



NEW ENGLAND ASSOCIATION OF SCHOOLS AND COLLEGES, INC.  
COMMISSION ON PUBLIC SCHOOLS

VISITING TEAM REPORT

# Bristol-Plymouth Regional Technical School

207 Hart Street  
Taunton, MA 02780 USA

**Dr. Alexandre Magalhaes**  
*Superintendent/Director*

**Ms. Elizabeth Sullivan**  
*Principal*  
*Self-Study Coordinator*

**Mr. Glenn Lopes**  
*Program Administrator*  
*Self-Study Coordinator*

**Ms. Melanie Shaw**  
*Pupil Services Administrator*  
*Self-Study Coordinator*

**Mr. Kenneth Sutcliffe**  
*Academic Coordinator*  
*Self-Study Coordinator*

---

**Mr. Richard Shellman**  
Oliver Wolcott Technical High School  
*Principal*  
*Chair*

**Mr. Christopher Comeau**  
Southeastern Regional Vocational Technical School  
*Mathematics / Computer Science Teacher*  
*Assistant Chair*

**11/05/2018 - 11/08/2018**

# STATEMENT ON LIMITATIONS

---

## THE DISTRIBUTION, USE, AND SCOPE OF THE VISITING TEAM REPORT

The Committee on Technical and Career Institutions of the New England Association of Schools and Colleges considers this visiting team report to be a privileged document submitted by the Committee on Technical and Career Institutions of the New England Association of Schools and Colleges to the principal of the school/center and by the principal to the state department of education. Distribution of the report within the school/center community is the responsibility of the school/center principal. The final visiting team report must be released in its entirety within sixty days (60) of its completion to the superintendent, school board, public library or town office, and the appropriate news media.

The prime concern of the visiting team has been to assess the quality of the educational program at this school/center in terms of the Committee's Standards for Accreditation. Neither the total report nor any of its subsections is to be considered an evaluation of any individual staff member but rather a professional appraisal of the school/center as it appeared to the visiting team.

# **STANDARDS FOR ACCREDITATION**

---

The Committee on Technical and Career Institutions Standards for Accreditation serve as the foundation for the accreditation process and by which accreditation decisions are made. The seven Standards are qualitative, challenging, and reflect current research and best practice. The Standards, written and approved by the membership, establish the components of schools/centers to ensure an effective and appropriate focus on teaching and learning and the support of teaching and learning.

## **Teaching and Learning Standards**

**Core Values and Expectations**

**Curriculum**

**Instruction**

**Assessment**

## **Support Standards**

**Culture and Leadership**

**Student Services and Support**

**School Finance and Community Relations**

# CORE VALUES AND EXPECTATIONS

---

## Teaching and Learning Standard

*Effective schools/centers identify their mission, core values, and beliefs about learning that function as explicit foundational commitments to students and the community. Mission, core values and beliefs manifest themselves in age appropriate, researched-based, school-wide 21st century learning expectations. Every component of the school/center is driven by the mission, core values, and beliefs and supports all students' achievement of the school/center's learning expectations.*

1. The school/center community engages in a collaborative and inclusive process to identify and commit to its mission, core values, and beliefs about learning.
2. The school/center has challenging and measurable learning expectations for all students which address career, academic, social, and civic competencies. Each expectation is defined by specific and measurable criteria for success, such as school/center-wide analytic rubrics, which define targeted high levels of achievement.
3. The school/center's mission, core values, beliefs, and learning expectations are actively reflected in the culture of the school/center, drive curriculum, instruction, and assessment in every classroom, and guide the school/center's policies, procedures, decisions, and resource allocations.
4. The school/center regularly reviews and revises its mission, core values, beliefs, and learning expectations based on current research, multiple data sources, as well as district and school/center community priorities.
5. The school/center's mission, core values, beliefs, and learning expectations are widely displayed throughout the facility, on the website, and in all handbooks.

# CURRICULUM

---

## Teaching and Learning Standard

*The written and taught curriculum is designed to result in all students achieving the school/center's 21st century expectations for student learning. The written curriculum is the framework within which a school/center aligns and personalizes its learning expectations. The curriculum links expectations for student learning to instructional and assessment practices. It includes a purposefully designed set of learning opportunities that reflect the school/center's mission, core values, beliefs, and learning expectations. The curriculum is collaboratively developed, implemented, reviewed, and revised based on analysis of student performance and current research.*

1. The curriculum is purposefully designed to ensure that all students practice and achieve each of the school/center's learning expectations.
2. The curriculum is written in a common format that includes:
  - units of study with essential questions, concepts, content, and skills
  - the school/center's learning expectations
  - developmentally appropriate instructional strategies
  - a variety of developmentally appropriate assessment practices.
3. The curriculum emphasizes depth of understanding and application of knowledge at the appropriate developmental levels through:
  - inquiry and problem-solving
  - exploration and creativity
  - higher order thinking
  - collaboration and communication
  - cross-disciplinary learning
  - authentic learning opportunities both in and out of school/center
  - informed use of technology.
4. There is clear alignment between the written and taught curriculum.
5. Effective curricular coordination and vertical articulation exist between and among all areas within the school/center.
6. The curriculum is supported by sufficient staffing levels, instructional materials, technology, equipment, supplies, facilities, and educational media resources to fully implement the curriculum, co-curricular programs, and other developmentally appropriate learning opportunities.
7. Curriculum is developed, evaluated, and revised using assessment results and current research.
8. Program Advisory Committees are effectively utilized to recommend program modifications based on changing technology; assist with the development of an equipment acquisition plan; assist in the development of the technology plan; and review both the technical and academic curricula. (Their agendas/minutes are maintained on file.)
9. Technical programs are competency-based education identifying specific duties and tasks.
10. Instructional programs offered in career fields requiring licensure or certification are designed to prepare students to meet those requirements.

# INSTRUCTION

---

## Teaching and Learning Standard

*The quality of instruction is the single most important factor in students' achievement of the school/center's 21st century learning expectations. Instruction is responsive to student needs, deliberate in its design and delivery, and grounded in the school/center's mission, core values, beliefs, and learning expectations. Instruction is supported by research in best practices. Teachers are reflective and collaborative about their instructional strategies and collaborative with their colleagues to improve student learning.*

1. Teachers' instructional practices are continuously examined to ensure consistency with the school/center's mission, core values, beliefs, and learning expectations.
2. Teachers' instructional practices support the achievement of the school/center's learning expectations, as evidenced by:
  - personalizing and differentiating instruction
  - engaging students in cross-disciplinary learning
  - engaging students as active learners
  - emphasizing inquiry, problem-solving, and higher order thinking
  - applying knowledge and skills to authentic tasks
  - emphasizing communications skills
  - providing feedback
  - engaging students in self-assessment and reflection
  - integrating technology.
3. Teachers adjust their instructional practices to meet the needs of each student by:
  - using formative assessment
  - strategically differentiating
  - purposefully organizing group learning activities
  - providing additional support and alternative strategies within the regular classroom.
4. Teachers, individually and collaboratively, improve their instructional practices by:
  - using student achievement data from a variety of formative and summative assessments
  - examining student work
  - using feedback from a variety of sources, such as including students, other teachers, supervisors and parents
  - using feedback from a variety of sources
  - examining current research
  - engaging in professional discourse focused on instructional practice.
5. Teachers, as adult learners and reflective practitioners, maintain expertise in their content area and in content-specific instructional practices.
6. All technical programs provide safety instruction, instruction in hazardous chemical awareness (safety data sheets), and written and applied safety testing.

# ASSESSMENT

---

## Teaching and Learning Standard

*Assessment informs students and stakeholders of progress and growth toward meeting the school/center's 21st century learning expectations. Assessment results are shared and discussed on a regular basis to improve student learning. Assessment results inform teachers about student achievement in order to adjust curriculum and instruction.*

1. The professional staff continuously assesses whole-school and individual student progress in achieving the school/center's learning expectations.
2. The school/center's professional staff communicates:
  - individual student progress in achieving the school/center's learning expectations to students and their families
  - the school/center's progress in achieving the school/center's learning expectations to the school/center community and stakeholders.
3. Teachers communicate to students the learning expectations and the unit-specific learning goals to be assessed.
4. Teachers, individually and collectively, employ a range of assessment strategies, including formative and summative assessments.
5. Teachers provide specific and timely feedback to ensure students revise and improve their work.
6. Teachers regularly use formative assessment to inform and adapt their instruction for the purpose of improving student learning.
7. Teachers and administrators, individually and collaboratively, examine a range of evidence of student learning for the purpose of improving instructional practice.
8. A systematic program review is conducted periodically to guarantee effective program design.

# CULTURE AND LEADERSHIP

---

## Support Standards

*The school/center culture is equitable and inclusive, and it embodies the school/center's foundational mission, core values, beliefs, and expectations about student learning. The culture is characterized by reflective, collaborative, and constructive dialogue about researched-based practices that support high expectations for teaching and learning. The leadership of the school/center fosters mutual respect and a safe, positive culture by promoting citizenship, learning, and shared leadership that engages all members of the school/center community in efforts to improve teaching and learning.*

1. The school/center community consciously and continuously builds a safe, positive, respectful, and supportive culture that fosters student responsibility for learning and results in shared ownership, pride, and high expectations for all.
2. The school/center is equitable, inclusive, and fosters heterogeneity by using student grouping practices that reflect an understanding of the unique learning and social needs of all students and demonstrate an awareness of the diversity of the population of the school/center.
3. In order to improve student learning through professional development, the principal and professional staff:
  - engage in professional discourse for reflection, inquiry, and analysis of teaching and learning
  - use resources inside and outside of the school to maintain current with best practices
  - dedicate formal time to implement professional development
  - have a planned orientation program for new staff
  - apply the skills, practices, and ideas gained in order to continually improve curriculum, instruction, and assessment
  - ensure that all faculty and staff meet state and local certification requirements.
4. Research-based evaluation and supervision processes that focus on improved student learning are used to evaluate the performance of the administration, faculty, and staff.
5. The organization of time supports research-based instruction, professional collaboration among teachers, and the learning needs of all students.
6. The principal/director, working with other building leaders, provides instructional leadership that is rooted in the school/center's mission, core values, beliefs, and learning expectations.
7. All members of the school/center community feel welcome at the school/center and have opportunities for school/center improvement.
8. Teachers exercise initiative and leadership essential to the improvement of the school/center and to increase students' engagement in learning.
9. The work, contributions, and achievements of students and school/ center personnel are regularly acknowledged and celebrated and appropriately displayed throughout the school/center.
10. The school committee, superintendent, and principal/director are collaborative, reflective, and constructive in achieving the school/ center's learning expectations.
11. The principal/director has sufficient decision-making authority to lead the school/center.
12. Current written policies and procedures are readily available to all personnel and to the public.



13. A written school/center improvement plan with measures of accountability has been implemented.
14. Students are provided opportunities for student government/leadership.
15. The school/center's calendar is designed to ensure minimal disruption of the school's educational program.
16. The school/center encourages non-traditional careers for students and supports gender equity in all programs.

# STUDENT SERVICES AND SUPPORT

---

## Support Standards

*Student learning and well-being are dependent upon appropriate sufficient support. The school/center is responsible for providing an effective range of coordinated programs and services. These resources enhance and improve student learning and well-being and support the school/center's mission, core values, and beliefs. Student services and support enable each student to achieve the school/center's 21st century learning expectations.*

1. All students have an equal opportunity to achieve the school/center's learning expectations.
2. The physical areas provided for student support services are appropriate for the particular service and ensure privacy and confidentiality.
3. The school/center maintains all student, alumnae, administrative, and personnel records in a confidential and secure manner consistent with federal, state, and local laws or regulations.
4. School/center counseling services have access to an adequate number of certified/licensed personnel and support staff who:
  - provide academic, career, and personal counseling
  - deliver a written, developmental program
  - engage in individual and group meetings with students
  - deliver collaborative outreach and referral to community and area mental health agencies and social service providers
  - provide preventative health services and direct intervention services including emergency care
  - conduct ongoing student health assessments
  - inform faculty and staff of medical conditions of their students when appropriate
  - securely maintain student health records
  - use ongoing, relevant assessment data, including feedback from the school/center community, to improve services and ensure each student achieves the school/center's learning expectations.
5. The school/center ensures that students have access to educational media services that are integrated into curriculum and instructional practices. There are an adequate number of personnel and support staff who
  - are actively engaged in the implementation of the school/center's curriculum
  - provide a wide range of materials, technologies, and other information services in support of the school/center's curriculum
  - are responsive to students' interests and needs in order to support independent learning
  - conduct ongoing assessment using relevant data, including feedback from the school/center community, to improve services and ensure each student achieves the school/center's learning expectations.
6. Support services for identified students, including special education, Section 504 of the Federal Rehabilitation Act of 1973, and English language learners, have an adequate number of certified/licensed personnel and support staff who:
  - collaborate with all teachers, counselors, targeted services, and other support staff in order to achieve the school/center's learning expectations
  - provide inclusive learning opportunities for all students
  - perform ongoing assessment using relevant data, including feedback from the school/center community, to improve services and ensure each student achieves the school/center's learning expectations.

7. The institution has a published Information Resources and Responsible Use policy which is consistent with its mission.
8. An adequate method of student record keeping is in place and individual student files include the following:
  - Attendance
  - Technical competency assessment
  - Academic achievement
  - Test results
  - Individual Education Plan or 504 Plan as appropriate
  - Safety test documentation
  - Industry recognized certifications attained.
9. Graduate follow-up studies are conducted and the resultant data is shared with staff to assist with program and curriculum development.
10. An assessment system is available to assist students with the identification of career aptitudes and interests.
11. The school/center has a comprehensive safety/crisis response plan that ensures:
  - Students, faculty and staff are trained to assist with emergency situations
  - A written crisis intervention plan has been developed and implemented
  - Evacuation procedures are widely publicized, and regularly scheduled drills are held and results documented.
12. Written admissions policy identifies enrollment criteria for students as well as the process for determining student enrollment allotments, if appropriate, from participating/sending schools/centers.
13. Student transportation is scheduled to ensure that all students will arrive and depart from the school/center with minimal loss of time on task.
14. Residential Program creates and maintains an environment that allows students to learn and practice independent and community living skills.
15. Residential Program provides a safe, secure, clean, and attractive physical and social living environment for students that is appropriate to their varied needs and levels of maturity.

# SCHOOL FINANCE AND COMMUNITY RELATIONS

---

## Support Standards

*The achievement of the school/center's mission, core values, beliefs, and learning expectations requires active community, governing board, and parent/guardian advocacy. Through dependable and adequate funding, the community provides the personnel, resources, and facilities to support the delivery of curriculum, instruction, programs, and services.*

1. The community and the district's governing body provide dependable funding for:
  - a wide range of school/center programs and services
  - sufficient professional and support staff
  - ongoing professional development and curriculum revision
  - a full range of technology support, including personnel and infrastructure
  - sufficient equipment for CTE and academic programs
  - sufficient instructional materials and supplies
  - a learning environment that supports high levels of learning for all.
2. The school/center community develops, plans, and funds programs to ensure:
  - the replacement of equipment, the maintenance and repair of facilities and equipment, and thorough and routine cleaning of the facility
  - adequate network infrastructure and technological peripherals
  - school/center's plant is effectively and efficiently ventilated, heated, and lighted.
3. There is sufficient funding to ensure the school/center implements a long-range plan that addresses and supports:
  - programs and services
  - enrollment changes and staffing needs
  - capital improvements to protect the financial investment of the site and buildings.
4. Faculty and building administrators are actively involved in the development and implementation of the budget.
5. The school/center site/facility supports and enhances all aspects of the educational program and is maintained to meet all applicable federal, state, and local laws, and are in compliance with local fire, health, and safety regulations.
6. Appropriate school/center transportation procedures are in place to ensure the safety of the students and in compliance with all federal, state, and local laws and regulations.
7. The professional staff actively engage parents/guardians and families as partners in each student's education and reach out specifically to those families who have been less connected with the school/center.
8. The school/center develops productive career and technical advisory, community, business, and higher education partnerships to support student learning.
9. Records of all funds collected and disbursed in connection with any part of the school/center's program are kept in an accurate and systemic form
10. Funds collected are properly safeguarded.
11. The governing board and the administration exercise control over all financial operations. An appropriate

system of checks and balances is in place to ensure integrity in the collection and disbursement of all school/center funds.

12. Records of all funds collected and disbursed are audited at appropriate intervals in accordance with local and state requirements.

# Introduction

---

## Introduction

The New England Association of Schools and Colleges (NEASC) is the oldest of the six regional accrediting agencies in the United States. Since its inception in 1885, the Association has awarded membership and accreditation to those educational institutions in the six-state New England region who seek voluntary affiliation.

The governing body of the Association is its Board of Trustees which supervises the work of four Commissions: the Commission on Institutions of Higher Education (CIHE), the Commission on Independent Schools (CIS), the Commission on Public Schools which is comprised of the Committee on Public Secondary Schools (CPSS), the Committee on Technical and Career Institutions (CTCI), and the Committee on Public Elementary and Middle Schools (CPEMS), and the Commission on International Education (CIE).

As the responsible agency for matters of the evaluation and accreditation of public secondary school member institutions, CTCI requires visiting teams to assess the degree to which the evaluated schools align with the qualitative Standards for Accreditation of the Committee. Those Standards are:

### Teaching and Learning Standards

Core Values and Expectations

Curriculum

Instruction

Assessment

### Support of Teaching and Learning Standards

Culture and Leadership

Student Services and Support

School Finance and Community Relations

The accreditation program for career and technical schools involves a threefold process: the self-study conducted by the local professional staff, the on-site evaluation conducted by the Committee's visiting team, and the follow-up program carried out by the school/center to implement the findings of its own self-study, the valid recommendations of the visiting team, and those identified by the Committee in the follow-up process. Continued accreditation requires that the school/center be reevaluated every ten years by a full visiting committee, five years later with a focused visiting committee, and that it show continued progress addressing identified needs.

### Preparation for the Accreditation Visit - The School Self-Study

A steering committee of the professional staff was appointed to supervise myriad details inherent in the school's self-study. At Bristol-Plymouth Regional Technical School (B-P Tech), a committee of 11 members, including the principal, supervised all aspects of the self-study. The steering committee assigned teachers and administrators in the school to appropriate subcommittees to determine the quality of all programs, activities, and facilities available for young people. In addition to faculty members, the self-study committees included input from students, parents, central office professionals, and school board representatives.

The self-study of B-P Tech extended over a period of 10 school months from September, 2017 to June, 2018. The visiting team was pleased to note that the steering committee went to great lengths to get input from

students, parents, and community members as well.

Technical and career schools evaluated by the Committee on Technical and Career Institutions must complete appropriate materials to assess their alignment with the Standards for Accreditation and the quality of their educational offerings in light of the school's core values, beliefs, and learning expectations, and unique student population. Using the Self-Study Guides developed by a representative group of New England educators and approved by the Committee, B-P Tech was able to reflect on the concepts contained in the Standards for Accreditation. These materials provided discussion items for a comprehensive assessment of the school by the professional staff during the self-study.

It is important that the reader understand that every subcommittee appointed by the steering committee was required to present its report to the entire professional staff for approval. No single report developed in the self-study became part of the official self-study documents until it had been approved by the entire professional staff.

### **The Process Used by the Visiting Team**

A visiting team of 17 members was assigned by the Committee on Technical and Career Institutions to evaluate Bristol-Plymouth Regional Technical School. The visiting team members spent four days at the school, reviewed the self-study documents which had been prepared for their examination, met with administrators, teachers, other school and system personnel, students and parents, shadowed students, visited classes, and interviewed teachers to determine the degree to which the school aligns with the Committee's Standards for Accreditation. Since the members of the visiting team represented classroom teachers, technical program teachers, guidance counselors, school administrators, and central office administrators, diverse points of view were brought to bear on the evaluation of Bristol-Plymouth Regional Technical School.

The visiting team built its professional judgment on evidence collected from the following sources:

- review of the school's self-study materials
- Approximately 60 hours of classroom observation (in addition to time shadowing students)
- numerous informal observations in and around the school
- tours of the facility
- individual meetings with over 50 teachers about their work, instructional approaches, and the assessment of student learning
- group meetings with students, parents, school and district administrators, and teachers

Each conclusion in the report was agreed to by visiting team consensus. Sources of evidence for each conclusion drawn by the visiting team are included with each Indicator in the Standards sections of the report. The seven Standards for Accreditation reports include commendations and recommendations that in the visiting team's judgment will be helpful to the school as it works to improve teaching and learning and to better align with Committee Standards.

This report of the findings of the visiting team will be forwarded to the Committee on Technical and Career Institutions which will make a decision on the accreditation of Bristol-Plymouth Regional Technical School.

# Community Profile

---

## Community Profile

Founded in 1639 and incorporated in 1864, the City of Taunton is located in southeastern Massachusetts, forty miles southwest of Boston, and twenty miles northeast of Providence, RI. Bristol-Plymouth Regional Technical School services the towns of Berkley, Bridgewater, Dighton, Middleboro, Raynham, Rehoboth and Taunton. The largest city in land area in the Commonwealth, Taunton is a growing industrial community of approximately 56,000 people, Middleborough and Raynham have each about half of that number. Taunton has the lowest income per capita, at about \$54,000, followed by Middleborough at about \$75,000, while the rest of the communities served by the school have per capita incomes in the high 80-thousand and low 90-thousand range.

Given its close proximity to Plymouth, the history of European settlement in the Taunton area dates back hundreds of years and it has a correspondingly long history of interaction between Native Americans and English settlers and their descendents. Historically, the area was home to many iron-working and silversmithing industries and today there is an effort to grow the presence of digital technology and biotechnology in the area. The school sits directly adjacent to State Route 24, a major traffic artery between Boston and southeastern Massachusetts, and just a couple of miles from interstate Highway 495 which circles metropolitan Boston and provides access to the tourism and hospitality rich area of Cape Cod and the Islands.



# School/Center Profile

---

## School/Center Profile

September of 1972 marked the opening of Bristol-Plymouth Regional Technical School (B-P Tech), with 472 students. Over 1200 students are enrolled at the school for 2017-2018 school year with a faculty of 111. B-P Tech has eighteen technical programs as well as a college preparatory academic course of study.

B-P Tech is now a facility of 211,825 square feet on a 68-acre campus. The facility was originally built and opened in 1972 for a maximum capacity of 740 students and 12 technical areas. The school now offers 18 technical programs and has added about 30,000 square feet of space in various renovations over the years. The school enrollment at the time of the decennial visit was 1,278. The school is currently working with the Commonwealth of Massachusetts to secure the means for a complete renovation of the existing building or a new building to address an aging plant and a lack of space. 56 percent of the total current enrollment is male. The overall enrollment has remained generally steady over the last five years. 85 percent of the school enrollment reports as white, seven percent as Hispanic, 2.9 percent as multi-race, and 3.4 percent as African-American. 18.6 percent of the total enrollment are students with disabilities.

B-P Tech's per pupil expenditure was \$18,535.45 compared to the 2017 state average per pupil expenditure of \$15,452.83. The 2017 four-year graduation rate for all students is 98.7, no sub-group has a graduation rate less than 97.4 percent. The current daily attendance rate is 95.6% and the chronic absentee rate is 7.4%.

On the academic side, the schedule is comprised of a four block day. All academic content areas share common planning time. On the technical side, once students are placed in their permanent shop areas after semester one of freshman year, they are scheduled for a full day in that area. Students switch between the academic and technical areas weekly. Math, Science, and English classes are scheduled in ninety minute blocks. History and elective courses are forty-five minutes each. All freshmen and sophomore students take either an additional math or reading course in preparation for state testing requirements. Juniors and Seniors take optional electives. Technical course blocks run the entire school day. The school makes every effort to limit changes to the schedule such as field trips, class meetings, and even mandated testing, to the technical side in order to maximize time for student academic preparation.

The school and district is led by a superintendent and B-P Tech is the only school in the district. The school is led by a Principal who oversees a Program Administrator and Director of Pupil Services. Assisting the Program Administrator are an Academic Coordinator, a Technical Coordinator and a coordinator of Nursing Programs. The Director of Pupil Services oversees the Special Education and School Guidance Departments. There is also a Director of Business Services who reports to the Superintendent. There is also a school disciplinarian

There are approximately 110 teachers in the building, including Guidance Counselors. There are currently 19 technical programs offered for secondary students, although one, Engineering Technology, is new for 2018-19 and not included in the self-study.

All teaching staff are evaluated as part of the Massachusetts Teacher Evaluation System. All administrators are evaluated by the principal.

The local community participates in the school through the School Council, Parent Council, Special Education Advisory Council and multiple Program Advisories. There is also a yearly Open House where visitors may speak with staff and students about academic and technical programs. All technical programs are operative during Open House and students give demonstrations of live work being done in them. The school also has a Mentor Program which matches students with community members who volunteer to serve as mentors for the students. The school is also proud of two important annual school events- the Credit for Life Fair and the Job Fair - where students meet with community members to prepare for post-secondary life. The school also has articulation agreements with Bristol Community College for six of its technical programs. Yearly, about half of the students

enter post-secondary education. Half of those students attend 2 year programs and the others four-year programs, the vast majority of college attendees enroll at public institutions.

# Standard 1 Indicator 1

---

## Narrative Program Summary

Bristol-Plymouth Regional Technical School (B-P Tech) has engaged in a year-long collaborative and inclusive process to identify and commit to its mission, core values, and beliefs about learning. As part of preparation for the current decennial visit, the school established a committee comprised of teachers and administrators to address these elements of the standard. Core values were presented to the faculty by March of 2018, and learning expectations with accompanying rubrics were complete by June of 2018. Final versions of core values, beliefs about learning, and learning expectation are expected to be presented to parents, community members, and finalized during the FY18-19 school year.

## Sources of Evidence

- self-study
- panel presentation
- school leadership
- Standard sub-committee

# Standard 1 Indicator 2

---

## Narrative Program Summary

Bristol-Plymouth Regional Technical School (B-P Tech) has developed challenging learning expectations for all students. B-P Tech used the Partnership for 21st Century Learning framework for developing learning expectations. Based on this, the school developed rubrics for critical thinking and problem solving, interpersonal skills, communication skills, civic and social skills, and technical area skills.

## Sources of Evidence

- self-study
- panel presentation
- school leadership

# Standard 1 Indicator 3

---

## Narrative Program Summary

Bristol-Plymouth Regional Technical School (B-P Tech) is currently in the process of creating the new mission statement, core values, and learning expectations to drive curriculum, instruction, and assessment in every classroom. The document will serve to guide the school's policies, procedures, decisions and resource allocations. The new core values (**b**elonging, **p**ersistence, **t**eamwork, **e**xcellence, **c**reativity, and **h**onor) were chosen by the core values committee because they were descriptive of existing school culture. For example, the visiting team frequently heard references to a sense of family and belonging in the building. The core values appear clearly on the school's website, the parent-student handbook, and there are efforts underway to place the values in conspicuous locations both inside and outside the school building. There have been some efforts to use the new statements to drive decision-making. One example of this effort is the professional development that was provided in May of 2018 in Social Emotional Learning, which targeted areas of the school's new learning expectations. Earlier in the year, students in the Roots and Wings leadership program were provided with training in the creation of an emotionally and culturally safe school for students. However, these efforts are still largely transitional and the school is aware of its need to make these values and expectations a part of the school community.

## Sources of Evidence

- self-study
- panel presentation
- school leadership
- school website

# Standard 1 Indicator 4

---

## Narrative Program Summary

Bristol-Plymouth Regional Technical School's (B-P Tech) recently reviewed and updated its mission statement and created core values, beliefs, and learning expectations based on research, community feedback, as well as district and school community priorities. The Core Values committee was comprised of five faculty members, consisting of one (1) Technical teacher, three (3) Academic teachers and one member of the guidance department. This committee focused on research in Employability Skills from the Perkins Collaborative Resource Network and the Framework for 21st Century Learning from the P21 Partnership for 21st Century Learning. This committee then joined a larger committee to review their work as well as engage in conversations about measuring these new focus areas. B-P Tech is currently developing plans for including all stakeholders in reviewing and revising the core values, beliefs, and learning expectations.

## Sources of Evidence

- self-study
- panel presentation
- school leadership

# Standard 1 Indicator 5

---

## Narrative Program Summary

Bristol-Plymouth Regional Technical School's (B-P Tech) core values are beginning to appear in school publications such as the website and in the handbook. Currently, physical displays of the core values are being created in different mediums for display inside and outside the school. However, there are many recent school publications which lack reference to these new statements of beliefs, such as the B-P Tech letterhead and freshman orientation materials.

## Sources of Evidence

- self-study
- panel presentation
- central office personnel
- school leadership
- school website

# Standard 1 Commendations

---

## Commendation

The orderly, research-based approach to create learning expectations and accompanying rubrics. (1.2, 1.4)



# Standard 1 Recommendations

---

## Recommendation

Create and implement a plan to introduce the new standards to the entire school community. (1.1)

## Recommendation

Develop a plan to ensure the mission statement, core values, and learning expectations drive curriculum, assessment, and instruction in every classroom and guide the school's policies, procedures, decisions, and resource allocations. (1.3)

## Recommendation

Continue efforts to widely display the mission statement, core values, beliefs, and learning expectations throughout the facility, on the website, and in all handbooks. (1.5)

# Standard 2 Indicator 1

---

## Narrative Program Summary

The curriculum is purposefully designed to engage students in their learning and aligns with Bristol-Plymouth Regional Technical School's (B-P Tech) core values. The written curriculum is the road map for individual departmental instruction. The written academic curriculum is updated annually by lead teachers with input from the departments. The visiting team found evidence that the technical curriculum has been inconsistently updated. Most technical curriculum reviewed contained 2007 frameworks, and evidence of updating was limited to to memos outlining changes made to the curriculum.

## Sources of Evidence

- self-study
- teacher interview
- department leaders
- school leadership

# Standard 2 Indicator 2

---

## Narrative Program Summary

Academic curriculum is in the process of transitioning to a common curriculum mapping tool. The tool contains:

- units of study with essential questions, concepts, content, and skills
- the school/center's learning expectations
- developmentally appropriate instructional strategies
- a variety of developmentally appropriate assessment practices

Most academic courses have been updated to the electronic curriculum maps. Academic curriculum are available with accompanying materials including common assessments in a shared folder. A plan is in place to update the remaining academic courses.

Technical curriculum is not common or in electronic format. A plan for updating the technical curriculum to align with the academic format is in place. The plan calls for lead technical instructors to convert all technical curriculum to the electronic format by the end of the current school year. The visiting team found that there are common assessments within technical departments and common rubrics for exploratory. Production programs use a common daily rubric to assess student work.

## Sources of Evidence

- self-study
- teacher interview
- department leaders
- school leadership

# Standard 2 Indicator 3

---

## Narrative Program Summary

Academic and technical curriculum emphasize depth of understanding and application of knowledge at the appropriate developmental levels. In both the academic and technical curriculum, this includes but is not limited to:

- Higher order thinking
- Collaboration and communication
- Cross-disciplinary learning
- Authentic disciplinary learning both in and out of school/center
- Informed use of technology

Examples observed include the individual computing devices, building trusses for the new police station in Carpentry, and finding the circumference of a frame for circular fire pit in Metal Fabrication. Additionally, data shows the curriculum is supporting the depth of understanding and application of knowledge. For example, Bristol-Plymouth Regional Technical School (B-P Tech) received a 75% Massachusetts Department of Elementary and Secondary Education (DESE) accountability rating, and 34.3% of Advanced Placement (AP) exams taken, received qualifying scores on their exams in 2017-2018. B-P Tech has also steadily increased their AP participation and has two AP courses in technical program areas.

## Sources of Evidence

- classroom observations
- self-study
- student work
- teacher interview
- teachers
- students

# Standard 2 Indicator 4

---

## Narrative Program Summary

The visiting team found that there is clear alignment between the written and taught curriculum. Lesson plans are submitted on a set schedule two weeks ahead of lessons taught and are developed from the course curriculum, and although there is a template for lesson plans, the visiting team found that teachers are allowed to modify for individual usage. Conversations with technical instructors revealed that a lack of updated curriculum on a common template did not equal a lack of curriculum. For example, electrical teachers had a clear four-year curriculum plan which they were able to articulate.

## Sources of Evidence

- classroom observations
- self-study
- teacher interview
- teachers
- department leaders
- school leadership

# Standard 2 Indicator 5

---

## Narrative Program Summary

The visiting team discovered that some effective curricular coordination is evident. Academic curriculum has been developed through collaboration between the Academic Coordinator, the Lead Teachers, and the individual departments. Multiple meetings are scheduled to further this coordination and to ensure continuous program development. The Academic Coordinator, Program Administrator, and Lead Math Teacher will be attending a summit that will assist in course alignment. Information gathered will be used to inform course sequence decisions. The curriculum, program of studies, and master schedule is reviewed annually to determine if any necessary changes are necessary. Technical programs collaborate on interdisciplinary projects such as building the Early Childhood Center. All students earn their OSHA 10 certification in grade nine. All students are CPR certified through their Health classes.

## Sources of Evidence

- classroom observations
- self-study
- teacher interview
- school leadership

# Standard 2 Indicator 6

---

## Narrative Program Summary

The visiting team found that curriculum is supported by sufficient instructional materials, technology, equipment, supplies, and educational media resources to fully implement the curriculum, co-curricular programs and other developmentally appropriate learning opportunities. Most department/program areas visited reported adequate supplies, materials, and technology. The school is equipped with enough individual computing device carts for each classroom or technical program space. However, equipment (laptops) are outdated and in need of replacement, as are aging Smart Boards and projectors in some areas. The visiting team found staffing numbers impacted instructor ability to fully implement the curriculum in some programs. Student/teacher ratio is high in areas where safety and supervision could impact curriculum implementation.

