

The Transformation of Education in Vermont

A Framework for Transformation from the Vermont State Board of Education

Preparing Students for the World That Awaits Them

Because the world's accumulated information is estimated to literally double every two years, next year's kindergarten students who graduate from high school in 2022 will be entering a world that has 128 times more information than exists today. The challenge for students is no longer related to an absence of information, but rather, to its over-abundance. America's education system – including the system in Vermont – is simply not adapting quickly enough to what has become a knowledge-based economy, nor is it keeping pace with continuing technological advances or the societal shifts of a growing, global economy.

Fortunately, Vermont's existing education system has a solid foundation on which to build on and prepare students for the future. Our state has a lengthy history of educational accomplishments of which we can be justifiably proud. But we need to keep accelerating those accomplishments in order to provide all Vermont students with the skills and opportunities they need and deserve to succeed.

All students, regardless of their learning styles, gifts, challenges, circumstances or expectations, deserve the opportunity to build the skills necessary for success in school, college, their careers and their communities. To achieve those challenging objectives, Vermont's schools cannot merely be readjusted. They must be genuinely *transformed*.

What Is Involved in Educational Transformation?

A transforming educational system will be less bound by schedules and facilities, and instead, will promote more flexible learning environments. Student success will be measured not by the number of courses completed, but by what students know and what they can accomplish. Students will be encouraged to develop the kind of complex problem-solving skills that are required in today's world. By becoming fluent in the use of information and communication technologies, they will learn to use the essential tools of the 21st century. And by gaining meaningful experience, they will learn how to be responsible local and global citizens.

What Are 21st Century Learning Environments?

21st Century learning environments are schools that help students become comfortable with ideas and abstractions, become skilled at analyzing and synthesizing new information, learn quickly and flexibly, be creative and innovative, and be able to work well as part of a team.

Students in schools that teach 21st century skills will spend significant time on basic skills, including reading, writing and math. They will debate ideas, be capable of creating meaning from multiple texts, and have the ability to generate new ideas.

Teachers will become facilitators and coaches, helping students find information they need and helping them make informed judgments about its accuracy and relevance. They will emphasize *how* to learn, along with *what* to learn.

What Skills Do All Vermont Students Need?

In order to succeed in our rapidly changing world, Vermont's students need to acquire a different set of essential skills. They need:

- Critical thinking and problem-solving skills
- Creativity and innovation
- Communication and collaboration skills
- Information and media literacy
- The ability to use information and communication technology
- Flexibility and adaptability
- The ability to demonstrate initiative, productivity and self-direction, as well as leadership, responsibility, ethics and accountability
- Social and cross-cultural skills
- Rigorous academics in traditional disciplines (English, math, science, and social studies) and expanded emphasis on 21st century disciplines (world languages, economics, entrepreneurship, personal finance, health, arts, ecology, political science).

How Will They Acquire All This?

To ensure that all students build content mastery and lifelong-learning skills, we must give them access to opportunities that emphasize:

- Applied, project-based and interdisciplinary learning
- Collaborative learning
- Inquiry and investigation
- Technology for learning
- Demonstration of competence
- Personalized learning
- Information access, analysis, synthesis and the generation of new ideas.

What Will a Transformed Educational System Look Like?

While the specifics of a transformed educational system in Vermont are yet to be fully developed and determined, some themes are likely to be important components of a transformed system.

- There will be increased emphasis on vital skills including reading, writing, speaking, science, mathematics, information and communication technology, global and civic awareness, critical and creative thinking, collaboration, business and economics, personal health, world languages and learning skills.
- Students will work together as researchers, continually engaged in authentic projects that provide interdisciplinary learning opportunities requiring deep analysis of information to solve complex problems.
- Digital learning tools will largely replace textbooks and teacher lectures as the way students access new information. Technology links students to the world, with teachers as their guides and coaches as they explore and experience.
- Individual learning plans will be situational and personalized.

