

Key Points for Local Plan Creation

- Local planning should be carried out by an *S.U.-based technology planning team* that is representative of stakeholders in the local educational process. Teachers, administrators, parents, community members, technology staff, and students should be represented appropriately on the committee.
- Where possible, planning should be done in conjunction with other key strategic plans at the SU level. For instance, school improvement plans, strategic plans, action plans and School-wide plans may all have elements that inform the technology plan. **In some cases, so long as your “plan” meets all the requirements for E-rate, and contains appropriate goals matched to the goals laid out here, one of the other aforementioned plans could be submitted as the technology plan as long as an executive summary is developed to address the technology aspect. Call or email to discuss with Peter Drescher if this is a viable option for your plan strategy.**
- Local planning teams should write *at least one goal for each of the four component areas*. More than one goal per area (e.g., one that focuses on teachers and another on students) is possible, but not mandatory. Whenever possible, reflect on goals from your previous plan, and adapt them when appropriate to the four current categories.
- Each goal should have a related action plan that details the action steps necessary to achieve the goal *over the course of the three-year planning period*. Some action steps may last only a portion of the three years, while others may take more years to complete. There is no limit to the number of action steps that can be created for each goal.
- Every action in the plan should include consideration of related *staffing, technology infrastructure, budget, and professional development* needs. Many districts will find it useful to aggregate, for example, the staffing components of each goal into a single staffing plan. This will make it possible to view the comprehensive infrastructure plan for the three years as a single document.
- For each goal in their plan, teams should develop and include one or more *indicators of success*. The data types listed in the “Data Collection” column of each action plan, for each action step, should support these indicators.
- *This local technology plan needs to be submitted to VT DOE by June 15, 2012*, using the template provided here. Should districts wish to use a different format, this will suffice as long as the goal areas can be correlated with the template provided. The Vermont Department of Education suggests, but does not require, that each June thereafter through 2015, SUs conduct a review to evaluate their goals and their progress towards meeting them. This review should be used to drive decisions about further program decisions. Locals should note that USAC requires evaluation of plans if they are submitted for E-rate purposes. The Vermont Department of Education hopes that an annual summative evaluation, along with more frequent, internal, formative evaluation, will drive the local planning committee to update and revise its action plans. This updating work is considered to be a locally useful process: *It is not formally required for SUs to submit annually updated technology plans to*

DOE. Should a review entail significant changes to the current plan on file with the VTDOE, the Department suggests that an updated plan be submitted.

USAC Requirements for Technology Plans

The Universal Service Administration Company, a division of the Federal Communications Commission, has requirements for Technology Plans that are the basis for E-rate reimbursements. These are the stated requirements for technology plans:

- **The plan must establish clear goals and a realistic strategy for using telecommunications and information technology to improve education or library services;**
- **The plan must have a professional development strategy to ensure that staff know how to use these new technologies to improve education or library services;**
- **The plan must include an assessment of the telecommunication services, hardware, software, and other services that will be needed to improve education or library services; and**
- **The plan must include an evaluation process that enables the school or library to monitor progress toward the specified goals and make mid-course corrections in response to new developments and opportunities and they arise.**
- Suggested budget, though no longer required for E-rate under USAC rules.

The plan you are reading uses goal headings that do match and address these requirements under USAC. The goal headings in this plan are written to be more useful in terms of a visionary technology program that can be improved and built upon over the three year period. It also makes an attempt to align with current vision from the Vermont Department of Education and work going on in the field, specifically from the Vermont Superintendent Association in late 2011 and early 2012.

The crucial piece here for the review and approval process is to be sure that you have addressed these USAC requirements in your overall plan. The approval process with the Vermont Department of Education is bound to uphold the USAC requirements in its role as state plan approval entity. Please be sure these requirements are fairly clear in each of the broader goal areas. It is suggested that plan developers highlight or otherwise make clear the strategies and actions that directly address USAC requirements. It will make the reviewing and approval process go much smoother.

On the following page, there is a table that indicates a “mapping” of USAC requirements to the overall goal areas. These are quite general and represent some areas where they would logically fit. Use the table in any way you see fit. As long as the USAC requirements are within the plan, the approval process will not hinge on your strategies and actions following the table below. It is simply provided as a reference.

Here is a quick reference table that may help in matching where your USAC requirements can fit in the goals laid out in this plan:

USAC language	Areas that could be covered under this	Goal Areas that are appropriate
“...strategy for using telecommunications....to improve education or library services.”	<ul style="list-style-type: none"> • Broadband needs • Videoconferencing • Cell phone/landline • Acquisition of hardware, devices 	Student Centered Learning Flexible Learning
“...must have a professional development strategy...”	Any and all professional development: <ul style="list-style-type: none"> • Inservice days • Tech integrationists, tech coord., any support Positions • After school workshops • Online courses, webinars, etc. 	Leadership in Student Centered Environments Flexible Learning Engaged Community Partners
“...assessment of telecommunications services, hardware, software	<ul style="list-style-type: none"> • Broadband needs • Devices for students/teachers • Web services • Cloud services • Budgeting plans 	Student Centered Learning Flexible Learning
“...must include an evaluation process...to monitor progress toward the specified goals...”	<ul style="list-style-type: none"> • Evaluating your plan • Create actions that evaluate success of each action 	Comes under all of the goals. You should have evaluation strategies throughout.

