

CONTOOCOOK VALLEY SCHOOL DISTRICT  
Office of the Superintendent of Schools  
106 Hancock Road, Peterborough, NH 03458-1197

**ATC COMMITTEE**

November 8, 2018

SAU Boardroom

7:00 PM

**Agenda**

**Committee Members:** Richard Dunning, Jim Fredrickson, Stephan Morrissey (Chair), Kristen Reilly, Pierce Rigrod, and Jerome Wilson

**Strategic Plan Action Steps Aligned to the Applied Technology Center (ATC)**

**1.4.3** The School District will review the present ATC offerings in relation to workforce projections and make appropriate programmatic changes.

**1.4.4** The School District will collaborate with other community organizations and businesses to provide extended learning opportunities.

**2.2.3** The School District will create local internships related to Applied Technology career paths.

**2.3.2** The School District will create partnerships with local businesses.

**7:00 Approval of September 13, 2018 Minutes**

**7:05 State Report**

- Review Region 14 Monitoring Letter (see attached).
- Share ideas/decisions that have come out of the Program Advisory Committees.
- Next Steps

**7:35 Update on Partnership with Nashua Community College (NCC)**

**7:45 Other Updates**

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Office of the Superintendent of Schools  
106 Hancock Road, Peterborough, NH 03458-1197

**ATC COMMITTEE**

September 13, 2018

SAU Boardroom

7:00 PM

**Minutes**

**Committee Members:** Richard Dunning, Jim Fredrickson, Stephan Morrissey (Chair), Kristen Reilly, Pierce Rigrod, and Jerome Wilson

**Present:** Stephan Morrissey, Jerome Wilson, Myron Steere, Michelle Voto, Jen Kiley, Gib West, Dr. Ann Forrest

**Strategic Plan Action Steps Aligned to the Applied Technology Center (ATC)**

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**2.2.3** The School District will create local internships related to Applied Technology career paths.

**2.3.2** The School District will create partnerships with local businesses.

**Stephan Morrissey called the meeting to order at 7:00 p.m.**

**7:00 Approval of August 9, 2018 Minutes**

**Jerome Wilson moved to approve the minutes of August 9, 2018. Stephan Morrissey second. Unanimous.**

**7:05 Introductions**

- Meet Jennifer Kiley, New Director of the ATC

Jennifer Kiley was introduced as the new Director of the ATC. Ms. Kiley said that she is pleased to be working alongside Ms. Voto. She reported that so far, data is being reviewed to inform decision making and education.

Stephan Morrissey spoke about the intent to keep the ATC moving forward and its identity in the ConVal community. Expanding the presence was also cited as a goal.

**7:15 Update on Partnership with Nashua Community College (NCC)**

Lucille Jordan (President) and Robyn H. Griswold (Vice President of Academic Affairs) from Nashua Community College (NCC) visited ConVal High School on Monday,

September 10<sup>th</sup> to tour the school and meet with staff from the SAU and the high school.

Discussion about NCC offering programs at ConVal High School after school is the focus, in particular, offering five possible programs—Paralegal, Teacher Education, Health Sciences, Business, and Manufacturing. Courses would run in eight week cycles with the ability to complete a degree in two years. These programs and courses would be open to the larger community. The district would be given a certain number of seats for high school students. These would be dual enrollment courses for students.

NCC will work with ConVal High School to review and coordinate these courses to develop pathways that map out how students could progress through a particular program.

In addition, offering ConVal teachers the right of first refusal, if qualified, to teach the courses offered on site. NCC will be attending the high school's faculty meeting on September 26<sup>th</sup> to review the requirements and application.

Lucille Jordan and Robyn Griswold described a “soft start” in January—likely starting with liberal arts course (e.g., English course, math course).

Michelle Voto said that it is very possible for a student to leave ConVal with a 30 credit certificate in manufacturing or other program. A community member could certainly receive an Associate's Degree in two years.

The important piece is to communicate this opportunity to the public to allow the minimum paid subscription for a class to run and allow students to enroll after that at no cost.

Capturing the students that intend to go off to college in June but don't actually attend in September was mentioned. Letting those students know of NCC at ConVal could be of value.

### **7:30 Current Student Enrollment in ATC Courses**

Enrollment data for both the Fall and Spring Semester for CTE courses was shared (see attached). The enrollments reflect CV students only and not receiving students with the exception of the LNA course, which is run by the Red Cross.

Communication with students will occur to bring their awareness about the time commitment involved and what the end result will mean for them.

Gib West suggested looking at the trends and variances with certain classes; Computer Systems and Networking have 18 students enrolled in semester I and 3 students in semester II. Other elements should be shared to best represent the figures.

### **7:40 Update on the State's Monitoring Report**

The State Monitoring Report is not yet available. Once received, it will be emailed to the ATC Committee members first for their review. The feedback will be critical in planning next steps. This will be a focus of the next ATC meeting. It was suggested that the next ATC Committee meet actually be replaced to attend the PAC meeting on October 17<sup>th</sup>. Confirmed. An official invitation will be sent to this committee.

Future programming plans were asked. Michelle Voto said that having NCC on board is the caveat; they are able to enhance career pathways and are open to the community.

Discussion took place about VLACS coursework. VLACS is not ATC programming. Students who participate in VLACS are doing so in a separate "school" with a teacher from that school.

The State Report will provide information about structures in place.

Jen Kiley spoke about the Program Advisory Committees (PACS). They are in place to make sure that students will be able to pass through programs into work place environments or higher education.

A PAC Night agenda was shared for the upcoming October 17<sup>th</sup> meeting from 7-9 in the ATC.

Looking at the alignment with the curriculum that we deliver at ConVal with state competencies will be reviewed. To be a completer of a program, students have to be 90% competent.

