

VERMONT TECH

INTERIM REPORT

To Vermont Technical College President Pat Moulton



**Vermont Tech Farm and Food System Transformation
Project Summary To Date
From the Steering Committee**

12.31.20

Purpose:

In April, 2020, then Vermont State Colleges Chancellor, Jeb Spaulding, recommended that three Vermont State College campuses be closed including Vermont Tech's Randolph Center campus. Several people realized what the impact of a closure would mean for the future of applied agricultural education in Vermont and its food system and approached President Pat Moulton asking her permission to gather a stakeholder group to see what could be done. This project was convened in May, led by a Leadership Team of Louise Calderwood, Regina Beidler, Ellen Kahler, and President Moulton and involves more than 45 stakeholders on work teams, including a 13 member Steering Committee. Those involved have 4 main motivations:

1. ensure that VT Tech Randolph campus does not close down; a key aspect of this is for a revised Ag & Food system educational program being financially sustainable which means substantially increasing enrollment and ensuring the VTC Farm at least breaks even in its expenses and revenue;
2. re-vision the Ag & Food system educational program to be rigorous and relevant to an evolving food system and the jobs that are emerging in it;
3. re-vision the Ag & Food system educational program so that VT Tech becomes THE place for applied, hands-on ag and food system education in the Northeast, with a clearly defined niche that enables VT Tech to recruit a much broader, more diverse student body from both VT and the Northeast. [note: students from VT dairy families will still experience a strong dairy program]; and
4. re-vision the role and focus of the VTC Farm, its facilities and 250 acres to better align with the core of what is being taught in the revised Ag & Food system educational program.

Vermont Tech's Agriculture and Food System Program with its hands on, applied education model has trained generations of farmers. The current transition process within the Vermont State College system has given a group of more than forty stakeholders the opportunity to evaluate the strengths of the current Agriculture and Food System Program while making recommendations for ways to increase its presence and relevance in an ever evolving regional food system.

To date, small teams of stakeholders looked at three areas: culture and curriculum, program models and the campus farm. Currently, a business case and plan is being developed, along with a robust marketing and outreach plan aimed at substantially increasing enrollment.

What's At Stake:

The current Agriculture program has seen a steady decline in enrollment to unsustainable levels (current 2020-2021 academic year has 26 of students; pre-COVID enrollment has also been in steady decline since 2017) -- due in part to a smaller number of Vermont farm families who are sending their kids to VT Tech (which mirrors the decline in the number of dairy farms in the state which has dropped from 1,015 in 2009 to 664 in 2019), insufficient staff capacity at VT Tech to conduct personalized recruitment for the program and overall demographic challenges facing the northeast. Without a significant reboot of

the program (including significant increases in enrollment), is a risk of closure due to the cost to operate and enrollment. At the same time, the regional food system is growing and employers across the state are struggling to find enough workers so that they can capitalize on growing market opportunities. Vermont Tech is needed more than ever to train the next generation of food system workers and owners, for a wide variety of [careers](#) across many types of production (e.g., commodity, value-added) and in the areas between the farmgate and the marketplace (e.g., food safety, supply chain logistics).

Gathering Input:

Three community meetings, large group visioning sessions, small group listening sessions, and an alumni and Randolph area survey fed into two initial work teams (Culture & Curriculum Team and Program Models Development Team) which explored the kind of curriculum and program format and delivery model would best serve the state's agriculture and food system needs. The teams also explored how the VTC Farm connects to needed learning objectives. Each team developed a set of recommendations that have been handed to a Business Case team for their consideration. The Business Case Team is currently exploring the financial viability of the proposal, conducting enterprise analyses to explore revenue generating options for the VTC Farm, developing multi-year financial projections, enrollment targets and a capital expenditures budget and is developing a business plan. A Communications & Outreach team is working with staff at Vermont Tech to better understand the market demand for the program, develop core messaging to attract new students to the program, and develop a plan to publicize the program. All these efforts will then be presented to the leadership, staff and faculty at Vermont Tech by the end of March 2021. A final community meeting will be held in late March or early April to present the group's final recommendation and report to President Moulton.