## Sources of Evidence

- classroom observations
- self-study
- teacher interview

# Standard 2 Indicator 7

---

## Narrative Program Summary

Bristol-Plymouth Regional Technical School's (B-P Tech) academic curriculum is developed, evaluated, and revised using assessment results and current research. Monthly meetings between the Academic Coordinator and the Lead Teacher for each academic program review necessary curriculum revisions based on available data. At the start of each year, the Academic Coordinator makes pertinent assessment data available to academic departments for analysis, which is used for programmatic evaluation. No evidence was provided that technical curriculum is developed, evaluated, and revised using assessment results and current research.

## Sources of Evidence

- self-study
- teacher interview
- school leadership



# Standard 2 Indicator 8

---

## Narrative Program Summary

The visiting team found that Program Advisory Committees (PAC's) are used to recommend technical program changes including equipment updates and curriculum revisions. There is not a consistent reporting format for the advisory minutes, and there is also no evidence provided that the Program Advisory Committees had any measurable influence on technical program decisions within the school.

## Sources of Evidence

- self-study
- school leadership

# Standard 2 Indicator 9

---

## Narrative Program Summary

Technical programs at Bristol-Plymouth Regional Technical School's (B-P Tech) are competency-based. A program is in place to track the competencies on a set schedule. The visiting team found that technical program curricula are based on state and industry standards leading to industry certifications and/or hours toward licensure. Part of the plan to revise the technical curriculum is to identify the grade level when each competency will be taught.

## Sources of Evidence

- self-study
- teachers
- school leadership

# Standard 2 Indicator 10

---

## Narrative Program Summary

Bristol-Plymouth Regional Technical School's (B-P Tech) technical programs which require licensure or certification prepare students for these requirements. The programs have maintained required status with all licensing or certifying agencies to ensure their ability to continue to provide the necessary instruction to students. Some of the agencies include National Automotive Technicians Education Foundation (NATEF), National Incident Management System (NIMS), American Culinary Foundation (ACF), and Project Lead the Way (PLTW).

## Sources of Evidence

- self-study
- teachers
- school leadership

# Standard 2 Commendations

---

## Commendation

The Academic Coordinator's development of a comprehensive, common template for academic curriculum, which creates a clear, unified system of instruction for each department. (2.2)

## Commendation

Bristol-Plymouth Regional Technical School (B-P Tech) for the use of data to inform the development of high-quality academic programs, which have resulted in a 75% Massachusetts DESE accountability rating for the school. (2.3)

## Commendation

Bristol-Plymouth Regional Technical School (B-P Tech) for the development of a robust Advanced Placement Program resulting in steadily increasing the number of students participating, holding two courses in technical programs, and having 34.3% of exams taken in 2018 earning a qualifying score. (2.3)

# Standard 2 Recommendations

---

## Recommendation

Revise existing outdated technical curriculum to match current state frameworks. (2.7)

## Recommendation

Transition technical curriculum to common format utilizing units of study with essential questions, concepts, content, and skills, school's learning expectations, developmentally appropriate instructional strategies, and a variety of developmentally appropriate assessment practices. (2.2)

## Recommendation

Review staffing levels of all technical programs to ensure curriculum is supported by sufficient levels to fully implement curriculum. (2.6)

## Recommendation

Review procedures for advisory committee meeting documentation to ensure consistent quality of advisory minutes, and develop a system for reporting on measures taken as a result of advisory input. (2.8)

# Standard 3 Indicator 1

---

## Narrative Program Summary

The visiting team has determined that Bristol-Plymouth Regional Technical School's (B-P Tech) teachers' instructional practices are continuously examined to ensure consistency that align with the school's/center's mission, core values, beliefs, and learning expectations. Faculty members submit lesson plans according to a regular schedule, and those plans reflect the standards as provided by state guidelines and the B-P Tech Curriculum Office. Lesson plan contain elements that include learning standards, lesson objectives, class activities, homework, and assessments. Instructional practices are regularly evaluated to provide teacher with valuable feedback, allowing for growth. Teachers prosper through self-assessment, goal setting forms, and the development of an educator plan. School and District Improvement Goals are provided by the Bristol Plymouth Regional Technical School District Office, which lists five goals for each section. This provides scope for the school learning expectations. Currently, B-P Tech is in the process of creating and transitioning its school Mission Statement. It will be presented as the Bristol-Plymouth Regional Technical School's Learning Expectations. It will captures the essence of their core values and beliefs. The Statement of Philosophy will describe the process of how B-P Tech students, who come from diverse cultural and socioeconomic backgrounds, will learn to compete and gain 21st Century skills. This progression will be accomplished through a variety of learning styles. B-P Tech individualizes their educational instruction to meet those various learning needs, thus enabling academic growth among the student population. High learning expectations within their technical and academic studies are the norm, and teachers are providing the students with the necessary tools to help bridge the gap from the classroom to the workforce. One piece of evidence is the Career Fair. Sophomores are given the task of marketing their shop to Freshmen exploratory students. To make this project successful, students must use their academic skills and gained technical knowledge. Another piece of evidence is the Cooperative Education Program, which provides students opportunity to gain work experience in their career fields. As a result of these successes, students capitalize on skills learned in both academic and shop settings.

## Sources of Evidence

- classroom observations
- self-study
- panel presentation
- facility tour
- teacher interview
- teachers
- school support staff
- school website

# Standard 3 Indicator 2

---

## Narrative Program Summary

The visiting team finds that teachers at B-P Tech support student achievement and the school's learning expectations through various instructional methods. Teachers at B-P Tech place a high emphasis on student engagement as active learners through personalized and differentiated instruction. This instruction emphasizes inquiry, problem-solving, and higher order thinking to apply knowledge and skills to authentic tasks. In technical areas, students work on solving real world problems in order to practice and demonstrate industry standards and skills. Students are given tasks that match their skill and knowledge level as well as their specific educational needs. In academic courses, students demonstrate their understanding of knowledge and skills through application in product-based assignments. These include posters, 3-dimensional models, presentations, and written work. Students are given many different opportunities to demonstrate their knowledge so that each individual may showcase strengths. Technology, such as Google Classroom, Edmodo, Plickers, and ClassDojo, are used to enhance the learning experience for the students, allowing them to receive more individualized instruction and advance at a pace that is appropriate for them. Students are given opportunities to connect different areas of study through cross-disciplinary learning. Evidence is from the students' freshman year through journal writing in English Language Arts classes about shop experiences. Senior year students complete a senior project which integrates their technical area with their English Language Arts course. Teachers provide regular feedback to students in the form of both formative and summative assessments in order for students to be able to play an active role in their educational progress. In both technical and academic areas, teachers monitor students' progress throughout the completion of a project in order to provide feedback to ensure that projects meet industry standards. In addition, teachers offer summative feedback to students at the end of a task to ensure understanding before moving on to tackling more complex tasks. Students are encouraged to reflect on their own progress in their courses. This is accomplished through journal writing, exit tickets, as well as being given access to view their grades electronically (Aspen). Communication skills are emphasized through both formal and informal written and oral presentations. In all courses, students engage in class discussions on a variety of topics. Senior students present their senior project to a small group of adult judges made up of teachers and community members. The visiting team found some efforts (and a fair amount of teacher interest) in cross-curricular learning, for example, the bio-fuel project in HVAC and the efforts of the Bio-technology program to assist the Science department.

## Sources of Evidence

- classroom observations
- self-study
- panel presentation
- student work
- teacher interview
- school support staff
- school website

# Standard 3 Indicator 3

---

## Narrative Program Summary

The visiting team observed that teachers adjust their instructional practices to meet the needs of each student. Data obtained from midterm and final exams as well as MCAS testing is analyzed to adjust future instruction. Shared assessments have been adopted in both the academic and technical areas in order to provide feedback that inform instruction. Teachers in academic areas utilize daily class assignments, teacher observation, class discussions, homework, warm ups, and exit tickets as formative assessments to assess student progress. Teachers in technical areas utilize teacher observations, group discussions, exit tickets/recaps, homework, vocabulary-focused reflections, and time cards. Teachers, in both academic and technical areas differentiate instruction. Differentiation in some cases is mandated by student IEP's, 504's, CAP and ELL plans. Strategies used include read aloud, small group testing, guided notes, and technology. Group activities are organized by teachers to improve collaboration among students, provide an additional method to access the curriculum, and accomplish group and individual learning goals. Academic teachers organize groups to jigsaw content, complete research and hands-on projects, and provide peer tutoring opportunities. Technical teachers group students to complete specific tasks, collaborate and encourage peer-to-peer learning, and simulate the real-world work environment in order to prepare them for the workforce. Within the inclusive school setting, support is provided by a myriad of sources including paraprofessionals, special educators, interpreters, general education and technical instructors. Additional tutoring and MCAS prep is provided before/after school in the library.

## Sources of Evidence

- classroom observations
- self-study
- panel presentation
- facility tour
- student work
- teacher interview
- teachers
- department leaders
- school website



# Standard 3 Indicator 4

---

## Narrative Program Summary

The visiting team observed teachers, individually and collaboratively, improving their instructional practices, primarily at the department level. A plethora of both formative and summative assessments are created in all educational settings. Teachers at B-P Tech use the results to analyze student achievement data. Shared Assessments, formerly known as District Determined Measures, allow teachers to evaluate summative assessments within their unit plans, or pre-post test assessments. Based on the data received, teachers improve their instructional practices and future assessments. Formative assessments are used in the classroom to gauge students strengths and weaknesses. Follow-up in the form of homework assignments, observations and questioning, and checkpoint assessments drives instruction. Procedures are modified by instructors to ensure knowledge is retained and students have a deeper understanding of the material. Students complete a Senior Project Presentation, which enable them to integrate skills from their technical and academic areas. They create a tangible multimedia presentation. Students are tasked with individual writing assignments in their academic classes to discuss their processes, challenges, and lessons they have encountered throughout their project. Teachers evaluate project guidelines and student performance and completed product to improve future instructional practices. Supervisors provide feedback to teachers through the use of TeachPoint evaluations system. In school Professional Development opportunities allow teachers to develop their educational practices in the classroom. Common planning time has been built into the academic teachers' schedules. Examining current research is through further professional development opportunities including Bachelors, Masters, and Certificate of Advanced Graduate Study (CAGS) programs.

## Sources of Evidence

- classroom observations
- self-study
- panel presentation
- facility tour
- teacher interview
- teachers
- department leaders
- school website

# Standard 3 Indicator 5

---

## Narrative Program Summary

Teachers, as adult learners and reflective practitioners, maintain expertise in their content area and in content-specific instructional practices. Teachers are encouraged to take advantage of professional development opportunities. Teachers are granted, contractual, annual tuition reimbursement opportunities for further professional development. Teachers are required to have either a preliminary or professional teaching license, acquired and issued by the Massachusetts Department of Elementary and Secondary Education (DESE), which reflects the need to maintain expertise in the content area and content-specific instruction through its professional development or graduate credit requirements. Many teachers at B-P Tech attend annual Massachusetts Association of Vocational Administrators (MAVA) workshops, and of DESE sponsored conferences, workshops, and trainings. As regards more specific needs, the visiting team found the school to be active in very active in growing the use of digital tools for instruction and there is a need to ensure continued training for teachers to use these digital tools.

## Sources of Evidence

- self-study
- panel presentation
- teacher interview
- teachers
- school leadership
- school support staff
- school website

# Standard 3 Indicator 6

---

## Narrative Program Summary

The visiting team found that all technical programs provide safety instruction in hazardous chemical awareness (safety data sheets), and written and applied safety testing. Each student successfully completes the OSHA-10 training, and all B-P Tech students are 100 percent CPR trained. Individual shops have additional safety training requirements for specific equipment or procedures involved in their trade. Additional certifications may be required for co-op eligibility. All technical programs use the SkillsPlus online competency tracking system to record student growth that is aligned with the chapter 74 frameworks. Specifically, Culinary Arts offers students the Serv-Safe food protection manager certification during their Junior year. Culinary students also complete the certifications for Tips, CPR and First Aid. Heating Ventilation and Air Conditioning (HVAC) students are trained for the Environmental Protection Agency (EPA608) certification to handle refrigerants. The Early Education and Care (EEC) students are 100 percent First Aid certified. Safety Data Sheets (SDS) for all shop materials are available and online based upon the chemical inventory provided for each shop.

## Sources of Evidence

- classroom observations
- self-study
- facility tour
- teacher interview
- teachers

# Standard 3 Commendations

---

## Commendation

The Bristol-Plymouth Regional Technical School's academic and technical teachers for the creation and implementation of instructional practices that engage students as active learners. (3.2)

## Commendation

The Bristol-Plymouth Regional Technical School for providing academic teachers with departmental planning time to improve and adjust their instructional practices to meet the needs of students. (3.4)

## Commendation

The Bristol-Plymouth Regional Technical School for the implementation of a plan in all technical programs that provides safety instruction pertaining to their trade, following chapter 74 framework requirements and assessments on safety, and establishing the goal of 100 percent CPR certification for all students. (3.6)

# Standard 3 Recommendations

---

## Recommendation

Create and implement a plan to increase cross-curricular collaboration among instructors to improve strategic instructional practices between departments and technical areas. (3.4)

## Recommendation

Continue to support teachers in adjusting their instructional practices to meet the needs of all students by providing additional support and alternative strategies. (3.3)(3.4)

## Recommendation

Continue to provide training and support to faculty and staff for the school's increased use of digital technology. (3.6)

# Standard 4 Indicator 1

---

## Narrative Program Summary

The visiting team has observed that Bristol-Plymouth Regional Technical School (B-P Tech) continuously assesses whole-school and individual student progress in achieving the school/center's learning expectations. At B-P Tech all incoming 9th-grade students take a standardized placement test to assess student performance levels. The standardized placement test is used to determine a student's initial academic placement in English Language Arts and Mathematics. B-P Tech's technical instructors use a common grading rubric during the exploratory period. The SkillsPlus Competency Tracking System is used in all of the technical areas to track student growth for all four years of high school. All 12-grade students must successfully complete a technology project and demonstration (Senior Project) that is supported by a rubric. B-P Tech's instructors submit monthly lesson plans that support state-mandated and school adopted frameworks. B-P Tech's English teachers discuss biweekly MCAS preparation strategies. Academic teachers meet bi-weekly to discuss Massachusetts Comprehensive Assessment System (MCAS) preparation integration. Students are assessed in both academics and technical areas through pre, midterm, and post-assessments.

All teachers submit lesson plans monthly to their supervisors reflecting the common frameworks that support the learning expectations of all students. Academic instructional staff integrates MCAS preparation strategies decided upon at weekly MCAS prep meetings into their lesson plans. DDMs are given twice yearly in both technical and academic areas to monitor individual student progress as compared to all students in the area of study and grade level. In the academic area, the DDMs are the standardized midterms and finals, with a pretest given at the beginning of the year. B-P Tech has begun in the Fall of 2018 to utilize the results of all assessments in order to modify and improve instructional practices to monitor both individual and school-wide student progress. The school is constantly looking at new ways to improve communication to students and parents and to convey learning expectations.

## Sources of Evidence

- classroom observations
- self-study
- student work
- teacher interview
- teachers
- students
- department leaders
- school leadership
- school support staff

# Standard 4 Indicator 2

---

## Narrative Program Summary

Bristol-Plymouth Regional Technical School (B-P Tech) communicates the progress of each student using Aspen software. Students, families, the school community, and stakeholders are kept informed about pertinent school items that include midterm warnings, the Aspen parent portal, parent/teacher conferences, report cards, IEP progress reports, requested weekly progress reports, academic/technical teacher input form for IEP meetings, deficiency reports, and MCAS scores. Bristol-Plymouth Regional Technical School's (B-P Tech) technical instructors complete a student competency report at the end of each grade. This report gives information about which competencies that the individual student has gained.

## Sources of Evidence

- self-study
- teacher interview
- teachers
- department leaders

# Standard 4 Indicator 3

---

## Narrative Program Summary

Bristol-Plymouth Regional Technical School's (B-P Tech) teachers communicate to students the learning expectations, the unit-specific learning goals to be assessed, and the daily objective(s) by posting them in their classrooms. B-P Tech's teachers post an agenda of the class period's activities, use worksheets, and Google Classroom to notify students of activities and rubrics.

B-P Tech collects and analyses student data to identify and respond to student needs. Periodically through the school year, the academic coordinator presents the Massachusetts Comprehensive Assessment System (MCAS) data to the academic departments with a summary of the results including inequities in student achievement. Teachers in the MCAS content areas of English, math, and science look at student results, analyze the data, and identify weaknesses to inform instruction and adjust practices. Administration works with staff in the analysis of data from district benchmarks, school progress monitoring, and course-specific common assessments. Teachers who teach the same course utilize many common practices. These teachers meet routinely to analyze the results and adjust instruction to ensure student success. For example, formative assessments are given using previous MCAS questions to ascertain topics needing more depth of instruction and objectives are communicated to students in various formats such as Google Classroom, whiteboards, and the Remind app. School syllabi are shared with the administration to allow transparency of its goals. Lesson plans are communicated to the community within shops at biannual advisory meetings. School-wide lesson plans are submitted to administration to ensure quality instruction and expectation of instruction. Lessons are structured based upon the most recent Massachusetts Frameworks. Pre and post-tests are administered at B-P Tech to assess prior knowledge and knowledge gained. This information is reported twice a year in an effort to monitor student progress. Individual technical areas provide students with a safety test specific to their trade area. Rubrics are reviewed and provided to students in advance to communicate expectations. The entire school body has the expectations outlined in the student handbook.

## Sources of Evidence

- self-study
- panel presentation
- teacher interview
- teachers
- school leadership



# Standard 4 Indicator 4

---

## Narrative Program Summary

Bristol-Plymouth Regional Technical School's (B-P Tech) teachers use traditional classroom approaches to assessment measures, including timed written summative exams. Teachers use a variety of hands-on formative and summative assignments including presentations, poster boards, dioramas, and small-group projects. B-P Tech's teachers use 21st-century technology in their instruction, including the use of Plickers, Mimio Response Clickers, Google Suite applications, and ClassDojo. Both formative and summative assessments are created in all educational settings. Teachers at B-P Tech use the results to analyze student achievement data. Shared Assessments, formerly known as District Determined Measures, allow teachers to evaluate summative assessments within their unit plans or pre-post test assessments. Based on the data received, teachers improve their instructional practices and future assessments. Formative assessments are used in the classroom to gauge students strengths and weaknesses. Follow-up in the form of homework assignments, observations and questioning, and checkpoint assessments drive instruction. Procedures are modified by instructors to ensure knowledge is retained and students have a deeper understanding of the material. Students complete a Senior Project Presentation, which enables them to integrate skills from their technical and academic areas to create a multimedia presentation. Students are tasked with individual writing assignments in their academic classes to discuss their processes, challenges, and lessons they have encountered throughout their project. Teachers evaluate project guidelines and student performance and completed product to improve future instructional practices.

AT BP Tech, older assessment methods are being replaced by more modern practices. Scantron forms and machines that were once heavily utilized by a majority of instructors have been replaced by the zip grade computer application. Rather than two computer labs that must be shared and competed for, there are now over a dozen computer and Chromebook carts around the building that help to bring technology to the classrooms that have been useful for assessment purposes when using assessment programs such as Google Forms. Many teachers also lean heavily on student participation in assessment practices by either allowing students to peer evaluate one another's work or to offer self-assessment opportunities to encourage students to chart their own growth and progress.

Finally, all of this evolution in assessment practices is discussed and refined at the department level. Teachers may bring the results of best practices to these meetings where they can share them with other teachers and arrive at new standard methods that benefit anyone teaching or taking particular courses. The department meetings also afford the teachers the opportunity to craft standardized tests and projects that are employed department-wide, helping to ensure that assessments are meeting state and Common Core standards.

## Sources of Evidence

- classroom observations
- self-study
- teacher interview
- teachers
- school leadership

# Standard 4 Indicator 5

---

## Narrative Program Summary

The academic and technical teachers at Bristol-Plymouth Regional Technical School (B-P Tech) provide specific and timely feedback to ensure students revise and improve their work. The academic teachers communicate progress through the use of rough and final drafts, test corrections, retakes, and peer reviews. The technical areas use the SkillsPlus Competency Tracking System, hands-on projects, in-process performance assessments, and cumulative project assessments.

As a district, all teachers at B-P Tech utilize midterm warnings, grades inputted on Aspen which can be made public by the teacher so both the student and parents have immediate access to own student's grades, and progress reports. All students have access to the before and after school help programs in which teachers can provide on the spot feedback and corrections to the student's work.

Some teachers use technology for both formative and summative assessments that provide students with immediate feedback. The teachers, in the academic and technical areas, use a variety of methods to provide students specific and prompt feedback to allow to improve their work.

## Sources of Evidence

- classroom observations
- self-study
- facility tour
- student work
- teacher interview
- teachers
- school leadership
- school support staff

# Standard 4 Indicator 6

---

## Narrative Program Summary

Bristol-Plymouth Regional Technical School's (B-P Tech) teachers provide students with specific and measurable criteria for success, including learning objectives, rubrics, and unit-specific requirements. Teachers in academic areas utilize daily class assignments, teacher observation, class discussions, homework, warm-ups, and exit tickets as formative assessments to assess student progress. Teachers in technical areas utilize teacher observations, group discussions, exit tickets/recaps, homework, vocabulary-focused reflections, and time cards.

## Sources of Evidence

- classroom observations
- facility tour
- teacher interview
- teachers

# Standard 4 Indicator 7

---

## Narrative Program Summary

Bristol-Plymouth Regional Technical School's (B-P Tech) teachers individually and collaboratively examine a range of evidence of student learning for the purpose of improving instructional practice. The variety of meeting types include bi-weekly academic department meetings, academic common prep times (Math, English, and Science only), Technical Advisory Board, and new teacher/mentoring meetings. These meetings address a multitude of topics, including curriculum alignment, MCAS strategies, common core standards, and student achievement goals.

Teachers regularly collaborate in formal ways on the creation, analysis, and revision of summative and common assessments. Allotted, common professional development time is built into the school calendar each year. There are collaboration/training times scheduled on days in which there exists a half day dismissal of the students. These trainings are aligned toward school improvement goals, as well as common teaching practices to strengthen student learning.

Faculty meetings also take place monthly to foster communication between administration and staff to address urgent concerns, upcoming events, and an open discussion dialogue of overall school operations. Additionally, classroom observations are performed randomly by the administration to provide feedback to the instructor regarding classroom procedures, including the posting of daily objectives/agenda, instructional strategies, and overall student engagement.

Smaller group collaboration occurs on several levels, including academic department meetings, academic common prep times, Technical Advisory Board, new teacher/mentoring meetings. Full department meetings occur monthly. A published agenda is discussed, which covers a multitude of topics, including curriculum alignment, MCAS strategies, common core standards, and student achievement goals. During this time, teachers of common disciplines review student performance and strategies to improve classroom instruction. The Technical Advisory Board meets twice a year to review the curriculum, employer feedback, and equipment needed to ensure each technical area meets industry standards, which in turn fosters an enriching learning environment for students. '

New teachers are assigned a mentor, as well as attend monthly meetings with the school principal, to acclimate them to the school culture and overall goals.

## Sources of Evidence

- classroom observations
- teacher interview
- teachers
- department leaders
- school leadership

# Standard 4 Indicator 8

---

## Narrative Program Summary

Bristol-Plymouth Regional Technical School's (B-P Tech) technical teachers host bi-annual Advisory Board meetings to make sure they are maintaining and meeting industry standards and to guarantee effective program design. Every four years the Massachusetts Department of Elementary and Secondary Education (DESE) performs a Coordinated Program Review of the special education department and the school to determine if they are meeting state-mandated requirements. Academic and Technical department lead teachers must administer a yearly curriculum project to ensure programs are meeting state standards, students are retaining and applying knowledge, and to develop improvements and advancements within their programs.

All technical students must receive and pass safety certifications, including a 10 hour OSHA training in order to receive their technical certification upon graduation. Technical shops also offer specific training and program certifications related to individual fields of trade thus proving knowledge and proficiency within their technical area. All students in grade 9 take the Biology MCAS test in June of the freshmen year and the Language Arts and Math MCAS tests in their sophomore year. Students must obtain a score of 220 or higher which is a requirement for graduation.

## Sources of Evidence

- self-study
- teacher interview
- department leaders

# Standard 4 Commendations

---

## Commendation

Bristol-Plymouth Regional Technical School for their high level of achievement on MCAS assessments which serves as evidence that the staff and community continuously assess areas for improvement. (4.1)

## Commendation

B-P Tech's school community celebrates its large number of students (187 students) who participate in cooperative education which enhances the learning experience for the students during the junior and senior year and communicates B-P Tech's strength to the community. (4.2)

## Commendation

B-P Tech proactively addresses high stakes testing information and curricula changes, acquired through professional development workshops and conferences, through school leadership and departmental meetings to plan and prepare for the upcoming state and district changes and adapt instruction for the purpose of improving student learning. (4.6)

## Commendation

B-P Tech's staff offers before and after school help programs for all students for all academic areas to improve student learning. (4.6)

## Commendation

The professional staff for recognizing and developing lesson plans, intra-departmental and inter-departmental collaborative work, and common preparation time to improve instructional planning to meet students' needs to improve instructional practice. (4.7)

## Commendation

The curriculum directors for implementing a senior summative technical project that showcases each student's skills acquired in their shop and a distinct opportunity to stretch their technical acumen. (4.4)

## Commendation

The academic department for maintaining, through a Google drive, a central digital resource area that enable the staff to share and access all curriculum and assessments to improve instruction and student learning. (4.7)

# Standard 4 Recommendations

---

## Recommendation

Continue to develop the process of reviewing the results and structures of all high stakes assessments to modify and improve instructional practices in both academic and technical areas. (4.1)

## Recommendation

Investigate ways to expand teacher use of digital tools which allow teachers to provide more specific and timely feedback to improve student performance. (4.5)

## Recommendation

Create and implement computer applications and other 21st-century technology to conduct formative assessment and mine the data provided by the applications to adjust future lesson planning and improve student learning. (4.6)

## Recommendation

Continue to provide teachers with on-going training on the creation, application, and reinforcement in the development and use of rubrics to extend understanding and give timely feedback to students for use on future assignments. (4.5)

## Recommendation

Develop and make available for all teachers and instructors, common rubrics and instructional resource links to disseminate formative and summative assessment strategies. (4.4)

# Standard 5 Indicator 1

---

## Narrative Program Summary

Bristol-Plymouth Regional Technical School (B-P Tech) consciously and continuously builds a safe, positive, respectful, and supportive culture that fosters student responsibility for learning and results in shared ownership, pride, and high expectations for all. This is evident in the recently adopted core values, "belonging, persistence, teamwork, excellence, creativity, honor" (B-P Tech). School pride is clear upon entering the building as a display of awards, posters, and activities dominates the front lobby. The visiting team found that staff and students alike were proud of B-P Tech and readily spoke of the many accomplishments of the school. Students were focused and respectful in the classrooms, hallways, and cafeteria. An atmosphere of responsibility and work ethic with support is evident throughout the school. This was seen in interactions between students and teachers, as well as between groups of students. The well-attended, voluntary morning and after school tutoring programs also creates student responsibility for learning and shared ownership. Staff work collectively to continuously improve the culture of the school through groups such as the school improvement committee. The climate and atmosphere committee contributes to the school climate by overseeing the selection of the student and teacher of the term. Clubs such as National Honor Society, Skills USA, and the Community Service Club work to foster student responsibility. Students are recognized at the senior awards night, through honor role, on the website and social media, on "Merit Mondays" and through recognition of good deeds.

## Sources of Evidence

- classroom observations
- self-study
- facility tour
- teachers
- students
- school leadership
- school website



# Standard 5 Indicator 2

---

## Narrative Program Summary

Bristol-Plymouth Regional Technical School (B-P Tech) is equitable, inclusive, and fosters heterogeneity by using student grouping practices that reflect an understanding of the unique learning and social needs of all students and demonstrate an awareness of the diversity of the population of the school. B-P Tech's admissions and grade nine course placement policies and practices takes great pains to avoid discriminatory practices. Many teachers have opted to use Google Classroom for assignment submission which allows them to make modifications privately. All students have equal access to technical programs through the exploratory process and are placed in programs based on a rubric consisting of grades, attendance, and discipline. The school has instituted the Roots and Wings program to provide opportunities for student leadership while expanding awareness about diversity. A multi-cultural club is an umbrella organization for diversity of different forms including lesbian, gay, bisexual, transgender (LGBT). A Non-Traditional Club exists for students enrolled in technical programs non-traditional for their gender.

## Sources of Evidence

- self-study
- teacher interview
- students
- school leadership

# Standard 5 Indicator 3

---

## Narrative Program Summary

Bristol-Plymouth Regional Technical School's (B-P Tech) engages in a professional development program to improve student learning through:

- engage in professional discourse for reflection, inquiry, and analysis of teaching and learning
- use resources inside and outside of the school/center to maintain current with best practices
- dedicate formal time to implement professional development
- have a planned orientation program for new staff
- apply the skills, practices, and ideas gained in order to continually improve curriculum, instruction, and assessment
- ensure that all faculty and staff meet state and local certification requirements.

There is sufficient time to implement professional development in the school calendar and outside the school day. Skills, practices, and ideas have been implemented. Staff have begun to use technological tools such as Google classroom. Staff have also reported benefiting from training on social emotional learning, however more could be done on this topic. Staff has input into the development of the professional development plan through the voluntary Professional Development School Improvement Committee and a needs assessment survey. Information from the Advisory Committees and the Youth Risk Behavior Survey is also used to develop professional development activities and bring in speakers. Each teacher receives \$2500 annually for course reimbursement as part of the collective bargaining agreement.

A new teacher orientation program and handbook for new staff exists. New staff are given the handbook at the start of the school year during a required induction program and are paired with trained mentors. Lead teachers work with new staff as mentors. New teachers meet as a group monthly with the Principal to discuss issues during the first year. Mentoring continues in years two and three on a less formal basis.

All academic staff are certified in their teaching area. The school is not currently part of the Massachusetts Association of Vocational Administrators (MAVA) cohort for professional development. MAVA offers the courses required for all technical instructors to earn their professional level teaching certification. Preference for enrollment is given to MAVA cohort members, which may make it difficult for instructors at Bristol Plymouth to enroll in required courses. All technical instructors hold required certifications for their trade area (i.e. registered nurse license for Health Assisting).

## Sources of Evidence

- classroom observations
- self-study
- teachers
- department leaders
- school leadership
- school support staff
- school website

# Standard 5 Indicator 4

---

## Narrative Program Summary

- Bristol-Plymouth Regional Technical School's (B-P Tech) has implemented the Massachusetts Teacher Evaluation System for all teachers and administrators. B-P Tech uses a software tool to streamline the documentation of teacher evaluations. There is clear expectations for teacher observations and goal setting. Multiple administrators observe teachers to provide feedback from varied viewpoints to improve practice. Teachers are observed five times a year. Administrators work together on evaluation calibration which gives teachers a balanced look at their teaching.

## Sources of Evidence

- self-study
- teachers
- school leadership

# Standard 5 Indicator 5

---

## Narrative Program Summary

Bristol-Plymouth Regional Technical School's (B-P Tech) schedule supports ample time for instruction, collaboration, and the learning needs of all students. Academic teachers have a common planning block each day for collaboration and department meetings. Math, Science, and English classes are scheduled in ninety minute blocks. History and elective courses are forty-five minutes each. All freshmen and sophomore students take either an additional math or reading course in preparation for state testing requirements. Juniors and Seniors take optional electives. Disruptions to the academic schedule are not permitted, therefore field trips are not allowed during the academic week. Technical course blocks run the entire school day. Disruptions to the technical programs to meet the learning needs of all students occur due to school wide events such as Massachusetts Comprehensive Assessment System (MCAS) testing, or to individual student needs such as speech services.

## Sources of Evidence

- classroom observations
- self-study
- teacher interview
- school leadership

# Standard 5 Indicator 6

---

## Narrative Program Summary

The principal and administrative team work together to provide instructional leadership. The team meets regularly to review the district improvement plan and progress toward school goals. Bristol-Plymouth Regional Technical School's (B-P Tech) principal has been in place for four months but has already begun working with other building leaders to provide instructional leadership that is rooted in school mission, core values, beliefs, and learning expectations. She has made subtle but meaningful changes such as installing additional bulletin boards to allow greater information distillation. She has given the student council a larger leadership presence in the school giving the students a greater sense of empowerment. The visiting team observed the administrative team working together to support the school's mission especially in relation to the new core values. The core values were developed with a committee of staff; however, efforts to roll-out the new core values (B-P Tech) with the full staff and community has been slow. Staff reported being unaware of the new acronym. The acronym is present on the school website, but is not present in all documents. Response to the content of the acronym has been positive.

## Sources of Evidence

- self-study
- panel presentation
- teachers
- students
- department leaders
- school leadership
- school website
- Standard sub-committee

# Standard 5 Indicator 7

---

## Narrative Program Summary

Bristol-Plymouth Regional Technical School (B-P Tech) emits a warm and welcoming atmosphere upon entering the front hall. Parents can join several Parent Advisory Committees to contribute to school improvement and become involved in the school community. Career and Technical Program Advisory Committee (PAC) participation is robust as observed by the visiting team during the annual PAC dinner. The school has created a student/community mentor program to assist students in planning for future career and post-secondary opportunities. The community also plays a role in the annual Job and Credit for Life Fairs. Staff members have multiple options for participating in school improvement activities and are encouraged to come to administration with issues. One item of note is that the all PAC areas have at least one parent on the committee.