### **7:50 Update on the Manufacturing Program**

Jen Kiley reported that electricity is needed for the milling machine. Once the science room renovation is complete, the electrical work will be complete.

Ms. Kiley reported that representatives from industry were invited to speak with students about their trade. Ways for industry to engage with students took place along with a Q &A. Seventeen students were present. Industry reps rotated to meet with students about the work that they are doing in class and what their post grad plans are. Students were able to make connections when sharing their plans and how they might apply to manufacturing i.e. legal, pre-med.

Making use of our gym to benefit manufacturers, local residents, and students to conduct a job fair was suggested.

Jen Kiley said that their goal is to make the students career and college ready.

### **8:00 Other**

None.

Ann Forrest reported that two SAU Administrators have been assigned to sub-committee meetings. Ann and Kimberly will take the lead at the ATC Committee meetings. Any communication should work through Stephan Morrey as committee chair and on to Ann Forrest.

**Jerome Wilson motioned to adjourn at 7:58 p.m. Stephan Morrissey second. Unanimous.**

Respectfully submitted,

Brenda Marschok

**Frank Edelblut**  
Commissioner



**Christine M. Brennan**  
Deputy Commissioner

STATE OF NEW HAMPSHIRE  
DEPARTMENT OF EDUCATION  
101 Pleasant Street  
Concord, NH 03301  
TEL. (603) 271-3495  
FAX (603) 271-1953

September 24, 2018

Jennifer Kiley  
CTE Director  
Region 14 Applied Technology Center  
182 Hancock Road  
Peterborough, NH 03458-2196

Dear Ms. Kiley:

This letter is to summarize and report on the on-site monitoring visit of the Region 14 Applied Technology Center on April 17 and 18, 2018. First let me say thank you for the hospitality, cooperation, and hard work from the staff members at the Region 14 ATC leading up to and during the visit. Everyone was very helpful in providing the information needed for a successful visit. Monitoring serves two purposes: fulfilling the monitoring requirement in the Perkins Act of 2006 (federal level) and verifying the operations of the center are in accordance with RSA 188-E, applicable rules, and the Region 14 Agreement.

A team of career and technical education (CTE) experts visited the Region 14 Applied Technology Center. The team was made up of staff members from the Bureau of Career Development of the New Hampshire Department of Education (NH DOE), CTE directors, and CTE teachers from New Hampshire CTE centers.

The scope of monitoring included activities at the center-wide level and activities of the following programs: Building/Construction Trades; Business/Commerce, General; Computer Programming, General; Computer Systems Networking and Telecommunications; Engineering, General; Film/Video and Photographic Arts, Other; Fire Science/Fire Fighting; Graphic Design; and Teacher Education, Multiple Levels.

Teachers and administration welcomed the visiting team. Most appear to be aware of their responsibilities to the students, especially around implementing a series of courses that will comprise rigorous and relevant CTE programs. Parents, Program Advisory Committee (PAC) members, and administrators with whom we spoke were clearly supportive of the programs and the center as a whole.

#### **Next Steps:**

This is a comprehensive summary of the monitoring at the Region 14 Applied Technology Center including findings and necessary corrective actions. Each section does not necessarily contain findings and corrective actions needed, but every finding needs to be addressed with corrective action. Your plan

to address each finding must be proposed to the Bureau in writing. Attached to this report is a Corrective Action Plan template, which compiles all the findings, corrective actions needed, and firm deadlines for some findings. Please propose reasonable deadlines for all the other corrective actions. While you are not required to use the template, I am offering it as a convenient way for us to track your progress together. Please return your corrective action plan within 30 days of receiving this report. I do not expect all findings be fixed within 30 days, but I do expect to know your plan within 30 days.

As you and your staff complete corrective actions, please let us know in writing and share evidence of completion. Evidence may take the form of new or revised documents, pictures of spaces or equipment, etc. We are also available for on-site visits to confirm completion of corrective actions. It is our sincere hope that the Region 14 Applied Technology Center continues to strive for CTE excellence, and we are ready to support your work in any way we are able.

Finally, I consider this process a partnership. Please do not hesitate to seek technical assistance from me or my staff to help along the way. The end goal is to continuously improve the programs in your center so students can receive the best career and technical education possible.

Please feel free to contact me if you need clarification or assistance with any of these items.

Sincerely,

A handwritten signature in black ink, appearing to read "Eric Feldborg".

Eric Feldborg, Ed.D.  
Administrator, Bureau of Career Development  
State Director, Career and Technical Education

**2018 Monitoring Report  
Region 14 Applied Technology Center  
Peterborough, NH**

### **Center-Wide Review**

#### **Center Context:**

The Region 14 Applied Technology Center resides in Peterborough, NH and serves the towns of Antrim, Bennington, Francestown, Peterborough, and Temple, in addition to students from Conant, Mascenic, Milford, and Wilton-Lyndeborough high schools. Center enrollment decreased somewhat dramatically in the last five years, with 508 students recorded in SY 12-13 to 243 students recorded in SY 16-17; this drop in enrollment is partially attributed to the loss of the health science program and partially to choice of Mascenic High School to leave the region.

#### **Evidence Examined:**

The visiting team reviewed Regional Advisory Committee (RAC) meeting minutes; economic and labor market information (ELMI), end-of-program assessment results, Perkins Performance Indicators (PPI), postsecondary agreements, curriculum maps and crosswalks, inventory documentation, and staff and faculty documentation. Members of the visiting team interviewed teachers from each CTE program. Also, members of the visiting team facilitated focus group interviews with the center director, administrative assistant, building and district administrators, teachers, parents, and industry partners.

