Summer 2018 Academic Planning
Closure/Merger/Expansion/New Subgroup
DRAFT: July 27, 2018
Subgroup Report (5-Year Strategic Plan)

Major Activities:

- Document current program locations and modalities.
- Solicit initial program expansion, merger, and closure ideas, especially considering nontraditional and transfer students.
- Solicit initial new program ideas, especially considering nontraditional transfer students.
- Develop guidance manual on expansion, merger, and closure needs and new program activities.

Perceived characteristics of healthy programs:

(NOTE: As the plan evolves and more data become available, terms such as "strong" and "some share" below should be replaced with quantifiable, measureable terms.)

- Versatility, allowing use of many commonly offered courses, especially in the earliest years
- A strong market demand and a program understood by the market over long periods of time
- Enrollments that cover direct costs plus some share of indirect costs of the College. Given variations in enrollments and demands over time, programs that experience times of extra success should remain efficient to help the overall College's condition, recognizing that downturns for that program may occur later when its ability to provide excess revenue will be limited.
- Strong student satisfaction with the program experience, where students are program advocates
- An understanding by all operating units as to what the program is all about and why it is considered important to Vermont, the marketplace, and the College
- Instructional locations and modalities are appropriate for the student population being served
- Best practices related to transfer credit and assessment of prior learning enable nontraditional students to complete degrees in a timely manner
- An engaged faculty with appropriate content knowledge for program instruction

Information and ideas driving program changes:

- Decisions should be data-driven
- Data should be longitudinal and presented in tabular and graphical manners, starting now and continuing to allow long-term trend (e.g., 10-year) analysis. Current program data should include, updated annually:
  - FTE (total and by year-in-program (1st, 2nd, 3rd, 4th, Masters) after add-drop of fall semester
  - Headcount (total and by year-in-program) after add-drop of fall semester
  - Headcount of transfers and of non-traditional students

- o Annual program incoming-class headcount target for the Marketing-Admissions-Program team
- o Admissions data (already collected): inquiries, applications, acceptances, deposits
- o Program direct expenditures
- o Expenditure per FTE
- o Appropriate external data (e.g., EAB market data or other data)
- Data for new programs should be cross-correlated with Policy 102 predictions for first three years
- A readily accessible, transparent, and understandable data repository is needed

Guidance document related to program closures, mergers, expansions, and additions (new programs):

- Break into chapters for each topic
- Should include both information and step-by-step processes to follow
- Should reference, not restate, VSC/VTC policies (e.g., VTC T117, VSC Policy 102, VSC Policy 109) and VSC-VSCFF contractual requirements
- Stability of a process is important; programs chasing moving targets frustrates chances for success
- Operating units at the College level (Financial Aid, Admissions, Registrar, etc.) should be aware of student experiences interacting with those units: what's going well, what should be improved, etc.

- **Expansion concepts:**
  - o Location choices and how to consider different locations
  - o Modality choices and how to consider different modalities
  - o Are there opportunities for "one cohort" special locations or modalities, such as a BS (insert any program here) completion offered at (say) Williston Campus only once every 5+ years instead of a continuous program? In other words, specific courses would only be offered one time, and eventually that cohort completes its degree. That offering is not made to any new students until demand gets pent up again.
  - o How to obtain estimates of enhanced enrollment and the make-up of the additional enrollment (e.g., transfers, nontraditional, traditional)
  - o How to estimate resource needs and effect on program delivery as expansion occurs
  - o How to determine scheduling issues resulting from expansion

- **Merger concepts:**
  - How to determine marketability of common programs with specialty tracks vs. all individualized programs
  - Consider how degrees would be formally named on diplomas if there are specializations/concentrations/tracks
  - Advising and scheduling issues that can result from merging programs and keeping tracks