## Sources of Evidence

- self-study
- panel presentation
- teachers
- students
- parents
- community members
- school leadership
- Program Advisory Committee

# Standard 5 Indicator 8

---

## Narrative Program Summary

Bristol-Plymouth Regional Technical School's (B-P Tech) teachers exercise initiative and leadership essential to the improvement of the school and to increase students' engagement in learning. A lead teacher is chosen from each department. Teachers volunteer to serve on committees such as the professional development and school improvement committee. Observed instructional practices show a commitment to teaching which promotes student engagement and high expectations. Teachers also demonstrate dedication to the school through their participation in clubs and activities. The visiting team also observed teacher initiative through numerous community service projects, outside work projects in the technical areas, and examples of technical program competitions.

## Sources of Evidence

- classroom observations
- self-study
- student work
- teachers
- students

# Standard 5 Indicator 9

---

## Narrative Program Summary

Bristol-Plymouth Regional Technical School (B-P Tech) acknowledges work, contributions, and achievements of students and school personnel. The school uses a Student and Teacher of the Term recognition system, as well as "Merit Mondays". A Co-Op student of the month is also recognized. A bulletin board off the front hall contains newspaper articles highlighting student achievements; however, articles were mostly outdated. Daily announcements acknowledge student achievements as does the school website and social media. Senior Awards night acknowledges senior achievements. Student work is posted throughout the classrooms. Technical awards, such as SkillsUSA, are prominently displayed in vocational areas.

## Sources of Evidence

- self-study
- facility tour
- teachers
- students
- school website



# Standard 5 Indicator 10

---

## Narrative Program Summary

The school committee, superintendent, and principal are collaborative, reflective, and constructive in achieving the school/center's learning expectations. School Committee support is evident in the new buildings for Early Childhood and health professions, and the opening of the new Engineering program. The vision of high quality career and technical education for the students of Bristol-Plymouth Regional Technical School's (B-P Tech) permeated every aspect of the school. Regular monthly school committee meetings are held where staff are invited to contribute to the superintendent's report. The agenda is posted; however, past agendas and minutes were not found on the website.

## Sources of Evidence

- self-study
- school leadership
- school website

# Standard 5 Indicator 11

---

## Narrative Program Summary

The Principal has sufficient decision-making authority to lead the school. The Principal is still transitioning to the position but has been given full support by the Superintendent and School Committee. The Principal and administrative team have the authority to carry out decisions related to achieving the school's mission and implementing school and district initiatives. The School Committee has the final authority on policy changes, however, the Principal makes suggestions for change. The Principal and Superintendent carry out the mission of the school and implement strategies to ensure the goals of the District Improvement plan are being met.

## Sources of Evidence

- self-study
- panel presentation
- school leadership

# Standard 5 Indicator 12

---

## Narrative Program Summary

Current written policies and procedures are readily available to all personnel and to the public. The website contains current handbooks, the program of studies and other pertinent information which are easily accessible. Students and staff are given hard copies of the student-parent handbook on the first day of school. Staff is also given the teacher handbook on the first day of school. New teachers are given the manual for new teachers at their induction day. District policies and school committee minutes were not found on the website.

## Sources of Evidence

- self-study
- school website

# Standard 5 Indicator 13

---

## Narrative Program Summary

Bristol-Plymouth Regional Technical School (B-P Tech) has a written improvement plan which contain goals, specific objectives, action steps, and evaluation plans. The plan was adopted by the School Committee in May 2018 for the 2018-2019 school year. Continuing elements of the plan are implemented and ongoing. Some examples from the plan include:

- Academic curriculum development is continuing.
- The technical curriculum is planned to be completed by the end of the school year.
- The Career Fair and Credit For Life Fair are planned for the spring.
- Nurse coverage has been expanded.
- Preparation for MCAS 2.0

## Sources of Evidence

- self-study
- teachers
- school leadership

# Standard 5 Indicator 14

---

## Narrative Program Summary

Students at Bristol-Plymouth Regional Technical School (B-P Tech) have multiple opportunities for student government/leadership. In addition to traditional student government options, students can serve in leadership roles in various clubs and activities, the School Council, and as a student representative on the School Committee. The recent addition of the Roots and Wings program provides additional avenues for student leadership.

## Sources of Evidence

- self-study
- teachers
- students
- school leadership

# Standard 5 Indicator 15

---

## Narrative Program Summary

The school calendar is designed to ensure minimal disruption of the school's educational program. The school considers disruptions to the alternating A/B week schedule for the academic and technical programs due to set scheduled dates such as Massachusetts Comprehensive Assessment System (MCAS) exams. Balance of academic and technical days is also considered when developing the calendar to ensure an even number of days in a grading semester. This results in a calendar with balanced days but uneven weeks when laid out on a calendar. Consideration is given to avoid disruption in the school day due to meetings and other reasons students may need to be pulled from class.

## Sources of Evidence

- self-study
- teachers
- school leadership
- school website

# Standard 5 Indicator 16

---

## Narrative Program Summary

Bristol-Plymouth Regional Technical School (B-P Tech) encourages non-traditional careers for students and supports gender equity in all programs. In 2017-2018, 201 students were enrolled in technical programs non-traditional for their gender. This is a 48.3% performance level according to the federal Perkins IV guidelines. The school was required to meet 19.06%. All freshmen are required to explore a non-traditional program by gender. The school has a Non-Traditional Club to help support non-traditional students and ensure program completion.

## Sources of Evidence

- classroom observations
- self-study
- teachers
- school leadership

# Standard 5 Commendations

---

## Commendation

Bristol-Plymouth Regional Technical School's (B-P Tech) for implementing a morning and after school tutoring program to improve student achievement and promoting student responsibility for learning. (5.1)

## Commendation

Bristol-Plymouth Regional Technical School's (B-P Tech) for implementing the Roots and Wings program to promote student leadership and diversity awareness. (5.2, 5.14)

## Commendation

Bristol-Plymouth Regional Technical School's (B-P Tech) for involving the community in the implementation of the annual Credit for Life and Job Fairs which prepare students for life after high school. (5.7)

## Commendation

Bristol-Plymouth Regional Technical School's (B-P Tech) for promoting equity and non-traditional enrollment and exceeding the required 19.06% Perkins performance level with 48.03%. (5.16)



# Standard 5 Recommendations

---

## Recommendations

Continue to implement and integrate the new core values “BPTECH” acronym. (5.6)

## Recommendations

Explore additional options to increase opportunities for technical instructors to continue to pursue courses toward professional licensure. (5.3)

## Recommendations

Develop a plan to increase public information related to District policies and School Committee information. (5.12)

# Standard 6 Indicator 1

---

## Narrative Program Summary

All students have an equal opportunity to achieve the school/center's learning expectations. The District Curriculum Accommodation Plan is distributed to all teachers on the first day of school ensuring that accommodations are provided to students as needed so that all students can attain success. The school goes to great lengths to increase the number of students enrolled in non-traditional programs. All freshmen must visit at least one non-traditional shop during the exploratory phase. There is a non-traditional club in school to promote student interest and awareness and the visiting team found many technical instructors to be implementing means to increase non-traditional enrollment. The principal fosters a climate of collegiality, respect and transparency. She encourages "out of the box thinking" and provides a safe environment to empower students to speak candidly about their concerns. The school's Restorative Justice Initiative allows students to reflect on adverse behaviors, and provides students the opportunity to become positive contributors to the BP community. The visiting team found the school to be aware of the needs of special education and 504 students and plans in place to ensure regular monitoring of student progress. There are also a number of extra-curricular activities like the Roots and Wings student leadership group to provide additional support to students.

## Sources of Evidence

- self-study
- teacher interview
- school support staff

# Standard 6 Indicator 2

---

## Narrative Program Summary

Most of the physical areas provided for student support services are appropriate for the particular service and ensure privacy and confidentiality. Guidance counselors, adjustment counselors and school psychologist are furnished with an appropriate and comfortable setting to provide counselling services and maintain confidentiality. However the visiting team observed that the space within the nurse's suite lacks a sufficient space for privacy or confidential matters. All other student services offices provide adequate space to ensure confidentiality as needed.

## Sources of Evidence

- self-study
- facility tour
- school support staff

# Standard 6 Indicator 3

---

## Narrative Program Summary

The school maintains all student, alumni, administrative, and personnel records in a confidential and secure manner consistent with federal, state, and local laws or regulations. The visiting team observed records stored in fire-proof locked cabinets.

## Sources of Evidence

- self-study
- facility tour
- school support staff

# Standard 6 Indicator 4

---

## Narrative Program Summary

School counseling services have access to an adequate number of certified/licensed personnel and support staff as evidenced by:

The school adjustment counselor is responsible for all students who fall within high risk categories. This includes students who suffer from suicidal ideation, anxiety, depression and various other mental health disorders/diagnoses. The school adjustment counselor works collaboratively with the four guidance counselors and works regularly with her own caseload. The school adjustment counselor is the SADD advisor. It appears that an increasing number of students require the services of the adjustment counselor.

The school psychologist provides counseling if required as part of the education plan. In addition the school psychologist participates in all 504 and special education meetings and engages in individual and group meetings with students.

There are four guidance counselors who provide social and emotional counseling to all B-P Tech students. They also track attendance, monitor academic progress, maintain career portfolios and assist in post-secondary planning. It is evident that all members of the guidance staff are caring and empathetic professionals. The guidance staff report that 90% of their time is spent counseling individual students, and that time is split fairly evenly between social-emotional and academic career planning. The guidance counselors are equipped to adequately assess crises and act as referral agents to the school adjustment counselor and school psychologists. The visiting team observed collegiality among the guidance counselors and positive interactions between counselors and students.

Guidance counselors utilize the Naviance online platform for career exploration and planning. They also conduct educational information sessions covering topics related to career plans, college application process and other post-secondary planning.

Roots and Wings is a student-driven initiative which provides students with a "voice" to confidentially express any concerns in a nurturing environment. The two full-time registered school nurses provide triage and day to day medical care to the entire student body and the visiting team found the nurses's offices to very active. There appeared to be a lack of privacy within the small office to provide confidential treatment to students as needed. Health records are securely maintained within the health office.

The support services department works collaboratively with faculty to provide events such as Career Showcase and Credit for Life events. These programs enhance the learning and overall development of the students.

## Sources of Evidence

- self-study
- teacher interview
- department leaders
- school support staff

# Standard 6 Indicator 5

---

## Narrative Program Summary

The school ensures that students have access to educational media services that are integrated into curriculum and instructional practices.

The Library at Bristol-Plymouth is staffed by one library aide who is present daily from 7:45 a.m. to 2:15 p.m. This staff member maintains the current library inventory and manages the schedule for use of the library and computer lab. Teachers and students have access to various software and hardware technology. Specialized assistive technology equipment for special education students is provided as needed. Students also use the library to complete OSHA certification, early childhood story reading projects and Power Reading activities with ELA classes.

## Sources of Evidence

- self-study
- facility tour
- teacher interview
- school support staff

# Standard 6 Indicator 6

---

## Narrative Program Summary

Support services for identified students, including special education, Section 504 of the Federal Rehabilitation Act of 1973, and English language learners, have an adequate number of certified/licensed personnel and support staff who collaborate with all teachers, counselors, targeted services, and other support staff in order to

- achieve the school's learning expectations
- provide inclusive learning opportunities for all students
- perform ongoing assessment using relevant data, including feedback from the school community, to improve services and ensure each student achieves the school/center's learning expectations.

The guidance counselors devised a 504 manual that is used to insure appropriate implementation of any and all accommodations. Each counselor manages his or her own 504 caseload. 504 feedback is achieved through teachers' assessments along with formative and summative reviews of student progress.

## Sources of Evidence

- self-study
- school leadership
- school support staff

# Standard 6 Indicator 7

---

## Narrative Program Summary

The district has a published Information Resources and Responsible Use policy which is consistent with its mission. All students must sign and return the policy prior to participating in career-technical program activities.

## Sources of Evidence

- self-study
- central office personnel
- school leadership
- school support staff



# Standard 6 Indicator 8

---

## Narrative Program Summary

An adequate method of student record keeping is in place and individual student files include attendance records, academic achievement records, safety test documentation, technical competency assessment and industry recognized certifications. Student information is stored in the X2 Aspen electronic student information management program. Individual Education Plans or 504 Plans are stored in student files in the Student Services office.

## Sources of Evidence

- self-study
- school leadership
- school support staff

# Standard 6 Indicator 9

---

## Narrative Program Summary

Graduate follow-up studies are conducted and the resultant data is shared with staff to assist with program and curriculum development. Data was shared with the visiting team showing the distribution between college, career, military and other post-secondary placement statistics. This data is discussed to help guide curriculum development.

## Sources of Evidence

- self-study
- school support staff

# Standard 6 Indicator 10

---

## Narrative Program Summary

An assessment system is available to assist students with the identification of career aptitudes and interests. The guidance counselors provide numerous career awareness and exploration activities for their respective student caseloads including but not limited to job fair, resume building workshops, college and post-secondary planning and the B-P Tech Career Showcase. The guidance department utilizes the Naviance program as a tool to align student strengths and interests to postsecondary pathways to success. Placement eligibility is decided on the following criteria: 60% is based on vocational exploratory performance, 30% overall academic performance, 5% conduct and 5% attendance.

## Sources of Evidence

- self-study
- central office personnel
- school leadership
- school support staff

# Standard 6 Indicator 11

---

## Narrative Program Summary

The school/center has a comprehensive safety/crisis response plan that ensures students, faculty and staff are trained to assist with emergency situations. A written copy of the crisis intervention plan is located under the teacher's desk in every classroom and technical program. Substitute teachers are also informed of the location of the crisis intervention plan. Evacuation procedures are widely publicized, and regularly scheduled drills are held and results documented.

## Sources of Evidence

- self-study
- central office personnel
- school leadership

# Standard 6 Indicator 12

---

## Narrative Program Summary

A written admissions policy identifies enrollment criteria for students as well as the process for determining student enrollment criteria from sending schools. The admissions policy is available on the school's website and in central offices.

## Sources of Evidence

- self-study
- central office personnel
- school website

# Standard 6 Indicator 13

---

## Narrative Program Summary

Student transportation is scheduled to ensure that all students will arrive and depart from the school with minimal loss of time on task. Bus stops and approximate pick-up/drop-off times are posted to the school's website. A late bus provides transportation for students who participate in after-school activities. The district also provides transportation to career technical program externships.

## Sources of Evidence

- self-study
- central office personnel
- school leadership
- school website

# Standard 6 Indicator 14

---

## Narrative Program Summary

N/A

# Standard 6 Indicator 15

---

## Narrative Program Summary

N/A



# Standard 6 Commendations

---

## Commendation

Bristol-Plymouth Regional Technical School's (B-P Tech) development of a student-driven process to evaluate school culture and to voice concerns to administration (Roots and Wings). (6.4)

## Commendation

The Career Center and Student Services for their role in increasing the number of students participating in co-operative education and the development of liaisons with industry partners. (6.6)

## Commendation

The Support Services team for fostering a collegial, collaborative environment in the Guidance department. (6.6)

## Commendation

The Support Services Department for working collaboratively with faculty to provide events such as Career Showcase and Credit for Life events. (6.4)

# Standard 6 Recommendations

---

## Recommendation

Create and implement a plan to improve student transition into the school environment after an extended absence. (6.4)

## Recommendation

Create and implement a plan to increase privacy in the Nurse's Office to ensure confidentiality and adherence to Health Insurance Portability and Accountability Act (HIPPA) guidelines. (6.4)

# Standard 7 Indicator 1

---

## Narrative Program Summary

Bristol-Plymouth Regional Technical School supports a wide range of school programs and services. The school offers 19 career-technical programs and a full range of academic offerings to prepare students for post-secondary education. The 19th program, Engineering Technology, was just added this year to accommodate local need for students with these skills. In addition to the regular school day programs, there are after-school MCAS preparation programs for ELA, mathematics, and biology/physics. There is also a before and after-school homework help program open to all students four days a week. The school also provides summer academic enrichment/transition opportunities for current and incoming students. The school offers a summer technical program for 400 middle school age students from member communities. BP Tech also funds extra-curricular programs across the school. There are 24 clubs and 19 sports teams available for students. An Adult Evening Continuing Ed program is also available to the community.

The community and district's governing body provides funding for sufficient professional and support staff. The professional staff is funded through the budget approved by the school committee. Paraprofessional support staff is adequate to enhance the learning needs of students with disabilities. School offices are staffed with clerical assistants who support the functions of administrators and the programs that they oversee. The facilities staff is adequate to ensure the cleanliness, safety and security of all who enter the building. Staff survey data revealed 84% of staff felt their programs had adequate funding and over 90% felt the school's technology programs to be adequately funded. Surveys of this year's Program Advisory Boards indicate that 100 percent agree/strongly agree that there are adequate supplies and materials to support student acquisition of learning standards.

During each school year, a minimum of four half days is dedicated to providing relevant professional development for all staff. A staff survey of in-house professional development in SY 2016-17 indicated that most felt the PD supported school improvement goals as well as teachers' five year professional development plans. In addition to those days, targeted small group/department professional development is also scheduled during the school day as needed and those in attendance are provided with coverage. Teachers can also attend professional development seminars during school hours and are provided coverage for their classes. Course reimbursement for staff is also an option provided to teachers and administrators. Each department in the school has a non-supervisory Lead Teacher position for which the annual appointee receives a stipend for curriculum revision. Each academic department is scheduled with common planning time to facilitate collaboration on the creation of common assessments and revision as well as curriculum revision.

## Sources of Evidence

- self-study
- facility tour
- school leadership
- Program Advisory Committee

# Standard 7 Indicator 2

---

## Narrative Program Summary

The district completes a Capital Plan annually through the Massachusetts School Building Authority with the submission of a Statement of Interest (SOI) which outlines building and facility needs. Bristol-Plymouth employs a Supervisor of Buildings, Grounds and Transportation who oversees six custodial/maintenance employees, two groundskeepers, one full-time electrician and one full-time maintenance mechanic. School Dude is the software system utilized by the district to track the maintenance and repair of facilities and equipment.

The technology department has one director in-house and outsources its helpdesk and managed services to an outside provider. This provider employs two on-site, full-time technicians who manage help desk services as well as special projects as directed by the IT director and district administrators. In addition, the provider monitors all network infrastructure devices 24/7. Along with the two full-time help desk technicians and the director, a cooperative education student works in the office during the senior shop cycle. During the third or fourth semester, the department may hire a junior student to work through his/her shop cycle. Ticket resolution averages under 24 hours.

Network infrastructure and technical peripherals appear adequate for reliable use throughout the school. The school grounds are monitored by a closed camera security system. All camera footage is stored on a DVR. Access to the footage is managed through user privileges as assigned by the school administration.

The connectivity within the district consists of a 10GB fiber backbone connecting intermediary distribution closets to the main distribution facility, which is locked and climate-controlled. Every classroom has a wireless access point standard A/C. Other wireless access areas include administrative and business offices, guidance, lecture hall, gym, and cafeteria. All classrooms and offices have internet access.

A full inventory of devices exists for the school. Inventory includes a variety of devices to support teaching and learning, including desktop PCs, chrome books, laptops, Surface Pros, and iPads, as well as headphones for these devices. In addition, the district has two computer labs for classes. Academic classrooms are 90% populated with carts, and there are plans for future expansion to ensure 100% of the academic classrooms have access to technology. Future plans including allowing the use of BYOD (Bring Your Own Devices) through a school-managed interface to access the bptech network.

All instructional classrooms have an interactive white board and accompanying software. Teachers and students have access to Microsoft Office, Adobe Creative Suite, Autodesk, Geosketch, internet, email, and specialized software. Teachers have access to the school network through a remote access portal on the [www.bptech.org](http://www.bptech.org) website. Future plans include offering this to students so that they may access school resources, software, and personal work via an internet browser.

The Student Services and Special Education department have dedicated laptops, iPads, and Macbooks that can be assigned to students for school and personal use after school. Specialized software is installed on these devices in accordance to IEP. The cafeteria and culinary programs use a point of sale system for lunch purchases. To manage cafeteria operations and lunch accounts, a program called Nutrikids is used. Parents are able to log into an account and populate funds for student use.

Teachers have an opportunity to access professional development technology training through TEQonline which offers training in Google Apps, Microsoft products, Adobe products, and more.

The lecture hall and the cafeteria both have HD projectors, connectivity and access to play DVDs and internet, and large screens for viewing. Microphones, both wired and wireless. In addition, there are two large-screen TVs in the lecture hall that connect to mobile devices via an AppleTV. Similar configurations are also found in the Career Center and in the Culinary restaurant.

The main district building has a closed AV system that allows a camera to record and send live video across the school. Future plans include a large retractable screen in the gymnasium that can simulcast live speakers, upgraded audio configuration, and a move to High Definition. Additional future plans include working with local ISP and/or cable company, to get access to town-run community access TV stations.

The school is currently lighted and heated acceptably. In response to the most recent energy audit in 2011, the district entered an Energy Audit Agreement in 2011. Much of the lighting throughout the building, both interior and exterior has been upgraded using current technology to be as efficient as possible.

## **Sources of Evidence**

- self-study
- facility tour
- school website

# Standard 7 Indicator 3

---

## Narrative Program Summary

Bristol-Plymouth Regional Technical School (B-P Tech) has adequate funding for current programs and services. The extent to which the community funds and Bristol-Plymouth implements a long-range plan that addresses enrollment changes and staffing needs is acceptable. The enrollment remains stable from year to year despite the enrollment far exceeding the building's original capacity design. The budget during the past five years (FY 15-19) has increased on average of two percent each year thus enabling the district to sustain current staff levels. Effective use of Perkins Funds/Capital Skills Grant funds has enabled the district to introduce the new engineering program and its instructor and to update equipment in various programs.

From 2015-2018, a 7,800 sq. foot new Early Childhood and Care building was constructed on site by Bristol-Plymouth students in the construction fields. The goals of this building project were two-fold: to provide access to real world construction trade experience to students and to offer the opportunity for expanded daycare to the community.

The current facility is almost 50 years old and space is at a premium even with the addition of a new outbuilding. Recently B-P Tech submitted to the Massachusetts School Building Authority (MSBA) a Statement of Interest. In July 2018, the MSBA invited Bristol-Plymouth into the Eligibility Phase for consideration for a new construction/renovation project.

## Sources of Evidence

- self-study
- facility tour
- department leaders
- central office personnel
- school leadership

# Standard 7 Indicator 4

---

## Narrative Program Summary

The budget process begins at the faculty level each year. Information from faculty, Advisory Boards, School Council and administration is used to create a prioritized list of items costing over \$5000. Faculty and staff are then asked to complete a "Budget Request Form" for such items. These forms are then submitted to their immediate supervisors who present them to the School Business Manager who reviews them in collaboration with the Superintendent, Administrators, Technology Director, and Principal.

The technology budget is developed through collaboration with the Technology Director, School Business Administrator and Superintendent. The technological needs of the District are met based on funding and need.

The School Business Administrator and Supervisor of Buildings, Grounds and Transportation develop the Operations and Maintenance budget collaboratively based on prior years expenditures, funding and need.

# Standard 7 Indicator 5

---

## Narrative Program Summary

The school/center site/facility supports and enhances all aspects of the educational program and is maintained to meet all applicable federal, state, and local laws, and are in compliance with local fire, health, and safety regulations.

A planned and adequately funded program of building and site management ensures the replacement of equipment, proper maintenance and repair of facilities/ equipment and cleaning of the facility. The school's plant is effectively and efficiently ventilated, heated and lighted. The physical plant and facilities meet all applicable state and federal laws and are in compliance with fire, health and safety regulations. The building is accessible to persons with disabilities. Sufficient care is given to the cleanliness and orderliness of the school building and grounds.

Individual teachers in each department evaluate all equipment so that it is repaired or replaced as needed. The school facilities department oversees all facilities repairs and maintenance. The facility is in compliance with and meets all Federal and State laws relative to fire codes, health regulations, safety regulations and is handicapped accessible. An up-to-date binder with all inspection certifications is located in the office of the Supervisor of Buildings, Grounds and Transportation.

A day staff of five custodial/maintenance/grounds people and a night staff of five people maintain the building and grounds. In addition, a security staff is on duty every night. School security is aided by recent improvements in cameras both inside and outside of the building as well as updated lighting in parking areas.

A relatively new Guidance/Student Services/Career Center Suite provides guidance staff with more space to meet collectively with students and parents. This increased space also facilitated the acquisition of a full-time school adjustment counselor.

Food services constantly updates appliances to be more efficient. The food service department, which is outsourced for staffing only, is equipped with the necessary tools/resources to train and manage staff and handle students. Student meals are prepared daily and meet or exceed all recommended standards. Nutritional information on menus is available to students, parents and staff on the school website.

The school's Nurse's Office recently received updated furniture and is staffed to care for students and provide an environment that will help promote/enhance each student's quality of life. The school's nursing staff provide patient centered care and professionalism. Nurses collect data to monitor the outcomes of care, meet state reporting requirements. They use information and technology to communicate with students, parents and staff. The visiting team found that recently there has been marked increase in demands by students for daily nursing care.

## Sources of Evidence

- self-study



# Standard 7 Indicator 6

---

## Narrative Program Summary

Appropriate school/center transportation procedures are in place to ensure the safety of the students and in compliance with all federal, state, and local laws and regulations.

The district currently contracts with a single commercial provider for transportation services. Appropriate school transportation procedures are in place to ensure student safety. The School Committee awards contracts on a competitive basis under M.G.L. c. 30b for pupil transportation services for a three year period with an option for an additional two (2), one (1) year contract terms. The contract outlines the minimum specifications and conditions for transporting approximately 1,300 pupils daily to and from school during the school year. Bus contractors will comply with all applicable state laws and regulations, including but not limited to: specifications for school bus design and equipment, inspection of buses, qualifications and examinations of bus drivers, driving regulations, insurance coverage and adherence to local regulations and directives as specified in the bid contracts. The School Business Administrator, working with the bus contractor and other appropriate administrators, is responsible for establishing bus schedules, routes, stops and all other matters relative to the transportation program. Students are transported to and from the district communities, which include the towns of Berkley, Bridgewater, Dighton, Middleborough, Raynham, and Rehoboth as well as the city of Taunton.

Students with specialized transportation needs due to disability or other status receive transportation to and from school in compliance with all federal, state and local laws. School policies regarding student safe conduct on school buses are found in the Parent-Student Handbook.

## Sources of Evidence

- self-study
- central office personnel
- school support staff

# Standard 7 Indicator 7

---

## Narrative Program Summary

The professional staff actively engage parents/guardians and families as partners in each student's education and reach out specifically to those families who have been less connected with the school/center.

An open house in October and a tour night in January are opportunities for families of prospective eighth grade students, as well as members of the general public, to access information about educational opportunities at Bristol-Plymouth Regional technical School. For current students, parent/teacher conferences are held in the fall. Progress reports and report cards with comments are issued quarterly. Instructors call and email parents to reach out regarding student performance. There are also Parent Advisory committees for special education and cooperative education students to increase parent involvement.

The guidance department regularly contacts parents of students who are in danger of failing. Guidance staff also notifies parents of students who have excessive absences and to arrange for scheduling of make up sessions. There is a student assistance team who work to develop a DCAP for at-risk students. A before and after school homework help program aids children needing additional support. The Guidance Department also holds two "Counselor Evenings" per year, where parents may make appointments to meet with their child's school counselor. The Academic Coordinator and Special Education Coordinator work with families of students in danger of not graduating to develop appropriate plans for success. The school nurse constantly contacts the parents/guardians of students with health concerns. Career-Technical Advisory boards have at least one parent/guardian as a member.

The school provides parents/guardians with an electronic portal on the Bristol-Plymouth website. Here, families can access various links for information about school activities, a variety of forms including the School Breakfast and Lunch Program information as well as applications for the federal free and reduced school meal program. Parent advisory committees also exist for co-op students and special students.

The school website also provides parent/guardians with a calendar of upcoming events such as open house, bus schedules, lunches, sports, and news about the school. A copy of the student/parent handbook is sent home with every student and covers an abundance of information relevant to the student and parent/guardian.

## Sources of Evidence

- self-study

# Standard 7 Indicator 8

---

## Narrative Program Summary

The school/center develops productive career and technical advisory, community, business, and higher education partnerships to support student learning.

Every career-technical program has an Advisory Committee. Membership is comprised of teachers, students, parents, industry leaders and continuing education members. Advisory Boards meet twice a year. Every career-technical program advisory board elects a chairperson who meets with the superintendent, members of the administrative team and school committee members to discuss topics such as program highlights, industry trends, recommendations and other relevant information. Chairpersons submit the Advisory Board suggestions and completed surveys which helps inform decision making relative to each program. In addition to the partnership with Advisory Boards, Bristol-Plymouth Regional Technical School (B-P Tech) forges relationships with the community through a co-operative education program, which places work ready second semester junior and first semester seniors in industry. In 2017-18, 187 students qualified for co-op. In certain tech areas, students gain apprenticeship hours/credit as well. Additionally, B-P Tech develops career and higher education partnerships to support student learning and achievement through tech prep and dual enrollment programs. Articulation agreements exist with a number of post-secondary institutions.

The school maintains memberships in three local chamber of commerce groups to support ties with business and industry. Every year the school holds a job fair for grade 11 and 12 students, last year over 60 employers attended the fair.

## Sources of Evidence

- self-study
- teachers
- community members
- school leadership

# Standard 7 Indicator 9

---

## Narrative Program Summary

Records of all funds collected and disbursed in connection with any part of the school/center's program are kept in an accurate and systemic form.

All funds collected are logged on a deposit spreadsheet to keep track of all deposits. All cash or checks awaiting deposits are kept in a fireproof safe located in the Accounting Specialist's office. All deposit slips are recorded and provided to the Treasurer on a master depository spreadsheet. The Treasurer reconciles the bank statements monthly to the general ledger cash reports generated by the business office.

Procurements are made in conformance with Massachusetts General Laws, particularly Chapter 30B. The District executes a purchase order for each purchase which is then approved via the proper chain of command. Final approval of all school expenditures is the responsibility of the School Business Administrator and Superintendent. The Business Office has effective controls in place to ensure receipts and disbursements are recorded completely, accurately and in a timely manner in the district's financial ledgers. Regular reconciliation of all accounts is undertaken to confirm the completeness and accuracy of financial information.

The Superintendent's office issues letters of hire or notifications of pay changes to the Business Office to authorize payment of all salaries and stipends. All hourly employees are required to submit time cards for payment which must be approved by the appropriate administrator. Invoices received are compared to purchase orders and then entered by the Accounts Payable Clerk into the financial software system for payment. If an invoice does not have an accompanying purchase order, the Accounts Payable Clerk researches each and sends to the appropriate Administrator for approval. Warrants authorizing payment of salaries and other expenditures are reviewed and approved by the School Business Administrator and Treasurer and are then approved by the School Committee Warrant Subcommittee before checks are issued. All grant expenditures are processed in accordance with the grant requirements, and grant funding is requested within prescribed frequencies as set by the State. Final grant reports are filed on or before deadline dates.

The School Business Administrator has the primary responsibility for overseeing any suspicions of fraudulent financial activities.

The District utilizes standard forms to initiate and record collection of receipts and disbursement of funds for all extracurricular activities including School Clubs, Athletics and other Student Activities.

## Sources of Evidence

- self-study
- panel presentation
- school leadership

# Standard 7 Indicator 10

---

## Narrative Program Summary

Funds collected are properly safeguarded.

The visiting team found the school had carefully developed protocols for collecting and safeguarding funds. Services provided by revenue-producing technical education programs are paid through cash, bank check, and credit card transactions. The money collected from these services, as well as fundraising activities, and the school lunch program is provided daily to the Accounting Clerk. All funds collected are logged on a deposit spreadsheet to keep track of all deposits. All cash or checks awaiting deposits are kept in a fireproof safe located in the Accounting Specialist's office. All deposit slips are recorded into accounting software and provided to the Treasurer on a master depository spreadsheet. The Treasurer reconciles the bank statements monthly to our general ledger cash reports generated by the business office.

For purchasing, requisitions are completed by the staff and are approved by their immediate supervisors. They are then forwarded to the School Business Administrator (SBA) where the SBA assigns account number and signs. Requisitions are then distributed to the clerical staff for entry into a web-based application that limits access to authorized individuals for requisition entry and viewing rights. The requisition is then electronically forwarded from Department Heads, to the principal and finally to the Superintendent for approval. After the Superintendent approves the requisition, it is sent to the SBA for approval. After approval by the SBA it is sent to the Superintendent for the requisition to be turned into a Purchase Order. The Secretary to the SBA, prints three copies of each purchase order. Purchase Orders are printed with the School Business Administrator's signature and the Superintendent's signature as they have been authorized electronically in the system or by Accounting Specialist and Principal in their absence. The three copies of purchase orders are provided as follows

The white copy is provided to the vendor (the white copy is the only copy that has approval signatures by the School Business Administrator and the Superintendent. The yellow copy is filed alphabetically by vendor name & kept in Business Office to be matched to invoice when it arrives. The blue copy is given to the person who is placing the order.

After goods or services are received, the person receiving the order signs/notes the packing slip & forwards it to Business Office where it is attached to the purchase order. The Secretary to the SBA and Accounting Clerk/Receptionist share the responsibility of attaching the packing slip to the purchase order.

When the invoice arrives, clerical staff match the invoices to the purchase orders. If the packing slip is not attached to the P.O., the Accounting Clerk/Receptionist sends a request for the packing slip to the person who placed the order. The Accounting Specialist approves the invoice for payment. Accounting Clerk/Receptionist enters invoices on a bi-weekly basis which creates a payable. Payables are reduced by warrants that are processed on a bi-weekly basis & approved by the SBA and the Superintendent. Checks are generated at this time and are electronically signed with the Treasurer's signature. The checks are then reviewed by the Treasurer against the check register. After reviewing all checks issued, the Treasurer forwards them to Accounting Specialist, to hold until warrants are approved and signed by at least two school committee members. Once approved by the school committee members, the checks are delivered. On a monthly basis, Accounting Clerk/Receptionist runs an open purchase order report to ensure all encumbrances in the system are accurate. Invalid purchase orders that are invalid (i.e. order not fulfilled, incorrect vendor/order never received) are voided. The SBA reviews expenses on a bi-weekly basis to ensure expenditures are accurate.