#### **Summary and Analysis:**

The center is served by an active Regional Advisory Committee (RAC), with membership from sending schools and local industry. RAC activities have been progressing toward meeting legislative requirements in recent years, especially after the director requested a presentation from the Bureau to the RAC membership. The membership representation of “a reasonable balance of the career cluster areas” does not yet meet the requirements set forth in RSA 188-E:4-a, I. According to meeting minutes, the RAC considers potential new programs and other possible developments and improvements for the center. Both conversations with the Bureau and review of center documentation reflect that multiple forms of data are used when making decisions: ELMI data analysis informed the creation of new programs, and enrollment and assessment data analysis resulted in additional student outreach and support.

Information from SY17-18 Program of Studies shows the courses offered for each CTE program, but not the course sequence. It is unclear what defines a completer for each program. Many classes have prerequisites (i.e. Building Trades is a prerequisite for Advanced Building Trades) that show a sequence of courses, but this is not true for all classes or programs. Some classes, such as Business and Personal Law, note a priority for Juniors. It is unclear how classes that appear to be electives, such as Website Design within the Graphic Design program, fit into the sequence of courses that defines the program. Some programs in Region 14’s ATC require two one-semester courses while others require three or four one-semester courses. No obvious impact emerged during the monitoring process, but the variation among the number of courses in different programs raises questions about relative size, scope, and quality of the ATC’s programs. An internal review might provide an explanation for the present variation or a rationale for future change.

All programs are delivered in Peterborough, with the exception of Building Trades, which is delivered at Conant High School. The program teacher is isolated from the ATC and this isolation limits his awareness of the whole breadth of requirements for CTE programs. I mention this here because several of the program specific findings for Building Trades will require system-level coordination between Region 14 and Conant. Additionally, it is likely that formal agreement between districts may be necessary to complete the necessary corrective actions for Building Trades.

Work-based learning is an active part of the center, with a dedicated extended learning opportunity coordinator managing CTE students at over thirty-five active industry sites. Post-secondary relationships are alive and well, with a total of seventy-four college credits available across the programs. There is also discussion of Region 14 becoming an extension site for Nashua Community College, focusing on early childhood education, business, paralegal studies, wastewater treatment, and a general studies: allied health and medical assistant program. Several teachers who were interviewed during the site visit discussed the strengths of the pathways between their CTE programs and community college programs.

### *Professional Development*

Evidence provided included the Contoocook Valley School District SMART goals, Professional Development Master Plan, and the SAU SMART goal planning sheet specific to the ATC. A CTE teacher serves on the district's PD committee. Part of the District master plan states that "professional development should be primarily school-based and built into the day-to-day work of teaching." While this notion could pose a barrier for CTE teachers to access high-quality, industry-based professional development, many of Region 14's CTE teachers report they are getting the training they need to be successful.

### *Inventory*

Specific and detailed regulations about how to inventory items purchased with Federal funds are listed in Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, Final Rule, released by the Federal Register in December 2013<sup>1</sup>. While some of the required inventory information is included in the Region 14 ATC inventory document, the following information was missing: vendor; date received; total cost; funding source; % Perkins / % local; cost to Perkins; specific location in the building; condition; date of last physical inventory; disposition date; and sale price at time of disposition. The Bureau has disposition policies that may be found on the website; the inventory document should record that these policies are being followed.

A review of inventory tags and the corresponding equipment document that most purchases are inventoried in a timely manner. State (red) inventory tags were being used instead of Federal (silver) inventory tags. While these tags don't need to be adjusted at this time, please confirm that staff know the difference and return any remaining state (red) tags to the Bureau.

The majority of equipment listed in the inventory was located where the document indicated. The exception was computers in the CADD classroom, several of which were missing their tags. New tags were sent to the Director on April 19, 2018. The Director reported that a physical inventory is taken every year, but several teachers interviewed were unaware of this process. A maintenance plan for the 3D printer was documented in the evidence, but no other maintenance plans were disclosed.

### *Encroachment*

Per RSA 188-E:3, space built for CTE must remain for use of CTE exclusively. Several areas of Region 14 ATC are currently being used for non-CTE purposes, including:

- Room 422, which was a CTE conference room and is now used for RENEW, which is an individualized school-to-career planning process for youths with emotional and behavioral challenges;
- the office space off the former ATC lobby, which had been CTE office space and is now used for student discipline;
- Room 450, which formerly housed Health Occupations and is now housing a science classroom;
- Room 411, which was formerly a Business classroom and is now a conference room; and
- Room 419 and the adjacent conference room, which was formerly space for the Business program and is now being used by special education.

<sup>1</sup> [https://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title02/2cfr200\\_main\\_02.tpl](https://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title02/2cfr200_main_02.tpl)



CTE activities happening in non-CTE spaces, including:

- Rooms 550, 551, and 554, which had been non-CTE classrooms are now being used by the Teacher Education, Multiple Levels program.

Encroachment is an ongoing concern that was documented during the last monitoring visit. The March 21, 2013 monitoring letter from the Bureau of Career Development documented encroachment into eight rooms and three suites. The corrective action established in that letter was “a three-year plan to revert CTE space to its original intent.” The plan was to be in place by May 1, 2013.

While encroachment reduced between 2013 and 2018, not all the CTE space has been returned to CTE use. The continuing encroachment is a violation of RSA 188-E:3 and must be corrected. A detailed accounting, including square footage, of the spaces built with State money for CTE that are currently used for non-CTE activities and the spaces built with local money that are currently used for CTE activities must be provided to the Bureau. Depending on the balance of the accounting, there may be an opportunity to document an exchange of spaces that might alleviate some of the encroachment violation.

