Inclusion of learning opportunities in the school and community, such as:
  - ✓ **Self-discovery** – Through exploration activities, students discover what their strengths and interests are and how to express themselves as learners
  - ✓ **Making connections** – Students are exposed to in-school and community educational resources that have the potential to support their PLP goals
  - ✓ **Exploration and application** – Through continuing, active exploration, students work to extend their interests to their post-secondary education plans
  - ✓ **Documentation and demonstration** – Student learning commonly takes the form of projects, portfolios, presentations or public discussions documented in a portfolio

Personal learning plans allow schools to unify many pre-existing programs, such as career exploration and career portfolios, community-based and service learning, field study, internships, applied learning and capstone projects, into an integrated approach to student-centered learning. Further, because a PLP targets individual student goals as well as the common learning goals identified in *Vermont’s Framework of Standards and Learning Opportunities*, the program allows students to follow multiple pathways to learning while demonstrating required individual competencies and achievement of common standards.

Many classroom teachers seek ways to personalize their students’ learning by incorporating students’ strengths, interests and aspirations into the coursework. Students use their PLP strategies as they learn new content in their classes. Self-discovery, making connections, exploration and application, documentation and demonstration are seen as vital stages of students’ classroom learning. The PLP advisory period and conferences, student choice and student empowerment in classroom learning combine to form personalized learning and a socially diverse setting.

### **Personal learning plans further these Principles:**

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|---------------------------------|-----------------------------------|
| <b>1. Engaged Learners</b>      | <b>6. Real-Life Experiences</b>   |
| <b>2. Challenging Standards</b> | <b>8. Alignment</b>               |
| <b>3. Multiple Pathways</b>     | <b>11. Family Participation</b>   |
| <b>4. Personalized Learning</b> | <b>12. Community Partnerships</b> |

## Capstone, Graduation Challenge and Senior Projects

A capstone, graduation challenge or senior project allows a student to integrate learning from a variety of settings and sources while demonstrating mastery of the Fields of Knowledge and Personal Skills identified in *Vermont's Framework of Standards and Learning Opportunities*. Because of the variety of learning activities involved, these projects also satisfy the *Framework's* requirements for Learning Opportunities. Projects generally include these elements:

### Personal portfolios

This collection of work products, performances and reflections exhibit a student's accomplishments and mastery of the Vital Results over time. The student and his or her family, teachers and peers often review the portfolio jointly.

### Research projects, generally involving community- or work-based learning opportunities

Students identify a topic and work with an advisor (e.g., faculty member or community mentor) to set learning goals for this phase. They may conduct research or demonstrate newly acquired knowledge through an internship or other experience outside of the traditional school setting. Students develop a mentor relationship with an expert in the area of study and also work with a faculty advisor for the project. Documentation of the research may be part of the portfolio, or may be a specific research paper, display, presentation or performance.

### Personal performances or presentations of research

Students share their learning in some original way with a jury of peers, mentors, experts and family members in a public performance or expressive presentation.

High schools throughout Vermont have adopted a variety of models for this practice. In some high schools, students develop skills and knowledge by carrying out a series of smaller projects each year, with the culminating presentation in the senior year. In other schools, the project becomes a focus for the entire senior year. These projects are elective in some high schools, but in at least three high school districts (Cabot, Randolph, and Champlain Valley Union) completion of the project is a requirement for graduation.

These initiatives provide students with the opportunities to establish sound work ethics; develop solid study and research skills; demonstrate high academic achievement; and develop effective social skills, good citizenship practices and a sense of community service. Moreover, these programs allow multiple forms of measurement to assess mastery of *Vermont's Framework of Standards and Learning Opportunities*.

