Growing the Ultimate Sustainable Crop:
CREATIVE CAPACITY
IN VERMONT STUDENTS

A Guide to Help Vermont Educators and Community Partners
Identify, Develop and Assess Creative Capacity in Students
If we teach today’s students as we taught yesterday’s, we rob them of tomorrow.

- John Dewey
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“I found out that I can be self-directed.”
- 6th Grade Student
Creative Schools Initiative project

St. Johnsbury School 3rd graders in a Creative Schools Initiative project built and tested a model community to withstand severe weather and answer their essential question: *How Do I Respond To What The Earth Is Saying?*
INTRODUCTION

VERMONT’S BOLD VISION

IN 2013, THE VERMONT LEGISLATURE PASSED ACT 77, THE FLEXIBLE PATHWAYS INITIATIVE, to support the creativity of school districts as they develop high-quality educational experiences that acknowledge each student’s individual goals, learning styles, and abilities, and to increase the rates of secondary school completion and postsecondary continuation in Vermont.

Act 77 acknowledges and promotes the idea that students can and should learn anytime and anywhere, through expanded learning opportunities, in which the school’s walls are permeable and learning is not restricted to the classroom.

Act 77 challenges students to create personalized learning plans—with the help of parents and guardians, teachers and staff—to take a larger measure of control over their education and to envision their future and map steps to get there.

This envisioning of goals, and planning to attain them, involves at its core creative and critical thinking.

Engaging creatively requires students to take control of their learning experiences—a core purpose of Act 77—so developing creative capacity and the goals of Act 77 are fundamentally connected.

Over six days in November, 2016, the Community Engagement Lab brought together five of the nation’s most experienced teaching artists, a leading researcher, and 85 committed Vermont educators, expanded learning providers and students to deepen their understanding of the ways creative capacity can be developed more effectively in their home towns and institutions.

That gathering, known as the Vermont Creative Learning Forum, led to this report, which shares the Forum’s key insights and conclusions, and hopes to support the inspiring commitment across Vermont to fully advance creative capacity as a central priority of learning.
6-8th graders invent, design and build STEM- and trades-related projects at Rosie’s Girls®, a Vermont Works for Women week-long summer camp. (vtworksforwomen.org)
WHAT IS CREATIVITY?

Creativity is a vague concept that is difficult to make actionable for teachers and expanded learning providers.

We use the following definition because it contains the key elements that research and experience tell us are essential to understand if Vermont is going to advance creative capacity as a central priority of learning:

**CREATIVITY is a disposition with a set of habits for application that grows from repeated interactions among aptitude, process, and environment in which an individual or group produces a perceptible product that is both novel and valuable as defined within a social context.**¹

Key elements affirmed in this definition:

- Creativity is a disposition; it involves every learner’s innate abilities and affinities.
- Creativity involves a set of habits that are developed by repeated use over time.
- Creativity applies to individuals and groups.
- The quality of creative products are evaluated for the combination of originality and their value within a social context. *(Products refers to the tangible, assessable culminations of creative work.)*

It is imperative that teachers and expanded learning providers embrace creativity as a disposition, a way of thinking and acting. It is not a skill or talent that some people have and some don’t.

All students can build the dispositions, capacities and skills that nurture creativity.

¹Adapted from Plucker, J.A., Beghetto, R.A., & Dow, G.T. (2004). *Why Isn’t Creativity More Important to Educational Psychologists? Potential Pitfalls and Future Directions in Creativity Research* (Educational Psychology, Vol. 39, 2004) 83–96. The published quotation from which this Guide’s definition is adapted is: “Creativity is the interaction among aptitude, process, and environment by which an individual or group produces a perceptible product that is both novel and useful as defined within a social context.”
One key to the success of Act 77 is the effective infusion of creative thinking, creative problem solving, and creative pedagogy across the state.

These five foundations represent the core building blocks that must be in place for creative learning to flourish.
The key choices students make should arise from their own ideas, curiosity, interests and passions (intrinsic motivation).

Just because students follow instructions, does not mean that they are engaged in a way that develops creative potential. Engagement, not merely compliance, must be the goal.

Developing creative capacities requires more than presenting interesting activities for learners. The learning environment must engage the whole student—body and mind—involve different ways of learning, and allow for timing that is flexible and responsive.

These learning environments are “growth mindset” environments, in which mistakes and failures should be embraced as positive steps, and self-assessment should be ongoing and interesting.

Creative learning inevitably produces final results that are often different than those originally anticipated, requiring an open mind to change.

Prioritize Intrinsic Motivation
Creative engagement unfolds only when the person is “making stuff she/he cares about.”

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Establish Creativity-Conducive Environments
The learning environment must prioritize individual-learner customization and self-direction.