Format of Technology Plan

The following sections should be in your plan:

Title Page, with entity responsible for creation and a clear name of the Supervisory Union or District it represents.

Executive Summary: This is new from our last plan. It was not required in the '09-'12 plan. Use the Executive summary to give the reviewer a sense of where your SU has been in its technology program over the past three years. Indicate areas of success, and areas that still need improvement going forward in this new plan. The Executive Summary need not exceed 1-2 pages.

Goals and Action Plan Tables: From the templates provided within this document.

Signature page: **This will be provided in full plan release. There is a new one for 2012-15 plans.**

Any necessary Appendices: You may wish to include documentation to support various actions cited in the overall plan or other relevant information.

Sample Action Plan Template

The following page offers a sample completed local Action Plan template. This sample provides guidance for how to complete the blank template that follows, together with the discussion of each goal, in the next chapter.

This example shows only two completed action steps of what would in reality be a larger number. The example text (exemplary of what the SU would create) is shown in **blue text**. Explanatory notes are made in **red text**.

Goal 1: Student-Centered Learning *(This is the state plan goal group. You need at least one-two action steps for each of these goals)*

Local Goal: Our SU will utilize technology to develop more comprehensive personalized learning structures for all learners. *(Your local team creates this goal statement, which articulates your SU’s local intent for this goal group.)*

Action Step	Description	Staffing	Infrastructure	Budget	PD	Y1/Y2/Y3	Data Collection
1	Use technology to support instruction in multiple units in lower grade levels.	<ul style="list-style-type: none"> Tech Integration specialists Tech skills committee 	none	\$2000 for subs and course fees	<ul style="list-style-type: none"> Attend VTFest UVM Online Tech integration course 	Y1	<ul style="list-style-type: none"> Interview committee members Review developed unit
2	Implement technology education unit in lower grades	<ul style="list-style-type: none"> Tech integration specialists Classroom teachers SU curric & inst admin 	<ul style="list-style-type: none"> Elem school labs Network Smart Boards 	<ul style="list-style-type: none"> \$10,000 per school for hardwire \$20,000 for tech integ spec time. 	<ul style="list-style-type: none"> Orientation workshop for all elem teachers VTFest presentation 	Y1 (2 nd semester) and On-going (y1 – 3)	<ul style="list-style-type: none"> Teacher focus group Teacher/ Parent survey Class observations
3	STEM module for MS students						
4	Develop online research skills curriculum for social sciences						
etc.	<i>Remember, you can have as many action steps as you need to achieve the goal by 2012.</i>						

Indicators of Success for this Goal: All students and teachers seamlessly utilize technology effectively to support learning across the curriculum by consistently integrating a variety of technologies and technology-infused techniques into classroom curriculum. Classroom activities exhibit compelling evidence of technological tools and instructional methods that utilize technology. All teachers, and students master real-world applications of technology and 21st century skills by selecting and appropriately using technological tools. Teachers, administrators, and staff utilize technology effectively and inventively throughout their day, to improve productivity across the system in communication, daily tasks, assessments, data analysis, and other routine duties. *(See the Evaluation section for help in creating Indicator statements.)*

Guidance and Templates for Creating Local Goals and Action Plans

The following sections, one for each of the five component goals for local plans, offer guidance for the creation of local goals and action plans. Each section starts with a brief vignette that gives a sense of the types of work, challenges, and images related to the focus area. These vignettes illustrate the sorts of things that local school/SU goal(s) and action plans for each area will address.

Each section then provides a background description of how this component goal from *The Transformation of Education in Vermont* relates to the technology goals created locally for this goal area. An organizing question is provided for local planning teams to consider when writing their goals, along with the essential questions that drive the sorts of action steps that local teams would create (and populate their template with) for each component area.

Guidance for creating the local formative evaluation plan, and the indicators of success for each goal, follows the goal-by-goal information. A blank template is included with the material on the first goal, with the suggestion that it be copied and used for each succeeding goal as well.

Student-Centered Learning

Students at Red River Valley School suspect there is a problem with the school water supply. With support from their science teacher, they decide to investigate. Using their research skills, they team up to find out about and conduct the crucial tests that will test their water. They contact local and state officials and schedule time so they can learn about water quality issues. Using mobile technology, including tablets and hand held devices, the students gather and analyze data in the local water supply.