Program Model Development Team:

The Program Models Development Team met 7 times and conducted an extensive scan of other colleges and universities that offer agriculture and food system degrees, keying in on those that have a similar commitment to hands-on learning. They also explored questions related to who are the intended audiences of programs offered at VT Tech (e.g., traditional college age student, adult continuing education, students who come from a farm background and those who do not, etc.), the school calendar (e.g., summer programs and J terms being added), what are the options for delivery models (e.g., in-person, on-line, hybrid), and how to encourage integration with "allied" degree programs offered at VT Tech (e.g., diesel mechanics, HVAC, etc.).

Culture & Curriculum Team:

The Culture & Curriculum Team met 6 times and laid out learning and skill outcomes for a successful program at VT Tech. They created a prototype of courses to determine credentialing and timelines for each degree that focused on requisite knowledge and applied skills development upon graduation, and compared that to the existing set course offerings and requirements for the 2021-2022 academic year. The Team generated course selections for both the 2 year associates degree and the 4 year BS/BT degrees. They organized possible courses by semester and included basic general education and classes and electives within the student's desired discipline. They have recommended that semester 3, for both 2 and 4 year students, be a guided semester in practice (pre-approved by VTC and would include weekly

assignments). For the 2-year associate degree program, during semester 4, students would take a capstone class that addresses learning from semester in practice (aka externship) and would include more electives. The Team also considered January Term electives and summer courses.

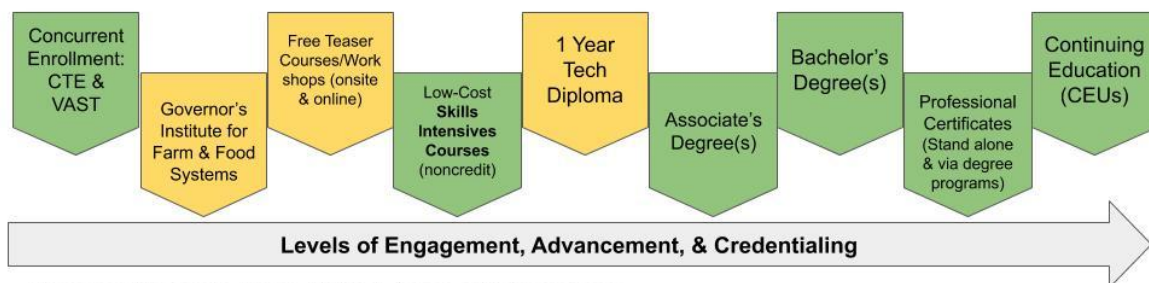
Recommendations From Initial Two Teams:

The following are some specific overall recommendations that come from our initial phase of exploration:

Reaching New Types of Students: VTC needs to expand the potential demographic for its agricultural curriculum. The overall program design must appeal both to VTC’s traditional Vermont on-farm students as well as an expanded audience. The latter include students from elsewhere in the Northeast, students aspiring to start new food businesses or farms, career changers, active professionals, and others simply seeking applied knowledge of farming and the food system.

Flexibility of Course Track: Courses need to be combinable into a variety of educational products, ranging from the BS/BT degrees, to a traditional AA, to a one-year technical degree, to stackable certificates. Development of a robust summer session and January term will increase course offerings and support students in identifying unique educational opportunities that match their individual circumstances. Development of technical certificates and continuing education opportunities will increase the population from which to draw VT Tech students.

Recruitment, Revenue, & Reputation-Building Opportunities



Success Depends Upon Critical Areas of Integration:

- Lean, common core curriculum for 3 programs within the School
- All programs should allow & encourage coursework in other Allied Services programs
- Calendar of synched offerings (undergrad & professional/CE courses)
- Increasing hybridized course offerings that feature onsite experience, complemented by online delivery so as to maximize student flexibility
- Curriculum & farm infrastructure
- Summer farm activities & coursework
- Support for advising, internships/externships, & apprenticeships
- Multiple points of calendar entry for students throughout the year

Team research yielded a number of models from around the US of programs and initiatives that offer insights into options VTC might pursue. [Access the research spreadsheet here.](#)

Green= Existing element, with some modification
 Yellow= New element

Moving to a Year-Round School Year: The summer months are when agricultural production is at its height. Moving to a year-round school year will enable a much wider range of course offerings, both for traditional students as well as career changers, active professionals and continuing education students. Offering a range of short courses in the summer months will enable the

traditional VTC student to take these courses with other adults, thus enhancing their exposure to other learners outside of their student cohort.