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**“PLP development is not merely a beefed-up advising program, nor is it a single-event, community-based learning experience. Rather, it represents the beginning of a four-year conversation between a student and her teachers about her hopes and dreams for the future. This conversation will aid in the creation of a personal portfolio in which to keep her reflections about her purpose and her learning. And it will provide her with access to caring adults who will help her to navigate her way.”**

David Gibson and John Clarke,  
*Growing Toward Systemic Change:  
Developing Personal Learning Plans at  
Montpelier High School*

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“Putting on a musical for the whole school that I’d composed and orchestrated was a stressful but exciting experience. I can’t say I learned the traditional way, but learned more from personal experience while putting on this concert. It was hard, but it helped me to leave high school feeling prepared for what was to come in college.”

Vermont high school senior

## Graduation challenge or senior projects further these Principles:

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|--------------------------|----------------------------|
| 1. Engaged Learners      | 5. Flexible Structures     |
| 2. Challenging Standards | 6. Real-Life Experiences   |
| 3. Multiple Pathways     | 8. Alignment               |
| 4. Personalized Learning | 12. Community Partnerships |

## Multiple Measures to Demonstrate Achievement of Standards

Because the *School Quality Standards* require high schools to redefine assessment, the Task Force explored the means and methods currently used to measure performance. We found that many widely used practices inhibit or even preclude the opportunity for personalized learning that is central to the vision we are presenting. We believe that each student’s learning must still be held to high, common standards. The pathways toward graduation may vary, but the standards are competencies that each student must achieve. Flexibility lies in how students demonstrate what they have learned and the pathways they follow to reach the commonly held standards for learning.

High schools should explore promoting accountability for performance in many ways. The Task Force identified several already in use in Vermont schools:

- Comprehensive personal learning plans
- Graduation challenge, capstone projects or senior projects
- A combination of standardized assessments, such as the NSRE English/language arts and mathematics exams in grade 10; the Vermont science assessment (PASS) in grades 9 and 11; and the Vermont mathematics portfolio in grade 10
- ACT, PSAT and SAT scores
- Reporting of student achievement in standards-based transcripts that include comparative and personalized measures
- Personal performance, such as reporting the results of a career exploration project or demonstrating competency in a skill such as welding or piano

By gathering and analyzing multiple data points, both for individual students and groups, the school community can evaluate not only student performance but also identify issues that may be inhibiting student achievement schoolwide.

Capstone assessment initiatives allow a well-rounded evaluation of each student’s performance, such as:

- A comprehensive student development collection or portfolio
- Standards-based units of study

- Community service and work-based learning activities
- NSREs in English/language arts and mathematics
- Vermont social studies assessment
- Writing portfolios
- Mathematics portfolios
- Vermont science assessments (PASS)
- Assets surveys

**Multiple measures of performance further these Principles:**

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|---------------------------------|---------------------------------|
| <b>1. Engaged Students</b>      | <b>5. Flexible Structures</b>   |
| <b>2. Challenging Standards</b> | <b>6. Real-Life Experiences</b> |
| <b>3. Multiple Pathways</b>     | <b>8. Alignment</b>             |
| <b>4. Personalized Learning</b> |                                 |

## **Strong Employer and Education Partnerships**

There is ample evidence that many students learn best by doing and that making the connection between the content of education and the world of work motivates and provides added meaning to the high school experience. Partnerships between educators and employers in the community allow for the creation of meaningful career exploration, applied learning and work-based learning opportunities for students. These opportunities are more numerous than schools may realize; while many schools partner with private-sector employers, fruitful partnerships are also available with nonprofit organizations (such as healthcare institutions) and with state and local government, which are often the largest employers in rural areas.

Work-based learning opportunities and partnerships for the development of classroom curricula expand learning for all students. Students, whether college-bound or career-bound, are exposed to a variety of careers and learn to recognize the associated education requirements. Their ability to make decisions about both post-secondary education and employment is enhanced.