#### Findings:

- Per RSA 188-E:4-a, “each designated region shall have a regional advisory committee consisting of representatives from each sending district and the receiving district. Appointees from each district shall represent a reasonable balance of the career cluster areas in the region’s approved career and technical education programs. Each regional advisory committee shall have at least 7 members representative of the districts and career and technical education areas and at least one member shall be a certified high school counselor.” The current RAC does not meet these membership requirements.
- Federal inventory requirements are not being met. Missing information includes: vendor; date received; total cost; funding source; % Perkins / % local; cost to Perkins; specific location in the building; condition; date of last physical inventory; disposition date; and sale price at time of disposition.
- The requirements of RSA 188-E:3 are not being met. Some State-funded CTE spaces are being used primarily for non-CTE activities.

#### Corrective Action Needed:

- The RAC will meet all legislative requirements specified in RSA 188-E:4-a, specifically those regarding membership.
- The center’s inventory document will include all federally required information and confirm that a complete physical inventory is conducted at least once every two years.
- A detailed list will be developed to include square footage of the spaces built with State money for CTE that are currently used for non-CTE activities and the spaces built with local money that are currently used for CTE activities. This list must accompany a plan to eliminate the encroachment.

#### Recommendations:

- RAC meeting minutes most closely resemble a report out rather than a record of discussion between members. While minutes do not need to be transcripts of the meetings, they should accurately reflect topics of conversation, including assenting and dissenting opinions. Meeting minutes are valuable documentation that can be used to support grant requests and other federal requirements.
- Continue to use data to inform decision making. All Federal grant spending should be clearly tied to gains in Perkins Performance Indicators.
- Consider revising the district’s PD Master Plan to allow for industry-embedded professional development.

Commendations:

- The position of CTE Research and Development allowed the ATC Director to delegate some responsibilities so that both parties can work towards center-wide improvement.
- The district has PD SMART goals specific to the ATC, and a CTE teacher is on the district's PD planning committee.

## **Program Specific Review**

**Evidence Examined:** The evidence examined for all programs is very similar: Program Advisory Committee (PAC) minutes and membership; curriculum and crosswalk; teacher certification and professional development logs; and program specific data, including Employment Labor Market Information (ELMI), assessment, and Perkins Performance Indicators (PPI). In addition to evidence included in online folders, members of the monitoring team to provide additional details and clarification also interviewed each teacher.

### ***Building/Construction Trades***

**Summary and Analysis:** The course sequence identified in the Program of Studies is Building Trades followed by Advanced Building Trades, both offered as two-credit, full-year classes. Per the Program of Studies, students must provide proof of health insurance and be at least 16 years old in order to enroll. This program is delivered at Conant High School.

There is no formal PAC; however, there is a Home Builders Trust, made up of several local industry representatives, that actively supports the program and advises about its content. Because there are no minutes from the Trust's meetings, the degree to which standards are being met cannot be ascertained. There are no postsecondary agreements in place.

The Precision Exam (end of program technical skill assessment) for this program is not administered. The teacher was unaware of the exam and did not know how to administer it. He was also unaware of the relevant Perkins Performance Indicator data for his program. He expressed interest in strengthening his connection to Region 14 ATC and attending and participating in the competency revision process and the summer conference. Students enrolled in the program are offered the chance to complete the OSHA 10 training course. The teacher stated that his students have a 70% success rate earning this certification but documentation was not available at the time of the visit. In 2014-15, three of 26 (11.54%) students in the program were female. The local goal was 26.22%. Zero of the four completers that year were female. In 2012-13, none of the program students were female. Data was not reported for 2013-14, 2015-16, or 2016-17.

The monitoring team reviewed the classroom/lab space. The teacher described it as archaic and specifically expressed interest in obtaining an outside air filtration system as the air filtration monitor he currently uses produces an unsafe level of dust. A review of the work-site where students are building a home resembled a typical industry site. The storage trailers appeared disorganized as tools and supplies were jumbled together. There was no system of inventory, and the teacher stated that he had never seen a Perkins inventory tag. Students engaged at the work-site were observed wearing protective gear and operating tools safely.

### **Findings:**

- End-of-program technical skill assessment is not being administered.
- There is no system to manage the program's inventory of equipment purchased with federal or state funds.

### **Corrective Action Needed:**

- Ensure students' technical skill attainment is assessed. The relevant Precision Exam for the program is Carpentry.
- Establish and maintain an inventory management system and list, and reconcile the physical inventory to the list at least every two years.

### **Recommendations:**

- Establish a formal Memorandum of Understanding between Region 14 ATC and Conant High School regarding the Building Trades program. This MOU should address expectations for both

schools' administrations as well as the Building Trades teacher regarding CTE requirements and collaboration with other CTE center teachers.

- Consistent and clear information needs to be relayed regarding how students can attain completion status.
- Consider professional development for teacher about how to use data for program improvement.
- Continue to develop and refine curriculum crosswalk.
- Consider developing and implementing a comprehensive laboratory cleaning and maintenance protocol performed at regular intervals throughout the school year.
- Develop ways to incorporate student performance in WBL experiences in the gradebook.
- Connect with The National Association of Women in Construction (NAWIC), which has a strong chapter in NH and would be an excellent resource for additional PAC members and WBL opportunities.

Commendations:

- The teacher has strong support from local industry and a desire to connect with Region 14 and other construction program teachers.

***Business/Commerce, General***

Summary and Analysis: The Program of Studies identifies four courses as part of the Business Management/Marketing program: Business & Personal Law (1 credit/1 semester), Entrepreneurship/Small Business Ownership (1 credit/1 semester), Business Management (1 credit/1 semester), and Principles of Marketing (1 credit/1 semester). None of the classes have prerequisites, nor is there a defined sequence for the courses in the program. All four classes are semester long and result in one credit.