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Promote Flexibility as Paramount
Creative learning does not unfold with the sequential reliability of other curriculum coverage.

High-quality creative processes and true collaboration involves figuring out ways to accommodate, celebrate, and take advantage of the unanticipated.

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4 **Activate Creativity Inside the Educators Themselves**

Creative capacity is cultured in an authentic “we” environment.

The most powerful tool for teachers and community partners who guide creative learning is the active presence of their own personal creative engagement in the work. Creative skills are not developed when a teacher is setting up activities without a personal investment in the process.

Creative process unfolds best in a “we” co-learning, co-exploring environment in which the adults embrace, and adventure within, the same processes as the learners.

5 **Craft Effective Partnerships**

Partnerships must support creative work in flexible and responsive ways.

Partnerships between schools and expanded learning providers must dedicate careful attention to clear roles, responsibilities in the evolving work, and shared understandings about creativity.

Partners must evolve their practices and policies as they learn what serves students best, with keen attention to continuous communications to foster responsible, accountable partnering.
INSIDE THE CREATIVE PROCESS

4 Key Capacities and Skill Sets

Educators must focus on creative processes more than, or at least as much as, the final products. Learners’ creative dispositions, capacities and skills are developed in these processes.

The key to developing creative learners is to attend to the capacities and skill sets that live inside the creative process.
High-quality creative processes involve generating multiple and different ideas, learning to scope out the project’s possibilities, scanning for opportunities and potential problems, and wanting the formative stage to gestate longer before jumping into action.

“\textit{What’s the Story?} allows students to pursue their own interests and create their own persuasive pieces in the form of videos.”

- 11th Grade Student
Bellows Free Academy, St. Albans

**GENERATING IDEAS**
The formative stages of a project can be as important as the project itself.

SKILLS:
- Generating multiple ideas
- Divergent thinking
- Scoping and scanning
- Identifying key problems
- Tapping personal experience

K-4th graders in a Creative Schools Initiative project at Thatcher Brook Primary School tackled the challenge of redesigning their playground, creating an original puppet show to refine and share their plan. (communityengagementlab.org)
Creative process requires putting a personal spin on tasks to activate one's own interests, discovering personal relevance, managing the ambiguity that comes with starting a project without necessarily knowing the outcome, embracing failures along with successes, revising strategies as you go, and articulating the value of lessons learned from mistakes.

**SKILLS:**
- Managing intrinsic motivation
- Self-assessing
- Tolerating ambiguity
- Failing effectively
- Making informed choices and noting their consequences

AWARENESS OF PROCESS

Students must manage their intrinsic motivation.

“It’s the first time I got to learn the way I wanted to.”

- 9th Grade Student, Montpelier High School
Creative Schools Initiative project

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“Tinkering is a great way to help kids gain problem-solving skills and learn the iterative process where they can continually refine their work.”

- Director, TechTime afterschool program
  River Valley Technical Center, Springfield

**EXPERIMENTING**

Trying multiple ideas while aiming for originality is key to a high-quality creative process.

Experimenting is about testing hypotheses and aiming for new things—not just recycling or imitating—and getting comfortable taking appropriate risks, harvesting discoveries, identifying ideas from others to try and/or adapt, and progressing in the quality of questions.

**SKILLS:**
- Iterating
- Questioning
- Appropriate risk taking
- Combining and mixing
- Synthesizing

The Vermont Afterschool’s Tinkering Project aims to strengthen STEM (science, technology, engineering and mathematics) experiences through opportunities to engage in high-quality tinkering and experimenting. (vermontafterschool.org)
Understanding how parts come together to form a whole work or a collaborative effort is at the heart of creative capacity. Skills include taking an interest in how others have approached similar problems and issues, attending to both details and the big picture, balancing vision with materials at hand and exploring a perspective very different from one’s own.

**ENGAGING MULTIPLE PERSPECTIVES**

Creative learning is the interplay of diverse viewpoints.

“It ignited a spark in my son that I had not yet seen—an excitement to learn that I hope he can keep experiencing!”

– Parent

Creative School Initiative project

**SKILLS:**

- Considering a different point of view (empathy)
- Perceiving the relationships between parts & whole / details & big picture
- Shifting back and forth between, and connecting, imaginative and realistic thinking
- Taking on different roles
- Managing one’s contributions within a group process
PITFALLS IN FOSTERING CREATIVITY

We all carry these limiting views within us. This list calls them out for awareness:

• Viewing creativity as “talent,” and assuming some people are creative and some people aren’t.
  ▶ Everyone has the raw material and can develop creative capacities and skill sets.

• Bringing preconceptions about the creativity of individuals.
  ▶ Learners with disabilities and academic or social challenges often have unusually rich creative capacities that surprise teachers and open up new success pathways.