The students decide that the best solution for the school is to bring in bottled water. They organize a presentation and bring it to the school board for consideration in budget plans. Through this work, students are empowered and each member of the various teams begin to make connections between government and civic action that can bring results for all citizens, as long as those citizens act after preparing themselves with the relevant information.

Organizing Question for This Goal

What is your SU's intent for how students, teachers, and administrators will use technology to support the development of personalized learning in all students?

Essential Questions for Creating Local Action Steps

The local plan should include action steps that address and/or create responses to these questions:

- In what ways will schools use technology to promote, support, and manage student-centered learning?
- How will the SU promote teaching methods and strategies that best support the use of technology in student-centered learning?
- How will the SU create technology policies and procedures that support student-centered learning?
- How will technology "specialists" in schools support student-centered learning?
- How will support keep students safe online while still utilizing a variety of online tools including social networking media?
- How will collaborative online tools be used to support student-centered learning?
- How will students take advantage of online tools to create and foster their own learning paths?

VT DOE's Background and Rationale for This Goal

In aligning the goals for learning technology with the concept of personalizing learning for learner success, both this state plan and local plans are organized around the central concept of student-centered learning. This concept encompasses much of what lies at the core of education in Vermont..

When learning is student-centered, it is:

- Relevant for students
- Personalized for each students' learning style and preferred modality.
- Robust and challenging
- Actively engaging (“hands-on/minds-on”)
- Inquiry-based
- Collaborative (locally, regionally, and globally)

When technology is used effectively to support learning in a student-centered environment, it provides a means for engaging students, challenging them, and developing their capacities as learners. Vermont teachers, administrators, students, and parents must become steadily more familiar with the range of possibilities that technology offers for enhancing education — and they must all be provided with opportunities to develop their own skills and capacities.

As Vermont moves forward with the meaningful integration of technology in education, and develops a clearer vision for the role of grade expectations around technology within the content areas, *assessment* — both of and with technology — will play an increasingly important role in student-centered learning.

Envision classrooms where the concept of the “teacher” shifts to a community of learning and sharing. Through the use of devices connected to the internet, learners craft The teacher becomes a facilitator of learning and guides students on a learning path that both challenges them and

Action Plan Template for Goal __

Local Goal: Our SU will:

Action Step	Description	Staffing	Infrastructure	Budget	PD	Y1/Y2/Y3	Data Collection
1							
2							
3							
4							
etc.							

Indicators of Success for this Goal:

Leadership in a Student-Centered Learning Environment

When it came time for the Wharton North Supervisory Union to update their strategic plan documents, the assistant superintendent, Mr. Stackpole, engaged a working group of principals, teachers, technology coordinators, and school-board members in the task. Members of the committee were encouraged to work collaboratively using online sharing tools and desktop videoconferencing that allowed for engagement in the various topics at hand over the course of the weeks between face to face meetings. Students were included in some of the strategic planning. In the end, everyone involved felt that they were encouraged to participate in a variety of ways and means.

Organizing Question for This Goal

How will school leaders in your SU exercise and display leadership in using technology as a tool for effective teaching and learning?

Essential Questions for Creating Local Action Steps

The local plan should include action steps that address and/or create responses to these questions:

- How will the SU create and implement professional development programs rich in content-based technology integration?
- How will SU leaders model technology use for both staff and students, in a variety of contexts?
- How does the SU insure that school leaders follow guidelines put forth by the ISTE NETS-A (for Administrators)?
- In what ways will school leaders build awareness by highlighting solid examples of student-centered learning?
- How will SU leadership administer the successful conception of the teacher as a facilitator in a classroom where technology can provide access to rich teaching and learning resources?
- How will administrators/school leaders address best practices in the use of data, and increase capacity in understanding the role technology plays in creating better efficiencies around this data

VT DOE's Background and Rationale for This Goal

The leaders we need embrace the realization that skillful and powerful integration of technology into everyday learning is key to transforming schools into centers for success. They understand that teachers and staff need access to technology for a rich and wide range of learning purposes. They advocate with their school boards and communities to build and develop the resources that these uses require. They support the creative and flexible use of technology within their schools — and they model this in many of their own daily tasks. To communicate within their schools, they use a variety of communication tools, from handheld devices to blogs to email. Many of the same tools are used to connect with parents and the community. Our best school leaders understand the strong connection between effective teaching, powerful learning, and the skillful use of a constantly changing set of tools for teaching, learning and communicating.

What's more, leadership for learning is not only about administration from the main office: it must be fostered among teachers, students, and parents alike. Teachers need to become educational leaders and facilitators by encouraging, inspiring, challenging, shaping, and guiding technology-rich projects for student-centered learning. Students should be encouraged to become leaders by taking the initiative in their own learning, through collaborative projects in particular. Students can lead one another in making the most of technology, helping each other as they explore the possibilities for all they can now discover, create, investigate, and do. For schools to continue to be relevant to our students, we must embrace the personal aspects of computing, with handheld devices and tablets that provide distinct choices in ways each student learns.