Employers can fulfill numerous roles in the high school setting. Opportunities vary with the intensity of the employer’s investment in the partnership. In Vermont high schools employers are:

- Participating in the development of applied learning curricula and teaching classes along with educators
- Identifying employability competencies and developing industry-skill standards

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**“The local system shall employ a balance and variety of assessment strategies, both classroom-based and school-level assessments, in order to gain useful information on student learning. Students and parents shall be informed on a regular basis regarding progress toward achieving the standards. The school shall provide students the opportunity to evaluate their own work ... These rules are designed to ensure continuous improvement in student performance and the provision of high-quality programs to enable students to attain rigorous standards.”**

*Vermont’s School Quality Standards, 2120.2.2: Development and Implementation of Local Comprehensive Assessment System*

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**“I need to learn more about what’s out there, not just what’s in my own school.”**

Vermont high school student

- Sponsoring teacher internships to facilitate creation of applied curricula
- Sponsoring apprenticeships, internships and other work-based learning opportunities for students
- Assisting as guest speakers on education and careers, sponsoring career fairs and offering job shadowing opportunities
- Acting as mentors

In addition to offering expanded learning opportunities, intensive employer and school partnerships provide benefits to employers:

- Well-educated and highly functioning youth contribute to stability and quality of life in the whole community
- Quality education supports development of a capable workforce
- Quality education systems further community economic development
- Partnerships allow early identification of qualified, experienced, potential employees

### **Strong business and education partnerships further these Principles:**

**1. Engaged Learners**

**3. Multiple Pathways**

**4. Personalized Learning**

**6. Real-Life Experiences**

**12. Community Partnerships**

## **Flexible Schedules**

One of the most consistent recommendations the Task Force found in major research on high school reform is flexibility in the time and place for learning, including establishment of flexible or block scheduling. As described in *Aiming High: Strategies to Promote High Standards in High Schools*, flexible scheduling is described as a “building block for other aspects of school renewal and offers many benefits:”

- With fewer classes per day, teachers can devote more time to actual classroom instruction and less time to classroom management, such as taking attendance and getting students settled into each new class.
- Students can concentrate on a smaller number of courses at one time, typically four instead of the usual six or seven.
- When teachers are responsible for smaller numbers of classes and students, they are able to establish closer relationships with their students, which has been found to be one of the most important influences on student motivation.

- Longer classes allow teachers to design and implement better project- and work-based learning opportunities. Collaboration among teachers and with business partners is also facilitated by flexible scheduling.

Work-based and community-based learning, community service learning, partnerships with employers in curriculum development and delivery and independent study and capstone projects that take students into the workplace and community all “flex” the walls of the high school and provide multiple opportunities for learning. Providing multiple measures of achievement to match these learning opportunities is key to ensuring that high academic standards are applied to non-classroom experiences.

### **Flexible models for instruction further these Principles:**

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|---------------------------------|---------------------------------|
| <b>1. Engaged Learners</b>      | <b>4. Flexible Structures</b>   |
| <b>2. Multiple Pathways</b>     | <b>5. Real-Life Experiences</b> |
| <b>3. Personalized Learning</b> |                                 |

## **Dual Enrollment**

Dual enrollment programs allow high school students to simultaneously earn credit toward high school graduation and a college degree. Guidance is provided to students so that they may align their course selections with their interests and career plans. Effective programs also include an orientation to college studies as well as academic advising and other supports students may need.

The Vermont Public Education Partnership (VPEP), a consortium of college educators, identifies several benefits of dual enrollment:

- Providing challenging curricular options
- Providing accelerated opportunities to earn college credit, saving students time and money
- Presenting educational opportunities not available at the local high school
- Smoothing the transition between secondary and post-secondary education
- Offering students alternative learning opportunities that appeal to different learning styles and diverse levels of motivation

While dual enrollment options are available in many parts of the State, the Task Force believes this option should be available throughout Vermont to provide challenging learning opportunities, multiple pathways of learning and better continuity for all students. As noted by the Vermont Public Education Partnership (VPEP), “high school access to appropriate post-secondary learning becomes an important component of the ‘menu’ of programs and services from which students can design their individualized learning experiences.”