- **Closure concepts:**
  - Must recognize how drastic closure is on the program and the overall institution.
  - The industry/market being served, beyond simply an advisory board, should be informed when a program is starting to appear not viable.
  - Because costs versus revenues typically are what threaten program viability, and because VTC is a state college, a closure process should include some notification to the state legislature that a specific market segment will no longer be served.
  - Must be generally understood guidelines as to the program attributes that make it vulnerable to closure
  - Closure should be pursued after thorough analysis of causes of any program problems exist
  - Timelines should be established for closure analyses and remediation efforts
  - Methods to improve program health must be given full attention when analysis suggests the program should be viable. Assistance from all parts of the College must be focused to assist at-risk programs without relying solely on a department chair or program director.
  - Program faculty and staff must be part of program analysis and improvement planning
  - There should be College-wide acceptance that not all programs will have positive cash flow at all times; the mission of the College must also be considered. Well performing programs should offset underperforming programs at time just like highly enrolled courses must offset more lightly enrolled but essential courses.
  - Are there quality issues with the existing program?
  - Make use of the draft "toolbox" developed by Mary O'Leary and Chris Reilly when constructing the guidance document

- **New program concepts:**
  - Reporting on program data relative specifically to original Policy 102 projections should be shared for the first three years
  - Use Policy T117 as basis but make entire process easily understood step-by-step
  - Encourage College-wide announcement of any proposed new programs early on
  - Has the "split the pie" (a move of existing student feeding paths from an existing program into a new one instead of growing new enrollment) issue been satisfactorily addressed?

Miscellaneous items and recommendations:

- A revisiting of similar courses should be undertaken, especially for courses within the same school in the new schools model, to see if course merging is feasible. It may be possible to compromise and obtain better efficiency without giving up too much program-based specificity. Models such as unique lab sections and common lectures are an option. It is important that

instructors understand and appreciate the needs of all programs that might be taking a specific common technical course.

- Modalities such as telepresence might be used to collapse two nonsynchronous offerings of the same course into one. Professional development in best practices for telepresence is important. Student experiences with telepresence are important to track (must ensure that quality of instruction is not diminished in a way that offsets efficiency in the delivery)
- A method to help programs with one full-time faculty member or a single program director with no full-time faculty should be implemented. Smaller programs can feel "on their own" and not benefit from the aid of in-program colleagues.
- Are there institutional issues vs. program-specific ones that need to be addressed that might be affecting some programs more than others? Which demographic knows we offer BS degrees and which ones do not? Same question for master's degrees.

Timeline (2018-2023):

- Initial assessment of current programs, merger/closure/expansion opportunities, and new program opportunities (May-June 2018)
- Development of guiding ideas over the 2018-2023 time frame for merger/closure/expansion/new (May-June 2018)
- Initiate any "no brainer" choices from the initial assessment (ones that do not require additional guidance to be developed to be a good idea to implement) (Fall 2018)
- Finalize program data collection, storage, and reporting (e.g., tabular, graphical) requirements and system (Fall 2018)
- Draft a guidance manual for program merger/expansion/closure/addition(new), that includes how to develop an action plan that involves all areas of the College to improve any programs needing help (AY 2018-2019)
- Issue first summary report using new data requirements (Fall 2019)
- Update data report annually (Annually starting 2019)

Program Additions/Closures/Mergers/Locations/Modalities Group

Draft: June 30, 2018

SUMMARY OF CURRENT PROGRAMS

Only programs that already exist and operate or are new and <u>completely</u> approved (but maybe not yet underway) should be included below.

Hospital locations for clinicals (e.g., nursing, respiratory) are not considered "sites" here; didactic instructional sites (in-person, telepresence) are.

Note: Modality refers to program availability in its entirety (e.g., online would mean that all courses needed are available completely online not "a few courses could be online"). If "2+2", the "+2" would be available completely in a format (could be in-person, could be online; a mixture of in-person and online might be possible but would not be noted below as "online" (the default is "in-person" for programs)). The same goes for site: the program must be completable at the site noted without travel to a different site (thus online or telepresence could enable that, but even a single in-person course required at a <u>specific</u> <u>site</u> means it's offered at <u>that</u> location).