Harper's payroll service is used to process payroll. Hourly employees submit bi-weekly timesheets that are approved by department supervisor. Compensated absences (sick, vacation, etc.) are tracked daily in the main office for both salary and hourly employees. There is a well-developed process to ensure the accuracy of payroll records.

When requests for employee reimbursements are made, the completed forms must be submitted with the proper

receipts attached. Regular accounting reconciliations are performed to confirm the accuracy of financial information as well as to address any anomalies which may require further investigation. Most requests for reimbursement are pre-approved to ensure reasonable expense limitations. The employee expense reimbursement form is signed off by the employee's immediate supervisor and then up the chain of command to the Superintendent as final signature.

The SBA reviews the expenditure/encumbrance report from the general ledger and report generator module of Infinite Visions to analyze budget to actual information. Budget to actual analysis is performed on a bi-weekly basis, after the accounts payable and payroll warrants are posted. If necessary, journal entries are prepared by the Accounting Specialist for approval by the SBA for variances that have occurred because of posting errors or incorrect account number usage.

The school and district utilizes standard forms to initiate and record collection of receipts and disbursement of funds for all extracurricular activities including School Clubs, Athletics and other Student Activities. The visiting team found these forms to be additional evidence that funds collected and disbursed for student activities are always kept in an accurate and systematic form. All student activity funds are turned in daily to the Accounting Clerk/Receptionist and are locked in a safe until the funds are ready for recording and deposit. Deposits for Student Activity Funds follow the same procedure as general fund deposits.

## **Sources of Evidence**

- self-study
- panel presentation
- central office personnel

# Standard 7 Indicator 11

---

## Narrative Program Summary

The governing board and the administration exercise control over all financial operations. An appropriate system of checks and balances is in place to ensure integrity in the collection and disbursement of all school/center funds.

The budget is prepared by school and district staff and approved by the seven member School Committee.

The visiting team found well-developed protocols in place for purchasing, collecting and safeguarding funds, payroll, employee reimbursements, and managing funds.

Monthly warrant reports of all accounts are provided to the superintendent and school committee as part of the school committee meeting agenda. The school committee also approves transfer requests at the end of the school year during the budget closeout. At year end, all General Fund accounts are closed and any balance remaining becomes part of the District's Excess and Deficiency account. Employees not covered by a Collective Bargaining Agreement or Individual Contract are paid from time cards which must be approved by their appropriate supervisor. All goods and services are procured in accordance with the Massachusetts Procurement Laws defined in MGL 30B.

## Sources of Evidence

- self-study
- central office personnel

# Standard 7 Indicator 12

---

## Narrative Program Summary

Records of all funds collected and disbursed are audited at appropriate intervals in accordance with local and state requirements.

An annual audit is completed by March 31st of each year and the audit report is presented to the school committee at public meeting. The End-Of-Year Report is filed in a timely manner each year as required by the Mass Department of Elementary and Secondary Education (DESE) and is required to be reviewed annually by the district's auditing firm to comply with DESE regulations. The district's Excess and Deficiency Report is filed each year as required by the Massachusetts Department of Revenue in order to certify the district's Excess and Deficiency funds. A student activity audit was performed by the District's auditing firm for fiscal year 2017 and an extensive report was provided to assist the District in improving the overall record-keeping of student activity funds. BP Tech presently aims to create a Student Activity Policy and Procedures Manual in accordance with M.G.L. Chapter 71, Section 47.

## Sources of Evidence

- self-study
- central office personnel



# Standard 7 Commendations

---

## Commendation

Bristol-Plymouth Regional Technical School for completing a three-year building project of a 7800 square foot facility on site to house the Early Childhood and Care Chapter 74 program to increase the number of programs offered to students and the community. (7.2,7.3)

## Commendation

Bristol-Plymouth Regional Technical School and district for developing and implementing proper and effective controls over its financial operations. (7.9,7.10)

## Commendation

Bristol-Plymouth Regional Technical School and district for collaboratively preparing and providing sufficient funding for programs, equipment and activities and maintenance of facilities. (7.1, 7.3)

## Commendation

Bristol-Plymouth Regional Technical School and the district for funding a wide-range of after school and summer activities that support the delivery of programs and services. (7.1,7.3)

## Commendation

Bristol-Plymouth Regional Technical School and the district for its on-going efforts to replace or renovate the current building so that they may continue to support the educational programs of the school and district. (7.5)

# Standard 7 Recommendations

---

## Recommendation

Continue to explore ways to codify and standardize the handling of matters related to Student Activity Policy and Procedures. (7.12)

## Recommendation

Ensure that, given the recent increase in demands for nursing care, appropriate measures are in place to ensure the safety of students. (7.5)

# English Language Arts

---

## Narrative Program Summary

Bristol-Plymouth Regional Technical School's (B-P Tech) has 11, highly qualified English teachers on staff. All of their ten classrooms are neatly decorated with inspirational posters, content-related information, word walls, and most showcase examples of student work. One teacher floats to different classrooms throughout the day. In the area of technology, every class is outfitted with an interactive white board and a cart of laptops or Chromebooks configured with WiFi internet connections. Many teachers use the interactive white boards to write active notes and interact with online resources. The visiting team found that the interactive white boards are approximately ten years old and repair becoming more frequent. The English department is presently at the end of a year-long effort of organizing a Professional Learning community around the use of instructional technology. Teachers and students appeared to be very comfortable with the use of digital tools for learning and teachers were attentive to the need to stay current on changing technology and the English department.

English Language Arts classes are leveled into four distinctions: Advanced Placement (AP), Honors, Advanced, and College Prep. Each level has its own variation of the curriculum. All levels up to the sophomore year are responsible for the preparation of the students for the state-mandated, graduation required Massachusetts Comprehensive Assessment System (MCAS) tests. Higher grades must also focus instruction on the MCAS for the students who have not passed sophomore year. Classes with Special Education, 504, and English Language Learner (ELL) students are often co-taught with a paraprofessional aide or a special education teacher to assist in meeting student accommodations and modification needs.

The department stipends a lead teacher who works directly with the academic coordinator to make strides to update and revise a specific portion of the English Language Arts (ELA) curriculum throughout each school year. This year the aim of the lead teacher is to add to the electronic curriculum hyperlinks to resources to assist teachers in preparing the students for the MCAS.

The department employs the use of common assessments and common grade level assignments which allow for student creativity and an opportunity for them to demonstrate their skill competencies and research skills. The formative assessments are teacher generated and discussed during bi-weekly department meetings and common planning time.

Students generate electronic writing portfolios which cull work exemplars of completed writing projects in all writing forms per year. In addition, students complete major research projects in both junior and senior year for the higher levels.

The curriculum is designed to meet the needs of all students taking the MCAS. Teachers use literature as a vehicle to address the skills for MCAS. Teachers encourage class discussion and have demonstrated knowledge of their students by calling them by name. In regards to technology, all classrooms have WiFi connections allowing for internet access and cart of laptops or Chromebooks. All of the teachers use Google Classroom. The English department currently has some cross-disciplinary activities with the Social Studies department. Examples include the alignment of reading Elie Wiesel's Night with teaching the Holocaust and historical narratives. Teachers also have indicated that there is a One Read program connecting the Juniors with a local author. The visiting team observed teachers using technology in the classroom along with traditional lecture and class discussion.

The staff prides itself on its collegial responsibility to meet the needs of their students through lessons and units designed to meet the standards of the MCAS, AP testing, and college-preparation. Their alignment with the curriculum is evidenced in their agendas and lesson plans. Teachers submit lesson plans monthly to administration and must be received at least two weeks in advance. Teachers may adjust planning based on pace and information gained in bi-weekly meetings.

Teachers examine common assessments such as pre-tests and post-tests. Student performance on formative assessments drives instructional practices. The visiting team found that time for designing activities to prepare students for MCAS was often prioritized over time spent on differentiated instruction and other student-centered practices. Assignments are only modified for students on IEPs and 504s. The visiting team observed students being instructed by lecture, individual work, question and answer sessions, and teacher-led discussion. Lessons were teacher-centered, where the students were asked questions during the lectures. Students accessed their Google Classroom to find and submit assignments. Each teacher appears to have the freedom to design instruction, lesson plans, agendas, worksheets, and activities, based on their preference, as long as the instruction serves to help students be successful on the MCAS. Some members of the English department thematically compliment the Career Technical Education (CTE) programs. This is evidenced by freshman writing assignments discussing their student's potential shop interest.

Research projects are employed by grade level and often have multimedia components to best prepare the students for their senior project. Creativity is stressed as a plus and is encouraged. Students who express interest have the ability to join the schools' various writing clubs including Scientific Writing Club, Comic Book Club, Literary Club, Book Club, and School Newspaper which members of the department coordinate.

The visiting team noticed that lesson objectives were clearly stated on lesson plans and posted on whiteboards in the classrooms. Classroom management strategies were also demonstrated. Classroom management techniques observed included proximity to redirect students, asking questions of specific students to ensure attention, and walking around the classroom. Teachers make accommodations for students on IEPs and 504s. Inclusion classes have Special Education teacher or a paraprofessional co-teach.

Students are evaluated using formative and summative assessments to track student progress. The department uses common assessments that include pre-tests and post-tests, midyear exams and final exams. Teacher-created quizzes, tests, classwork, and homework are used to evaluate learning. The results of post-tests are used to drive changes in the curriculum the following year.

Assessment results are communicated to parents by Aspen, the online grading system. Report cards are sent home 4 times a year. Midterm warnings are sent out to students in danger of failing. Teachers have the option of issuing deficiency reports after midterm warnings are issued. Parents are granted a code to access a portal on Aspen public view. While students are given feedback from assignments and are encouraged to save those assignments in a notebook or electronic portfolio.

Teachers use a wide range of 21st-century instructional tools. Quizzes and tests, teacher-created assignments, homework, classwork, research papers, writing assignments, and projects are shared through class-specific Google Classrooms. Online applications like Google Docs, ClassDojo, and Plickers are used by teachers to enhance instruction.

Common Writing Rubrics are available. However, most of the department has created individual teacher-generated rubrics because they indicated that the common rubrics are out-of-date. The AP English classes use rubrics provided by the College Board.

Teachers provide timely feedback to students. Google Classroom, Google Forms, Google Docs are used to provide timely feedback. Comments inserted on assignments, agendas, cycle worksheets, and rubrics provide feedback to students.

The visiting team found that the departments collective collegiality and being collaborative was a major positive to them. Teachers frequently share resources, assessments, and team up to combine efforts in planning and design. Teachers in the department discuss curriculum and educational issues and feel like their voice is heard and respected by their supervisor.

# English Language Arts Commendations

---

## Commendation

The English Language Arts Department for organizing the curriculum in a common format with clear benchmarks and frameworks to be addressed, with developmentally appropriate instructional strategies, and consistent assessment practices to ensure a common experience for each grade and level taught. (3.1)

## Commendation

The English Language Arts teachers coordinate various literary based clubs such as Scientific Writing Club, Comic Book Club, Literary Club, Book Club, and the School Newspaper which promotes equitability, inclusiveness, and meets the social needs of the students. (5.2)

## Commendation

The active involvement of the English Language Arts department in the dissemination of curriculum information resulting in improved access for student learning and achievement which is developed, evaluated, and revised using assessment results. (2.6)

## Commendation

The English Department teachers for collaboratively and continuously assessing student progress towards important learning goals resulting in high achievement levels. (4.1)

## Commendation

The English Department for its efforts in self-organizing a professional learning community around the use of digital tools in instruction. (3.2)

# English Language Arts Recommendations

---

## Recommendation

Develop a plan to increase the amount of student-centered instruction, including differentiated instruction, in English Language Arts classrooms to better meet the needs of each student. (3.3)

## Recommendation

Continue to look for ways to expand the use of cross-disciplinary instruction, including technical-related links, field trips, and outside speakers and professionals to meaningfully enhance learning activities. (3.2, 3.3)

## Recommendation

Explore ways to allow teachers to expand their existing efforts in sharing instructional resources to support all teachers with the most up-to-date instructional materials to best fully implement the curriculum. (2.6)

## Recommendation

Ensure a plan is in place to support the continued regular use of interactive white boards in the classroom. (2.2)

# Foreign Languages

---

## Narrative Program Summary

The Foreign Language Department at Bristol-Plymouth Regional Technical School (B-P Tech) consists of one (1) Spanish instructor. There is one classroom located at the south end of the building.

Two levels of Spanish are offered to students; Introduction to Spanish 1 and Introduction to Spanish 2. Introduction to Spanish 1 is only taught to Junior-year students and it is offered as an elective course. Currently, there are 77 Juniors enrolled in the Introduction to Spanish 1 course for the first semester, and an additional 70-80 students are expected to take the course during second semester. Introduction to Spanish 2 is only taught to Senior-year students and is offered as an elective course. Once a student matriculates into the Introduction to Spanish 1 course as a junior, he/she is required to complete the Introduction to Spanish 2 course in his/her senior year. Currently, there are 67 Seniors enrolled in the Introduction to Spanish 2 course for the first semester, and roughly 60-70 seniors are expected to take the course during the second semester. These enrollment figures are consistent with previous years' enrollment numbers.

Each class is comprised of approximately 11-15 students. The visiting team learned that the smaller class sizes are both appealing to the Spanish instructor, as well as conducive to student learning.

Given that the students are required to take Introduction to Spanish 2, upon completion of Introduction to Spanish 1, this eliminates any retention concerns. Delivering the instruction in subsequent years allows students to better retain the knowledge acquired from the Introduction of Spanish 1 course, therefore promoting a positive learning experience when students are faced with Introduction of Spanish 2 during the senior year.

The visiting team learned that the Spanish courses are true introductory classes because most of the students who elect to take these two courses, enroll without any previous Spanish background. Very few students received any foreign language education in either grammar school or middle school.

The curriculum for Foreign Language at B-P Tech is based on the Massachusetts Foreign Language Frameworks and is purposefully designed to ensure all students practice and achieve a level of proficiency in Spanish. As with most subjects, student performance levels vary. Some students enter the program on a "trial" basis due to the complex subject matter. These students are typically either not college bound, or in most cases, students who receive Individualized Educational Plan (IEP) services and the rigor of the course proves to be too difficult. If deemed necessary, the team convenes to discuss the appropriateness of placement for said student, and if the team determines that he/she would struggle, he/she would be removed from the course within the first two to three weeks of the semester and reassigned to a new elective. This process is based on complete transparency and said student is aware of his/her "trial" status upon entering the course.

B-P Tech has embraced technology in this area. The Spanish classroom is fully equipped with iPads for every student. In addition to incorporating the use of iPads into the class lesson plans, the Spanish instructor uses appropriate materials and web-based programs. This is evidenced by the instruction provided to each class, observed by the visiting team, to access the spanishspanish.com website when completing their classwork and/or homework assignments. The Spanish instructor complements her traditional curriculum material with Quizlet and Quizlet Live. As evidenced by an enthusiastic student-wide response, the implementation of technology is well-received by the students. The Spanish curriculum supports informed and ethical use of technology, which is embedded in the school culture.

B-P Tech's curriculum emphasizes a basic, fundamental understanding and application of knowledge at the introductory level, through inquiry, problem-solving, and higher order thinking skills. Though the curriculum does not account for many project-based opportunities due to significant time constraints, the instructor does make an earnest effort to provide students with a general overview of the Spanish culture as well as authentic learning opportunities. In previous years, when time was not as restricted, the curriculum included many culture-centered

projects. Now that time is of the essence, students are limited to only one major project each semester. The duration of the course primarily focuses on Spanish vocabulary and grammar. The visiting team found that the time on learning is inadequate. Understandably, students need to juggle their vocational/technical program requirements, along with the DESE core requirements, however, the integrity of the Spanish program is at risk, due to the time of learning that is sacrificed to accommodate these other areas of study.

Funding is readily available, if needed, for effective instruction.

Cross-disciplinary learning is minimal, but attention is being given to that area and initiatives are in the infancy stage of implementation. For example, the Spanish instructor is seeking opportunities to collaborate with the Child Care program. The Spanish instructor wants to contribute to the positive school culture, as well as enhance student skills. She would like her students to read Spanish children's literature to the children who are affiliated with the Child Care program.

The Foreign Language program provides students with a foundation of knowledge that prepares them for future success at the college level. The Spanish instructor receives communication from many post-secondary students, reporting that they "passed the college placement exam" during the freshman year. Given that the B-P Tech Spanish classes are only 42-minute blocks that meet only one period each day, for only 45 days, the wealth of knowledge that they receive is most impressive.

B-P Tech's Foreign Language Program is written in a common format which includes units of study with essential questions, concepts, content, skills, and instructional strategies, as well as assessment practices. The unit goals for the Foreign Language curriculum focus primarily on communication (vocabulary and grammar), but also includes culturally-based components. A variety of assessments are employed in classes including: formative and summative, students may chorally and individually respond to questions or write out questions/answers on white boards and/or SmartBoards. Quizlet and Quizlet Live are used to informally and formally assess students' knowledge on vocabulary, and at times, traditional paper and pencil quizzes are issued.

The students have a clear understanding of expectations and outcomes through a daily/weekly agenda of objectives on the board, which is centrally located in the classroom for all to view easily. The visiting team observed that the students respond favorably to the repetition of instruction when told to record their assignments inside their agenda books. The instructor makes emphatic, deliberate attempts to reiterate key concepts of the lessons that they are about to navigate. She explains the objectives in a clear and concise manner. Under the B-P Tech inclusion model, the Spanish courses are not homogeneous groupings. This makes it necessary for the Spanish instructor to incorporate differential learning techniques into her delivery. The visiting team observed that she accomplishes this task effectively. Students are encouraged to ask questions and reminded about class expectations throughout the entire class period. The instructor consistently "checks-in" with her students when they work independently, and she provides constant feedback in an affirming and validating manner. The instructor's vibrant and charismatic approach to teaching is undoubtedly a contributor to student success. Not only does her high-energy teaching style captivate her students' attention, it holds their interest for the entire period. This was evidenced by the two classes observed by the visiting team. The instructor consistently looks for opportunities to praise her students and improve their confidence by acknowledging their success. It is evident that she structures her curriculum with an awareness of the broad spectrum of cognitive levels within her class. As observed by the visiting team, the instructor finds ways to connect the "foreign" subject matter to examples that are easier to understand. For example, when explaining the pronunciation of *venti*, she compared it to the word, "vein" and the students immediately made the connection. Also, by using a compare and contrast method, the students are clearly able to draw more meaningful conclusions when asked to deliver outcomes. Modifications and accommodations are embedded into her curriculum as best practice for all students. In addition to in-class support, she offers after school extra help sessions on Thursdays.

The taught curriculum consistently mirrors the written curriculum by requiring the Spanish instructor to submit weekly lesson plans every month to the Academic Coordinator. As the sole instructor within the Foreign Language Department, this presents challenges for professional community learning. The Spanish instructor seeks opportunities to advance her knowledge by taking an abundance of Spanish classes and participating in numerous professional development activities. One benefit of being the only instructor is the autonomy that she has when creating and delivering the curriculum. She controls the pace of the content delivery while maintaining



fluidity, consistency, and continuity in all classes.

The Spanish instructor holds a Masters in Education degree in Communication Disorders and is licensed in Spanish. Despite not having any formal Foreign Language degree, she is revered among her colleagues as an expert in the field. She is very well-versed in both Spanish and Portuguese, her native tongue. She invests a significant amount of time keeping herself familiar with current topics within the realm of all things Spanish. The fact that she never formally matriculated into a program does not at all reflect her abilities to effectively teach the student population at B-P Tech. In addition to her role as the Spanish instructor, she also holds the title of Translation Document Editor. She is responsible for servicing all of the translation needs within the building, both oral and written.

As reported by the sole instructor, she believes the department is sufficiently staffed. The visiting team reports having plenty of instructional materials, technology, equipment and supplies to fully implement the curriculum, co-curricular programs and other developmentally appropriate learning opportunities.

The visiting team observed that the Foreign Language Department uses creativity and initiative in its instructional strategy practices by using a variety of resources, such as graphic organizers, a multi-sensory approach, and multimedia presentations to ensure standards-based learning for all. The instructional strategies are developmentally appropriate for varied groupings and learning styles. These instructional strategies include hands-on learning activities, student-centered options, direct instructions, and individual and cooperative learning opportunities. Instructional materials such as iPads, interactive SmartBoards and media games, workbooks, videos, CD's, typed notes, enlarged texts, and the use of Quizlet are some examples used by the Foreign Language Department to differentiate instruction. The Spanish instructor incorporates many different learning styles strategies into her day-to-day routine. She provides pre-written notes to all students, regardless of educational services (IEP's or 504). Extended time is allocated for all students to take class notes, when applicable (in addition to the notes provided by the instructor). Everyone is encouraged to actively participate and ask questions. The teacher redirects students and repeatedly clarifies directions to the entire class. The note-taking process, in particular, is done as a three-tiered system: step one encompasses the auditory component as the students listen to the instructions and/or lecture, step two engages the visual dynamic for students to view the pre-written notes on the SmartBoard or projector, and step three incorporates the physical challenge by teaching the student to write his/her own notes and answer questions both verbally and written.

The B-P Tech Spanish Instructor embodies the necessary attributes of a successful teacher. As evidenced by her classroom management, supportive and caring nature, and overall knowledge, she ensures a safe learning environment for her students. She addresses student concerns swiftly and demands respectful behavior, as evidenced by her professional reaction to a student when he told his peer she is "annoying" upon entering her classroom environment. By simply reminding the student to "be nice" she promoted a healthy class climate. It is extremely evident that she takes great pride in the accomplishments of her students because many projects adorn her classroom walls. In addition to the students' work, she dedicates an entire bulletin board to student photographs. The visiting team observed that the Spanish instructor exhibits the core values based on the school community's nickname for Bristol Plymouth--Belonging, Persistence, Teamwork, Excellence, Creativity, and Honor. It is evident, upon meeting the Spanish instructor, that she is invested in the well-being of all of her students social/emotional needs, in addition to their academic success.

B-P Tech has been consistent with the school's core values and beliefs in learning, and learning expectations by offering its students both Introduction to Spanish 1 and 2 within its general education curriculum thus proving its commitment to cultural proficiency and linguistic opportunities to its student population.

# Foreign Languages Commendations

---

## Commendation

The Foreign Language instructional practices support the achievement of the school/center's learning expectations, as evidenced by effective interpersonal skills and promoting a positive and safe learning environment. (3.2).

## Commendation

The Foreign Language Department for adjusting their instructional practices to meet the needs of each student by personalizing and differentiating instruction. (3.3)

# Foreign Languages Recommendations

---

## Recommendation

The Foreign Language Department improve their instructional practices by participating in a variety of professional development courses and conferences. (3.4)

## Recommendation

The Foreign Language Department continue to make efforts toward creating a project-based curriculum that encompasses cultural learning, and addresses student interest. (2.3)

## Recommendation

The Foreign Language Department provide campus wide activities and program initiatives that introduce culturally based educational opportunities to improve overall growth in cultural competencies. (2.1)

# Health / Physical Education

---

## Narrative Program Summary

The Physical Education department is located in the north east part of the building with an outside entrance to the right of the main office. The Physical Education and Health department consists of a main gymnasium with a connected Health classroom, a storage room, an instructor's office, a weight room/fitness room above the gymnasium as well as a wrestling room/yoga room. The visiting team noticed that the Physical Education department seemed to have ample equipment and supplies. There were various pieces of athletic equipment placed around the gymnasium presenting a potential safety hazard. The instructors informed the visiting team that it was due to a lack of storage space. The gymnasium was clean and well maintained with proper signage and evacuation routes posted in several places. The Health classroom was equipped with a SmartBoard, laptop cart, as well as many visual aids throughout the classroom. The Health classroom was recently moved to its present location.

The Physical Education and Health Department uses a co-educational model to deliver curriculum to the student population, adhering to Massachusetts state frameworks. Course offerings are arranged by quarters for the freshmen and sophomore students. Junior and senior students are offered courses by semester. The department offers a program of activities which include individual, small group, team sports, and life-long wellness activities. Curriculum is structured in a way that allows for student choice that has resulted in more involved student participation. The department focuses on all aspects of physical fitness including strength, flexibility, cardiovascular, aerobic, and anaerobic fitness. The Health Department offers course activities that provide students the opportunity to become well-rounded learners of healthy habits and decision making. Course selection includes offerings that are both elective and mandatory. The Physical Education program's performance expectations are based on a four point system (two (2) points for complete and proper clothing/changing, one (1) point for behavior, and one (1) point for active participation). The Physical Education program also offers alternative assignments for students unable to participate due to medical issues and those who do not have proper clothing. In the Health Department, students will receive a letter grade which is based off of tests, projects, classwork, homework, and class participation. Both follow the school's grading policy which can be found in the student/teacher handbook. All physical education and health students are required to pass the course on a yearly basis. The curriculum is updated every two to three years (or as needed) to stay within the framework of the school's core values. Both the physical education and health curriculum is aligned with state standards and benchmarks.

The visiting team observed that the lessons being taught were student-centered and technology is integrated to the lessons via the use of iPads. There was some concern from the instructors that the Wi-Fi was unreliable in the gymnasium. In the Health classroom there was evidence of effective classroom management strategies as the instructor reinforced established good behavior standards in her class. In one Health class, the visiting team noticed that there were a significant number of students with Individual Education Plans (IEP) and it was obvious that accommodations were being made successfully for them. All IEP's are submitted to and reviewed by the department at the beginning of the year or through the year as needed. All IEP's are accessible through Aspen online.

All physical education and health students are required to pass the course on a yearly basis. Winter and/or summer school is available to those students who fail the requirement. In regards of the creation of the master schedule, the Program Administrator is responsible for that duty. For monitoring progress, students receive a total of eight reports, four of which are midterm warnings, and four are graded marking terms. In addition, a notice may be sent home at any time during the term to inform parents of student progress. Students have a variety of assessments to use in the different units. Pre and post tests, peer, self and teacher evaluations, practical demonstrations, and questionnaires are all used to assess student learning. In addition, the physical education department grades students daily, and they receive a letter grade based on four daily points, consisting of preparation for class, participation, attitude/behavior and proficiency. In the health department,

students will receive a letter grade which is based on all assessments (tests, projects, classwork, homework) and class participation. The results of these assessments help us to shape the curriculum to make sure the unit information is offered in the best way possible.

Both the physical education and health department are adequately funded to help meet the curriculum as well as the needs of the student population. The department submits equipment and material requisitions on a yearly basis. The school meets the needs of the students by helping us supply them with updated equipment and materials. The school is very open to new ideas for programs from both the Physical Education and Health department.

Outside professional development and conferences are often attended in order to help the instructors stay current in the field. From this, the instructors are able to stay up-to-date with the ever changing world of health and fitness.

Upon entering the Physical Education/Health Department, the visiting team felt a sense of "welcome" both from students and instructors. The students were respectful towards each other and their instructors. They seemed to work well together in a collaborative manner.

# **Health / Physical Education Commendations**

---

## **Commendation**

The Physical Education/Health program for training all students at a rate of 100 percent in CPR certification. (3.6)

## **Commendation**

The Physical Education/Health program for updating their curriculum to align with the school's core values to improve their instructional strategies. (3.1)

# **Health / Physical Education Recommendations**

---

## **Recommendation**

Create and implement a plan to address the lack of space for athletic equipment and storage space which presents a potential safety and security issue. (7.5)

## **Recommendation**

Develop and implement a plan to seek additional resources to update technology in the Physical Education/Health department (Wi-Fi) to provide the students with better access to the curriculum. (7.1, 7.2)

# Mathematics

---

## Narrative Program Summary

There are 11 designated mathematics classrooms located in three different areas of the school building. Two teachers are "Floaters" and teach in different classrooms for each class. Every classroom is equipped with a SmartBoard, which teachers utilized during all classes observed. Each class has a set of scientific calculators for daily student use. Some classrooms have class sets of TI-inspires, Chromebook carts, and document cameras. Each classroom is equipped with fire exit and evacuation route signs. The classrooms appear clean and organized. Signs are outside each of the classrooms to indicate the teachers' name and subject area.

The Bristol-Plymouth Regional Technical School's (B-P Tech) Mathematics Department teaches standard, college preparatory, honors and advanced level math courses to all students. All mathematics courses are taught by Massachusetts Department of Elementary and Secondary Education (DESE) licensed mathematics teachers. Many classes are co-taught by special education teachers or supported by paraprofessionals within the mathematics classrooms.

Curriculum is developed using a common curriculum template. The template format includes the unit title or theme, essential questions, objectives, state standards, examples of assessments, teaching strategies, and content resources (textbooks, websites, software, etc.). Some of the current mathematics curriculum was written by small groups and some was created by individual teachers. Teachers produce their own lesson plans that follow the course curriculum. Common planning time allows Mathematics teachers to reflect on their best practices and to collaborate on the creation of lesson plans and formative assessments. Common mid-term and final exams included in the curriculum for each course. The curriculum emphasizes depth of understanding and application of knowledge.

The Mathematics Concepts course provides differentiated supplemental math instruction and practice. The course helps students strengthen middle school math skills and bridge the gap from Algebra I and Algebra II.

Effective curricular coordination and vertical articulation exists throughout most of the 9th through 12th grade courses. Generally the curriculum transitions from Algebra I to Geometry, Algebra II and Intro to College Math, Precalculus or Calculus. The only exception is a small group of students who take Advanced Geometry as freshmen and are unable to switch out of the advanced course sequence. A student who struggles through Advanced Geometry in 9th grade must go on to Advanced Algebra II and Advanced Precalculus in 10th and 11th grades. This is a problem for a handful of students who are unsuccessful in the advanced courses but are unable to take any other course.

The curriculum is supported by sufficient staffing levels. However, many teachers teach multiple courses and the visiting team found a sense that this might hinder the ability to address other issues such as improvements to instruction and student support. The Mathematics department would like to have more input in the schedule planning process.

The Mathematics Department currently uses SmartBoards and scientific calculators to support student learning. Teachers report that increased access to graphing calculators and online math practice programs would help prepare students for computer based state testing beginning in May 2019. There are two class sets of TI Inspire calculators that are rarely used; the teachers are more experienced with standard graphing calculators. Teachers utilize Kuta Software, Google Classroom, Zip Grade, and textbooks to support instruction.

The curriculum is developed, evaluated and revised using assessment results and current research. This year, B-P Tech teachers are performing a gap analysis between the current curriculum and new content assessed on the upcoming Massachusetts Comprehensive Assessment System (MCAS) 2.0 test. They plan to update the curriculum over the next two years.



The Mathematics Department self-study indicated “lack of clarity for curriculum projects” as a focus area of improvement. Recent curriculum updates were led by administrative and state mandates. The lead teacher of the Mathematics Department was responsible for writing new curriculum for the last several years. The lead teacher role has rotated among four different teachers in the past five years. Starting this year, curriculum is revised and developed by multiple math teachers during common prep time.

The Mathematics Department instruction is consistent with the school's new core values. An inclusive, encouraging environment was observed during class visits. Students worked together to analyze and solve problems and persevere when their answers came up short. Interviews and observations showed that the mathematics teachers genuinely care about their students and have high expectations for all learners. Mathematics and special education teachers work together to personalize and differentiate instruction based on Individual Education Plans (IEPs), 504 plans, Sheltered English Immersion (SEI) frameworks and observed student progress. The visiting team observed students in three classes successfully using graphic organizers to solve high level problems. Guided notes were provided to introduce new concepts. Special education teachers and paraprofessionals were observed actively supporting students in a few of the the school's many Algebra I and Algebra II inclusion classes. Mathematics teachers are available before and after school to help students in the library. Teachers respond to students questions via emails and/or the remind app. Students apply knowledge and skills to authentic tasks on their senior projects and guide students through studying for their union exams. Mathematics teachers emphasize communication skills by having students, read, write, listen, and speak.

The teachers and administration continually examine instructional practices to ensure consistency and meet high expectations. All teachers utilize the department's curriculum to create their lessons, and submit their plan books monthly to the academic coordinator. Administrators perform walk-through evaluations monthly to monitor instructional practices. Teachers provide informal feedback in the classroom as well as formal feedback through assessments. Grades are open to all parents and students through the Aspen portal. All teachers use SmartBoards for lessons, the department has TI-Nspire calculators, and some mathematics teachers use Google Classroom, Chromebooks, and the Computer Lab regularly. The Mathematics Department uses results from MCAS data and shared assessments to guide and improve instruction. During instructional time, mathematics teachers check for understanding with a variety of methods from direct questioning to a Plickers review. Mathematics teachers use organized cooperative learning to allow heterogeneous groups to collaborate in problem solving. Examples of collaborative activities include expert jigsaws and scavenger hunts. B-P Tech mathematics teachers provide additional support by having open access to Aspen and online books, referring students to Khan Academy, offering before and after school help, and answering emails after hours.

Mathematics teachers enthusiastically share the responsibility of teaching all learners. The Mathematics Department meets regularly to use student achievement data to improve student performance. The Mathematics Department analyzes assessment to inform and improves instruction. B-P Tech students have shown high student growth from 8th to 10th grade MCAS mathematics results every year for the last five years, as reported by the state's district analysis (the district's 10th grade Mathematics Student Growth Percentiles from 2014 to 2018 were 61.5, 65, 58.5, 61.5, 62).

Mathematics teachers participate in school-wide professional development and pursue Individual Professional Development Plans. Mathematics teachers have Masters' degrees, Certificates of Advanced Graduate Study (CAGS), SEI endorsements, and all education and licenses required by the school and state. There appears to be a need for professional development to optimize the use of technology in the classroom.