• Assuming the use of artistic or interesting media means creative processes are happening.
  ▶ A student can have her hands on clay or a clarinet all day and not have a single creative moment.
• Believing that a lot of time is required for students to learn to be creative.
  ▶ Short, regular activities also contribute.

• Believing that artistic or personally expressive media are required for creative engagement.
  ▶ Creativity can grow in all media and subject areas.

• Assuming compliant students are creatively engaged.
  ▶ All learners have their own style and challenges, so attend to the inner processes, even of those who seem quiet and on task.

• Enjoying culminating products, and then quickly moving on.
  ▶ Use final products as documents brimming with data on creative capacity to delve into, reflect upon, and assess what has been learned.

• Thinking that the adults have to do all the assessment work.
  ▶ Learners should be actively self-assessing throughout the creative process.

• Assuming that creativity is resource- or location-dependent.
  ▶ Creativity does not require special materials, personnel hours, or custom spaces.

• Imposing preconceptions about the aesthetics of creative work.
  ▶ That it should be “beautiful” or “meaningful” in ways the teacher prefers.

• Assuming that verbally-inclined students are learning or reflecting better.
  ▶ Just as there are multiple kinds of intelligence, there are multiple expressions of creativity, including physical and visual.

• Downplaying the essentialness of the educator’s active creativity.
  ▶ The creative environment needs co-engagement and co-learning.

• Assuming creative work is all about “the new.”
  ▶ Much creative work is a re-imagining of what is already present.

• Expecting that creative work will result in fulfilling the original expectations.
  ▶ Goals usually change during the creative process.
“I have more motivation and more ability to go out and be an active member of the community.”

- 11th Grade Student, Montpelier High School
Creative Schools Initiative project
CONCLUSION

CHARTING OUR FUTURE

Vermont educators and expanded learning providers stand as the crucial contributors to an historic opportunity.

Many states profess their commitment to creativity, but none have, as Vermont does, a law like Act 77, education policy that mandates teaching and assessing creative thinking, a history of innovation, a proactive and supportive leadership, and a rising opportunity to make theirs the most creative state in the nation—from the youth up.

This guide presents ideas that educators and community partners can rely on to find their own way into this statewide investment.

Changing educational practices is never easy or quick. Adjusting teaching strategies and launching new projects to boost the creative strengths of Vermont students will take time, sustained experimentation, and tolerance of some uncertainty and imperfection in the early going.

There is no getting around those extra efforts and complications in this process of change. However, these guidelines invite experimentation that will produce positive surprises and assessable impacts fairly quickly.

To make it easier, turn over as much control to students as possible.

We have a state full of students whose learning-lives will be invigorated by Act 77’s bold vision; a state full of schools that will radiate fresh vitality and relevance (and better academic results); a state full of expanded learning providers who are eager to share the challenges, responsibilities, and successes; a state with families whose children will be more excited to go to school and to share their excitement at home; a state full of employers who can’t wait to hire young workers who love learning; a future field of new businesses that will spring up from young entrepreneurs;...

...and most importantly, a state full of youth that have the creative capacities and passion for learning that allows them to imagine and chart a better future for themselves and their communities.
ACKNOWLEDGMENTS

If you are reading this report, you are part of a collection of change agents seeking to empower students to love learning.

Specials thanks to the Expanded Learning Coalition Project for partial underwriting of the Community Engagement Lab’s Vermont Creative Learning Forum, where these insights were developed. The Expanded Learning Coalition Project’s goal is to develop resource-rich communities that work collaboratively to provide equitable, accessible, high-quality learning opportunities for all students.

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RESOURCES

For more about Act 77 Flexible Pathways Initiative, personalized learning and expanding learning, visit the Vermont Agency of Education: education.vermont.gov.

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To access this publication on line, visit communityengagementlab.org.

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ABOUT THE COMMUNITY ENGAGEMENT LAB

Founded in 2011, the Community Engagement Lab is a leader in placing creativity at the center of learning. Our goal is for all PreK-12 students in Vermont to have the creative and critical thinking skills they need to succeed in school and life. Our flagship program is the Creative Schools Initiative, which helps classroom teachers, teaching artists, expanded learning providers and community leaders develop more creative learning opportunities for Vermont students. Each year, the Creative Schools Initiative supports a ten-month learning, planning and programming sequence for PreK-12 teachers, with extended in-school teaching artist residencies and public culminating events that present students and their creative work alongside and in collaboration with professional artists.

We also host the Vermont Creative Learning Forum, which brings together Vermont educators, students and expanded learning providers with national leaders in creative learning, to explore how creative engagement can support personalized learning.

To learn more visit CommunityEngagementLab.org
Creativity is contagious. Pass it on.
- Albert Einstein