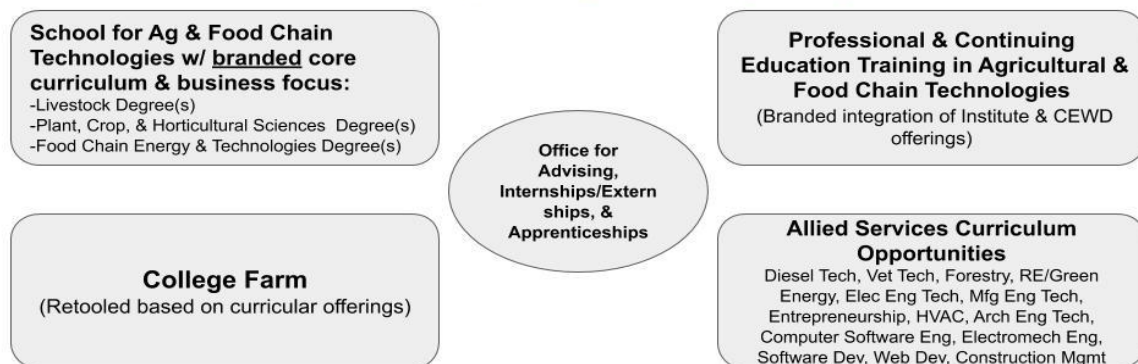
Importance of Externships: The curriculum should strengthen its experiential emphasis through a guided and rigorous semester in practice and other externship opportunities. A 3rd semester externship will match students with a closely monitored work experience in an environment that mirrors their career ambitions and serves as the foundation for their final semester and their Capstone project.

Establishment of a Center: A clearly defined Center structure for the Ag and Food Systems programs offers a number of advantages:

- Easily identifiable and marketable portal for prospective students to see the variety of available learning options.
- Visibility of VT Tech's thought leadership in this area and demonstrated institutional commitment to keystone programs representative of Vermont's heritage and future.
- Centralized coordination for procurement, dispersal, and impact assessment of external funding both for innovative and operational needs that enhance educational opportunities for a range of audiences.
- A structure that allows for more collaborative and coordinated efforts between classroom, staff, externships and the VTC farm and between other staff and faculty at Vermont Tech, including strategic budgeting across all related sectors.
- More natural way to build synergy and coordinated educational offerings for a variety of audiences.
- The ability to place advising at the center of the learning process to assist individual students in meeting their individual learning and professional goals.
- Ability to strategically market, implement, assess, and continually enhance a suite of programs and learning modalities under the umbrella of the Center.

Vermont Center for Agricultural & Food Chain Technologies*

Training Professionals & Supporting Technological Innovation to Accelerate the Development of a More Resilient & Equitable Regional Food System by 2030



* "Center" is the defined framing of this enterprise. "Vermont" brands the enterprise. This framing becomes the web landing page which packages all of the integrated assets in one place. Precise naming is up for debate and warrants SEO and target audience research. Note that "Centers" in academic institutions tend to be more encompassing than "institutes." Institutes are often more targeted and research-oriented and less likely to have academic programs under their umbrellas.

Alignment of the Campus Farm with educational objectives and faculty across Ag and Food System

programs: The farm as it is currently managed with 80 cows and selling to Agrimark loses about \$200,000 in operating costs each year, while the orchard and sugaring operations are roughly break-even or profitable enterprises. The Dairy Sub-Committee of the Culture & Curriculum Team met 6 times to explore the current and potential future state of the VTC Farm, especially in relation to its educational value to students looking for hands-on learning opportunities. Combined with a strong externship program (e.g., on a large conventional dairy farm, at Cabot Creamery, at a local vegetable farm, at Ayers Brook Goat Dairy), these learning opportunities will accentuate the range of options available to an increasing diversity of students, who have a wider array of interests. The intent is to expose students to a wider array of farming types (e.g., grass-fed livestock, traditional dairy, maple sugaring, diversified vegetables) and careers in the food system (e.g., non-dairy farming, meat processing, sales and marketing food, logistics, food safety, food entrepreneur, etc.) so that VT Tech can attract a wider range of students than it has in the past. The Sub-Committee developed a number of scenarios that were then passed on to the Business Case Team for further development from a financial sustainability lens.