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**“Some of the most rewarding educational experiences I have had come from work with students in individualized studies.”**

Teacher, Peoples Academy

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**“The best preparation for college is taking a college course.”**

Dennis Littky, The Met High School, Providence, Rhode Island

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### **Dual enrollment furthers these Principles:**

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|---------------------------------|---------------------------------|
| <b>1. Engaged Learners</b>      | <b>4. Personalized Learning</b> |
| <b>2. Challenging Standards</b> | <b>5. Flexible Structures</b>   |
| <b>3. Multiple Pathways</b>     | <b>10. Pre-K-16 Continuity</b>  |

## **Using Post-Secondary Data for Systems Improvement**

Our renewed vision is that Vermont high schools will prepare each student for a successful adult life. Therefore, we must not only evaluate student performance while students are in school, but also after they graduate. Surveying students after graduation adds yet another important element for assessing the effectiveness of our secondary schools and the relevance of the learning opportunities provided. As post-secondary evaluations evolve, our high schools, communities, families and students should be able to make better choices and decisions about:

- Adequacy of student preparation for post-secondary education
- Adequacy of student preparation for career choice and career success
- Relevance and effectiveness of curricula and learning opportunities
- The relationship between particular pathways to learning and post-secondary success, whether in career or higher education settings

Standardized testing, portfolios, graduation rates and other in-school measures of achievement provide an important snapshot of progress toward the Twelve Principles. Vermont’s high school graduates are an untapped reservoir of information for evaluating and then improving the elementary through secondary school experience for future students.

### **Incorporation of post-secondary data into the pre-K-12 assessment framework furthers these Principles:**

- 2. Challenging Standards**
- 7. Instructional leadership**
- 10. Pre-K-16 Continuity**

## Mentoring

Studies consistently show that a supportive one-to-one mentoring relationship between a youth and an older person reduces absenteeism, inspires students to achieve and set high goals, builds confidence and self-esteem and leads to better social and academic performance. Being exposed to real-life work experiences with a mentor allows students to see the direct relationship between academic performance and life achievement. The combined impact gives adolescents crucial support while demonstrating the need to stay in school. An additional benefit is exposure of adults to the high school atmosphere, which leads both parties to a better understanding of the community and the challenges it faces. Effective mentoring programs involve more than recruiting and matching. Successful long-term programs have found that key elements are orientation for mentors and mentees and ongoing support for the mentoring relationship.

### Mentoring furthers these Principles:

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|--------------------------|-----------------------------|
| 1. Engaged Learners      | 6. Real-Life Experiences    |
| 3. Multiple Pathways     | 7. Instructional Leadership |
| 4. Personalized Learning | 12. Community Partnerships  |

## Close Relationships Between High Schools and Technical Education Centers

Technical education centers around the country that have succeeded in improving student performance have made high academic performance the foundation of their reforms. Historically in our education system, students choosing technical education centers were those who had been tracked into low-level academic courses at their home schools, and tech school courses failed to incorporate high academic standards that either prepared students for success in the workplace or allowed them to pursue further education. In a turnabout of their missions, successful technical education schools have shifted from providing shared-time vocational programs to offering a comprehensive high school education.

At the same time, the academic high schools that have succeeded in improving student performance have done so by introducing real-life experiences and practical applications into their education programs. Fortunately for students in Vermont, work-based and community-based learning opportunities have expanded greatly in high schools, principally through the five-year School-to-Work initiative that concluded in March 2001. Sustaining career opportunities will require maintenance and further development of the relationships among all educational resources in communities, including technical education centers and sending high schools.