RC = Randolph Center; WC = Williston; S = other sites (e.g., nursing)

IP = In-person; ON = Online; T = Telepresence (presented one place, broadcast to others (might be to fixed separate classroom; might be to fixed other remote PCs via AdobeConnect/Zoom/etc.)

An asterisk (*) after the program means the information has been confirmed or corrected by the program designee for the summer 2018 effort.

DEGREE	LOCATION(S)	MODALITY(IES)	COMMENTS
MASTER OF SCIENCE			
Dental Therapy*	WC	IP	2020
Computer Software Engineering*	WC	IP	
BACHELOR OF SCIENCE			
Applied Business Management	N/A	ON	+2
Architectural Engineering Technology*	RC	IP	
Business Technology & Management	RC, WC	IP	Both 4-yr and +2
Computer Engineering Technology*	RC, WC	IP, T	
Computer Information Technology*	RC, WC	IP	
Computer Software Engineering*	RC, WC	IP	
Construction Management*	RC	IP	
Dental Hygiene*	WC (4-YR)	IP (4-YR); ON (+2)	Still offered; not replaced by Oral Health Sciences and some may think
Diversified Agriculture*	RC	IP	exploring hybrid courses at RC and WC, even courses with lab
Electrical Engineering Technology*	RC, WC	IP	Some courses are telepresence
Electromechanical Engineering Technology*	RC, WC (see comment)	IP	4th year available both RC and WC; 3rd year available RC only
Entrepreneurship	RC	IP	Both 4-yr and +2
Manufacturing Engineering Technology*	RC	IP	
Nursing*	N/A	ON	
Oral Health Sciences*	WC	IP	This is the degree confirmed as an exit degree for someone who attempts the MS-Dental Therapy degree but does not complete it. (Need to confirm specifics.)

Professional Pilot Technology*	WC	IP	There are online or telepresence individual courses offered but degree requires Williston Campus presence to complete
Renewable Energy*	RC	IP	
ASSOCIATE OF APPLIED SCIENCE			
Agribusiness Management Technology*	RC	IP	exploring hybrid courses at RC and WC, even courses with lab
Architectural & Building Engineering Technology*	RC	IP	
Automotive Technology	RC	IP	
Business Technology & Management	RC, WC	IP	
Construction Management*	RC	IP	
Dairy Farm Management Technology*	RC	IP	exploring hybrid courses at RC and WC, even courses with lab
Diesel Power Technology	RC	IP	
Entrepreneurship	RC	IP	
Equine Studies*	RC	IP	
Fire Science	RC	IP	
Forestry*	RC	IP	exploring hybrid courses at RC and WC, even courses with lab
General Engineering Technology	S (varies)	IP	On-site at sponsoring company
Landscape Design & Sustainable Horticulture*	RC	IP	
Veterinary Technology*	RC	IP	
ASSOCIATE OF ENGINEERING			
Civil & Environmental Engineering Technology*	RC	IP	
Computer Engineering Technology*	RC, WC	IP	
Electrical Engineering Technology*	RC, WC	IP	
Mechanical Engineering Technology*	RC	IP	Some courses are telepresence
ASSOCIATE OF SCIENCE			
Computer Information Technology*	RC, WC	IP	
Computer Software Engineering*	RC, WC	IP	
Dental Hygiene*	WC	IP	
Nursing*	RC, WC, S (various)	IP, T	
Respiratory Therapy*	WC, S (White River Junction)	IP, T	Didactic classes are held over telepresence. Students travel to hospitals for clinicals.
ADVANCED CERTIFICATE			
Advanced Software Development*	RC, WC	IP	
Computer Networking*	RC, WC	IP	
Cybersecurity*	RC, WC	IP, ON	
Software Development*	RC, WC	IP	
Web Development*	RC, WC	IP	
CERTIFICATE			
Diesel Technology	RC	IP	
~~Forestry*~~	~~RC~~	~~IP~~	Discontinuation imminent as of June 25, 2018 (with the advent of the AAS) but still officially

			operating as a certificate right now
Paramedicine*	WC	IP	
Practical Nursing*	RC, WC, S (various)	IP, T	