The Mathematics Department assesses student progress by regular quizzing and testing of students and comprehensive semester and final exams. Course specific test question analysis is conducted by peer teaching groups during the year. Students can be apprised of performance status via weekly progress reports issued by the classroom teacher, guidance progress reports requested by parents and parental access to student grades via the online Aspen grading system. Student achievement is also communicated to parents via email, through IEP and 504 plan meetings and during parent/teacher conferences. Additionally, district results of state-wide testing and Advanced Placement exams are available to the public. Learning expectations and achievement methods are communicated to students at the beginning of classes in September. Unit specific learning objectives and are presented visually and reviewed verbally in the classroom each day. Consistency of objectives

is attained through subject specific departmental curriculum guides. Assessment strategies include weekly quizzes and tests, electronic response unit testing, oral examinations, partner and/or group projects as well as take home assignments and classwork. Collectively and simultaneously administered standardized department tests by subject are given periodically. Specific, timely and annotated test and quiz results are shared with students within a time-frame consistent with improving student performance. Curriculum rewrites are performed year by year as learning goals are amended or as courses are updated.

B-P Tech has a Mathematics Team. The team competes in three competitions throughout the school year. One senior student was awarded with the Outstanding Mathematics Student award.

The visiting team noticed that mathematics teachers genuinely care about their students and have high expectations for all learners. Mathematics teachers share the responsibility of teaching all learners. They enthusiastically collaborate to improve instructional strategies and materials. Instructors receive adequate professional development. Mathematics teachers examine current research through and maintain expertise through school-wide professional development. All teachers pursue Individual Professional Development Plans.

Interviews and observations showed that the mathematics teachers genuinely care about their students and have high expectations for all learners. The classrooms are comfortable and welcoming. The instructors collaborate during common planning time and share best practices and instructional materials.

# Mathematics Commendations

---

## Commendation

The Bristol-Plymouth Regional Technical School's Mathematics teachers for their effective use of common prep time to share best practices, resulting in improved student engagement and learning. (3.1, 3.2, 3.3, 3.4)

## Commendation

The Mathematics Department for vigorously analyzing student assessment results and instructional practices that has resulted in high student growth. (3.4)

## Commendation

The Mathematics teachers for implementing the Concepts course that provides additional differentiated supplemental mathematics instruction and practice that helps students strengthen middle school math skills and bridge the gap from Algebra I and Algebra II, as evidence of the school's learning expectations. (2.1)

# Mathematics Recommendations

---

## Recommendation

Create and implement a plan to increase access and use of graphing calculators, Chromebooks and online math practice programs to improve student mastery of math standards to support instructional practices. (3.2)

## Recommendation

Investigate and create an alternative course pathway for students enrolled in an advanced math course as freshmen but who are unsuccessful in the advanced track. (2.5)

## Recommendation

Expand the opportunity to include teacher input in scheduling decisions to the extent possible to optimize the level of student instruction. (2.6)

## Recommendation

Provide mathematics-specific professional development opportunities to improve instructional strategies and use of technology in the classroom. (3.4)

# Science

---

## Narrative Program Summary

The Science Department at Bristol-Plymouth Regional Technical School (B-P Tech) is not located in one area of the school building. Teachers are spread out in rooms throughout the school. A few of the teachers float from room to room using a cart. In total there are 12 science classrooms, each with seven lab stations. Sinks, gas source, hoods and cabinets are on the periphery. Actual lab/chemical supplies and specific equipment are kept in a common storage room, or in certain classroom cabinets. These supplies are shared among all the science instructors. The science coordinator keeps all Safety Data Sheets (SDS) sheets in their office. Each classroom also has a SmartBoard and separate regular whiteboards. Carts with a classroom set of laptops or Chromebooks is available.

There are no obvious safety or health issues. Each area is clean, well lit and has clear signage, which includes an large "EXIT" sign over door with written directions for evacuation route. Each classroom is equipped with smoke detector and fire extinguisher. Lab rooms have safety shower and eye wash. There are both verbal and nonverbal indicators of a positive welcoming environment. For example, engaging quotes, pictures, photos, and three-dimensional examples of student work, as well as positive word choice by teachers and staff ("Hi Billy", "We missed you yesterday. Here is your make up work." "Excellent ideas guys.").

The following courses are offered at B-P Tech in science (in order, 9-12); Biology and Advanced Biology, AP Biology, Bioethics and Anatomy and Physiology and Advanced A & P, Physics, Advanced Physics, and Chemistry and Advanced Chemistry. The curriculum is based on the Massachusetts Science Framework and the National Common Core Standards. They are aligned to the schools core values and beliefs in an effort to expose students to a wide variety of subject areas. The curriculum is presented using multi-modal strategies so students are prepared to use logical thinking to solve problems both in and out of a classroom setting.

The science department curriculum is written in a common format. It includes courses/units based on both state and national standards to include essential questions/objectives, key concepts and vocabulary and inquiry based skills. The purposeful design of the science curriculum supports the schools learning expectations for students. The use of appropriate instructional strategies such as scaffolding, jigsaw and flexible grouping helps support student learning and success. The use of both formative (quizzes, group activities and exit tickets) and summative (lab reports, projects and unit tests) tie teaching and learning together.

Teachers are required to submit formal lesson plans monthly. There is a suggested format with certain required components (objectives, standards, opening activity, lesson activities, closing activities). Teachers can personalize the format accordingly as long as it contains those key components. These lessons are clearly aligned with the curriculum and school core values.

The curriculum emphasizes application of knowledge and depth of understanding at the appropriate developmental levels. As the students move through high school, expectations of lab skills increase and lab report development becomes more involved and thought provoking. The department is working towards a common lab report format. Currently three of the teachers use the same rubric to develop a cohesive writing strategy for formal lab reports. The goal is for students to feel a continuity in science throughout the high school experience. All science classes reinforce vocabulary and concepts from previous years to access prior knowledge.

Curriculum is developed, evaluated, and revised using assessment results and current research. Each subject administers two shared common assessments (formerly District Determined Measures) at the beginning of the year (pre-test), and then near end of year (post test). When a subject's curriculum needs to be revised, a lead teacher who specializes in that particular subject is given a stipend to perform the task. Their job is to survey and discuss areas of improvement with other teachers of the subject, analyze standardized tests, and make changes to curriculum from there. When finished, the lead teacher will present revisions to the supervisor.

Instructors receive prompt feedback from supervisors' observations via TeachPoint to help reflect on teaching practices. Other sources of feedback include parent conferences, communication via email/phone, and with the students themselves. Teachers often will adjust instructional practices and differentiate to better suit student needs, specific learning styles, and unique situations. For example, analysis of class results on a quiz encourages student comments about specific questions and clears up sources of confusion.

The visiting team member observed six science classes using a variety of instructional strategies. Evidence includes 9th grade biology Osmosis lab, where students were brainstorming their lab results in small groups. In another 9th biology grade classroom, students were organizing their binders for teacher to check near the end of a unit on the Cell. In a 11th grade Physics class, the lesson started with a demonstration on momentum where the teacher asked for student feedback on what they observed as two carts collide at different speeds. Some of the technology used included student laptop computers, SmartBoard technology and a simple metal track with two metal carts. Many of the concepts and skills from science on the academic side will be useful for those students in Career Technical Education programs such as Engineering, Dental Assistant, Community Health and Biotechnology.

Evidence of differentiated instruction was noted in all classes visited. Science teachers personalize and differentiate instruction based on students needs and accommodations (504, IEP). Examples of practices observed were a list of vocabulary or word bank (Biology), organization of Biology notebooks, study guide (Honors Biology), color coding the Periodic Table (Chemistry), and a rubric checklist to assist in writing a formal lab report (Biology). The use of multi-modal instruction gives students many ways to access information, for example presenting instruction verbally (Biology, Chemistry and Physics), graphically (Physics), mathematically (Physics), and through demonstrations (Physics) and hands-on activities (Physics, Chemistry, Biology).

The visiting team member observed appropriate classroom management by the science instructors. Nonverbal examples include organization of the physical space, posted classroom expectations (Social Agreement) and assignment of class jobs (for lab experiments- leader, timekeeper, recorder and clean up). Good rapport between teachers and their students was evident in all science classrooms visited. Students were greeted in hallway as they entered the classroom/labs. Students were kept engaged by being given jobs/tasks that allow them to take ownership of their learning, for example as the leader or clean up person within a lab group, or in helping the teacher with a whole class demonstration. Other verbal management examples include, "That may be the case, however that is not your role in this situation." "Everyone eyes on me. You are forgetting that we need to work quietly so everyone can concentrate....." " We missed you yesterday. Don't forget to get the assignment from the missed work folder."

Student achievement data from a variety of formative and summative assessments, as well as student work is utilized to improve instruction. Formative assessments like bell ringers, exit tickets, parking lot are some of the ways used to modify or improve lessons. Teachers use data from summative assessments as well as Common Assessments to inform instruction. Student work is examined mostly through rubrics. Lab reports and projects are tied to expectations that must be met as stated in the rubric. Teachers gather feedback from students, other teachers and parents. Instructors receive prompt feedback from supervisors' observations via TeachPoint to help reflect on instructional practices. Teachers also meet both formally and informally to exchange information, techniques, and instructional materials.

The Science Department has implemented the use of a common shared assessments, which are administered during each semester of the school year. The shared assessment is required in each course and is used to inform instruction in order to meet individual student's needs. Massachusetts Comprehensive Assessment System (MCAS) data is reviewed each year by administrators and science teachers to identify areas of weaknesses. Science teachers meet once per week to discuss MCAS strategies and create common assignments to help improve scores. Science instructors weave MCAS practice activities into lessons at least once a week for all 9th grade Biology classes. This was observed twice by the visiting team member in both Biology and Honors Biology classrooms.

Science teachers at B-P Tech use formative assessment to inform and adapt their instruction for the purpose of improving student learning. This is achieved through hands on laboratory exercises, projects, and problem-solving activities. Where appropriate, scoring rubrics are used to assess student progress on such activities, although some rubrics are not consistent throughout the department. Summative assessments accompany each

unit covered in science courses. Data from these assessments along with midyear and final exam scores are discussed to further evaluate the curriculum for possible changes. In addition, student scores on the Biology MCAS test (common rubric is used) help to determine what areas in our curriculum need improvement. Analysis of Biology MCAS scores have led to strategic planning sessions, held every other week, among those teachers involved to inform their instruction.

Teachers in the science department communicate student progress to families in a variety of ways. The most widely used system of communication is the Aspen grading system, which has a family portal available to parents/guardians and students. Teachers input grades in a timely fashion to be available to parents/guardians and students. Email and telephone are more immediate methods used to communicate with parents/guardians. In addition, teachers issue students progress reports, midterm warning letters, and deficiency reports to notify families of their child's progress. The use of Google Classroom also allows teachers to post assignments for students to complete and submit back online. The Google Classroom platform is outfitted with a grade-book for students to view after a teacher has corrected an online assignment.

The science teachers at B-P Tech communicate the unit-specific and daily learning goals to be assessed. This is done in most of the classrooms by posting objectives somewhere in the classroom, generally on the whiteboards or SmartBoards. The visiting team member observed that the format used to communicate these objectives was not consistent from teacher to teacher (Bloom's Taxonomy). Teachers are required to submit daily lesson plans to their supervisor monthly. The science teachers also display the class's daily (sometimes weekly, for example Physics) agenda somewhere visible in the classroom. Most teachers discuss the agenda and objectives of the lesson at the beginning of each class.

A systematic program review is conducted periodically to guarantee effective program design. The Science Department meets at least once a month with administration to reflect and adapt instructional practices. Each staff member analyzes the results of all exams to determine strengths and weaknesses in the curriculum. Shared annual assessments are analyzed as evidence to determine the efficacy of the program design. Biology MCAS meetings conducted every other week allow those teachers involved to plan and revise MCAS strategies to meet the needs of students. Biology MCAS sessions, held after school, allow students the opportunity to further practice the content.

Each year, the science department awards one senior the Outstanding Senior in Science Award. This award is presented to the student that achieved academic excellence throughout their four years at B-P Tech. The school also offers students the opportunity to participate in the Scientific Writing Journal Club, the National Honor Society, and Skills USA.

Science instructors keep up to date in their field using a number of professional development opportunities including workshops, conferences, and collegiate coursework outside of the school building. Instructors are personally responsible for maintaining their own professional development records for review every two years by the Academic Coordinator. B-P Tech instructors demonstrate professional leadership and responsibilities through instructor-led professional development workshops in order to share expertise in specific content or skill areas. Monthly departmental meetings, as well as weekly Biology MCAS meetings, allow instructors to reflect on methodologies in order to make adjustments to practice. Newly hired science teachers are assigned a mentor practitioner in the science department for the duration of the first year of employment. The role of the mentor is to guide, support, and aid the new teacher in their curriculum, pedagogical approach, and classroom management skills. Instructors also informally meet regularly during shared planning time to reflect on and share lessons and best practices with each other.

The B-P Tech science faculty feel they have sufficient resources to provide adequate instruction to the students. There are, however, three members of the science department who travel from class to class using carts. The "roaming" of science teachers makes the planning and implementation of activities, such as running labs and performing demonstrations, a real challenge. This means that some of the resource sometimes go unused. For the most part, the equipment and technology is consistent with current practice and in working order. There are, however, several SmartBoards in science classrooms that having dimming screens and poor sound quality. The IT department in school does its best to respond to technology issues. Sometimes these responses are completed in a timely manner and sometimes not. In addition, all science classrooms have access to laptop and/or Chromebook carts to utilize for instruction, however many are old and poorly working.

The climate and atmosphere of the science program at BP Tech is a welcoming and all-inclusive one. Students of all types are welcome in the program and teachers strive to inspire students to go beyond the standard course track by enrolling in Advanced/Honors or AP courses. Teachers spend time, both before and after school, providing additional instruction to students which includes a homework help program as well as an MCAS assistance program. Teachers pride themselves on promoting good behavior, serving as role models, and addressing any issues quickly and effectively in the classroom. These qualities were very evident to the visiting team member. The rapport between teachers and students as well as student to student is commendable.



# Science Commendations

---

## Commendation

The Science Department for creative and collaborative use of available classroom spaces, supplies and equipment, to ensure students have appropriate learning opportunities. (2.6)

## Commendation

The members of the Science Department for going above and beyond in commitment to provide assistance to students outside of class time, providing additional support to students. (3.2)(3.3)

## Commendation

The Science teachers for fostering a welcoming and all-inclusive environment in science classrooms, reflecting the schools core values and commitment to teaching and learning.(1.1)(1.3)

# Science Recommendations

---

## Recommendation

Create a plan to locate permanent classroom for the teachers who are “traveling” from room to room to teach, providing continuity for teaching and learning. (2.6)

## Recommendation

Implement a shift to using a common rubric for grading lab reports, grade 9 through 12, allowing for vertical alignment through all the grade levels. (2.5)

## Recommendation

Integrate the use of a common format to communicate the learning expectations/goals to students. (4.3)

# Social Studies

---

## Narrative Program Summary

The Social Studies department at Bristol-Plymouth Regional Technical School's (B-P Tech) is located at the south end of the building. There are six dedicated classrooms for the department. The classrooms are located in close proximity to each other. One teacher (floater) travels to various classrooms throughout the day. The classrooms have a computer, printer and an interactive projector for teacher use. There are two classrooms with laptop carts and one classroom with a Google Chrome cart. Classrooms appear to be clean and set up for ease of mobility. There is an exit sign and fire evacuation route located above the door. The classrooms are decorated by teachers to reflect the subject taught.

There are seven courses offered by the Social Studies department. U.S. History I in grade 9, U.S. History II in grade 10, Civics and Government and Humanities in grade 11, Sociology and Economics in grade 12. There is also an Advanced Placement U.S. History course in grade 10. Humanities is offered as a half year course. There is no block scheduling for history courses, which makes all history courses are 42 minutes in duration.

The curriculum was developed by committee by members of the department. The school is in process of aligning curriculum to the new Core Values.

There is a common format for the curriculum. The curriculum maps viewed by the visiting team included essential questions, benchmarks, Massachusetts Frameworks, Common Core, instructional strategies, methods of assessment, cross-curricular and real world connections and resources. The department is in the process of digitizing the curriculum. The digitized curriculum will include hyperlinks for District Determined Measures (DDMs), midterm exams and final exams. There is recommended template for lesson plans. Modifications and accommodations are built into lessons to assist all learners access the curriculum.

The curriculum emphasizes depth of understanding and application of knowledge at the appropriate development levels. Inquiry and problem solving, exploration and creativity, higher order thinking, collaboration and communication, cross-disciplinary learning and authentic learning opportunities in and out of school are used when delivering curriculum. This is evidenced by open ended discussions on election issues. Teachers demonstrate an informed use of technology in their classrooms. Teachers sign out a laptop cart for their classes. All classrooms have WiFi connections allowing for internet access. Teachers may also sign out time to use computers in the Library computer lab. Teachers use Google Classroom. The Social Studies department conducts cross-disciplinary activities with the English department. One example is to align teaching the Holocaust with reading Night. The visiting team observed teachers using technology in the classroom along with traditional lecture and class discussion.

There is clear alignment between written and taught curriculum. Teachers post agendas. The visiting team did not observe a standardized format for agendas. All agendas must have objectives as a minimum. Teachers are required to submit lesson plans monthly to administration. The lesson plans are reviewed by administration. Administration conducts walk-throughs to ensure written and taught curriculum are aligned.

There is effective curricular coordination and vertical articulation between and among all areas of the school. This is evidenced by monthly department meetings attended by the Academic Coordinator. There are numerous administrative walk-throughs. Regular reports are sent to the Student Services Department and members of the Special Education Department. These reports are used for IEP and 504 meetings.

Curriculum is reviewed monthly and annually and is accomplished in many different ways. Monthly department meetings are used to review curriculum. Common planning time scheduled into the school day provides an opportunity for collaboration and curriculum review. Lesson plans are turned in monthly to administration. The department's Lead Teacher performs an annual revision of curriculum with department members. This is part of a curriculum project. The Lead Teacher works on one course / grade level every year to review and revise

curriculum. The department is in the process of aligning the curriculum with the new Massachusetts Social Studies Frameworks. These Frameworks were approved in June 2018.

Teachers reflect upon their learning practices by examining common assessments such as pre-tests and post-tests. Student performance on formative assessments also drives reflection on learning practices. Teachers differentiate instruction. The visiting team observed students be given instruction by lecture, individual work, question and answer sessions and open ended class discussion. Lessons were student centered, where the students had the ability to ask questions during lecture. Students asked for clarification on assignments. Technology is integrated into lessons. The interactive projector was utilized to present images, online articles and videos. The Social Studies department tries to integrate with Career Technical Education (CTE) programs. This is evidenced by an assembly line project and discussing issues that apply to CTE like the Ford Motor Company.

Effective classroom management was demonstrated. Classroom management techniques observed included proximity to redirect students, asking questions of specific students to ensure attention, and walking around the classroom. Teachers make accommodations for students on IEPs and 504s. Inclusion classes have Special Education teacher or a paraprofessional. Feedback from administrative observations on Teach Point help to improve instructional practices. Data from formative and summative assessments such as DDMs drive change to instructional practices.

Students are evaluated using formative and summative assessments. The department uses common assessments that include pre-tests and post-tests, midyear exams and final exams. Teacher made quizzes, tests, classwork and homework are used to evaluate learning. The results of post-tests are used to drive changes in the curriculum the following year.

Assessment results are communicated to parents by Aspen, the online grading system. Report cards are sent home 4 times a year. Midterm warnings are sent out to students in danger of failing. Teachers have the option of issuing deficiency reports after midterm warnings are issued. The form is submitted to the Academic Coordinator. The deficiency report then goes to Guidance and parents. Students are given feedback on Google Classroom, Google Docs and Google Slides. Teachers also email or phone parents to provide updates on student progress.

The visiting team noticed that lesson objectives were clearly stated on lesson plans.

Teachers use a wide range of assessments. Formative and summative assessments are used in the classroom. Quizzes and tests, teacher created assignments, homework, classwork, research papers, writing assignments, and projects are employed. Online applications like Google Docs, Google Classroom, ClassDojo, and Remind 101 are used by teachers.

Rubrics are teacher generated. There is a department wide rubric for the grade 9 and grade 10 research paper. The AP U.S. History class uses rubrics provided by the College Board.

Teachers provide timely feedback to students. Google Classroom, Google Forms, Google Docs are used to provide timely feedback, and comments were placed on assignments and rubrics provide feedback to students.

There is evidence of periodic program review to improve program design. This is evidenced by review of curriculum at monthly department meetings, the annual curriculum project by the Lead Teacher, and submission of monthly lesson plans.

Teachers stay up-to-date in their field by taking courses and in-house professional development offerings. Teachers attend professional conferences. The Social Studies department is a member of the Gilder Lehrman Institute. Professional leadership is evidenced by teachers of the Social Studies department participating in before and after school help sessions. Teachers in the department are involved in extracurricular activities including athletics, Student Council and the Diversity Club.

The department has sufficient resources. This is evidenced by each teacher having set of textbook and textbook resources. There are two laptop carts and one Google Chrome cart in certain classrooms. Each classroom is equipped with a computer, printer, and an interactive projector for teacher use. The equipment works properly. There is not enough staff to cover the classes offered. Teachers are responsible for 200-300 students teaching

12 classes over 2 weeks. There is inconsistency in class sizes. The budget seems sufficient to implement curriculum.

The department appears collegial and collaborative. Teachers frequently share resources and assessments. Teachers in the department discuss curriculum and educational issues. Teachers review and discuss strategies to improve instruction and curriculum development.

# Social Studies Commendations

---

## Commendation

The Social Studies department for actively updating curriculum to meet state standards and frameworks. (2.7)

## Commendation

The members of the Social Studies department for working collaboratively to improve curriculum and student learning. (5.3)

# Social Studies Recommendations

---

## Recommendation

Integrate laptop carts / chrome books into instruction to enhance student learning. (3.2)

## Recommendation

Evaluate student:teacher ratios to improve the ability of teachers to individualize instruction. (2.6, 3.2)

## Recommendation

Create and implement a plan to increase the meeting time of history courses to help students prepare for projected History MCAS. (3.2)

# Graphic Arts (Communication, Design, Printing)

---

## Narrative Program Summary

Graphic Design program at Bristol-Plymouth Regional Technical School's (B-P Tech) is located in three rooms within the High School building. The shop is well lit. The room contains equipment that supports the program: press, bindery and all forms of printing (Screen Printing, Embroidery, Digital Printing, Vinyl Printing and Cutting, Offset Printing, Thermal printing) and a Copy Center is combined in the main shop area room 154. This area makes up the main body of the shop with 3956 sq.ft. A separate room contains 16 Macintosh workstations, a teacher workstation and a Xerox C60 copier/printer. There is a shared Theory classroom. A Hewlett Packard Roland large format printer sits on a counter. An additional Roland Large format printer is free standing; a dedicated workstation supports these printers. A computer workstation is setup with embroidery software and supports a Barudan embroidery machine. Room 154-1 is a room dedicated to screen printing; it contains two reclaiming stations, an exposure unit, a double sink and an eyewash station. Room 154-1 and its adjoining room make up another 599 Sq. Ft. Related room 156 is shared with other shops and consists of another 522 Sq Ft. There is a locker area, hand wash sink, and one bathroom. All the necessary signage for evacuations, bathrooms, health and safety such as Safety Data Sheets (MSDS) and fire extinguishers are clearly marked and available.

Student population over the past ten years has changed from nearly a 28% male to female mix to nearly to 51% male to female mix. At present there are 27 students enrolled in the program for all four grades.

It was observed that the students use a variety of equipment and techniques that are aligned with the Massachusetts Vocational Technical Education Frameworks for Graphic Communication (CIP Code 10031). The visiting team observed upper class students working on individual workstations and equipment to create and produce live work. Sophomore students are given project based assignments in order to learn Adobe Photoshop and Adobe Illustrator, computer design programs used in industry. The students' work is assessed and evaluated by using a weekly grade sheet system.

The team observed that the students are often taught individually in the shop. The instructor gives out "Job Tickets" - live jobs as assignments, the students work individually or in small groups to complete the work. There did not appear to be an alignment between the curricular frameworks or was feedback given based on what was on the job tickets.

The visiting team was provided with the Safety test; a multiple choice safety test administered in the 9th grade. Students use a daily assessment rubric detailing their production/work for each day. These are graded weekly. All students must obtain their OSHA-10 certification.

Some students compete in SkillsUSA competitions. Students that meet the criteria participate in National Technical Honor Society. The students participate in several industry organization contests: product label design, poster and embroidery design and printing. A sophomore recently won a PINE award for his embroidery on garment design.

The students in the Graphic Design program have co-op job opportunities available to them beginning in January of their junior year and senior year. Currently there are two juniors on co-op.

There are two teachers in the Graphic Design shop, both former graduates of B-P Tech. Both instructors are licensed by the Massachusetts Department of Elementary and Secondary Education. One teacher has a bachelor's degree. The teachers stay current in their field by taking part in trade professional development in addition to taking courses and workshops when available to earn PDPs. Both teachers demonstrate professional leadership by serving in different leadership capacities, such as coaching, mentoring and union leadership positions.



The visiting team observed that adequate work stations were in the shop. The area around the silk-screening equipment was cluttered and the equipment was placed very closely together. The folding equipment is aging. Otherwise, the shop equipment is current and appears in good working condition. The supplies are adequate to provide for well-functioning equipment.

Live production work is the basis of the shop, who provide printing serves for the school and the community. As of November 5, 2018, the Graphic Design production has logged 42 live jobs. Along with this production work students are provided with practice lessons to reinforce and strengthen skills that may not be provided by the live jobs.

The visiting team observed the students work together closely on live jobs. The instructor circulated around the room for one-on-one instruction to most all students. Students have a clear set of boundaries and expectations of behavior and work ethics. It was observed that all students remained on task.

Classroom instruction is given on trade procedures and terminology, as well as overview of the industry and entrepreneurship. The students' classwork is supported by the text *Graphic Communications: Digital Design and Print Essentials*, 6th Edition By: Z. A. Prust and Peggy B. Deal

Outside input is provided by the Graphic Design Program Advisory Board that is made up of five members. The programs advisory board consists of two business owners, a local newspaper employee, a parent and a student representative. The advisory committee keeps the instructors up to date with changes in the industry and makes recommendations to modify curriculum. Both program instructors participate in the semi-annual advisory meetings. A detailed agenda is followed. A follow up meeting is takes place in the spring.

# Graphic Arts (Communication, Design, Printing) Commendations

---

## Commendation

The operation of Graphic Arts as a production-based shop where all students are exposed to a real life work experience, which allows students to apply knowledge and skills to authentic tasks. (3.2)

# Graphic Arts (Communication, Design, Printing) Recommendations

---

## Recommendation

Create and implement a plan for following industry guidelines to eliminate clustered silk screen equipment and related storage to ensure compliance with safety regulations. (7.5)

## Recommendation

Create and implement a plan to address safety training for all students each school year and as necessary on all equipment to eliminate any safety issue. (3.6).

## Recommendation

Review and increase ways in which staff communicates student progress and competencies met to parents/guardians on a regular basis. (4.2)

## Recommendation

Create and implement a plan for curriculum revision which includes scheduled planning time. (2.7)

# Design and Visual Communication

---

## Narrative Program Summary

The visiting team observed that the Design & Visual Communication (DVC) program at Bristol-Plymouth Regional Technical School's (B-P Tech) is technologically driven and designed to meet the needs of its students and to prepare them for employment in the DVC industry. This program is aligned with the Commonwealth of Massachusetts Department of Education's DVC Frameworks. Students gain knowledge of typography, color theory, illustration, vector and raster imaging and apply these skills with current publishing applications to a series of graphic design related/advertising projects.

There are two full time DVC teachers, in an adjoining lab space totaling 1,781 square feet. The room is welcoming and inviting. Exit and safety signs are clearly marked. This environment encourages collaboration between grades and instructors. The program is equipped with state-of-the-art Macintosh computers.

The DVC program is a 1:1 computer to student ratio. Students grow skilled in the OSX Macintosh computing environment using state-of-the-art workstations. The assignments utilize the industry- standard cloud-based software applications such as: Adobe Photoshop, Adobe Illustrator, Adobe InDesign, Adobe Animate, Adobe Character Animate, Adobe Fireworks, Adobe Dreamweaver, GarageBand, Final Cut Pro, and Sculptri 3D sculpting. These desirable skills present the student with a wide variety of post-secondary career and college options.

The visiting team noted that students came from diverse backgrounds and multiple sending towns. Student population has grown since the program's inception and is near its capacity of 18 students per grade level. In FY18 a total of 68 students were enrolled across the four grades. Students are afforded the opportunity to explore a wide range of visual design careers which ensures opportunities for all students.

There are two (2) instructors in the program. Both are appropriately licensed by the Dept. of Elementary and Secondary Education. The teachers stay current in their field by taking part in trade professional development in addition to taking courses and workshops when available to earn PDPs. DVC instructors routinely collaborate and communicate throughout the academic year in order to plan, adjust, and modify the DVC curriculum in order to match industry standards and maximize student needs. This collaboration facilitates a tiered, scaffolded educational model which students benefit from. Both teachers demonstrate professional leadership by rotating the lead teacher role. One instructor is participating in MAVA Leadership Academy I. Both teachers participate in the Summer Exploratory program. One teacher is the lead for grade 9 and grade 10. One is the lead instructor for grade 11 and grade 12. They use a curriculum that is based on the Massachusetts Vocation Technical Education Frameworks for DVC (CIP Code 500401). Instructors utilize a variety of teaching methods for all grades including lecture, discussion, role play, workbook activities, computer activities, visual aids, videos, demonstrations and return demonstrations. Critique is an integral part of formative assessment. Teaching methods vary to accommodate multiple styles of learners (i.e. visual, auditory, tactile, etc.) and individual educational plans.

The teacher's classroom instruction is evaluated four to eight times per year by administration observations. As part of the Massachusetts Department of Education evaluation system, teachers set goals for personal performance that align with the school district and state curriculum standards. Instruction is given in a variety of ways, full class lectures, small groups, demonstration & modeling, and individual teaching techniques. Students are often taught individually, both in the shop and the theory classroom. Teachers provide different types of instruction for the differing kinds of learners.

Students are graded on theory application and creative performance. Students are provided with technical knowledge and fundamental application knowledge. Students combine this knowledge with critical thinking theory in order to produce industry based projects. Students are continually assessed on their written, mathematical, oral, computer and performance skills throughout various activities and assignments with formative as well as summative assessment strategies.

Peer/group/self-analysis, review, and reflection is encouraged, conducted and monitored. Students also receive daily instructor feedback, written daily student performance evaluations, and feedback through project-specific rubrics. Class content and expectations are accessible to students at every stage of an assignment's duration, posted online for outside of school access. After completion of junior year, students begin to compile a creative portfolio that showcases their imaginative talents as well as technical skills. Seniors continue to build digital portfolio to create a marketable formatted portfolio which is compatible with most two to four year college enrollment programs, or job placement in an entry level employment position. In addition all student competencies are tracked using Skills Plus, and all students must pass their OSHA-10 certification.

DVC students participate in a wide-range of co-curricular activities including SkillsUSA, Drama, Diversity Club, National Honor Society, National Technical Honor Society, Student Council, Glee Club, and Newspaper. Students in DVC frequently place at the state and national level in Business Professionals of America, in design categories and business readiness competitions.

The students in the Design and Visual Communication program participate in the cooperative education program. In FY18 two students secured cooperative education employment positions.

The annual follow-up survey shows steady Chapter 74 positive placement with annual variations between post-secondary education and technically related employment, with a greater percentage choosing post-secondary education.

The DVC program benefits from the implementation of a school-wide Technology Plan which encourages a 3½ year standard for the replacement of computer workstations.

Likewise, each classroom is equipped with a multi-function, folding, binding, laser printers/scanner which allows students first-hand industry experience.

There is one 3D digital printer shared by both classrooms allowing for 3D design applications. Through the advisory program's recommendations DVC was able to obtain two new high definition ClearTouch displays, the 3D printer, additional traditional art supplies, and two new printer/scanners.

Students in this shop work on real-world and project based assignments and students are trained to apply their aesthetic eye to the consumer digital message; developing conceptual and technical skills with a foundation in design principles.

Theory transforms into practice through professional examples, taught techniques, and hands-on project experience. This program looks at the visual discussion around us: the medium, the audience, and the creative approach that elicits impactful, targeted messaging. Students become well-versed in the art of presentation.

Outside input is provided by the DVC Program Advisory Board that is made up of five members. The programs advisory board consists of two industry professionals, a post-secondary, parent and a student representative. The advisory committee keeps the instructors up to date with changes in the industry and makes recommendations to modify curriculum. Both program instructors participate in the semi-annual advisory meetings.

# **Design and Visual Communication Commendations**

## **Commendation**

The active involvement of the DVC team in Business Professionals of America which increase students' engagement in learning. (5.1, 5.8)

# Design and Visual Communication Recommendations

---

## Recommendation

Create and implement a plan for curriculum revision which includes scheduled planning time. (2.7)

# **Business Management / Office Technology**

---

## **Narrative Program Summary**

### **Business and Applied Technologies Program**

The Business and Applied Technologies (BAT) Program is comprised of two classrooms with an attached school store. The school store is located in the first floor atrium areas of Bristol-Plymouth Regional Technical School (BP-Tech). The adjacent BAT classrooms are located behind the school store with the Business Technology classroom providing accessibility to the school store. The two classrooms are comprised of 20 PCs and 20 MacBook ProAir computers along with two Interactive Whiteboards. The school store remains current utilizing a Point of Sale system for store sales. Both classrooms and the school store are neatly organized and pose no safety or health issues. In the event of an emergency, all areas provide for a clear evacuation route. The Program also has 72 student lockers but there are no bathroom facilities within the area.