According to PAC meeting minutes, the PAC met on October 19, 2016 and again on January 16, 2018. In addition to the teacher, one business representative attended the 2016 meeting, and two business representatives and one former student attended the 2018 meeting. The membership roster does not include representation from any postsecondary institutions. Both meeting minutes mention that some good ideas emerged in the discussion. Course syllabi were explained, but there is no evidence that other important topics were addressed, such as labor market information, program evaluation, postsecondary relationships, and student performance. This level of participation and activity do not meet the requirements or expectations for a PAC outlined in RSA 188-E:4-a and the State Plan (pp. 182).

Monitoring evidence included documentation from the center to Rivier University regarding the possibility of an articulation agreement, but no follow-up documentation was included. There are no other postsecondary relationships in place. No industry recognized credentials are available to students. The Precision Exams for Business Law, Business Management, and 21st Century success skills are being given; scores are on par with the rest of the state.

On-site observations and conversations with students indicate that students feel well prepared to exit the program and move into industry, with many students reporting that they appreciated the flexibility to take different courses in various programs of the cluster. Classroom space was clean and well organized, and equipment and supplies are appropriate. The teacher reported that the loss of the original CTE business space has been detrimental to the program. The current space is not adequate for the class size.

Space originally constructed for the Business program is now being used as conference space and for special education. See the Center-Wide section of this report for more about encroachment.

Findings:

- PAC membership and activities do not meet the requirements per RSA 188-E:4-a and the State Plan (pp. 182).
- Students do not have the opportunity to earn college credit as part of the program.

- There are no postsecondary agreements in effect.

#### Corrective Action Needed:

- Ensure the program maintains a PAC that meets requirements in per RSA 188-E:4-a and the State Plan (pp. 182). The PAC Handbook may be a valuable resource.
- Secure partnerships so students have the opportunity to earn at least three college credits as part of the program.
- Ensure the program has at least one articulation agreement or dual enrollment contract with a postsecondary institution.

#### Recommendations:

- Consider providing students the opportunity to earn at least one industry valued credential as part of the program.
- Consider reviewing Microsoft Office Specialist as a potential industry recognized credential.

#### ***Computer Programming, General***

Summary and Analysis: The course sequence identified in the Program of Studies is Computer Programming & Software Development I (1 credit/1 semester) to Computer Programming & Software Development II (1 credit/1 semester). Running Start credit is available for both courses through Nashua Community College for a total of six credits. Students participate in the CISCO curriculum and earn an industry recognized certification as a result. The Precision Exam aligned with the program is Computer Programming 1A; a review of results shows students scoring at or slightly above the state average for Computer Programming IB Visual Basic and Computer Programming IB C++. During the on-site interview, the teacher explained that students are taking the Precision Exam much more seriously now that he is counting them as 50% of the final exam grade.

The program has an active PAC, with meeting notes that demonstrate the group is meeting twice a school year. These notes take the form of letters to the center director from the program teacher, and therefore do not include the level of detail that best supports programmatic changes or budget requests. PAC members are mostly program alumni and the group functions as the PAC for both Computer Programming and Computer Systems Networking & Telecommunications. While one PAC can serve two programs, agendas and meeting minutes must clearly reflect the time and attention dedicated to each. Current practice does not ensure that clarity. Postsecondary representatives are not recorded as attending PAC meetings but meet with the teacher separately. The Running Start partner from NHTI visits the program periodically and would make a logical addition to the PAC.

Monitoring evidence also included DOE program competencies, but no crosswalk. RubiconAtlas included both a unit calendar and a curriculum map complete with assessment titles; however, the state competencies for the program are not clearly crosswalked and multiple measures of student achievement are not identified. It is unclear the extent to which students have opportunities to practice and demonstrate mastery of all the State competencies for the program. Students who were interviewed all expressed that they were pleased with the classes and their potential to successfully transition to postsecondary. Few students were aware of the program competencies, and those who were say they only remembered the competencies being addressed briefly.

In the monitoring evidence, the teacher stated that “students have limited opportunities in this area for work based learning. Several have had internships but not necessarily in the software area.” The teacher noted that students have WBL in other areas, for example, working with district IT or with the IT department at a local hospital. A review of the classroom and lab space showed clear methods of organization with well labeled storage, resulting in a room that was functional and safe. The teacher reported he feels well supported by the center with both equipment and supplies but would be interested in seeking additional funding to expand the robotics program, add fiber optics, and obtain additional

CISCO routers. Most of the equipment was tagged with silver Perkins inventory tags, but some computers had their labels removed.

Findings:

- It is unclear the extent to which students have opportunities to practice and demonstrate mastery of all the State competencies for the program (RSA 188-E:5, VIII).
- All computers purchased with Perkins funds did not have federal inventory tags.

Corrective Action Needed:

- Ensure the program complies with RSA 188-E:5, VIII and students have multiple opportunities to practice and demonstrate mastery of State competencies for the program. Include State competencies for the program in curriculum map, perhaps under the “competencies” or “standards” sections on the Core Map Template on RubiconAtlas.
- Ensure all equipment purchased with federal funds are tagged or engraved correctly.

Recommendations:

- Add additional PAC members beyond those who are program alumni to gain a broader perspective on potential program improvements.
- Review PAC meeting minutes samples in the PAC Handbook.

Commendations:

- Teacher has clear passion and enthusiasm for both his content area and for seeing his students become successful.

***Computer Systems Networking & Telecommunications***

Summary and Analysis: The course sequence identified in the Program of Studies is Computer Networking I (1 credit/1 semester) to Computer Networking II (1 credit/1 semester). Running Start credit is available for both courses through Nashua Community College for a total of six credits.