Program Additions/Closures/Mergers/Locations/Modalities Group

Programs for Non-traditional students (modalities, locations)

Draft: June 30, 2018

EXPANSION/CLOSURE/MERGER OPPORTUNITIES RELATED TO EXISTING PROGRAMS

Note: Modality refers to program availability in its entirety (e.g., online would mean that all courses needed are available completely online not "a few courses could be online"). If "2+2", the "+2" would be available completely in a format (could be in-person, could be online; a mixture of in-person and online might be possible but would not be noted below). The same goes for site: the program must be completable at the site noted without travel to a different site (thus online or telepresence could enable that, but even a single in-person course required at a site means it's offered at that location).

Providing items below is not a commitment to initiate the process, but only provide items that are realistic and likely worth pursuing.

E = Expansion (current program offered to new audience)
C = Close/eliminate program with no new manifestation
M = Merge programs (originals either continue or close in some way)
RC = Randolph Center; WC = Williston; S = other sites (e.g., nursing)
IP = In-person; ON = Online; T = Telepresence

DEGREE/ CERTIFICATE	EXPAND, CLOSE, OR MERGE?	NEW LOCATION(S)?	NEW MODALITY?	ATTRACT ESPECIALLY NONTRAD STUDENTS OR TRANSFER STUDENTS?	ESTIMATED ENROLLMENT? TIMING OF FIRST OFFERING (SEMESTER/YEAR)? OTHER COMMENTS?
MASTER OF SCIENCE					
Dental Therapy					
Computer Software Engineering					
BACHELOR OF SCIENCE					
Applied Business Management	E		Summer 1-week-per-course;	Yes (those currently working)	For +2 degree; Cohort = 15; Summer 2019; Financial Aid issues?

			(summer total = 1 semester)		
Architectural Engineering Technology	E		WC (One-time BS completion for those with AAS/equivalent)	Yes (those currently working who would not commute to RC)	15+ students needed to run initially (attrition will lose some during process); 1-2 courses/semester; one-time (possibly two) option (single starting cohort complete BS over multiple years; not a new group that starts each year) to flush market of those wanting/needing BS in Williston commuting distance (some courses might be telepresence; others offered specifically to this group in Williston); First junior courses Fall or Summer 2020
Business Technology & Management					
Computer Engineering Technology					
Computer Information Technology	M?				Is there potential payoff in having a single computer science/info based degree with concentrations (either IT or software) based on curriculum overlap? Note: Idea for merger came from outside of the program; the program has specific comments suggesting it would not be a payoff to do this (topics and nature of interested students are more disparate than might be thought)
Computer Software Engineering	M?				Is there potential payoff in having a single computer science/info based degree with concentrations (either IT or software) based on curriculum overlap? Note: Idea for merger came from outside of the program; the program has specific comments suggesting it would not be a payoff to do this (topics and nature of interested students are more disparate than might be thought)
Construction Management					
Dental Hygiene					
Diversified Agriculture	M				Merge multiple degrees into one (AMT, DAG) with tracks of Agribusiness, Dairy, Forestry/Silviculture, Landscape/Horticulture (at BS or AAS level as appropriate)
Electrical Engineering Technology					

Electromechanical Engineering Technology					
Entrepreneurship					
Manufacturing Engineering Technology					
Nursing					
Oral Health Sciences					
Professional Pilot Technology	E				Develop an Aviation track within a Business degree program
Renewable Energy					
ASSOCIATE OF APPLIED SCIENCE					
Agribusiness Management Technology	M				Merge LDSH into AMT. Develop tracks in AMT for dairy science, forestry, plant science, business specialization. Merge multiple degrees into one (AMT, DAG) with tracks of Agribusiness, Dairy, Forestry/Silviculture, Landscape/Horticulture at AAS or BS levels as appropriate
Architectural & Building Engineering Technology					
Automotive Technology					
Business Technology & Management	M				Merge with AAS Entrepreneurship – rename as AAS Small Business & Entrepreneurship; Minimal effect on enrollment (possible small increase for those wanting combined degree); Fall 2020
Construction Management					
Dairy Farm Management Technology					Stays as is; not part of AMT mergers noted elsewhere
Diesel Power Technology					
Entrepreneurship	M				Merge with AAS Business Technology & Management – rename as AAS Small Business & Entrepreneurship; Minimal effect on enrollment (possible small increase for those wanting combined degree); Fall 2020