Currently, the BAT Program has 43 students enrolled in the Program, which is comprised of 17 sophomores, 8 juniors, and 8 seniors. The name of the Program was changed within the past couple of years to include a new career path in Marketing and to attract more students to the Program. BAT has seen a decline in enrollment over the course of the last ten years. Part of the reason for this decline is the fact that they are in competition with sending districts that also have established business programs. In many instances, there is a duplication of some courses; in addition, one of the sending districts also has eighth graders housed at the high school allowing them to enroll in business courses/DECA. This early enrollment hinders the ability of Bristol-Plymouth to attract more students to the school because they are already entrenched in their classes and prefer to stay with their friends. The Program is equally comprised of both males and females

The BAT Program includes a number of business courses including: Microsoft Office, Accounting, Customer Service, Marketing, Retail Store Management, Personal Finance, Entrepreneurship, Communication and Business Concepts. The Department is comprised of two licensed instructors who teach in one of two pathways: Business Technology and Marketing. The BAT competency-based curriculum and performance standards are aligned with the Massachusetts CVTE Business Technology and Marketing Frameworks for grades 9-12. However, there is no alignment to any national standards such as National Business Education Standards, Council on Economics Standards, National JumpStart Standards, etc. The Program does utilize components from some national curricula such as NEFE, NextGen, etc. The BAT Program Advisory Committee (PAC) in collaboration with the BAT instructors review the curriculum on a yearly basis to ensure that it remains up-to-date and current with business and industry standards.

The visiting team observed a student-centered lesson on accounting concepts. Students were engaged in the lesson; and the teacher delivered instruction with a combination of teacher demonstration and the use of the interactive whiteboard. Students stated that they have the opportunity to utilize Excel software to complete various accounting concepts. Assignments were listed on the whiteboard and the instructor provided the lesson objectives at the beginning of class. Lesson objectives are also contained within the instructor's lesson plans. No formal alignment of Bloom's Taxonomy is integrated into the curriculum; however, the Massachusetts CVTE Business Technology and Marketing Frameworks appear to address Bloom's Taxonomy. The visiting team could not determine if the lesson provided for differentiated instruction; however, staff indicated that they do make accommodations for students on IEPs and 504 plans as needed.

Students in the BAT Program are assessed utilizing a variety of strategies, which include written, hands-on, on-line, and project-based assessments. Instructors incorporate pre- and post-assessments into their instruction. The visiting team could not determine if any formative assessments were used in guiding instruction but summative assessments were utilized by the instructors. The visiting team could not determine the extent to which assessment data is dis-aggregated and used to inform instruction. Rubrics are incorporated throughout the curriculum and utilized as part of the assessment process. The results of these assessments are communicated to students and parents using the Aspen grade book system. The curriculum allows students to demonstrate



competency through attaining certification as a Microsoft Office User Specialist or passing the WISE financial literacy certification assessment, which also ensures that students attain the skills being taught in the BAT Program.

Students enrolled in the BAT Program have the opportunity to participate in a variety of co-curricular activities including SkillsUSA, Distributive Education Clubs of America (DECA), Business Professionals of America, and the National Technical Honor Society. Currently, over 50% of the students participate in one or more of these clubs. The success of these clubs can be seen with an average of two students going to state SkillsUSA finals and a few junior students being inducted into the Technical Honor Society.

Students in the BAT Program have the opportunity to participate in work-based learning with three seniors currently on WBL. Due to economic and transportation factors, many students are unable to participate in WBL, which has been a barrier to getting students on work-based learning opportunities. Currently, the Business and Applied Technologies BAT Program has some articulation agreements with local community colleges but are working collaboratively with guidance to map out articulation agreements with other post-secondary institutions.

The guidance department at Bristol-Plymouth Regional Technical School tracks where students go after graduation. This is done through a system called S2. Over the course of the past several years, 85% of the students in the BAT Program have gone on to post-secondary education and 15% are working in industry-related careers. The BAT Program currently has a graduation success rate from the program of 100%.

The two instructors in the program remain current in their field by participating in professional development and taking classes in both their content area and content-specific instructional practices. Both teachers serve as advisers for co-curricular activities.

The visiting team believes that the Business and Applied Technologies Program does have sufficient resources for instruction and that the equipment and technology used is consistent with current practice. However, several of the PC computers do not operate properly thus causing issues for student usage and downtime for completion of assignments. The BAT Program currently does not have a budget with money allocated to the Program. Any funds required for the Program are done on a case by case basis and approved by the administration. The school store's sales do not directly go into a fund for the BAT Program but rather the funds get deposited into the school's general account.

At the present time, the BAT Program does not provide any production work; however, they do operate a profitable school store, which includes merchandise such as school supplies, clothing, etc.

The overall atmosphere of the BAT Program is one that is welcoming and inviting to students, staff, and outside visitors. Reminders of respect, diversity and good choices are posted throughout the classrooms. Lessons on ethical standards with regard to diversity, acceptance, integrity, and teamwork are woven into the curriculum. The Program is one that is welcoming and supports high expectations with regard to student behavior. The classroom environment provides students with a sense of emotional and social support.

The BAT program has a Program Advisory Committee (PAC) that meets twice a year to provide feedback to ensure the curriculum is aligned with industry standards. There is a diverse representation on the Committee which includes a parent, student, members of the business community, men and women, minorities, and a representative from higher education. After reviewing the minutes from a PAC meeting and speaking with the instructors, the visiting committee believes the PAC provides a positive impact upon program improvement.

# **Business Management / Office Technology Commendations**

---

## **Commendation**

The Business and Applied Technologies (BAT) teachers for developing a brick-and-mortar, permanent, student-run school store which allows students to apply knowledge and skills to authentic tasks. (3.2)

## **Commendation**

The instructors in the Business and Applied Technologies Program (BAT) provide a warm and nurturing culture which results in improved student learning. (4.2)

# **Business Management / Office Technology Recommendations**

---

## **Recommendation**

Revise and implement the Business and Applied Technologies Program curriculum to incorporate units of study with essential questions, concepts, content and skills, Bloom's Revised Taxonomy, as well as including national standards National Business Education Standards (NBEA), Council on Economic Education Standards (CEE), aligned to units of study in the curriculum. (2.2) (2.9)

## **Recommendation**

Implement instructional practices into the Business and Applied Technologies Program curriculum so that it incorporates differentiated instruction within units of study and meet the needs of each student through formative assessment and strategic differentiating. (3.2) (3.3)

## **Recommendation**

Create and implement a technical area model in which Administration and the Business and Applied Technologies Program instructors work collaboratively to ensure the constant upgrading of equipment, and the development of a budget which allocates school store funds to the Business and Applied Technologies Program for updating of equipment, materials, and other resources. (7.2) (7.4)

# Cosmetology

---

## Narrative Program Summary

The Cosmetology Program is located in the main building to the left of the atrium area. Upon entering the Program from an outside door, clients are welcomed to a waiting area for client services that contains display cases with professional product brands such as Paul Mitchell and Redkin. For safety purposes for both students and clients, appointments are capped at 10 per day. The reception desk is part of the clinic area which contains 20 workstations including a handicapped station. This area is equipped with ten (10) sinks, nine dryers, two wig dryers, fourteen (14) manicure tables, and a reception desk. There are two restrooms, one locker room, a dispensary, four storage areas, and facial area. The dispensary includes a storage area, sink, washing machine, and two dryers. The facial area is equipped with a chair, sink, steamer, professional products, and a multi-purpose aesthetic machine. There is a separate classroom for underclassmen containing work-space for each student, designated teacher workstation, and a SmartBoard. Safety equipment includes three fire extinguishers, a fire blanket, and two eyewash stations.

The current enrollment of the Cosmetology Program is 55 students, comprised of 22 sophomores, 13 juniors, and 20 seniors. Out of the 55 students, 9 percent are males and 91 percent are females. Traditionally, Cosmetology students are female; however, the non-traditional enrollment has increased over the past few years.

The Cosmetology competency-based curriculum is currently being revised to include the Massachusetts Career Vocational Technical Education (CVTE) Cosmetology Frameworks and is aligned with the MA State Board of Cosmetology and Barbering rules and regulations. The unit plans and grading rubrics are reviewed annually with the Program Advisory Committee (PAC). The courses in the Program include: Hair-styling/Design, Coloring/Perming Techniques, Cyber Imaging, Anatomy, Chemistry, Skin and Nail Care, Salon Management Applied Cosmetology, and OSHA Safety Credential.

The Cosmetology Program offers a variety of instructional methods such as one-on-one instruction, hands-on activities, lectures, and demonstrations. The visiting committee observed a one-on-one instruction whereby the students were being given feedback on their practical skills. When observing the theory class, lesson objectives were clearly stated at the start of the lesson and related vocabulary terms were displayed on the SmartBoard. While observing the lesson, it was apparent that the instructor was making accommodations for students on IEP/504 plans.

Students in the Cosmetology Program are regularly assessed using an array of methods including practical assignments, homework, summative assessments, and project-based assessments. In addition, students accrue hours toward their Cosmetology license. When they have accrued 1000 hours, the students are eligible to sit for their state board written and practical exams.

Cosmetology students actively compete in SkillsUSA and have received numerous medals at the State and District level. B-P Tech Cosmetology students have a 100 percent pass rate on the MA State Board of Cosmetology practical exam and a 97 percent pass rate on the written portion.

When senior students of the Cosmetology program reach the 1000 hour mark, they have the opportunity to participate in the Co-Op program. Currently, there are no students on Co-Op. Since the Cosmetology Program has several partnerships with members of their PAC, many of the students have been placed in these members' salons. Due to the nature of the required licensure for the Program, there are no articulation agreements with higher education at this time.

The most recent data from the Class of 2017 shows that two students, .71% went to a two yr. public college, three students, 1.06% went to a four yr. private college, four students, 1.42% went to a public four-yr. college, 1 student, .35% went on to other post-secondary education, and 11, 3.9% went into the workforce.

The Cosmetology Program is comprised of three certified instructors. All instructors participate in professional development and taking classes in both their content area and content-specific instructional practices. Instructors also own or actively work in salons and one instructor is the SkillsUSA advisor. Students provide instructor-supervised services for clients by appointment with a cap of 10 clients per day to ensure the safety of both the students and the clients. Clients are charged for the cost of supplies/materials only. The clinic operates Tuesday thru Friday from 9 a.m. to 11 a.m. Students not assigned to clients are preparing for the State Board exam on a manikin.

The visiting committee observed sufficient resources in order to meet industry standards. The visiting committee observed a friendly, welcoming classroom with rules that support high expectations with regard to student behavior thus creating a classroom environment where all students feel safe, and respected by teachers and peers. Students of all types are made to feel welcome in the program. The Cosmetology Program has an active Program Advisory Committee (PAC), which meets twice a year providing feedback to ensure the curriculum is aligned with industry standards. Many of the members offer classes on advanced skills and interpersonal communication skills to students in the Program.

# Cosmetology Commendations

---

## Commendation

The Cosmetology Program for achieving a student passing rate of 100% on the State Board of Cosmetology and Barbering practical exam. (2.10)

# Cosmetology Recommendations

---

## Recommendation

Invite successful alumni as guest speakers to encourage students in the program to become more engaged in their learning process and participation in cooperative opportunities. (3.4)

# Carpentry

---

## Narrative Program Summary

The Carpentry program is located in room 650 of Bristol-Plymouth Regional Technical School's (B-P Tech). The approximately 6477 sq.ft. area includes the main shop with stationary equipment, the related classroom, the CNC room, paint room, tool crib and locker area. There are two mezzanines located in the shop for storage purposes; one with a stair case and one that must be reached by ladder. There is also a lumber storage rack. One overhead door leads to the outside of the building as well as an exit door. All the necessary signage for evacuations, bathrooms, health and safety such as Safety Data Sheets (SDS) are clearly marked and available.

Students come from diverse backgrounds and multiple sending towns. Student population over the past ten years has remained steady nearing the capacity of 20 students per grade level. In FY18, a total of 75 students were enrolled across the four grades. There has been a gradual but steady increase in the non-traditional enrollment. The increase in students with disabilities is consistent with the trend at B-P Tech.

Instructors use a curriculum that is based on the Massachusetts Vocation Technical Education Frameworks for Carpentry (CIP Code 460201). There are three instructors in the program. One instructor is the lead for outside constructions jobs with grade 11 & 12. One is the lead instructor for Grade 9 while co-teaching/assisting the other grades. The other is the lead teacher for Grade 10 while co-teaching/assisting the other grades. The general outline of the curriculum beginning with Grade 9 final placement is skill development with hand and power tools, proper use of machines and safety, including completion of OSHA-10 certification. Safety continues to be a focus each year. Annual review training takes place at the start of each year as well as safety instruction on any new tools and equipment. Grade 10 focus is cabinet making for the first three instructional quarters. During the cabinet making phase, each student will develop a project from a thumb nail sketch, to shop drawing, to completed project. An introduction to framing in the fourth instructional quarter is accomplished with the creation of a scaled model home. Grade 11 and 12 focus on all aspects of residential construction from foundation work through finish carpentry. Each day, students in each grade will receive a related theory lesson as well as hands-on applied practice in the shop. The scope and sequence allows for the students to build upon previously learned tasks and scaffold up to more complex tasks. The curriculum is competency-based and focuses on skill development through hands-on projects that allow students to master skills at their own pace. This model engages students and empowers them to take ownership of their own learning.

The teachers' classroom instruction is evaluated four to eight times per year by administrator observations. As part of the Massachusetts Department of Elementary and Secondary Education (DESE) evaluation system, teachers set goals for personal performance that align with the school district and state curriculum standards. Instruction is given in a variety of ways, full class lectures, small groups, demonstration & modeling, and individual teaching techniques. Students are often taught individually, both in the shop and the theory classroom. Teachers provide various types of instruction to students requiring differentiated instruction methods to understand concepts and processes. The visiting team observed all students in Grade 10 and 12 in the shop environment on task and wearing appropriate safety equipment. The visiting team also observed team-teaching and collaboration between the instructors in the program working with all students. Instructors are notified by the Special Education Department of the students who are on IEP's or have 504 plans. Instructors provide accommodations and modifications as needed to those students.

Student progress is regularly assessed in a variety of ways. In the related classroom students complete classwork, homework, quizzes, tests, and journal writing. In the shop environment students are graded daily with a multi-element rubric that includes preparation, conduct, and performance. In addition all student competencies are tracked using SkillsPlus, and all students must pass their OSHA-10 certification.

All of the carpentry students are eligible to participate in SkillsUSA. The nontraditional students participate in the nontraditional club.



The students in the Carpentry program consistently participate in the cooperative education program. In FY18 six students secured cooperative education employment positions.

The annual follow-up survey shows steady Chapter 74 positive placement with annual variations between post-secondary education and technically related employment.

There are three instructors in the Carpentry program. All are licensed by the DESE. The instructors stay current in their field by taking part in trade professional development opportunities in addition to taking courses and workshops when available to earn PDPs. The visiting team member observed the instructors collaborating and team teaching both grade levels in the shop. Two instructors demonstrate professional collaboration with the district by facilitating summer renovation projects. The other instructor participates in the Summer Exploratory Program that is a recruitment endeavor for the district's rising 6th – 8th graders.

The table saws in the technical area have SawStop technology to prevent serious injury to students. Other state-of-the-art equipment include a 4'x8' CNC router, a duplicating lathe, edge bander, line boring machine, a cut-off saw, a panel saw and an abrasive planer. All other equipment is industry standard. The off-campus authentic learning opportunity table saw does not have the safer SawStop technology on it. The Carpentry Program currently does not have a laptop cart that can be utilized in the shop for assignments and training purposes. Teachers and students have the necessary quantity and quality of hand and power tools, equipment and supplies to engage in meaningful and productive educational learning experiences.

The Carpentry program takes in a variety of production work. The junior and senior year curriculum is primarily community project driven. The past three years the students have worked to build the new Early Childhood Center on campus. In FY19 the students will begin work on a new storage facility for the Middleborough Police Department. During a rainy day, the visiting team observed students whom would normally be off campus working on the storage facility, preparing and painting the boards to be used on it. The Students complete projects in-house as requested by the district, faculty/staff and members of the community, provided the project aligns with curriculum and skill building practice needs of the students. The Carpentry department instructors assess all jobs before committing to completing the work.

The instructors and the students work collaboratively and professionally. There are seldom any student disciplinary issues in the shop or classroom areas. Students have clear, set boundaries and expectations for behavior and performance. Students in the program were observed by the visiting team on task and highly engaged in the projects they were completing. The students do a good job meeting the expectations of the program.

Outside input is provided via the Carpentry Advisory Board, that is made up of six members. Four are industry professionals, along with a student and a parent member. All three program instructors participate in the semi-annual advisory meetings. An Advisory Board dinner and meeting is held in the fall where discussion on program needs and standards are laid out with a plan of any changes or recommendations put in writing. A follow up meeting takes place in the spring to confirm and discuss what changes have been made or should be implemented.

# Carpentry Commendations

---

## Commendation

The Carpentry instructors for frequently utilizing community live-work experiences to develop student skills and authentic learning opportunities both inside and outside of the school to emphasize depth of understanding and application of knowledge. (2.3)

## Commendation

The Carpentry instructors for collaborative efforts in developing curriculum that is implemented and reviewed to ensure that all students practice and achieve each of the program's learning expectations. (2.1)

# Carpentry Recommendations

---

## Recommendation

Develop a plan to integrate a portable table saw with SawStop technology for offsite jobs to ensure students working off campus have the same safety precautions on their mobile cutting equipment similar to the training received in the shop setting. (3.6)

## Recommendation

Create and implement a plan to introduce a laptop cart (or viable substitution) for CNC and AutoCAD training that would allow grade level students to receive direct individual instruction. (2.6)

## Recommendation

Create and implement a plan to address the safety issues to comply with local laws and ensure compliance with local fire, health and safety regulations in regards to ladder access on the mezzanine. (7.5)

# Electricity

---

## Narrative Program Summary

The visiting team observed that the Electricity program is located in room 652 of Bristol-Plymouth Regional Technical School (B-P Tech). The approximately 4990 ft sq. area includes the main shop with 24 stations in the “mock house” area, 24 booths and 24 student workbench locations. It also includes the related classroom, tool crib and locker area. There is also a mezzanine area that is primarily used for storage of materials and tools. All the necessary signage for evacuations, bathrooms, health and safety such as Material Safety Data Sheets are clearly marked and available.

The district's students come from a diverse backgrounds. Student population in the Electrical program over the past ten years has remained steady, nearing the capacity of 24 students per grade level. In FY18 a total of 93 students were enrolled across the four grades. The Electrical program is one of the most popular shops with a high number of selected first shop choice for a number of years. There has also been a recent jump in the non-traditional enrollment from just one student in each class of 2018 & 2019 to six students in each class of 2020 & 2021. There has been an increase in students with disabilities that is consistent with the school trend.

Instructors use a curriculum that is based on the Massachusetts Vocation Technical Education Frameworks for Electricity. There are three instructors in the program. There is a lead teacher for grade 9 that also is lead for outside community projects jobs with grade 12. One is the lead instructor for grade 10 and the lead for outside community project jobs with grade 11. The third is the lead teacher for grade 11 while co-teaching/assisting the other grades.

The curriculum for the Electrical course covers information beginning with basic hand tools including safety procedures and proceeding to the wiring of residential and commercial applications. The Electrical program utilizes co-curricular activities such as SkillsUSA, cooperative work experience and field trips to area businesses that mirror the curriculum and provide the students with a sense of career awareness. The program also incorporates into its lessons supplementary materials such as trade journals, videos, lectures from different manufacturers, along with internet sources to provide up-to-date knowledge to the students.

Every student in the electrical program receives an OSHA-10 certification. Electrical is a licensed trade and upon successful completion of the program, students earn 1,400 apprenticeship hours and 300 classroom instruction hours toward their Journeyman electrician's license. The Electrical department provides a basic knowledge of DC theory through AC theory. Students are given hands on projects preparing them for real life experiences meeting industry standards. This is followed up with real life outside electrical construction projects, such as the Middleborough Library and the Child Care building. All students are trained in the importance of work ethics. The general topical outline for the curriculum is as follows. Grade 9 topics are safety, including OSHA-10 certification, low voltage practice, simple lighting, power and control circuit basics, reading and drawing electrical diagrams and generating stock lists for their work. Grade 10 topics are expanded safety, hand and power tools, electrical code requirements, calculating load and demands, residential wiring, and residential services. Grade 11 topics are safety, single and three phase motors and controllers, motor theory and installation and fabrication of complete systems including conduit interfaced with various controllers and motors. Senior year, many students participate in cooperative education opportunities and students will also work on projects in the community. Topics for students while in shop include safety, raceway wiring methods, electrical motors and transformers. Advanced work in electrical design and layout including blueprints, schematics and wiring diagrams. Each day, each grade receives a related-theory lesson as well as hands-on applied practice in the shop. The curriculum is competency-based: focused on skill development through hands-on projects that allow students to master skills at their own pace. This model engages students and empowers them to take ownership of their own learning.

The teacher's classroom instruction is evaluated four to eight per year by administrative observations. As part of the Massachusetts Department of Elementary and Secondary Education's (DESE) evaluation system, teachers set goals for personal performance that align with the school district and state curriculum standards. Instruction is

given in a variety of ways, full class lectures, small groups, demonstration & modeling, and individual teaching techniques. Students are often taught individually, both in the shop and the theory classroom. Teachers provide different types of instruction for the differing kinds of learners. Teachers are notified by the Special Education Department of the students who are on IEP's or have 504 plans.

Student progress is regularly assessed in a variety of ways. In the related classroom students complete classwork, homework, quizzes, tests and journal writing. In the shop environment students are graded daily with a multi-element rubric that conduct, productivity and workmanship. In addition all student competencies are tracked using SkillsPlus, and all students must pass their OSHA-10 certification. Upon successful completion of the program, students earn 1,400 apprenticeship hours and 300 classroom instruction hours toward their Journeyman's electrician license requirements.

The non-traditional students participate in a non-traditional club.

The students in the Electrical program consistently have high participation rates in the cooperative education program. In FY18 17 students secured cooperative education employment positions.

The annual follow-up survey shows steady Chapter 74 positive placement with annual variations between post-secondary education and technically related employment and overall high rates of employment in the trade. The graduating class of 2018 had 56% entering the work force, 13% Apprenticeships, 13% two year college, 13% four year college and 4.35% other post-secondary program.

There are three teachers in the Electrical program. One is licensed by the DESE, and the other two are working on licensure. The teachers stay current in their field by taking part in trade professional development in addition to taking courses and workshops when available to earn PDPs. Two teachers demonstrate professional collaboration with the district by facilitating summer renovation projects. The other by participating in the Summer Exploratory program, which is a recruitment operation for the community's rising 6th – 8th graders.

Teachers and students have the necessary tools, equipment and supplies to engage in meaningful and productive educational learning experiences.

The Electrical Department takes in a variety of production work. The junior and senior year curriculum includes a variety of live work in the community. Recently the students have worked on the new Early Childhood Center on campus and the Middleborough Library. In FY19 the students will begin to work on lights and power for a Dighton Little League field. Student's also complete projects in-house as requested by the district, faculty/staff and members of the community provided the project aligns with curriculum and skill building practice needs of the students.

The instructors and the students work collaboratively and professionally. Students have clear set boundaries and expectations for behavior and performance. They do a good job meeting the expectations.

Outside input is provided by the Electrical Advisory Board that is made up of eight members. The programs advisory board is very active and diverse coming from all areas of the electrical trade, including members of the electrical union and non-union and wholesale supplier, parent, and student representatives. In addition, the advisory committee keeps the electrical instructors up to date with changes in the electrical industry and makes recommendations to modify curriculum. All three program instructors participate in the semi-annual advisory meetings. An Advisory Board dinner and meeting is held in the fall where discussion on program needs and standards are laid out with a plan of any changes or recommendations put in writing. A follow up meeting takes place in the spring to confirm and discuss what changes have been or should be implemented.

# Electricity Commendations

---

## Commendation

The Electrical instructors for utilizing community live work experiences to develop student skills and authentic learning opportunities both inside and outside of the school. (2.3)

# Electricity Recommendations

---

## Recommendation

Create and implement a plan to address the safety issues to comply with local laws and are in compliance with local fire, health and safety regulations in regards to tool and/or material(s) falling from the mezzanine. (7.5)

# Heating, Ventilation, Air Conditioning and Refrigeration

---

## Narrative Program Summary

The Heating, Ventilation and Air Conditioning (HVAC) shop is approximately 3406 square feet with a classroom that is 432 square feet. The classroom, located within the shop and near the shop entrance has a capacity of 22 students. The shop has 15 metal work benches to accommodate all the students to work on various HVAC projects. There are also 21 refrigeration simulator work benches, 10 boilers and one walk in cooler for the students to train on. There are three fire extinguishers located around the shop for emergency purposes. There is one eyewash station, locker area, hand wash sink, and one bathroom. The HVAC shop has 30 chrome books available for student use at all times. Evacuation / fire exit routes are clearly identified for efficient exit of the building.

The visiting team observed that the shop was clean, material was stored and organized. The shop has an upper area used for storage of supplies and equipment. The shop has one bathroom and lockers for student use. There are no student computers in the theory room, however the HVAC department has access to Chromebooks. The overall appearance of the shop is that it is well maintained and organized. The program does an exceptional job of maximizing the limited space. The fuel oil storage tank is currently located inside the walk-in cooler.

HVAC students come from a diverse backgrounds and multiple sending towns. Student population over the past ten years has remained steady near the maximum of 22 students per grade. HVAC has had a steady nontraditional student enrollment on average around 18% per year. Selections for the HVAC shop has been significantly higher in the past ten years averaging about thirty-five top pick choices per year after the exploratory process. In FY18 a total of 82 students were enrolled across the four grades. The increase in students with disabilities is consistent with the trend for the school at large.

The visiting team observed there are female students in the HVAC shop. The enrollment in the program has been steady. The HVAC is one of the most desirable shop with freshman exploratory. The students interviewed are excited about the HVAC program. The students like the different types of work involved in this trade.

Instructors use a curriculum that is based on the Massachusetts Vocation Technical Education Frameworks for HeatingVentilationAir Conditioning & Refrigeration (CIP Code 470201). There are 2 instructors in the program with a full-time aide with industry experience. One teacher is the lead for grade 9 and grade 12. One is the lead instructor for grade 10 and grade 11.

The students are involved in many activities inside and outside the shop. Inside the shop students practice electrical wiring in workstations starting with basic moving towards advanced wiring projects. Students learn hands on how to handle refrigerants including recovery and recycling of refrigerant, charging, evacuating, and calculating system performance using procedures and formulas taught in the classroom.

Each day each grade will receive a related-theory lesson as well as hands-on applied practice in the shop. The curriculum is competency-based: focused on skill development through hands-on projects that allow students to master skills at their own pace. This model engages students and empowers them to take ownership of their own learning.

The visiting team interview the instructor and part- time instructor as to the pacing of the curriculum. One teacher instructs grades 9 and 12. The other instructs grades 10 and 11. There is also part-time instructor, with HVAC experience. The 9th and 12th grades instructor was not available during the NEASC visit. The programs follow the Bristol -Plymouth HVAC Curriculum which is developed within the framework of the State of Massachusetts Vocational Technical Education Construction Cluster. Every student in the HVAC program receives an OSHA-10 certification. The HVAC shop awards the students, upon successful completion of the program, a total of 1750



hours of credit towards their state journeyman refrigeration/ sheet metal license. Students are provided instruction on theoretical applications and are coached on practical applications in order to ensure that they fully understand the material presented. They are given numerous opportunities to practice application of theory. The program goals conform to the school's core values and goals by providing a number of school-based projects which effectively utilize technology in teaching and learning. The students also obtain their EPA 608 refrigerant certification.

The visiting team observed that students are assigned many instructors generated work sheets, directly linked to the curriculum to assist the students in their comprehension of the developed curriculum. The curriculum is aligned with the State standards, and the values of the Bristol Plymouth Tech. The curriculum is reviewed every two years and has input from the advisory committee twice per year.

The teacher's classroom instruction is evaluated 4-8 times per year by administration observations. As part of the Massachusetts Department of Education evaluation system, teachers set goals for personal performance that align with the school district and state curriculum standards. Instruction is given in a variety of ways, full class lectures, small groups, demonstration & modeling, and individual teaching techniques. Students are often taught individually, both in the shop and the theory classroom. Teachers provide different types of instruction for the differing kinds of learners. Teachers are notified by the Special Education Department of the students who are on IEP's or have 504 plans. Teachers provide accommodations and modifications as needed to those students.

The visiting team observed HVAC students working on a vocabulary work sheet using the Essentials of Heating and Cooling Textbook. The class was engaged with the assignment. The instructor monitored the class by occasionally asking questions pertaining to the content. The program accommodates the students with special needs with minimal help from the special education department. Reading and math skills are an issue with some students. The theory room was neat and well organized. Daily objectives written clearly on the board. Instructors were actively engaged with the students in the shop.

The visiting team visited the shop on six different occasions over three days. The students were all following safety procedures and actively engaged in learning.

Student progress is regularly assessed in a variety of ways. In the related classroom student's complete classwork, homework, quizzes and tests.

In the shop environment, students are graded daily with a multi-element rubric that includes initiative, preparation, safety, attitude and project completion. In addition, all student competencies are tracked using Skills Plus, and all students must pass their OSHA-10 certification.

The visiting team observed that all of the work or job sheets generated by the instructor were clear as to the expectations of the instructor. All students are required to obtain their OSHA 10 certification before working in the shop. There are 4 marking periods in the school. The passing grade for the program is 65. If a student fails the trade program for the year, they may be denied credit for the year. The students that graduate will receive a maximum of 1750 hours towards their HVAC/ Sheet metal license. After speaking with the shop instructor and the vocational coordinator the actual assignment of the hours in HVAC is not clear.

The assessment grading outline is made up of a student Time card which assesses, Initiative, safety, preparation, attitude and shop tasks. The shop tasks constitute 50 percent of the student's grade. Shop Theory test makes up 30 percent and Classroom theor work makes up 20 percent of their grade.

All of the written test used within the HVAC program are instructor generated. All levels of Bloom's Taxonomy are assessed within in the HVAC program assignments and/or testing.

All HVAC students are registered participants in the Skills USA organization. Annually eight students are sent from HVAC to compete in the Skills USA competition. Four students compete in HVAC and four students compete in the sheet metal competition. Additional HVAC students are sent for leadership competitions as well. The visiting team discovered that a HVAC student participated in the SKILLS National competition last year.

The students in the HVAC program have high participation in the cooperative education program. In FY18, 32

students secured cooperative education placements.

The visiting team determined that currently 13 HVAC students are participating in the co-op program. These students report to work during their shop cycle and do not report to school. Junior are permitted to participate in the program beginning in the third marking period. All students must maintain at least a C to be eligible for the program.

The annual follow-up survey shows steady Chapter 74 positive placement with annual variations between post-secondary education and technically related employment, with nearly half being employed in the HVAC field.

The visiting team determined that for the graduating class of 2018, 3 students were attending 2 year colleges, 1 was attending a 4 year private college, 6 were attending a 4 year public college, 2 were entering the military and 5 were pursuing the HVAC trade.

There are two teachers in the HVAC program. Both are appropriately licensed by the Dept. of Elementary and Secondary Education. The teachers stay current in their field by taking part in trade professional development in addition to taking courses and workshops when available to earn PDPs.

The visiting team determined that the trade instructors must renew their trade license every two years. There is no requirement for CEU's before renewal of a HVAC license.

The HVAC shop provides adequate resources for the students to learn the emerging technologies within our trade. Chromebooks, digital tools, ductless heat pumps, new books and new boilers are just some of the resources provided.

The visiting team observed that the funding for material and tools does not appear to be a problem. The shop is quite crowded given the number of students. The equipment is in good shape. The shop doesn't have an outdoor oil storage tank any longer and has installed an oil tank in the walk-in cooler. The shop is waiting for the completion of a new natural gas line into the shop which will allow them to purchase newer high efficiency boilers and furnaces. The advisory committee has not mentioned the repair and or replacement of equipment in their meeting minutes to the school. The school's business manager mentioned the use of Perkins grant money for replacement of equipment. There are also major and minor equipment repair funds available.

The HVAC Department does complete production work off site. The students are involved in many activities in and outside of the shop. Some of the outside job site experiences include walk in cooler troubleshooting and repair, construction HVAC installation of equipment and duct work, and commercial HVAC system repairs.

The visiting team toured the new child care building and is very impressed with the quality of the HVAC systems installed in the building. The installation appears to be installed in a very professional manner.

The instructors and the students work collaboratively and professionally. There are seldom any student disciplinary issues in the shop or classroom areas. Students have clear set boundaries and expectations for behavior and performance. They do a good job meeting the expectations.

The visiting team observed a program where every student interviewed enjoyed being in the program. The instructors have created a positive learning environment with mutual respect for all. The visiting team visited the shop on 6 different occasions and never saw any inappropriate behavior or language. All of the students were engaged in learning!

Outside input is provided by the HVAC Program Advisory Board that is made up of five members. The programs advisory board is active and diverse coming from all areas of the trade, including technicians, shop owners, and parent and student representatives. The advisory committee is actively promoting the acceleration of learning by donating time, equipment, seminars, and updated information on new technologies. The advisory committee meets twice a year and at these meetings discussions revolve around current trends in the HVAC trade and the types of programming needed to prepare our students for a changing industry.

Both program instructors participate in the semi-annual advisory meetings. An Advisory Board dinner and

meeting is held in the fall where discussion on program needs and standards are laid out with a plan of any changes or recommendations put in writing. A follow up meeting takes place in the spring to confirm and discuss what changes have been or should be implemented.