The PAC has three industry members plus the teacher and meets once or twice a year. PAC members are mostly program alumni and the group functions as the PAC for both Computer Programming and Computer Systems Networking & Telecommunications. While one PAC can serve two programs, agendas and meeting minutes must clearly reflect the time and attention dedicated to each. Current practice provides that clarity, but agendas should include additional topics. A specific area of growth is annual evaluation of curriculum and competency development. The Running Start partner from NHTI visits the program periodically and would make a logical addition to the PAC.

According to the teacher, third party exams (Precision Exam: Network Fundamentals) were first given in the 2016-2017 academic year. On posttests, some students (mostly seniors) realized the tests had no impact on their grades, so they did not take them seriously. Because of a policy change for the 2017-2018 academic year, third party exams account for 50% of the final exam for all students. They took the tests much more seriously.

Students in the program can earn two industry recognized credentials from Cisco Networking Academy: Routing and Switching - Introduction to Networks; and IT Essentials. Work-based learning opportunities are available to all program students, such as class tours of various organizations’ data centers. A few students take advantage of deeper WBL internships. The teacher plans to work with the ELO Coordinator and leverage an expanded PAC to increase the number of WBL opportunities and also increase the number of students taking advantage of those opportunities.

The classroom, lab space, and equipment are all well suited to deliver the program.

Findings:

- PAC membership and activities do not meet the requirements per RSA 188-E:4-a and the State Plan (pp. 182).

Corrective Action Needed:

- Ensure the program maintains a PAC that meets requirements in per RSA 188-E:4-a and the State Plan (pp. 182). Specific requirements to be met include annual evaluation of curriculum and competency development. The PAC Handbook may be a valuable resource.

Recommendations:

- Design a progression of WBL experiences that, perhaps, starts with whole class visits to industry partners and then intentionally generates internships for each student.

***Engineering, General***

Summary and Analysis: The course sequence identified in the Program of Studies is Engineering Design & Manufacturing I (1 credit/1 semester), Engineering Design & Manufacturing II (1 credit/1 semester), Engineering Design & Manufacturing III(1 credit/1 semester) , and Engineering Design & Manufacturing IV(1 credit/1 semester; this course is pending school board approval.). Students are eligible to earn up to fourteen credits with Manchester Community College as part of the program and may also obtain Solidworks certification, which two students earned in SY16-17. During the on-site interview, the teacher reported her goal to have 100% of students earn this certification at the completion of the level IV course. Students have the opportunity to take six different Precision Exams over the course of the program; students score at or slightly higher than the state average in most cases.

The curriculum is clearly crosswalked with state competencies using RubiconAtlas and includes multiple forms of assessment. The teacher is supported by an active PAC; this group may need support on understanding, interpreting, and using various sources of data to initiate program improvement. Meeting minutes are more like notes rather than minutes and therefore do not include the level of detail that best supports programmatic changes or budget requests. PAC membership does not include a postsecondary representative.

The teacher reports that the classroom space is underutilized and demands on the program's lab space exceed its capacity. Several areas of the carpet in the classroom were worn so badly that they represent slip, trip, and fall hazards. The interactive whiteboard cables were draped over the fire extinguisher.

The teacher was observed providing constructive reinforcement of lab and classroom policies during the on-site monitoring visit. During this visit, the teacher expressed that she would like the opportunity to visit other engineering programs in the state but that getting a substitute teacher was a challenge. Students were clearly engaged during the on-site visit. The teacher manages both the lab and classroom concurrently, maintaining excellent rapport with students, a real-world environment, and realistic and clear expectations.

Inventory stickers were missing from several pieces of equipment; the teacher noted that these had been removed during her absence when the class was supervised by a substitute. There was no formal inventory list for the program. According to the teacher, local budget freezes make it difficult to managing supplies. The teacher frequently makes photocopies of texts for students as information for this program changes so frequently that print texts become obsolete quickly.

Findings:

- Several areas of the carpet in the classroom were worn so badly that they represent slip, trip, and fall hazards. This should be addressed immediately.

Corrective Action Needed:

- Remove the slip, trip, and fall hazards in the classroom.

Recommendations:

- Consider reviewing how classroom and lab spaces are used and consider revising for increased productivity.
- Review PAC meeting minutes samples in the PAC Handbook.

Commendations:

- Teacher demonstrates excellent rapport with students.
- Curriculum crosswalks are strong.

***Film/Video and Photographic Arts, Other***

Summary and Analysis: Two year-long courses comprise the Film, Video, and Photographic Arts program at Region 14. The courses which make up the program are: Digital Photography and Video Arts I and Digital Photography and Video Arts II. Each of the two courses has three Running Start credits available to students. The credits are for courses at Great Bay Community College and Nashua Community College. Students do not have opportunities to earn Industry Recognized Credentials (IRCs). During the conversation with the teacher, it became clear he was unaware of this requirement. He is a new teacher, having only begun a number of weeks prior to the monitoring visit, and expressed the intention to learn more about the need to provide opportunities for students to earn IRCs.

The PAC is healthy with a history of meeting consistently two times per year and minutes show a strong interest in curriculum, facilities, and equipment needs of the program. The PAC does not appear to review or analyze various program performance data as part of their recommendation process.

Student classroom and lab activities take place in the same location. This was a classroom space with shared tables with computers on each. There were enough computers available for each student to work independently, although during the time of the monitoring team's visit, students were not using them. During the visit, students were previewing student film projects. Most of the equipment right now is photography equipment, with less video equipment.

Findings:

- None

Corrective Action Needed:

- None

Recommendations:

- Include the opportunity for students to earn the approved IRC for this program: Final Cut Pro. If the PAC recommends a different IRC, submit a recommendation form to the Bureau for consideration.
- During the conversation with the monitoring team, the teacher mentioned the need for more opportunities for students to work with streaming video and TV studio production work.
- The PAC may consider reviewing and analyzing various program performance data to identify area of need and growth.
- While the program in its present form has the capacity for students to attain New Hampshire state competencies using equipment already in place, additional equipment, as recommended by the PAC, would give students opportunities to explore a wider range of career pathways within the program.