Another component of effective leadership in a student-centered learning environment relates to the strategic use of data for informed decision-making. Done properly, data-driven decisions and planning can improve the effectiveness of nearly all SU, district, or school functions, including instruction, student assessment, and evaluation of systemic needs.

Flexible Learning Environments

In Mapleton, a math teacher started a sixth-grade project called Snack Express. Students used online survey tools to query students, asking what snacks they might like, did these need to be prepackaged, etc. Using a free database application, they developed a menu, and created an “app” called “MapleSnack” to collect daily orders from throughout the school. The students used graphic-design software to create ads, and spreadsheet software to analyze sales and calculate profits. Starting their project with a loan from the PTO at 5% interest, the sixth graders repaid that and earned a \$1,600 profit. They decided to give half to the local United Way, and with the other half funded food for a special sports event.

Organizing Question for This Goal

What will your SU do to maximize a flexible environment for both student and professional learning?

Essential Questions for Creating Local Action Steps

The local plan should include action steps that address and/or create responses to these questions:

- In what ways will the SU continue to pursue and grow broadband capacity to support learning opportunities for all schools?
- In what ways will the SU promote use of distance-learning opportunities for the community, parents, school leaders, teachers, and students?
- How will the SU provide professional development for the effective use of distance learning and cloud-based free applications that are accessed via tablets and handheld devices?
- In what ways will the SU require or encourage teachers to become involved in collaborative learning projects with teachers throughout the state, nation, and world?
- In what ways will the SU provide access to learning resources for all students and community members beyond the traditional school day and year?
- In what ways will the SU ensure flexibility in staffing and scheduling student learning opportunities?

VT DOE's Background and Rationale for This Goal

A transforming educational system will be less bound by schedules and facilities, and instead will promote more flexible learning environments. ... Students will be encouraged to develop the kind of complex problem-solving skills that are required in today's world.

The Transformation of Education in Vermont

Technology provides a ready vehicle for students pursuing their own course of learning, and supports the idea that there are multiple pathways and learning opportunities that students can follow to meet graduation requirements. This is a crucial component of student-centered education.

A flexible learning environment supported by technology is one that opens and encourages connections to resources and expertise beyond the school walls. Network technology allows students ready access to the resources they need to support their learning — any time, from any location.

The Vermont DOE aims to support schools in the development of flexible learning environments that will enable students to communicate, access resources, collaborate, think in new ways, create new knowledge, and manage their work as members of a globally linked community of learners.

Engaged Community Partners

At Winningham Central School, a grades 7-8 social studies teacher and a local university intern co-created a unit on climate change that called for each student to create a blog on an alternative energy source, then use technology to get advice and feedback from a professional in that field. Earlier in the year, a group of students within the class had created their own blogs, along with an online YouTube presentation on how blogs work, what issues they raise, and how they can benefit learning. Those students now oriented their classmates, who each got parental permission to start a blog.

The students used online tools to calculate their own carbon footprint, and posted those. As each began researching a report on a source of alternative energy, their teacher organized field trips to wind, hydro, and composting sites — and recruited adults who work with wind power, hydropower, solar energy, and biofuels to serve as expert advisors. Students posted report drafts on their blogs, and communicated with their experts on a regular basis — by cell phone, virtual communication tools and on the blog — to get detailed feedback and insightful advice.

Organizing Question for This Goal

How will your SU utilize technology to connect to and engage with local, regional, state, and global communities?

Essential Questions for Creating Local Action Steps

The local plan should include action steps that address and/or create responses to these questions:

- What will the SU do to promote digital citizenship among students and staff?
- How will the SU develop communication resources, and make available to the community existing resources such as the Learning Network of Vermont, thereby solidifying the role of the school building in community participation?
- In what ways will the SU communicate the continuing need for infrastructure that supports personalized learning and enables students to learn in contexts that support lifelong learning?(e.g., through project-based or other applied work)?
- How will the SU create structures that allow for the use of social networks in community-based activities but maintain awareness of digital citizenship and online safety?

VT DOE's Background and Rationale for This Goal

Learning will not be confined to a classroom, but will extend to immersion in community, workplace, and service environments. Civic and personal responsibility will be as important an outcome as building academic skills.

The Transformation of Education in Vermont

Technology is continually redefining community, providing new settings for connecting common interests — yet in Vermont, many communities are still barely tapped as human resources for student learning. To be active learners, students must have access to community members of all kinds, both locally and worldwide.

In fostering these relationships and collaborations, schools can enable students to build valuable communication and collaboration skills that will serve them well in an increasingly competitive global environment.