The visiting committee attended the HVAC shops trade advisory committee meeting. The committee had 5 members attending and a current student. The committee members are very supportive of the HVAC program and the quality of students they graduate.

# Heating, Ventilation, Air Conditioning and Refrigeration Commendations

---

## Commendation

The Heating, Ventilation, Air Conditioning and Refrigeration department for developing strong industry partnerships with a large number of students on co-op placements which increases the frequency of authentic learning tasks for students. (3.2)

## Commendation

The Heating, Ventilation, Air Conditioning and Refrigeration instructors and students for their professional workmanship in the new Child Care facility which serves as evidence of effective instruction. (3.2)(4.7)

## Commendation

The Heating, Ventilation, Air Conditioning and Refrigeration instructors and students for their successful participation in the SkillsUSA program. (4.7)

## Commendation

The Heating, Ventilation, Air Conditioning and Refrigeration department for implementing the HVAC curriculum using a range of shop projects to support student achievement. (3.2)

## Commendation

The Heating, Ventilation, Air Conditioning and Refrigeration instructors continued success in achieving high numbers of freshman picks which serves as evidence to the program's commitment to the school's core values. (3.2)(3.4)

# Heating, Ventilation, Air Conditioning and Refrigeration Recommendations

---

## Recommendation

Examine ways to reduce the crowding in the HVAC shop area to ensure safe and efficient implementation of curriculum. (2.6)

## Recommendation

Complete the installation of the new natural gas line into the shop and explore means to provide for new high efficiency and furnaces and boilers to better provide students with up-to-date learning experiences. (2.6)(2.10)

## Recommendation

Work with the technical coordinator to clarify the breakdown of the hours earned by students toward their HVAC/sheet metal license.(2.10)

# Plumbing

---

## Narrative Program Summary

The Plumbing Department is located on the north end of the building. The program opened during the 2004 – 2005 school year. The area is made up of several training areas. These training areas include a theory room, main shop area, one (1) training mezzanine level, one wooden mock house, and wet lab area. The shop also has an outdoor uncovered area used to simulate underground plumbing installations. The department is located in the main area of the building and consists of 4,368 square feet. The theory room has seating for twenty students and is equipped with a SmartBoard projector, white boards, textbooks, and plumbing material used to assist with instruction and demonstration.

The visiting team observed that the shop was clean, material was stored and organized. The shop has an upper area used for installation of plumbing fixtures. The shop has two bathrooms and lockers for student use. There are no student computers in the theory room. The program does an exceptional job of maximizing the limited space. The upper area was added to the shop, which prompted the modification of the fresh air/exhaust system.

The program currently has 77 students enrolled in grades 9 through 12, six of whom are nontraditional, 12 of the students are currently working in the Cooperative Work Experience Program. The Plumbing program has tripled its non-traditional enrollment in the past year. Currently, 49 percent of students are currently on a special education plan.

The visiting team observed there are several female students in the plumbing shop. The enrollment in the program has been steady. The mechanical trade has seen an increase in the number of students interested in these trades, and the attraction to the mechanical trades for many, is the earning potential.

The curriculum for Plumbing covers information beginning with basic hand tools including safety procedures and proceeding progressively to more complex plumbing installations and repair. The Plumbing program utilizes co-curricular activities such as Skills USA, Cooperative Work Experience and field trips to area businesses that mirror the curriculum and provide the students with a sense of career awareness. The program's advisory board is very active and diverse coming from all areas of the plumbing and heating trade, in addition the advisory board keeps the plumbing instructors abreast of changes in the plumbing industry and make recommendations to modify curriculum.

The program has a full-time aide with plumbing experience. Curriculum from multiple resources such as the National Center for Construction Education (NCCER), Plumbing Levels 1-4, Lee, and Ripka. The program also incorporates into its lesson's supplementary materials such as trade journals, videos, lectures from different manufacturers, along with internet sources to provide up-to-date knowledge to the students. The supplementary programs in the plumbing shop are cooperative education, field placement and off-site training.

The visiting team interview the instructors as to the pacing of the curriculum. One teacher instructs grades 11 and 12. One teacher instructs grades 9 and 10. The program follows the Bristol-Plymouth Regional Technical School's (B-P Tech) Plumbing Curriculum which is developed within the framework of the Massachusetts Vocational Technical Education Construction Frameworks. Every student in the plumbing program receives an OSHA-10 certification. The plumbing shop and related course give the students, upon successful completion of the program, 220 theory hours and 1700 hours (on the job) credit towards their state journeyman plumbing license. Students are provided instruction on theoretical applications and are coached on practical applications in order to ensure that they fully understand the material presented. They are given numerous opportunities to practice application of theory. The program goals conform to the school's core values and goals by providing a number of school-based projects which effectively utilize technology in teaching and learning.

The visiting team observed that students are assigned many high-quality instructor generated work sheets, directly linked to the curriculum to assist the students in their comprehension of the developed curriculum. The

curriculum is aligned with the State standards, and the values of the B-P Tech. The curriculum is reviewed every two years and has input from the advisory committee twice per year.

The teacher's classroom instruction is evaluated four to eight times per year by administrative observations. As part of the Massachusetts Department of Elementary and Secondary Education's (DESE) evaluation system, teachers set goals for personal performance that align with the school district and state curriculum standards. Instruction is given in a variety of ways, full class lectures, small groups, demonstration & modeling, and individual teaching techniques. Students are taught individually, both in the shop and the theory classroom. Teachers provide different types of instruction for the differing kinds of learners. Teachers are notified by the Special Education Department of the students who are on differing kinds of learners. Teachers are notified by the Special Education Department of the students who are on differing kinds of learners, and which students are on IEP's or have 504 plans.

The visiting team observed students working on a vocabulary work sheet. The class was engaged with the assignment. The instructor monitored the class by asking questions pertaining to the content. Almost 50 percent of the students in the 10th grade plumbing class have a special education plan and the program accommodates the students as much as possible with minimal help from the special education department. Reading and math skills are also an issue with the students. The classroom was well organized. Daily objectives were clearly written on the board.

Students' progress is regularly assessed by means of student weekly time cards and weekly work projects in shop. Assessments are also conducted by means of weekly homework assignments for math and reading. Theory tests are also administered weekly. Assessment results are also communicated to parents through the Aspen Grading System. Students are also obligated to complete OSHA-10 safety certification training for the construction cluster by the end of freshman year. Students are also granted work hours and theory hours toward their journeyman license from the Board of Examiners of Plumbers and Gas fitters with completion of the plumbing program.

The visiting team observed that all of the work sheets developed by the instructors included a performance rubric. All students are required to obtain their OSHA-10 certification before working in the shop. There are four marking periods in the school. The passing grade for the program is 65 percent. If a student fails the trade program for the year, they are denied credit for the year. The students that graduate receive 220 hours toward the required 550 related instruction hours and 1700 hours credit toward the required 8500 hands on hours for their state license.

The assessment grading outline is made up of a student Time card, which assesses, conduct, safety, effort, and attendance. This component is 40 percent of the student's grade. Shop projects constitute 20 percent. Theory test makes up 25 percent and Homework makes up 15 percent.

All of the written test used within the plumbing program are instructor generated. All levels of Bloom's Taxonomy are assessed within in the plumbing program assignments and or testing.

Every year, six to ten students compete in various skills and leadership competition run by Skills USA. Two students reached the state competition. Two of the students won medals; one gold, one silver. A non-traditional student was recognized for outstanding vocational accomplishment by a professional plumbing organization (PHCC).

The visiting team observed a awards plaque from the PHCC Plumbing Heating and Cooling Contractors with the name of a outstanding plumbing student for each of the last 10 years. There were certificates of accomplishment from both the PHCC and SkillsUSA.

Student placement in co-operative education has been very positive. In FY18, 21 students secured cooperative placement employment opportunities. Some of our graduates are continuing onto post-secondary education. Many graduates are working at entry level positions as apprentice plumbers.

The visiting team observed that currently 11 plumbing students participating in the co-operative work program.

These students report to work during their shop cycle and do not report to school. Junior are permitted to participate in the program beginning in the third marking period. All students must maintain at least a "C" to be eligible for the program.

Rates Over the past five years the graduation rate from the program has been approximately 94 percent. A large percentage of the graduates have gone directly into the workforce as apprentice plumbers. A smaller percentage has gone on to post-secondary education and the military.

The visiting team determined from graduation data, that for the graduating class of 2018, one student went to a four year private college, one attended a four year public college, five entered their apprenticeships in the plumbing trade, and two students went to work outside of the trade.

Two instructors and one aide staff the Plumbing Department of the B-P Tech. The instructors in the plumbing program hold numerous certifications and licenses as well as ownership of small businesses, including being appropriately licensed by DESE as Chapter 74 Vocational Plumbing Instructors. Some of the other licenses and certifications are Journeyman Plumber License, Master Plumber License, Master Sheet Metal License, Master Pipe fitter License, Oil Burner Technician Certificate, and Commercial and Residential Fire Sprinkler training certificates.

The visiting team observed the latest copy of the State of Massachusetts, Tiered Requirement for apprenticeship training. The instructor aligns his lessons to closely follow this curriculum. Instructor must renew their trade licenses every two year. The instructors also are required to acquire eighteen hours of continuing education for the trade licenses.

The program has two instructors and one full time aide. The square footage of the shop area appears too small for the number of students and the type of training implemented. Some equipment will need replacement and updating due to extreme usage from many students.

The visiting team observed that the loft area is used for instruction. It is difficult to monitor students at all times with this layout. The resources for material and tools appear to be adequate. The shop is quite crowded given the number of students. The equipment is in good shape; however, the visiting team observed that a threader had broken down due to extreme usage. The advisory committee does not mention the repair and or replacement of equipment in their meeting minutes. The business manager mentioned the use of Perkins grant money for replacement of equipment. There are also major and minor equipment repair funds available. The work done to be able to use the loft area for instruction required the adapting of the area's fresh air/exhaust system and there is a large number of people who use the space and the nature of the work done in the area can put demands on air quality.

The program has completed off-campus work for the community in the past, as well as on-campus work dealing with maintenance items in different areas of the building. The program has also been heavily involved in the installation of the plumbing and gas system for a new Child Care building. The visiting team determined that the plumbing program does not currently perform any production work off-campus.

The visiting team toured the new child care building and viewed the impressive quality of the plumbing and gas systems installed in the building. The installation appears to be installed in a professional manner.

The plumbing department provides an environment conducive to learning where students are treated on an individual basis. Teachers assist students before and after school hours to help students achieve their goals.

The visiting team observed a program where every student interviewed enjoyed being in the program. The instructors have created a positive learning environment with mutual respect for all. The visiting team visited the shop on six different occasions and inappropriate behavior or language was not discovered. All of the students were engaged in learning.

The Plumbing program has an active advisory committee which meets twice a year. It is composed of twelve representatives from business and industry, labor, students, and parents. The committee includes non-traditional, labor, and post-secondary representation. The advisory committee has made many suggestions to help enhance



the program to make it even more successful.

The visiting committee attended the plumbing shops trade advisory committee meeting. The committee had five members attending as well as a current student. They are very supportive of the plumbing program and the quality of students they graduate.

# Plumbing Commendations

---

## Commendation

The Plumbing Department for utilizing community live work experiences to develop student skills and authentic learning opportunities both inside and outside of the school. (3.5)

## Commendation

The Plumbing instructors and students for their professional workmanship in the new Child Care facility which serves as evidence of effective instruction. (3.2)(4.7)

## Commendation

The Plumbing Department for successfully participating in the Skills USA program adding to the range of learning opportunities for students. (2.10)(2.3)

## Commendation

The Plumbing Department for effectively implementing the Plumbing curriculum using diversified, shop projects to assist with student comprehension. (3.2)

# Plumbing Recommendations

---

## Recommendation

Examine ways to address the overcrowding in the plumbing shop areas. (2.6)

## Recommendation

Continue to ensure adequate funding to replace and or upgrade equipment. (2.6)

## Recommendation

Further investigate the need to improve the fresh air/exhaust system for the shop.(7.5)(7.2)

## Recommendation

Continue to ensure cooperative learning and production work opportunities for students to provide them with authentic learning tasks both in and out of the school. (3.3)

# Early Education and Care

---

## Narrative Program Summary

The Early Childhood Education program is a four year program for 9-12 graders that began in 2007. It is housed in a brand new free-standing building. The entryway consists of a check in desk and one family bathroom. Immediately beyond there is an office and three additional bathrooms-one female, one male, and one gender neutral. Down the hallway to the left there are two classrooms for the high school students, each containing student lockers separated by a pantry/kitchen area. Down the hall to the right there are two functioning preschool and one pre-k classrooms. There is a motor/activity room with an observation window that allows for both student and teacher observation and feedback. One other classroom is currently being used as storage, the hope is that it will become the planned infant/toddler classroom. There is also a storage closet. Outside of the building is a newly designed play area.

Evacuation routes are clearly displayed in each classroom and in the hallways. Locked First Aid cabinets are present in each classroom. A First Aid backpack is hanging near exit and a fire extinguisher is hanging on the wall. The Safety Data Sheets are visible. Hallways are bright, clean and inviting. The laboratory preschool classrooms are warm and inviting as well. The laboratory pre-k classroom is welcoming, although slightly cluttered and disorganized in the teacher areas. Due to the recent move, the storage room is cluttered, and the teachers are still organizing materials in the space.

Many seniors were out on co-op and the visiting team observed the remaining four working on Chromebooks. The visiting team also observed the sophomore students actively engaged with children in assigned lab classrooms, facilitating center activities developed by the preschool/pre-k teachers.

There are 75 students enrolled in the Early Education and Care Program (EEC). The capacity of the program is 88 students. Four non-traditional students have graduated from the EEC program over the last six years. According to the instructor, effort is made during exploratory to engage non-traditional students in the program, through career pathway exploration and discussion. Last year three males chose the program. One of them moved into his first choice when an opening came up (cosmetology), and the other two students went back to their sending schools. Currently, 9th grade accepts 22 students; 10th grade-18 enrolled; 11th grade-16 enrolled; 12th grade-18 enrolled. There has been a downward trend over last five years in enrollment.

The curriculum for the Early Education and Care Program is competency based & aligned with the Massachusetts Department of Elementary and Secondary Education's (DESE) Vocational Technical Education Frameworks. The visiting team did find that the syllabi for all grades was last updated in 2009. The curriculum is standardized throughout all grades.

One teacher is responsible for teaching both 9th and 12th grade students and the other teacher is responsible for 10th and 11th grade students.

The Developing Child text and Child Development Associate, along with other supplements are used. Topics include Child Growth and Development, Maintaining a Safe Environment/OSHA, First Aid and CPR, Curriculum Planning and implementing, Child Care Administration, Observation techniques, and MA Early Education and Care (EEC) Preschool Teacher Certification requirements and mandatory trainings in the Early Childcare field.

Early Childhood Instructors work closely with the Special Education department to provide accommodations to those students having IEP's or 504 Plans. Accommodations and modifications are used as needed. All students are encouraged to ask for any extra help if needed. Students participate in the on-site laboratory child care center to support proficiency of Early Childhood Education and Care competencies.

Instructors were observed utilizing a variety of teaching methods including lecture, discussion, workbook activities, computer activities, and visual aids. Objectives are clearly displayed on the board in each classroom.

Classroom expectations are also posted, and consistent throughout. Technology is integrated through the use of Chromebooks and interactive whiteboards. Students also utilized the school library for research.

Assessment is accomplished daily using a teacher developed rubric. The instructors said that they also use the SkillsPlus online competency program for students, it was not clear as to whether or not parents receive a copy of these competencies. They do not, however, have on-line access to the results.

Students are able to review a completed assessment tool weekly. Guidelines for assignments are reviewed with the students when assigned and a specific rubric is provided for assignments. The visiting team observed students and teachers actively engaged in discourse about program related topics.

Students are eligible to apply for Massachusetts Department of Early Education and Care preschool teacher licensure upon completion of all program requirements.

Students in the Early Education and Care program (EEC) are encouraged to participate in SkillsUSA. The instructor creates study materials to assist students as they prepare for competition. Two students in EEC compete in the SkillsUSA Leadership Conference each year, and a team of six seniors is competing at the conference this year. One senior is a member of the National Technical Honor Society. A total of four juniors and seniors are members of the National Honor Society.

Students have the opportunity to participate in co-op during junior and senior year and there are currently 9 senior students out on co-op. The junior class participates in an internship program, and beginning in January they will also have the opportunity to go out on co-op. There are internships at various Community Schools and Childcare Programs with four sites currently being used, and new sites being sought after this year. Each student works towards their 150 hours required to be recommended for preschool teacher certification by the Department of Early Education and Care. The early education and care program also has an articulation agreement with Bristol Community College.

In 2016, a one year follow up survey of program graduates revealed that 88% of graduated students are employed in a position related to their training at Bristol-Plymouth Regional Technical School (B-P Tech).

Over past two years, an average 4% of program graduates have gone directly to work in the field, 94% onto higher education, and 2% onto military service. A breakdown of post-secondary placements is as follows: 2 yr public college 5-1.77%, 4 yr private college: 2 -.71%, 4 yr public college: 6-2.13%, working in field: 3-1.06%

Currently, there are two Chapter 74 teachers and two preschool teachers working in the program. Chapter 74 teachers participate in continuing education to satisfy DESE licensure requirements. One teacher serves on B-P Tech school improvement committee. One teacher serves as Massachusetts Association of Vocational Administrators strand coordinator/summer conference, assists with Business Professionals of America, and is also part of the school improvement committee. The two preschool teachers are current in the DEEC online trainings.

The Early Childhood Education Program moved into a brand new facility in September. Equipment, technology, space, all materials are in working order. Program has appropriate resources to implement the curriculum.

The program provides high quality care for children in the community, and can accommodate up to 30 preschool/pre-k children as a result of new building. In addition to the maximum number of 88 high school children. There are currently 37 families enrolled with some children attending part-time, while others full time. A summer camp program has been offered for the last four years to the children of staff and community families.

Walking into the classrooms there is an immediate sense of welcoming. There was no evidence of harassing language or behavior in any of the classrooms. Students were collaborative and kind. The culture appeared to be one of teamwork and inclusiveness.

The program has a Trade Advisory Board with six members, which meets twice a year. The board is not varied in regards to representation. Currently all members are female, and there is no representation of someone with special needs.

# Early Education and Care Commendations

---

## Commendation

The outstanding work of moving into, setting up, and opening a new, state of the art, early childhood building for the start of the school year 2018-2019. (5.1, 5.8)

## Commendation

The creation of very strong industry and community partnerships as evidenced by the large number of students on internship and co-op placement. (7.8)

## Commendation

The development of partnerships with parents of former and current students in the program on advisory board which supports authentic student learning tasks (7.8)

# **Early Education and Care Recommendations**

---

## **Recommendation**

Review and increase ways in which staff communicates student progress on competency mastery to parents/guardians on a regular basis. (4.2)

## **Recommendation**

Develop and implement a plan to introduce exploratory students to career professionals who model non-traditional and diverse populations. (5.16)

## **Recommendation**

Create and implement a plan for curriculum updating and revision to align to current research and assessment results. (2.7)

# Dental Assisting

---

## Narrative Program Summary

The Dental Assisting Program (DAP) is housed within a separate building on the school grounds. There are two classrooms and connecting corridor which leads to the main entrance which is locked and has a door bell for safety.

The first and largest classroom (approx. 960 square feet) houses three functional dental operatories with dental chairs, mobile carts and sinks. There is an equipment sterilization center with two autoclaves and an ultrasonic unit. The dental lab section of the shop contains two model trimmers with shields, vacuformers, and a lathe. Instruments and disposable supplies are stored in cabinets within this classroom. There is an exhaust (ventilation) hood to remove dust and particulate matter as well as fumes/odors from dental materials. Two dust collector machines are used during fabrication of dental products.

The room is equipped with interactive white board, desks, and chairs. Students each are assigned a Microsoft Surface Pro with dental office software simulators installed.

Safety equipment includes an eye wash station and fire extinguisher. Safety information is posted and Safety Data Sheet (SDS) binder is clearly marked and available. Students are required to complete the OSHA 10 program for Health Care Providers.

The second smaller classroom (approx. 650 square feet) contains a radiography room with lead lined walls and shielded glass door. Inside the room is an x-ray machine and chair. Students who operate the equipment wear radiation badges for safety.

The classroom is also equipped with adequate desks and chairs for the class, an interactive white board and each student has a Microsoft Surface Pro to access the required dental programs which have been pre-loaded. The room has fire extinguisher, SDS binder, and radiation is monitor.

Bathrooms and lockers are easily accessible from either classroom.

The DAP curriculum is aligned with the Commonwealth of Massachusetts CVTE Dental Assisting Frameworks.

The curriculum is written in common format. Each unit contains a description of the unit and related Massachusetts VTE curriculum standards. The curriculum emphasizes depth of understanding and application of knowledge at the appropriate developmental levels. Objectives are identified for each unit and each objective is clearly linked with the standard it addresses. Essential questions guide student learning and embedded academic crosswalks provide the academic relationship with dental theory and highlight the association between classroom theory and what students need to know when caring for dental patients. There are cross specialty units that are included in the curriculum: biology, anatomy and physiology, reading and writing. The DAP curriculum identifies the performance skills/procedures that are required in each Unit.

Curriculum also includes the required coursework for Dental Assisting National Board certification in Infection Control and Radiation Health and Safety. Both certifications are required to obtain a dental assistant license from the Commonwealth of Massachusetts. Students are eligible for licensure when they turn 18.

Instruction in DAP prepare students for certifications and state licensure after graduation (at age 18.) Students complete programs in Infection Control (grade 10) and Radiation Health and Safety (grade 11) in preparation for Testing from the Dental Assisting National Board (DANB) These certifications are required in order to receive a license as a Dental Assistant in the Commonwealth of Massachusetts.

Instructors use various teaching strategies and resources to assure a wide range of educational experiences.



Lecture, group work, online student directed learning, hands-on practice, observation, mentoring, and shadowing in dental practices are just a few. Students are required to produce posters, PowerPoint presentations, and maintain journals. Seniors complete a senior project which is a graduation requirement and focus of senior year. Students on Co-op must check in regularly and complete all required assignments. Internships are an integral part of instruction in the DAP, but the dental offices and related sites tend to be small and able to accommodate few students. It is apparent that to continue the high level of instruction, additional internship sites will be needed,

Instructors have added cross specialty units in biology, anatomy and physiology, reading and writing.

Students earn OSHA-10 certification for Health Care Providers, DANB -Infection Control Certification, DANB - Radiation Health Safety Certification. The DANB certifications are required in order to obtain a license for Dental Assisting in the Commonwealth. The minimum age for licensure is 18.

SkillsPlus web based competency testing is used for all grade levels and provides students with instant feedback. Grades are posted on the Aspen grading system, which is accessible to both students and parents.

Written assessments and performance (competency) test are given at the end of each unit, summative mid-term and final exams are also given.

Instructors provide pre-and post tests to assess student progress in specific content areas.

Dental Assisting Students participate in SkillsUSA and Health Occupations Students of America (HOSA.)

Students are encouraged to participate in the National Technical honor Society and National Honor Society.

DAP is fortunate to have several dentist offices which provide internship opportunities for students, although with the large student body, it will be necessary to add additional sites to accommodate all students needing internships. Nine students are presently on Co-op.

In 2015, The Commonwealth of Massachusetts required licensure for Dental Assistants. All practicing non licensed Dental Assistants were required to be retrained and licensed to keep their position. Some chose not to go through the training, leaving more positions available to new graduates. For those students continuing in the Dental profession, and placement has been good.

In 2018, five students were accepted in a public two-year college, four students in a public four year college, and three students in a four year private college, two students were employed. (14/18)

In 2013 one student was referred to adult education, and in 2014 one student was referred to adult education. From 2015-present all DAP students have graduated.

There are two full time faculty members. Each is licensed as a dental hygienist and/or dental assistant. Both instructors are certified to teach a Chapter 74 program. Faculty members participate in Professional Development at the school and through professional organizations. Both instructors have participated in panels to discuss the licensing and role of dental assistants in the Commonwealth.

DAP is well equipped with modern dental stations, chairs, work areas/with ventilation hood, and well-insulated x-ray room. Instructors feel that there are adequate supplies and consumables for proper instruction. There is adequate storage for all supplies.

DAP is not a production shop.

Classroom rules are prominently displayed, and students were cordial to each other and welcoming to guests as they worked. Clinical settings (dental offices) that welcome student interns express that students are professional, respectful and work well with peers, instructors, and dental office personnel. There is a departmental focus on inclusion of all students and the need to maintain honest and integrity in dealing with patients and all members of the school and health care community.

DAP is a relatively young program but has developed a strong Advisory Committee. The Advisory Committee has actively reviewed the curriculum, VTE Frameworks and is informed about the new licensure regulations.

Student assessment results and placement are discussed at the twice-yearly meeting. Members from the dental community provide feedback pertaining to current research and trends in dentistry. Recommendations of the Advisory Board are reported to the program director and reviewed with the school principal.

# Dental Assisting Commendations

---

## Commendation

The visiting team Commends the Dental Assistant program for seeking and establishing diverse and challenging settings for dental internships. (2.3)

# Dental Assisting Recommendations

---

## Recommendation

Explore the possibility of establishing clinical partnerships with larger dental practices in order to place more students in dental internships to provide authentic learning tasks for students. (2.10)

# Health Technology

---

## Narrative Program Summary

The Community Health Program (CHP) is located in a separate building on the school grounds. There is a doorbell at the main entrance for safety. The two main classrooms are well equipped, clean, uncluttered and clearly set up to facilitate both theory instruction and clinical skills.

The larger of the two rooms (approx. 835 square feet) has one sink, three new hospital beds, six large tables, 24 chairs, 25 Chromebooks with a charging cart, a SmartBoard, and a standard white board. Safety features include a first aid kit and two fire extinguishers and Safety Data Sheet (SDS) binder. The second classroom is slightly smaller (approx 650 square feet) and is equipped a sink, exam table, 22 student desks, 25 chrome books and charging cart, SmartBoard, white board and fire extinguisher.

An AED, fire extinguisher, eyewash station, and fire blanket, are readily available in the corridor connecting the two classrooms. SDS binder is clearly marked and available in the skills classroom.

The connecting corridor also contains 24 student lockers and three bathrooms.

There are 83 students presently enrolled in the CHP. The retention rate is good with 22 freshmen, 21 sophomores, 21 juniors and 19 seniors. The CHP consistently draws more than the 22 freshmen than can be accepted into the program. This past year there were 5 students on the waitlist. Occasionally a student may leave the program or the school and the position is promptly filled from the waitlist. Students may cycle into the shop through sophomore year.

Historically, CHP has been a predominantly female shop. In an effort to attract a more diverse student body, the Emergency Medical First Responder course was added in 2014. There is now one male student in grade 11, one male student in grade 12, and 3 male students in grade 10. Freshmen have not yet made final shop selections for the 2018-2019 year.

The CHP curriculum is based on the Massachusetts Vocational Technical Education Frameworks for Health Assisting. There is a school specific format for all career and technical education programs, which is aligned with NEASC 2015 Standards. The schools core values emphasize personalized instruction and there is a wide range of strategies employed in CHP to ensure that each student has a supportive learning environment. Strategies include lecture, seminar, small group work, mentoring, modeling, skills videos, on-line resources and activities, literature search, student prepared PowerPoint and poster presentations, hands-on skills practice and performance, clinical site direct resident care, and one on one time as needed. Unit goals may be met in a variety of ways based on student learning style and needs. In order to prepare students for success in a health care profession the curriculum requires a high order of thinking and analytic skills to meet objectives. A printed copy of the 9-12 curriculum is available and clearly reflects a competency-based curriculum essential for a program that demands clear performance expectations for students. The curriculum may be revised to address particular issues that may arise.

The curriculum is reviewed regularly by teachers, administrators and by the Program Advisory Committee (PAC) which meets two time as year. The (PAC) is very active and its members have a good working relationship with the CHP instructors, it provides feedback regarding industry trends, equipment recommendations and takes an active part in helping to update and fine-tune CHP curriculum.

The CHP curriculum has been effective in providing the necessary theory and clinical goals and experiences to support a high level of student understanding and mastery of required content. It is noteworthy that there is a consistently high pass rate on the American Red Cross Nurse Aide Certification Exam.

The Massachusetts Department of Public Health, Division of Healthcare Quality conducts a biannual desk audit

and on the alternate year they perform an onsite review of the CNA (11th grade) curriculum. The agency annually recertifies the Nurse Aide Training Program in accordance with State and Federal Guidelines.

Lesson plans contain clear learning objectives and all units pose overarching essential questions. Instructors link content with the related standard and plans are posted on Google Classroom. Students are able to access the course syllabi, lab procedures, handouts as well as individual and group assignments, and announcements.

Instructional strategies include full class lecture, small group work and individual teaching techniques. Classroom technology (Google Classroom, Skills Plus web-based software system providing competency based instruction and evaluation) and skills labs allow students to link hands-on skills with theory. CHP students with an IEP or Section 504 plan are provided modifications or accommodations as specified.

Students are required to pass a safety test each year. Freshmen are required to earn an OSHA 10 for Health Care Professionals certification. Safety rules and general classroom rules are posted throughout the department.

Instruction for sophomores include shadowing at long term care, assisted living, and adult day care facilities. For sophomores the internship focus is on communication skills and recreational activities. Students in junior year are required to complete all theory requirements of the Nursing Aide curriculum as well as complete a required number of hours of direct resident care at Skilled Nursing Facilities (SNF) under the supervision of their CHP instructor. Seniors have the ability to take the First Responder class, participate in internships at various health care facilities, and participate in Co-op if their paid job is during school hours. Some students work on weekends or after school hours and do not participate in Co-op.

The State and Federal Regulation governing health care student to teacher ratio- (a maximum of 10 students : 1 clinical instructor) are met for all students who engage in hands-on resident/patient care.

SkillsPlus software and regular formative assessments (weekly tests, journals, demonstrations and discussions,) provide instructors with reliable ways to track students' progress. Summative assessments (final exams) contain both theory and performance components. Junior year students take the American Red Cross Nurse Aide Exam in order to become Certified Nursing Aides, and the capstone for seniors is the Senior Cumulative Project.

Grades are posted on Aspen, a web portal available to students and parents. Grades are posted weekly. Written assessments are administered using Google Forms providing students with immediate feedback. Teachers provide Rubrics for grading work and post copies of the rubric with the assignments. Teachers provide immediate feedback in skills labs and at the clinical sites.

Students in the CHP have historically had a 100% certification rate for OSHA 10, CPR and First Aid. The vast majority of juniors (90%-100% over the past 5 years) earn their American Red Cross Nurse Aide Certification.

Students in the CHP are actively involved in school-based activities. There are CHP students on the soccer, football, volleyball, basketball, lacrosse, cross country, track, softball, wrestling and baseball teams. CHP students are active in many school clubs, and vocational organizations such as Health Occupations Students of America (HOSA) and SkillsUSA.

In 2018, 19 CHP students and one instructor participated in HOSA state leadership conference at Worcester State University. Eight CHP students were awarded medals at the district competition of SkillsUSA in March of 2018.

CHP had several students who were inducted into the National Honor Society and/or National Technical Honor Society in 2018. CHP students assist at annual Blood Drives at Bristol-Plymouth Regional Technical Vocational School, and volunteer at food kitchens and local assisted living facilities.

Many CHP students participate in any number of work-based experiences outside of school. In the 2018-2019 academic year, 11 seniors (of 19) have paid co-op jobs at local health care facilities. Some students (juniors and seniors) maintain healthcare jobs in the evening and on weekends and are not part of the formal co-op program.

The CHP has affiliations with 7 local Health Care facilities. (Crystal Springs, Life care of Raynham, Associates for

Human Services, Longmeadow Nursing Home, Cooperative Productions, Countryside Adult Day Care and All American Assisted Living.)

CHP has had a 100% graduation rate for past 10 years. Eleven of this year's seniors have received acceptance letters to colleges. 10 of those acceptances were into Nursing Programs and one into Human Services. Although no formal tracking is in place, personal communications suggest that many CHP students continue with their Nursing Assistant jobs after graduation.

There are three instructors in the CHP two full time and one part time. All three instructors have a BSN and one has a MSN, all hold a current RN license in the Commonwealth of Massachusetts. The position of lead teacher is shared by the two full time instructors, each serves as lead teacher on alternate years. All instructors are licensed by the Massachusetts Department of Elementary and Secondary Education. One instructor has a professional license (certification) for Health Science and Practical Nursing, another has a professional license (certification) for Health Science, and the third with preliminary licenses for Health Sciences and School Nursing. All instructors participate in professional development at the school and by taking summer workshops. One instructor continues to work as an emergency department nurse. The two professional teachers rotate serving as lead teacher for the program.

The CHP has two full time and one part time instructor. There are 3 new hospital beds in the skills classroom, however with 22 students, it would be helpful to have access to additional clinical beds on regular basis. Each classroom has adequate technology (25 Chrome books in each) to provide the required web based programs and content to each students whether in class or at home and sufficient desks & chairs for all students. Each classroom has a SMART board. There are adequate consumables (i.e gloves, gowns, masks, clinical supplies) as well as linens, manikins, and CPR equipment. Each student is able to have his/her own copy of the required textbook, which is recent if not the latest edition.

Although the LPN skills lab (a 7 patient bed set-up) is theoretically available to the CHP students, the availability is minimal.

CHP is not a production shop.

The CHP is a welcoming and vibrant department. Teachers and students have a comfortable and respectful rapport with each. The seniors and sophomores were in residence and both groups of students were quick to share their experiences interlaced with humor and positive interaction among the students. In one classroom, students were sitting at desks/tables but were interacting in small groups, in the other classroom some students had just returned from internship and were sharing the experiences of the day.