Commendations:



- The program has built strong enrollments over time. One successful strategy to attract students to the program has been outreach from the previous and present teacher to potential students through speaking to them during their time in elective arts courses related to the program.

### ***Fire Science/Fire Fighting***

**Summary and Analysis:** The course sequence identified in the Program of Studies is Firefighting 1 (2 credits/1 semester), and Emergency Medical Technician (2 credits/1 semester). Students who complete Firefighting 1 are eligible to earn several certifications, including CPR/First Aid, Firefighting 1, Hazardous Materials Operations Level Responder, and Wildland Firefighter Level 1. Both courses are articulated with Franklin Pierce University and Mount Wachusett Community College for a possible total of fourteen credits. The program is not supported by a formal PAC, although the teacher, a local fire chief, indicated that there are frequent communications between the local fire departments regarding the program. No formal documentation regarding this communication is kept. The third party assessment is offered by the NH Fire Academy; students may take the exam at age 17, and the certificate is held until students are 18. Students have access to WBL opportunities through Monadnock Hospital and the Peterborough Fire Station and can participate in Explorer or jr. firefighting groups at their local firefighting and medical facilities.

Onsite observations reveal a need for additional classroom/lab space and equipment. The lab space is also used by other classes and has to be rearranged daily to meet the needs of the program. Ideally, the space should mimic patient care areas such as the back of an ambulance. The majority of equipment is donated or loaned by local fire departments, and may be antiquated. For example, the EMT ambulance portable/collapsible cot is 20 years old. Equipment is not securely stored, which may result in lost or damaged items. Many items are kept on the floor of the classroom or on tables, which are used by other classes.

### **Findings:**

- PAC membership and activities do not meet the requirements per RSA 188-E:4-a and the State Plan (pp. 182).
- Space and equipment are not adequate.

### **Corrective Action Needed:**

- Ensure the program establishes and maintains a PAC that meets requirements in per RSA 188-E:4-a and the State Plan (pp. 182). The PAC Handbook may be a valuable resource.
- Ensure that class/lab space and equipment meet the needs of the program and mirror industry standards.

### ***Graphic Design***

**Summary and Analysis:** The three courses which make up this program are each one semester. The sequence of courses is: Graphic Design 1, Graphic Design 2, and Graphic Design 3. A student can complete the program in one and a half years. The teacher reports she uses the metric of 90% student attainment of New Hampshire state competencies in order to determine program completion status. Central Maine Community College offers three credit hours for a Photoshop course to students taking Graphic Design 1 and 2. The teacher is in the process of working with Manchester Community College to develop a Running Start agreement for courses in the Graphic Design program. The teacher reports she is not aware of any industry recognized credentials (IRCs) available from credentialing bodies for graphic design students in New Hampshire.

The lab and classroom spaces are adequate for instruction and for student practice. The current room configuration has students facing computers lined up against the perimeter of the classroom. While this set-up has advantages for instruction, it more closely resembles a classroom, rather than a typical graphic design workspace found in the industry. Current industry standard workspaces are “pods”, with small groups of students seated at tables, allowing for collaborative work and discussion.

Finding:

- None

Corrective Action Needed:

- None

Recommendations:

- Include the opportunity for students to earn the approved IRC for this program: Final Cut Pro. If the PAC recommends a different IRC, submit a recommendation form to the Bureau for consideration.
- The lab space should more closely resemble workspaces found in industry.
- PAC members should provide input to the teacher, in order to ensure students can meet the “All Aspects of an Industry” competencies in the program.
- Students could also take advantage of work-based learning opportunities, such as internships, in order to meet those needs.

Commendations:

- It was clear from conversations with students that the teacher runs the program in a manner which respects students and which demonstrates caring for them and their future success.

***Teacher Education, Multiple Levels***

**Summary and Analysis:** The course sequence identified in the Program of Studies is Careers in Education I (2 credits/full year), and Careers in Education II (2 credits/full year.). Child Growth and Development is not part of the sequence of courses but is an elective recommended for students considering the program. Running Start college credits are available through Nashua Community College for a total of nine credits. Students are also eligible to earn First Aid/CPR/AED certification for adults and pediatrics through the American Red Cross; all students successfully completed these certifications in SY16-17. During SY17-18, students took the Early Childhood Education I Precision Exam and scored on par with state averages, a 9% increase from the pretest given at the beginning of the year. The state has not aligned a Precision Exam with this program.

The program is supported by a PAC with representatives from diverse careers in education, including speech development and occupational and physical therapists. Meeting minutes do not reflect labor market or performance data being discussed for program improvement, and overall the minutes need additional development because they do not include the level of detail that best supports programmatic changes or budget requests. The curriculum crosswalk completed through RubiconAtlas partially documents alignment between the curriculum and the state competencies; additional details need to be added to complete the alignment. Observations of the classroom space indicate a well-organized learning environment with effective use of technology.

During the on-site visit, the teacher expressed interest in relocating the program to the former program space, which is currently being utilized by alternative education. See the Center-Wide section of this report for encroachment details.

Findings:

- It is unclear the extent to which students have opportunities to practice and demonstrate mastery of all the State competencies for the program (RSA 188-E:5, VIII).

Corrective Action Needed:

- Ensure the program complies with RSA 188-E:5, VIII and students have multiple opportunities to practice and demonstrate mastery of State competencies for the program. Include State

competencies for the program in curriculum map, perhaps under the “competencies” or “standards” sections on the Core Map Template on RubiconAtlas.