Note: The Dairy Sub-Committee, representing a range of dairy operations (e.g., conventional small and large scale, goat, organic, and value-added products), also explored ways to best serve Vermont's existing dairy community and position it for the inevitable transition to the next generation of dairy farmers. Part of this exploration included how best to utilize the assets (e.g., 250 acres of land) and facilities (e.g. existing dairy barn and associated buildings) as a learning lab connected to core classroom learning. The goal of the process is to increase the diversity and quality of dairy related educational opportunities for students. The 2+2 program with UVM will also be continued, and hopefully expanded upon if sufficient funding is secured.

Scenarios currently being explored include: moving away from a conventional milking herd focus to a more diverse mix of animal and diversified agriculture; value-added products; offerings that engage students in farm management, marketing and on-farm enterprises and ways to engage with the larger Randolph community (e.g., marketing products). The Business Case Team is currently conducting robust enterprise analyses for on-campus production of grass fed beef, deep bedded feeder pigs, maple, apples, potatoes and supplying custom grazing services for dairy heifers.

The team used a series of 12 questions to assess the merit of an initial list of 16 production enterprises to serve as academic models. Topics considered in determining the final selection of production enterprises included economic sustainability, academic considerations, future job placement and the potential to attract students.

Developing a Business Plan:

A business plan will be developed over the next several months, working from the outlined recommendations (as described above) and adjusting assumptions as needed. The bottom line is that any revisioned / transformed program at VT Tech needs to be financially sustainable, including significantly increasing the number of students in the program. Part of the business plan will include a capital expenditure and 3-year transition plan for the revisioned VTC Farm. An initial organizational chart that indicates current and desired future state staffing and connection to the larger campus-wide organizational chart has also been developed.

Marketing and Outreach Across the Northeast:

A marketing plan will be developed during this process, developing the language and strategies needed to position the revisioned program to significantly increase enrollment. A market assessment will soon get underway to test the idea of a Center for Ag & Food Systems at VT Tech, to test a name for the Center, and test our assumptions about the types of students who will be most attracted to what we have envisioned. Additional investment will be needed for student recruitment and to implement the marketing plan once complete.

Those Involved in the Process:

Over 45 Vermonters who want to see a thriving future for VT Tech's ag and food system educational program have been volunteering their time (often through weekly meetings) since July.

Process Leadership Team – meets weekly

- President Pat Moulton
- Louise Calderwood (co-chair), Echo Hill Farm Maple Products
- Regina Beidler (co-chair), Organic Valley
- Ellen Kahler, Vermont Sustainable Jobs Fund / VT Farm to Plate

Steering Committee -- meets monthly

- President Pat Moulton
- Louise Calderwood (co-chair), Echo Hill Farm Maple Products

- Regina Beidler (co-chair), Organic Valley
- Ellen Kahler, Vermont Sustainable Jobs Fund / VT Farm to Plate
- Marc Mihaly, retired, VT Law School (established the Center for Ag & Food Systems at VLS)
- Philip Ackerman Leist, Sterling College, Dean of the School of the New American Farmstead
- Jed Davis, Cabot Cooperative Creamery, Sustainability Director
- Dan Tobin, assistant professor -- UVM Community Development & Applied Economics
- Kate Finley Woodruff, UVM - office of Dean of College of Agriculture & Life Sciences
- Laura Ginsburg, VT Agency of Agriculture, Section Chief, Ag Development Division
- Meg Nelson - VTC alum, Nelson Farms and Shadagee Farm (dairy) [alum]
- Steve Schubart - VTC alum, Grass Cattle Co. (grass-fed beef) [alum]
- Molly Willard -- representing VTC faculty/staff
- OBSERVER: Erica Campbell – serving in a personal capacity (but she works for US Senator Bernie Sanders)

Work Teams

Program Models Development Team:

- Philip Ackerman Leist – Chair
- Dan Gingue, Dehm Associates
- Dan Tobin, UVM CDAE
- Grace Oedel, Executive Director, NOFA-VT
- Kate Duesterberg, Cedar Circle Farm
- Chuck Ross, former Secretary Agency of Ag, former director UVM Extension
- Sarah Danly, VT Farm to Plate (VSJF)
- Molly Willard, VT Tech

Culture & Curriculum Team:

- Marc Mihaly -- Chair
- Emily Wright, dairy nutritionist, alum
- Dr. Kim Crowe, VT Tech
- Emma Marvin, Butternut Mountain Farm
- Brent Beidler, former organic dairy farmer, VT Tech adjunct prof
- Katie Ballard, Miner Institute
- Sherry Lussier, retired, former CTE teacher
- Vern Grubinger, UVM Extension
- Steve Schubart, Grass Cattle Co, alum
- Laura Ginsburg, VAAFM

Dairy Sub-Committee of Culture & Curriculum Team:

- Laura Ginsburg – Chair
- Steph Nault, VT Tech
- Chelsea Sprague, Sprague Farms

- Henry Pearl, Hillview Farm, VT Tech alum, 2+2 program
- Ryan Andrus, Bridgman Goat Farm
- Linda Dimmick, Neighborly Farms
- Jamie St. Pierre, Pleasant Valley Farms
- Meg Nelson, Nelson Farms and Shadagee Farm, alum

Survey & Input Committee: [surveying alumni and greater Randolph community]

- Erica Campbell – Chair
- Diane Bothfeld, Dairy Section Chief, VAAFMM
- Meredith Niles, UVM
- Amanda Chaulk, VT Tech
- Jenn Colby, UVM Extension

Business Case Team:

- Jed Davis – Chair
- Andy Wood, VEDA/VACC loan officer, alum
- Brett Denny, VT Dairy Herd Improvement Assoc.
- Holly Fowler, Northbound Ventures
- Marty Strange, retired, Randolph resident
- Dan Gingue, Dehm Associates
- Jenn Colby, UVM Extension
- Steph Nault, VT Tech
- Lit Tyler, VT Tech
- Greg Hughes, VT Tech

Communications & Outreach Team:

- Kate Finley Woodruff – Chair
- Megan Smith, former Commissioner, VT Department of Travel & Tourism
- Mary White, VT Farm Bureau
- Amanda Chaulk, VT Tech (Marketing & Communications)
- Jessica Van Deren, VT Tech (Admissions)

In addition, 3 larger community meetings have been held since late June with additional stakeholder involvement. Numerous listening sessions with current and former faculty and staff, various producers (e.g., dairy, goat, beef, value-added processing), and neighboring farms have taken place to solicit their input and feedback.

Connection to VT Tech’s Transformation Advisory Taskforce (TAT) and the Legislative Select Committee on the VSC system:

The work of this process fits within the overall transformation planning of Vermont Tech and the work of the Transformation Advisory Taskforce (TAT) put in place to help guide the transformation of the entire college. The Legislative Select Committee is focused on the entire Vermont State Colleges System

(VSCS) focusing on governance and system configuration. That process assumes all the VSCS institutions are undergoing processes to enhance efficiency in operations and physical infrastructure as well as program reviews to avoid duplication appropriateness of programming. Thus, both the work of the TAT and this Ag & Food Systems program planning work are relevant to this larger VSC-wide process.

Next Steps:

With the hand-off of the above recommendations from the Program Models Development and the Culture & Curriculum Teams, the Business Case Team is currently exploring the financial viability of the proposal, developing multi-year financial projections, enrollment targets and a capital expenditures budget and is developing a business plan. The Communications & Outreach Team is working with staff at Vermont Tech to better understand the market demand for the program, develop core messaging to attract new students to the program, and to develop a plan to publicize the program. All these efforts will then be presented to the leadership, staff and faculty at Vermont Tech at the end of March 2021. A final community meeting will be held on April 2nd to present the group's final recommendation and report to President Moulton. An Advisory Board consisting of some members of the stakeholders who have been actively engaged in this process will be selected to then work with President Moulton, faculty and staff to begin implementing the recommendations President Moulton agrees to.