Equine Studies					Develop methods/delivery ideas for nontransfer students, even if only specific courses and not the whole
Fire Science	M (?)				Merge with Paramedicine certificate to create a "Public Health & Safety" or "Emergency Services" program?
Forestry					Stays as is; not part of AMT mergers noted elsewhere
General Engineering Technology	E				Offer AAS.GET in specific specialty tracks, with 20 credits of General Education coursework, 20 credits of foundational courses appropriate to the specialty (e.g., Computer Applications or Programming (6), Oral, Written, or Graphic Communications (6), Advanced Math or Science elective (4), Technical elective (4)) and 20-27 credits in the specialty (e.g., Electronics, Manufacturing). J. Higgins has draft course selections for those two tracks. Also, could possibly offer AAS.GET program through the High School Tech Centers, especially near areas where GET is already offered (e.g., Rutland).
Landscape Design & Sustainable Horticulture	M				Merge LDSH with Agribusiness Management Technology
Veterinary Technology					
ASSOCIATE OF ENGINEERING					
Civil & Environmental Engineering Technology	E	RC	IP	Transfers in addition to AE.CET continuations	Expand to a 4 year BS degree (see also "New Program" table), either in CET, Env. Eng. Tech., or Water Resources Engineering. Still offer AE.CET degree with a 2+2 format or similar. Goal of 10 students in first junior year class, offered in Fall 2022. Retain some current CET students, attract students initially (not yet at VTC) looking for BS degree, in addition to transfers
Computer Engineering Technology					
Electrical Engineering Technology					
Mechanical Engineering Technology					

ASSOCIATE OF SCIENCE					
Computer Information Technology	M?				Is there potential payoff in having a single computer science/info based degree with concentrations (either IT or software) based on curriculum overlap? Note: Idea for merger came from outside of the program; the program has specific comments suggesting it might not be a payoff to do this, although it may be more feasible than for the BS degree.
Computer Software Engineering	M?				Is there potential payoff in having a single computer science/info based degree with concentrations (either IT or software) based on curriculum overlap? Note: Idea for merger came from outside of the program; the program has specific comments suggesting it might not be a payoff to do this, although it may be more feasible than for the BS degree
Nursing	E	Morrisville/ Johnson	IP&T		TBD
Respiratory Therapy					
ADVANCED CERTIFICATE					
Advanced Software Development					
Computer Networking					
Cybersecurity					
Software Development					
Web Development					
CERTIFICATE					
Diesel Technology					
~~Forestry~~					
Paramedicine	M (?); E				See Fire Science entry above regarding merger options. PMD does anticipate proposing an A.S. degree based on recent Advisory Board approval of the idea. Fire Science graduates could add 3rd year after AAS.FSC degree to get certificate. Pathways seen as: 1. Fire Science to complete a 3rd year as a certificate.

					2. Someone to enter off the street and do a 2-year "zero to hero" program (no prior experience or education necessary). 3. Existing paramedics to receive credit for prior learning and receive an AS 4. Technically an option would remain to attend only for a certificate (with the option to take the general education credits after for the degree)
Practical Nursing					

OTHER COMMENTS RECEIVED:

- "With regards to expansion, I feel that all the programs included in the "new" "Engineering School" should have a presence at both RC and W campuses. We cannot ignore that growth can only come from easy access to our programs. Although not immediately feasible due to lab constraints, this should be our goal"
- Should be looking at programs that are offered in 2 locations and decide if only one is more appropriate or at a minimum is synchronous telepresence offerings necessary for efficient section sizes;.