Recommendations:

- Review PAC meeting minutes samples in the PAC Handbook.

Commendations:

- Classroom is well organized and conducive to learning.
- Lesson plan development is unique and complementary to the program.
- Elementary and early childhood education and middle school practicum days are embedded throughout the program.
- The PAC membership represents diverse careers in education.

## Corrective Action Plan

Region 14 Applied Technology Center

Following Monitoring On-site Visit on April 17 and 18, 2018

For each finding, indicate how you plan to make the necessary corrections, who is responsible for the corrective action, and when completion is due. If a due date extension needs to be negotiated, please highlight your proposed due date and write a note in the action plan describing why an extension is needed. Return your signed corrective action plan to the Bureau of Career Development within 30 days of receiving this report.

Finding	Corrective Action Needed	Action Plan (Proposed by center Director. Include who is responsible for actions.)	Due Date	Date Completed and Type of Evidence Presented
Center-Wide				
The RAC does not meet these membership requirements per RSA 188-E:4-a.	The RAC will meet all legislative requirements specified in RSA 188-E:4-a, specifically those regarding membership.			
Federal inventory requirements are not being met. Missing information includes: vendor; date received; total cost; funding source; % Perkins / % local; cost to Perkins; specific location in the building; condition; date of last physical inventory; disposition date; and sale price at time of disposition.	The center's inventory document will include all federally required information and confirm that a complete physical inventory is conducted at least once every two years.			

**Corrective Action Plan**  
Region 14 Applied Technology Center

<b>Finding</b>	<b>Corrective Action Needed</b>	<b>Action Plan</b> (Proposed by center Director. Include who is responsible for actions.)	<b>Due Date</b>	<b>Date Completed and Type of Evidence Presented</b>
The requirements of RSA 188-E:3 are not being met. Some State-funded CTE spaces are being used primarily for non-CTE activities.	A detailed list will be developed to include square footage of the spaces built with State money for CTE that are currently used for non-CTE activities and the spaces built with local money that are currently used for CTE activities. This list must accompany a plan to eliminate the encroachment.			
<b>Building/Construction Trades</b>				
End-of-program technical skill assessment is not being administered.	Ensure students' technical skill attainment is assessed. The relevant Precision Exam for the program is Carpentry.			
There is no system to manage the program's inventory of equipment purchased with federal or state funds.	Establish and maintain an inventory management system and list, and reconcile the physical inventory to the list at least every two years.			
<b>Business/Commerce, General</b>				
PAC membership and activities do not meet the requirements per RSA 188-E:4-a and the State Plan (pp. 182).	Ensure the program maintains a PAC that meets requirements in per RSA 188-E:4-a and the State Plan (pp. 182). The <u>PAC Handbook</u> may be a valuable resource.			
Students do not have the opportunity to earn college credit as part of the program.	Secure partnerships so students have the opportunity to earn at least three college credits as part of the program.			
There are no postsecondary agreements in effect.	Ensure the program has at least one articulation agreement or dual enrollment contract with a postsecondary institution.			

## Corrective Action Plan

Region 14 Applied Technology Center

Finding	Corrective Action Needed	Action Plan (Proposed by center Director. Include who is responsible for actions.)	Due Date	Date Completed and Type of Evidence Presented
Computer Programming, General				
It is unclear the extent to which students have opportunities to practice and demonstrate mastery of all the State competencies for the program (RSA 188-E:5, VIII).	Ensure the program complies with RSA 188-E:5, VIII and students have multiple opportunities to practice and demonstrate mastery of State competencies for the program. Include State competencies for the program in curriculum map, perhaps under the “competencies” or “standards” sections on the Core Map Template on RubiconAtlas.			
All computers purchased with Perkins funds did not have federal inventory tags.	Ensure all equipment purchased with federal funds are tagged or engraved correctly.			
Computer Systems Networking & Telecommunications				
PAC membership and activities do not meet the requirements per RSA 188-E:4-a and the State Plan (pp. 182).	Ensure the program maintains a PAC that meets requirements in per RSA 188-E:4-a and the State Plan (pp. 182). Specific requirements to be met include annual evaluation of curriculum and competency development. The <u>PAC Handbook</u> may be a valuable resource.			
Engineering, General				
Several areas of the carpet in the classroom were worn so badly that they represent slip, trip, and fall hazards.	Remove the slip, trip, and fall hazards in the classroom.			
Fire Science/Fire Fighting				

**Corrective Action Plan**  
Region 14 Applied Technology Center

<b>Finding</b>	<b>Corrective Action Needed</b>	<b>Action Plan</b> (Proposed by center Director. Include who is responsible for actions.)	<b>Due Date</b>	<b>Date Completed and Type of Evidence Presented</b>
PAC membership and activities do not meet the requirements per RSA 188-E:4-a and the State Plan (pp. 182).	Ensure the program establishes and maintains a PAC that meets requirements in per RSA 188-E:4-a and the State Plan (pp. 182). The <u>PAC Handbook</u> may be a valuable resource.			
Space and equipment are not adequate.	Ensure that class/lab space and equipment meet the needs of the program and mirror industry standards.			
Teacher Education, Multiple Levels				
It is unclear the extent to which students have opportunities to practice and demonstrate mastery of all the State competencies for the program (RSA 188-E:5, VIII).	Ensure the program complies with RSA 188-E:5, VIII and students have multiple opportunities to practice and demonstrate mastery of State competencies for the program. Include State competencies for the program in curriculum map, perhaps under the “competencies” or “standards” sections on the Core Map Template on RubiconAtlas.			

Corrective Action Plan presented by

\_\_\_\_\_ Date \_\_\_\_\_  
(CTE Center Director)