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**“Rate your success not on the minimum requirements for a high school education, but on how high your students have achieved. Push to raise expectations.”**

1994 Essex High School graduate's marginal notes on returned 2000 Alumni Survey

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**“While families bear the primary obligation to care for their children and to help them become healthy, contributing citizens, other institutions can help families accommodate to a rapidly changing world. A mentor can provide the nurturing, supportive adult relationship absent in the lives of many of our young people.”**

Vermont Student Assistance Corporation, *Mentoring Guide*

Research shows that student performance is enhanced when students are provided a mix of academic, technical and real-world experience. A traditional comprehensive high school does not have the resources to do this, nor do technical and career centers that serve multiple sending high schools have the capacity to provide a range of opportunities to each and every student. Better communication and partnerships between high schools and technical and career centers can create systems in which high schools provide a broader range of technical skills and experiences in collaboration with technical education centers where students can access strong academic programs leading toward specific careers.

The Task Force urges communities to foster closer alignment between high schools and technical education centers. Communities can accomplish this by:

- More closely aligning grades 9 to 12 curricula
- Offering encouragement and technical assistance that allow schools to share funding so that technical education centers, communities and high schools have a common financial base
- Ensuring that high schools, communities and technical education centers share a common mission; developing school and community task forces to bring together community members, technical education centers and schools on a regular basis
- Encouraging joint action planning between sending high schools and technical education centers
- Increasing the availability of internship and apprenticeship opportunities that feature a high school and post-secondary connection
- Collaborating on the development of a comprehensive career system and the implementation of career pathways

**Strong relationships between sending high schools and technical education centers further these Principles:**

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|---------------------------------|-----------------------------------|
| <b>1. Engaged Learners</b>      | <b>5. Flexible Structures</b>     |
| <b>2. Challenging Standards</b> | <b>6. Real-Life Experiences</b>   |
| <b>3. Multiple Pathways</b>     | <b>9. Shared Purpose</b>          |
| <b>4. Personalized Learning</b> | <b>12. Community Partnerships</b> |

# Small Learning Communities

Small learning communities is the name given to a variety of organizational strategies for creating smaller learning groups within a whole school environment. Such strategies include:

- Establishing small learning clusters, “houses,” career academies, magnet schools or other approaches to creating schools within schools
- Block scheduling
- Personal adult advocates, teacher advisory systems and other mentoring strategies
- Reduced teaching loads
- Other innovations designed to create more personalized high school experiences for students and to improve student achievement

The benefits to students are: learning within a smaller, supportive community of peers; developing personal relationships with peers and learning important social interaction skills; developing more personal relationships with teachers and other adults; and feeling safer in a large high school. For teachers, this organizational model provides opportunities for teaming with colleagues for integrated curricula, taking more responsibility for fewer students and developing closer relationships with students.

Citing numerous studies, the U.S. Department of Education Office of Elementary and Secondary Education states that “the size of the learning environment has an indirect effect on student learning ... Essentially, size creates conditions for success, especially when high expectations and standards exist.”

The Task Force recommends that districts with large high schools, especially areas with supervisory union high schools, consider developing small learning communities. By implementing a house system, career academy, faculty advisory or other small learning cluster, schools will be providing safer, more personalized and satisfying learning environments for students and teachers. This is particularly important for students arriving in a large union high school from small, sending elementary and middle schools.

## Smaller learning communities further these Principles:

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|---------------------------------|---------------------------------|
| <b>1. Engaged Learners</b>      | <b>4. Personalized Learning</b> |
| <b>2. Challenging Standards</b> | <b>5. Flexible Structures</b>   |
| <b>3. Multiple Pathways</b>     | <b>10. Pre-K-16 Continuity</b>  |

For more examples of effective practices and contact information for the examples described above, please see Appendix A.

**“Large schools can have an even more deleterious effect in a predominantly rural community than in areas where people might already be accustomed to malls, large housing developments and the urban-suburban highway system. For these small communities, where most elementary schools do not have more than 200 students, a high school with more than 1,000 students is monstrous.”**

Orleans-Essex North Supervisory Union, Smaller Learning Communities Program grant application