Program Additions/Closures/Mergers/Locations/Modalities Group

Programs for Non-traditional students (modalities, locations)

Draft: June 30, 2018

NEW PROGRAMS

Note: Modality refers to program availability in its entirety (e.g., online would mean that all courses needed are available completely online not "a few courses could be online"). If "2+2", the "+2" would be available completely in a format (could be in-person, could be online; a mixture of in-person and online might be possible but would not be noted below). The same goes for site: the program must be completable at the site noted without travel to a different site (thus online or telepresence could enable that, but even a single in-person course required at a site means it's offered at that location).

Adding items is not a commitment to initiate a new program process but only ideas with probable strong feasibility should be recommended.

RC = Randolph Center; W = Williston; S = other sites (e.g., nursing)

IP = In-person; ON = Online; T = Telepresence

DEGREE/ CERTIFICATE	LOCA-TION(S) ?	MODALITY?	ATTRACT ESPECIALLY NONTRAD STUDENTS OR TRANSFER STUDENTS?	ESTIMATED ENROLLMENT? TIMING OF FIRST OFFERING (SEMESTER/YEAR)? OTHER COMMENTS?
MASTER OF SCIENCE or other MASTER'S				
Master of Business Administration				Recommendation from K. Crowe
BACHELOR OF SCIENCE				
Policy Management				Within Business Department; possibly new or revise current program(s) to include (recommendation from K. Crowe)
Civil Engineering Technology (or Environmental Engineering or Water				Offer 4 year BS degree (see also "Expand/Merge/Close Program" table) that builds on AE.CET degree with a 2+2 format or similar. Goal of 10 students in first junior year class, offered in Fall 2022. Retain some current CET students, attract students initially (not yet at VTC) looking for BS degree, in addition to transfers.

Resources Engineering)				
"Make Your Own Degree"	RC, WC	IP	New students who do not like our scripted degrees so do not come here; nontraditional students who have some coursework but cannot spend 4 years to do all the scripted courses in existing curricula	Allow any coherent, individually proposed set of courses that meets all other College requirements to be a degree, such as "BS – Engineering Studies" or "BS – Agricultural Studies." Engineering would not be ABET-accredited (unless if tried to be "Engineering Sciences"). Possibly problematic advising if a tailored curriculum is all over the place. Will take lots of pre-thinking about NEASC/CIHE, ABET, etc. Start 2022? Potential scheduling nightmare so anyh schedules have to be based on primary programs with "make your own students" folks fitting into those other schedules.
Aviation Management	WC	IP		Melds well with Professional Pilot Technology to some degree
ASSOCIATE OF APPLIED SCIENCE				
ASSOCIATE OF ENGINEERING				
ASSOCIATE OF SCIENCE				
ADVANCED CERTIFICATE				
CERTIFICATE				
Cannabis Supply Chain Management		ON	Yes, nontrads	Summer 2021
Cannabis (Ag) Production (hemp, CBD, and THC)				

Architectural Technology Essentials	RC	IP	Nontrads; possibly traditional students not ready for the math/science of AAS.ABT	Take ARE 1011, 1012, 2022 (specific courses TBD)? Students learn the basics of construction drawing and building information modeling and building envelope/materials. Provides some skills; also possible on-ramp to getting full AAS.ABT degree. Must wait until Department figures out how BIM/CAD II (e.g., Revit) may evolve in the AAS.ABT and BS.AET curricula.
Structural Technology Essentials	RC	IP	Nontrads	Take ARE 3020/3111, then ARE 3030 or (and?) 4010. Make use of existing courses for those with Associate degree wanting only structural area knowledge enhancement, or with BS degree in engineering/technology (without structural courses) but wanting structural specialty courses. Both cases might be as preparation for Professional Engineering licensure exam. Likely rare, but makes use of existing courses (no new costs). (Program had one former AE.CET student start such a sequence, but did not continue to conclusion.) Requires ability to take on the courses noted (i.e., prerequisite knowledge).