The CHP prides itself on inclusion of all students and promotion of good behavior. Instructors encourage students to be role models and to address any issues that may come up quickly and effectively and in a professional and courteous way.

The CHP has an active Program Advisory Committee that meets twice a year. There are representatives from business and industry, higher education, the health care community, as well as students and parents. Minutes of each meeting are kept as part of the school record. The purchase of three new hospital beds for the CHP was in part based on the recommendation of the Program Advisory Committee.

# Health Technology Commendations

---

## Commendation

The Visiting Team Commends the Community Health Program (CHP) for the high pass rate on the American Red Cross State Examination for Nursing Assistants. Historically 90%-100% of the class. (2.10)

## Commendation

The Visiting Team Commends the Community Health Program (CHP) for emulating the Core Values and Expectations of the school which are embedded throughout the CHP curriculum, climate, culture, instruction and assessment within the classroom and at clinical sites. (1.3)



# Health Technology Recommendations

---

## Recommendation

Investigate the possibility of increasing the number of hospital bed units available to the CHP to allow for more hands-on skills practice for CHP students.(2.6)

# Culinary Arts and Sciences

---

## Narrative Program Summary

The Culinary Arts Department is located on the Southeast side of the building at the rear of the building. There are two sides of the shop facility; the Culinary side of the kitchen which measures 31' x 30' which is used for the Culinary curriculum, and the Baking Department, measuring 31'x30' that encompasses Pastry Arts. Hospitality curriculum is integrated into both sides. The "Silver Platter" is the student run restaurant is contained within an area measuring 35' x 33' and is able to seat 64 guests. The student run Café measures 28'x20' and seats 12 guests. The Café is a Quick Serve Restaurant (QSR), which offers a salad bar and "grab and go" deli section. The Culinary kitchen, Bakery, and Silver Platter restaurant all appear clean. On the kitchen side of the shop, a number of extension cords were in use and presented potential tripping hazards. Students appeared to be following the required sanitary and safety procedures. There is a locking student restroom/locker room area directly off of the kitchen. Parking for the restaurant is very limited.

66 students are enrolled in the Culinary program, which is presently 60% females in a non-traditional shop. The program accepts up to 22 new students each year after the completion of ninth grade Exploratory. Enrollment has fluctuated in previously, but over the past three years is enjoying has been on an upward trend, due to a modification to the 9th grade Exploratory curriculum.

The Culinary Arts program at Bristol-Plymouth Regional Technical School's (B-P Tech) takes advantage of a wide range of learning opportunities, experiences and standards that align with the schools Core Values. The curriculum takes place in a state of the art commercial kitchen and is in compliance with current industry standards and trends. The student run bakery, Café and restaurant, provide students with an opportunity to not only practice the technical preparation of product but the business application of the industry. This takes place through hands-on practice of technique in American, French Traditional and International cuisine. The related theory part of the curriculum is taught on Mondays by all three full time instructors using an online version of "The Culinary Professional" that is accessible by the programs' I pads. On a frequent basis there are guest speakers from several post-secondary culinary colleges and universities that come and speak to the Culinary Arts students.

The kitchen lab is designed to mirror an actual restaurant setting, in a four to five station operation service. It is conducted in the classic French expeditor style system that involves the coordination of multiple students working all separate stations in the facility. The preparation line as well as the equipment have all been updated within the last three years.

The bakery has been updated offering state-of-the-art equipment to include multiple stand mixers, Fryolator, range top, proofing box, 80 quart floor mixer, multiple convection ovens, induction burners, immersion blenders, and sous-vide machine, allowing student to work with current industry equipment. The student run cafe affords the students the ability to develop and practice both interpersonal and QSR skills as well as cash management in a practical setting. The school recently installed new point-of-sale terminals which gives students exposure to equipment common in the restaurant trade.

The Culinary program is an American Culinary Federation (ACF) Certified program, complying with all 73 aspects of the latest certification (2017). The student body is 100% enrolled in SkillsUSA. There is a wide variety of extracurricular activities and events our students participate in such as: The Great Chowder Cook Off (winning first place honors for three consecutive years), multiple chili cook offs, Massachusetts Day on the Hill and various other community service events. In addition to the off campus events that are participated in, there are also in-house catering events such as the Advisory Board dinner for 200 people, the National Honor Society dinner for 150, multiple open houses for large numbers of guests and other extra-curricular events hosted by the school. Testing and delivery of instruction is also modified to meet the learning requirements of students with 504 and IEP plans.

The teachers' classroom instruction is evaluated annually, in accordance with a comprehensive evaluation

system prescribed by the Massachusetts Department of Elementary and Secondary Education (DESE) and adopted by the school district. As part of this system, teachers set personal performance goals that align with school and district goals. Teachers in the Culinary Arts Program use a combination of full class lectures, small group, and individual, hands on teaching techniques. As indicated earlier, students with disabilities are accommodated through a variety of instructional aides and techniques. READS collaborates with the Culinary department with hearing impaired students. There are helpful visual aids located around the shop as well. Instructors provide individual assistance in a manner that is effective for the particular learning style of the student. Technology plays a large role in the operation of the shop and classroom. Students have full access to a variety of technology mediums.

Assessment measurements are established reflecting the curriculum frameworks, using standards. Students are assessed through the MCAS. The Culinary Arts curriculum supports the language arts and math concepts. Competencies throughout the curriculum are measured and feedback is provided to the students. The Culinary department grades it's students on Production/Shop (50%), Exams/Quizzes (30%), and Homework (20%).

Culinary students have the opportunity to become certified in ServSafe, OSHA, TIPS, CPR, and Fire Extinguisher Training.

Students have a high level of co-curricular activity participation. Culinary Arts, Pastry Arts and Hospitality students are fully engaged in SkillsUSA and DECA, Business Professionals of America, National Honor Society, National Technical Honor Society, and Merit Club.

Dual enrollment at Johnson and Wales University is available through an articulation agreement with the University. There is also an articulation agreement with Bristol Community College. Each year there are numerous students that attend high level post-secondary Culinary education after graduation from the Culinary program. Students are eligible and participate in the cooperative education program after the third semester of their junior year as long as they have achieves a passing score on their ServSafe exam. Culinary students are placed in employment opportunities within the local business sector that range from high production bakeries to local supermarkets, fast food operations and fine dining restaurants. In FY18 two students participated in cooperative education placements.

Bristol-Plymouth tracks the progress of graduates through a variety of methods. The annual follow-up survey shows steady Chapter 74 positive placement with annual variations between post-secondary education and technically related employment.

There are three full-time teachers and one full-time aide in the Culinary Arts program with well over 60 years of high production, high quality industry experience. All three teachers in the program are licensed by DESE. One instructor has multiple Master's Degrees and the other two are in pursuit of Bachelor's Degrees in Occupational Education. The teachers stay current in their field by taking part in professional development opportunities offered through the school, maintaining direct relationships with Advisory Board Members and through MAVA annual summer workshops. Each teacher maintains the proper progress for professional development goals set by the administration. Two of the instructors maintain positions in industry which allow them to remain current with trends and industry standards. All three teachers and the aide participate in the Summer Exploratory program, which is a recruitment operation for rising 6th – 8th graders.

The Culinary Arts program is equipped with equipment and supplies sufficient to meet the needs of the program. The equipment is industry equivalent and is working condition. There are sufficient computers in the shop and all students have access to them. The shop is also equipped with Wi-Fi and an iPad cart. The program has a budget that is sufficient to pay for supplies and to implement the curriculum. The textbooks that are currently used are all available online to our students.

Instructors and students work well together. Students are engaged with instructor demonstration daily and each student has the benefit of instructor evaluation and guidance on a daily basis. Instructors are available before and after school and provide additional instruction to students as needed. Over the past three years there have been very few disciplinary situations. Mutual respect is modeled and is considered to be a highly integral part of the culture.

Culinary Arts has a program Advisory Board that meets twice a year and is comprised of members of industry from several segments as well as student and parent representatives. The Culinary Arts department bprides itself in a strong collaboration with the Taunton Board of Health and one of the local inspectors is a member of the Advisory Board. Guest speakers from several post-secondary culinary colleges and universities commonly attend the Advisory Board meetings. All instructors and aides attend the annual meetings and are receptive to suggestion.

# Culinary Arts and Sciences Commendations

---

## Commendation

The Culinary Arts department for collaborating with the Biotech department in the re-purposing of used fry oil to make bio diesel and starting a composting program, which allows the students to expand their sustainability training. (?.?)

# **Culinary Arts and Sciences Recommendations**

---

## **Recommendation**

Create and implement a plan to address the lack of parking near the "Silver Platter" restaurant to increase patronage. (7.5)

## **Recommendation**

Acquire further, more complete training in using the new POS system to better utilize this technology. (5.3)

## **Recommendation**

Install drop down electrical extension cords on the kitchen side of the shop to alleviate the safety hazard of extension cords on the floor. (7.5)

# Other Information Technology Services Cluster

---

## Narrative Program Summary

The Computer & Network Technology (CNT) program at Bristol-Plymouth Regional Technical School (B-P Tech) is geared to providing a challenging broad based curriculum in computer technology. The competency based curriculum offers students the opportunity to develop skills in computer repair and/or computer networking. The program is taught by two certified teachers who work diligently to provide students with a comprehensive IT curriculum that is continuously updated and enhanced to meet industry standards. The shop consists of two adjacent classrooms that house a simulated computer repair & networking workshop. The square footage of both rooms is 2344 square feet. The shop is divided by a glass window partition to include a lab room and a classroom with a tool room adjacent to both rooms. There is a storage closet located in the shop and a Help Desk. There are 36 student stations, two teacher stations at the front of each classroom for lectures and presentations as well as two computer stations found at the teacher desk station. The overall view of the shop is that it is clean and organized. Above the main door is an exit sign and description of where to evacuate the room.

In FY18 a total of 71 students were enrolled in grades 9-12, just short of the capacity of 72 and a level of enrollment steady for at least 10 years. This program is non-traditional for females and there is a small non-traditional enrollment. The current enrollment is over 90 percent male.

The curriculum for this program focuses on building, maintaining, and troubleshooting computers, design and implementation of networks, management of the Internet and connectivity devices. Online curriculum is supplied through an industry partnership with Cisco Academy. This program includes information resources and online testing. In addition, students are able to access an online community that exists through Cisco to share information with other students and instructors worldwide who participate in this academy. The Computer & Network Technology Program has partnered with well-known industry providers to include CompTIA and Cisco. The partnership with CompTIA provides students with curriculum and certification support for the A and Network program. Through the Cisco Partnership, a Cisco Academy was developed offering students curriculum and certification support for the CCENT and CCNA certifications for networking. Students who successfully complete the curriculum in both areas are recommended by their teachers to take a certification exam in one or more of the following areas: CompTIA A , CompTIA Network , Cisco CCENT, Microsoft MTA in Operating Systems, Networking, and Security Fundamentals.

CNT offers training in HTML, coding, game development, and advanced information technology fields.

Students in their senior year work on an individual professional development plan to prepare them for a specific role in the IT industry. An example of this can be seen through the student-driven help desk that provides services to people in the area of computer and network support. In addition, all students in this shop are trained in customer service, business ethics, group dynamics and interpersonal skills.

Teachers in the Computer and Networking Technology program are evaluated regularly using TeachPoint software. As part of this system, teachers set performance goals that are aligned with state, school, and district goals. The CNT program provides competency-based education and student progress is tracked in SkillsPlus. Students are regularly observed and assessed and instruction is adjusted based on this data. All freshman students are OSHA-10 Hour General Safety certified and safety rules and procedures are reinforced every year. Instructors use a variety of methods to ensure student learning including: lecture, hands-on activities, and demonstration. Teachers are notified of the students who are on IEPs or have a 504 plan, and teachers provide modifications and accommodations as needed.

Students in the CNT program are regularly assessed using a variety of methods including: written, hands-on, and project-based assessments. There are numerous opportunities to earn industry certifications. The Bristol-Plymouth Technical School District covers the cost of the exam for those students who have completed the preparation program for test taking. In addition, students have the opportunity through an individual professional

development plan to acquire other industry certifications, such as Microsoft, Linux, Help Desk and Security.

There are a number of students participating in both Business Professionals of America and SkillsUSA and the program is often represented at the state and national levels.

Students in the CNT program have the opportunity to participate in the cooperative education program. Student placement in the field is difficult; employers often feel that high school students do not have enough knowledge or skill to be working without a college degree. In FY18 six students participated in cooperative education opportunities.

The annual follow-up survey shows steady Chapter 74 positive placement with annual variations between post-secondary education and technically related employment.

Currently the program is staffed with two certified teachers. The two teachers have degrees and experience teaching for over 18 years. Both teachers are involved in the school community with positions of coaching, advising, mentoring. One teacher is an adjunct professor at a local community college as well. One teacher has been working the last two summers to run a girls week only in CNT, giving the girls an opportunity to experiment with computers. The number of girls exploring the shop over the last few years has increased. The two teachers are very knowledgeable about their discipline and use their skills to support the school's technology infrastructure to the benefit of the whole community.

The equipment of the shop is state of the art with newer routers and switches being purchased just a year ago. The entire shop has been fit with brand new computers over a three year cycle with up-to-date hardware and software. The budget for the program maintains resources required to prepare the students.

This program does not perform production work outside of the school, however the students do operate the in-school help desk.

Classroom rules support high expectations with regard to student behavior creating a classroom environment where all students feel safe, welcome, and respected by teachers and peers. Lessons include ethical standards with regard to diversity, acceptance, integrity, and teamwork. Students of all types are made to feel welcome in the program.

The CNT program has a Program Advisory Committee, which meets twice yearly providing feedback to be sure curriculum is aligned with industry standards. There is a diverse representation including a parent, student, and business/industry representatives. The Advisory Committee's recommendations have a positive impact on the program. The Advisory Board offers advice, suggestions and insight to contribute to growth of our program.



# Other Information Technology Services Cluster Commendations

---

## Commendation

The school and program for providing up-to-date equipment and other resources to best provide appropriate learning opportunities for students. (2.6)

## Commendation

The school and program for supporting student opportunity to specialize and earn industry certifications. (2.10)

## Commendation

The school and program for creating a student-staffed help desk which both maximizes school resources and provides increased learning opportunities for students. (2.6)

## Commendation

The Computer Networking Technology instructors for using their mastery of technical skills to assist the school community in maintaining its digital technology infrastructure. (3.5)

# Other Information Technology Services Cluster Recommendations

---

## Recommendation

Explore methods to increase the number of students who can participate in cooperative learning to experience authentic learning tasks. (3.2)

## Recommendation

Continue to seek ways to increase the number of non-traditional students in the Computer Networking Program. (2.1)

# Biotechnology

---

## Narrative Program Summary

There are two Biotechnology classrooms in a separate building shared with the Dental Assistant and Community Health trades. The lab space is integrated within the classroom space. It makes for a somewhat crowded classroom environment. The area does appear to be clean with proper signage. There are lockers in the hallway between the Biotech classrooms and the Dental classrooms. There is a unisex restroom just inside the entrance to the building. The overall appearance is one of a fairly new building with small but well equipped, clean classroom/lab areas.

There are 69 students in the Biotech trade, with a total capacity for 72. It is a very popular program, with 33, 9th grade students applying for 18 spots at the end of exploratory in 2018. The shop is 70 percent (48) female students and 30 percent (21) male students, which is against the norm, since Biotech traditionally has been a male dominated trade. One possible reason for this trend offered to the visiting team is that both instructors are female, and that may be related to the comfort level of female students in choosing this trade area.

A wide range of units of study are contained within the Biotechnology program that are based on the Massachusetts Vocational Technical Education Frameworks. For example, microscopy, cloning, DNA fingerprinting and solution preparation. There are two certified teachers in this program. The delivery of the curriculum is in line with the schools core values. Alignment between the written and taught curriculum is documented yearly through the SkillsPlus competency tracking system as well as written pre and post tests every semester. A curriculum guide for all four grades has just been recently completed. The curriculum is reviewed two times a year by the Advisory Board.

The visiting team member had the opportunity to visit both the tenth and twelfth grade Biotech classrooms. Lesson objectives (using Bloom's Taxonomy) were clearly posted on whiteboards along with the daily/weekly schedule. The weekly Google calendar was posted on the SmartBoard. On the first visit to the tenth grade side, students were leading a "Journal Club" which entailed presentations on current research in the field. Students were engaged and participated well as both presenters and audience members. They were required to ask at least three questions of the presenter. A student was put in charge of tracking this. The twelfth graders were doing a "Crispr" lab.

On the second visit, senior students were working in their lab notebooks and on a draft of their formal lab reports. In the tenth grade class, students were making Agar gels and doing an experiment on bacterial resistance to antibiotics. This activity was very student driven, and all students were engaged and working as a team within their lab groups. The technology used for this activity included, gel plates, automatic pipettes, autoclave and incubator. In terms of classroom management, much of that is structured into the way the class/labs are organized, and in keeping students busy. Positive reinforcement was used often by both instructors and students. In an instance when a student started to "pack up" for dismissal too early, the teacher gave a clear yet fair consequence, "Since you are all ready to leave, how about you be in charge of putting all the laptops back in the cart."

Student progress in the Biotechnology trade is tracked through both formative (performance skills) and summative assessments (end of unit tests, mid-term and final exams). Teachers regularly use rubrics, which are reviewed with students, on lab skills, projects and presentations. The visiting team member observed the 10th graders present current research articles by way of Journal Club. The rubric assessed time management on the research and preparation, summary, methods, data, conclusion, and presentation style. Teachers provide informal feedback to the students within a few days of presentations/projects such as this. More formally, both students and parents will see grades posted weekly on ASPEN, the schools web portal for communicating student progress. There is no formal Biotechnology trade license, however students are certified in CPR and First Aid, attain a yellow belt in Lean Six Sigma (Good Lab Practice) and are OSHA-10 certified.

The students in the Biotech program are encouraged to participate in both SkillsUSA and Health Occupations Students of America (HOSA). Beginning in grade 9, Skills USA and HOSA train students with employability skills

and leadership competencies. There are not any Biotechnology specific competitions within Skills USA, however students from B-P Tech Biotech trade do compete in the leadership, speech, and interview competitions. The senior Biotech class for 2017-18 school year came in first place in the district in the "Health and Knowledge" bowl. In addition, some Biotech students also participate in the National Honor Society and National Technical Honor Society.

This is only year five for the Biotechnology trade. Currently nine students are placed in Co-op positions at BioDirect, Clinical Laboratory Sciences and Veolia. The newest Co-op opportunity sprung from a summer Professional Development program that one of the instructors attended. Three student from B-P Tech Biotech program are now working at Millstone.

The program has built a relationship with Quincy College and Bristol Community College, participating in off campus field trips and bringing in guest speakers. Representatives from these colleges are on the advisory board for the Biotech program. The program does have articulation agreements with both colleges as well.

Another positive connection for students was made through an Advisory Board member who works for Broad, a joint research program between MIT and Harvard. This past summer (2018), three up and coming seniors attended a summer research program sponsored by Broad and gained experience in a research project of their choice. The program culminates with a poster presentation to the public.

Since this is only the fifth year for the Biotechnology trade at B-P Tech, there has been only one graduating class, which had 100 percent of the students graduate. All have gone onto post-secondary programs at various colleges and universities. Some students are working in the field while attending school.

Both teachers in the Biotech department are committed to staying up to date and relevant in their trade. They complete continuing education credits to maintain licensure and participate in ongoing professional development. In addition, they read current literature and network with professional experts such as peers at Tufts University and NIH. It is from the collaboration with Tufts that a unit on Crispr in the senior year was introduced.

Both teachers demonstrate leadership by taking on other non classroom duties. One teacher is the advisor of the Science Writing Club, is a member of the Scholarship Committee and regularly leads professional development workshops. The second teacher is advisor to the National Technical Honor Society and is assistant girls soccer coach.

As a relatively new program, and having received substantial funding to start, the Biotechnology program is well equipped in terms of supplies and state of the art hardware and software. Although the lab space is well organized and managed (Lean Six Sigma), the classroom and lab space is crowded. In addition, the electricity demands of the equipment cannot be met in the current space. For example the autoclave and microwave (used like a hot plate) cannot be run at the same time without tripping the circuit.

The Biotech trade does not do outside production work. At present, there are no job-shadowing opportunities for students. In-house (within school building), the Biotech students help the science department prepare solutions, troubleshoot repair equipment issues, and even set up and run simple labs.

The overall sense of the culture and climate in the Biotech trade program is very positive. The instructors and especially the students were very welcoming to the visiting team member. There was a good rapport both student to student and student to teacher. Students were engaged and collaborative in their work. There was no evidence of disrespect or improper behavior. The climate appears to be gender neutral unisex restroom and uniforms, despite the heavy female to male ratio.

Biotechnology has an active Program Advisory Committee that meets twice a year. It is composed of representatives from business and industry (Milestone, BioDirect), higher education (Quincy College, Tufts, Bristol Community College), the community, students, and parents. Currently there are 12 people on the membership list, 10 attend regularly. The Program Advisory Committee keeps minutes of its meetings which occur twice a year, the first of which occurred during the NEASC team visit. All parties involved agree that the Program Advisory Committee has positively impacted the program by suggesting current biotechnology concepts (Crispr), necessary equipment (new dishwasher) and making connections in the industry which have led to cooperative education positions (Milestone).

# Biotechnology Commendations

---

## Commendation

Actively pursuing new Co-op opportunities for students as evidenced by recent connections with the MIT/Harvard Broad summer program and Millstone, to support student learning. (Standard 7.8)

## Commendation

Both instructors remain up to date as evidenced by introduction of unit on Crispr in the senior year, to maintain content-specific instructional practices.(Standard 3.5)

## Commendation

Exposing tenth grade students to college level strategies for reviewing and communicating scientific information as evidenced by regular Journal Club meetings that engage students as active learners. (Standard 3.2)

## Commendation

Exposing tenth grade students to Good Lab Practice (GLP) by having them certified in Lean Six Sigma, which prepares students for real world lab requirements. (Standard 2.9, 2.10)

# Biotechnology Recommendations

---

## Recommendation

Implement a plan to correct the electrical flaws in the classroom/labs to allow more than one instrument to be used at the same time, providing for a full CTE program experience. (Standard 7.1)

## Recommendation

Find space within the classroom or storage space to install the newly purchased dishwasher, which will enhance all aspects of learning good lab practice. (Standard 7.5)

## Recommendation

Create and implement a plan to expand students experience in the field to include job shadowing opportunities, which will prepare students for real world lab requirements. (Standard 2.5, 2.7)

# Computer Aided Drafting and Design / Manufacturing

---

## Narrative Program Summary

The CAD/CAM program is located on the northwestern end of the school's main building. There are two distinct work areas. The entire area is approx. 72'x 72'. A CAD Lab is located beneath a mezzanine in the northeast corner. It is used for both CAD and theory related classroom activities. It measures 16' x 32' and has 20 computer stations located on a countertop around the interior perimeter, spaced 30" apart, plus a computer station at the instructors desk. All are equipped with CAD software including Solid Works, Auto CAD, Designer, MasterCam. Other equipment includes the following: 3D printers including 5 Afinia printers, 1 MakerBot Replicator, and one Z printer 650. Printer-plotters include Aficio MP2852 and a HP design jet T2300. The room includes a Smart board, wall-mounted behind the teacher station. The machine shop area is 56'x72' and includes the following equipment: 14 manual Sharp Lathes, five CNC retrofitted Proto Trak Milling machines, one three axis CNC Bridgeport Milling Machine, three Proto Trak three-axis bed Mills, three surface grinders, one heat-treat oven, one belt sander, two pedestal grinders, one sand blaster, four drill presses, three Band Saw machines, three CNC Proto trak lathes, one HAAS CNC Tool Room Lathe, one table saw, two Techno Routers, two collet lathes, one CMM coordinate measuring machine, one HAAS Tool Room Milling Machine, three CNC Simulators, one three-axis Quik Cell Milling Machine and work benches throughout the shop. The remaining square footage consists of a gender neutral bathroom, tool crib and teacher office area, contiguously located in the southeast corner of CAD/CAM. There are no obvious safety issues. The shop is equipped with five emergency stops, one on each wall and one centrally located. There are also four fire extinguishers and an eyewash station. An MSDS manual and first aid kit are also wall mounted and in plain sight. Students are regularly queried as to the location of each of these safety features and devices. All areas are well-lighted. Exit signs are clearly posted. There are 42 student lockers. 24 are located on the ground level, the remainder are located in the upper mezzanine level.

Presently there are 76 students enrolled in the program. The shop area is adequate to accommodate the tools and equipment for the current 76 students. The groups are split between the A/B rotations. The A rotation includes grades nine and eleven, and the B group consist of grades ten and twelve. Currently thirteen of the students are female in grades ten, eleven, and twelve. The grade 9 students consist of 18 boys.

Instructors use a curriculum that is based on the Massachusetts Vocational Technical Education Frameworks for CAD/CAM (machine shop technology and technical drafting CIP codes). There are three instructors. Weekly lesson plans are in place and fully implemented. Students learn through a variety of activities including hands on experiential learning, lectures/discussions, textbook instruction, field trips and presentations by local companies. Students' assessments include written tests, performance evaluations, employability skills observations, and project evaluations. Students' progress is tracked by the instructors through SkillsPlus software and X-2 grading system. The curriculum and the way it is delivered to students is directly aligned with the school's core values which emphasize personalized instruction. The curriculum follows the same written format used in all other career and technical education programs in the school. It is a competency-based curriculum that sets out clear performance expectations for students. The curriculum is roughly aligned from grade 9 through grade 12. All three teachers in the CAD/CAM program use daily or unit lesson plans. The curriculum is reviewed regularly, both by teachers and administrators and by the Program Advisory Committee which meets twice annually. Teachers and administrators review and update the curriculum informally and as particular issues arise. The Program Advisory Committee provides general feedback to teachers and administrators about curriculum issues, equipment, hardware and software, and industry trends during its twice-a-year meetings. The Program Advisory Committee also completes an annual programmatic review every October.

The teachers' classroom instruction is evaluated annually, in accordance with a comprehensive evaluation system prescribed by the Massachusetts Department of Elementary and Secondary Education and adopted by the school district. As part of this system, teachers set personal performance goals that align with school and



district goals. Teachers in the CAD/CAM program use a combination of full class lectures, small group, and individual teaching techniques. Students are often taught individually, both in the lab, in the theory classroom, and after school. Teachers provide different types of instruction for the differing kinds of learners. Teachers are notified by the Special Education department of the students who are on IEPs or have Section 504 Plans. Teachers provide accommodations and modifications, as needed. In some cases, students also work with a Special Education staff one-to-one. In the theory classroom, the teacher incorporates PowerPoint presentations into instruction and encourages students to use technology in their study. Some of the equipment in the lab requires the use of technology, and computers are available for this purpose. CAD/CAM teachers provide competency-based education and they keep track of student progress on SkillsPlus, a web-based software system. Teachers use this data to gauge the performance of individual students, and the class as a whole. Teachers adjust their instruction based on this data. Teachers pose questions to the class, encouraging students to engage in higher-order thinking.

The shop area is busy, with many machines in operation simultaneously. However, with few exceptions, students follow the classroom rules. Students are courteous and respectful to their peers and their instructors.

Safety is important in the program. Each year, teachers give instruction on safety and students are required to pass safety tests. By the end of the freshman year, all students are expected to earn an OSHA-10 certificate. There have been no serious injuries or accidents in CAD/CAM program in the past 15 years.

Student progress is regularly assessed. First, teachers use the SkillsPlus software to keep tabs on student competencies. Second, teachers keep daily gradebooks to track hands-on work. Third, they administer written formative assessments at least once per week. Fourth, they administer written and hands-on end-of-year assessments. Fifth, teachers require all students to keep a timecard and make daily entries detailing their activities. Finally, teachers require all students to complete a senior project. Teachers use this variety of assessments to inform individual and classroom-wide instruction and to improve student performance. Grades are posted on Aspen, a web portal available to students and parents the web portal weekly. Grades can only be seen by the student and parents of that student. The theory instructors often use rubrics for grading work and posts copies of the rubric with assignments. Students receive immediate feedback from their teachers while in the lab, allowing students to revise and improve their work. Students in theory/related receive their grades in a timely fashion. Students have generally done well in securing state and national industry-recognized credentials. For example, all CAD/CAM students earn an OSHA 10 certificate as well as certifications from MACWIC and NIMS.

This year, 16 of the 76 students now in CAD/CAM competed in various skills and leadership competition run by SkillsUSA. One of the students qualified for state competition, winning Silver in district completion in Technical Drafting. Several of the program's students are inducted into the National and Technical National Society each year.

While enrolled at Bristol-Plymouth Regional Technical School (B-P Tech), most of the students in the CAD/CAM program participate in some kind of work-based experience outside of school. This year, for example, 11 of the 18 students who will be graduating have participated in the school's cooperative education program, employed bi-weekly by many of the manufacturers in the region. These employers include O.D. Tool, North Easton Machine, AccuRounds and Tegra Medical.

All three teachers in the CAD/CAM program are appropriately licensed by the MA Dept. of Education. One has a Bachelor of Science degree in Occupational Education. A second instructor will complete all requirements for the same degree by summer of 2018. The teachers stay current in their field by taking part in Professional Development offered by B-P Tech, by taking other courses/workshops offered by area schools and colleges. The licenses for all three teachers are current and all are on track to attain the necessary PDP's for license renewal.

The program has three teachers. As noted above, CAD/CAM is well equipped with state of the art equipment. Most of the equipment has been purchased in the past 8 years, and is continually updated as needed. Computers in the CAD lab, although several years old, are fully functional and adequate for our use. These computers have CAD and CAM software that are updated each year to the most current versions.

The CAD/CAM program is sufficiently funded to pay for the supplies needed to implement the curriculum. In 2016, the Program Advisory Committee voted to recommend that the school purchase at least three computers for the Marine Technology lab and update the computers in the theory/related classroom.

CAD/CAM does a very limited amount of customer-requested production work. The products generated by the department are designed and manufactured primarily to satisfy competencies as defined by the Massachusetts Curriculum frameworks for CAD/CAM.

Faculty and students work together closely and collaboratively in the CAD/CAM program. Students of all types are welcome and teachers actively promote non-traditional students to join our program during the grade 9 exploratory process. A culture of being a caring, cooperative learning environment is promoted and reinforced. Ethical, responsible behavior is expected and nurtured by all stakeholders in the program, teachers and students alike. Discipline issues are kept to a minimum. Students and teachers participate in training regarding harassment and bullying- a zero tolerance standard regarding this issue is a school-wide practice.

CAD/CAM has an active Program Advisory Committee that meets twice a year. It is composed of representatives from business and industry, higher education, labor, the community, as well as students and parents. Currently, there are 12 persons on the membership list; approximately ten regularly attend semi-annual meetings. The visiting team found the program to be engaged in efforts to find representatives from higher education and ethnic groups from the school population to serve on the committee. The Program Advisory Committee keeps minutes of its meetings. All three teachers attend these meetings. The visiting team found much evidence that many supported the work of the advisory committee in supporting the program especially as an important factor in getting upgrades and new equipment purchased.

# **Computer Aided Drafting and Design / Manufacturing Commendations**

---

## **Commendation**

The program instructors for maintaining a high number of students on cooperative placement to best provide authentic learning opportunities for students. (3.2)

## **Commendation**

The program instructors for maintaining a high percentage of non-traditional students. (2.1)

# **Computer Aided Drafting and Design / Manufacturing Recommendations**

---

## **Recommendation**

Develop and implement a plan to ensure computers in the CAD lab are upgraded as necessary. (2.6)

## **Recommendation**

Continue efforts to the diversity of membership of the Program Advisory Committee in order to ensure that the program is getting a broader range of viewpoints. (2.8)

# Welding / Metal Fabrication and Joining

## **Narrative Program Summary**

The Bristol-Plymouth Regional Technical School Metal Fabrication shop is approximately 6902 sq. feet with a ceiling height of approximately 16' and raised mezzanine of 12' X 24'. There is a walkway of differing heights attached to the mezzanine which appears to have been added to several times. Individual ventilation systems for welding areas one and two, a new individual ventilation systems for the CNC plasma table and shop ceiling vent provide adequate air transfer throughout the day. There appears to be a hole in the north wall of the shop that occasionally lets in fumes from the adjacent auto shop. Outside are two pressurized gas bottle storage areas of approximately 4' X 10' each. The shop area is split into two welding zones along exterior walls with a general fabrication area centrally located. The welding area one has 8 welding booths focusing on Gas Metal Arc Welding and Flux Cored Arc Welding. Area two has 8 welding booths focusing on Oxy-fuel welding, Shielded Metal Arc Welding, and Gas Tungsten Arc Welding. The fabrication area houses a 10' X ¼" power shear, 8' X 3/16" power press brake, a multi-station iron worker, vertical band saw, 3' X 14 gauge power press brake, CNC plasma cutting table, two 4' X 14 gauge power rollers, power ring roller, two drill presses, blacksmiths forge with anvils and work space, 8' hand brake, 4' box and pan brake and a variety of hand-operated forming equipment, a new corner notcher, tungsten grinder and a donated lathe. One of the brakes had a defective gauge, but all other equipment was in good working condition. Further, the shop has a contained locker/changing area that is 10' X 15' and a bathroom with facilities for both male and female students. Tools are in a separate caged and lockable area 10' X 15' door. Signage for eye wash, emergency shut off switches, fire extinguishers, evacuation routes, etc. is adequate and placed in proper locations. The eye wash station appeared to be in disrepair. Metal Fabrication shares a Related classroom with Collision Technology and CAD-CAM. The classroom is equipped with one computer for teachers and a laptop cart with 20 laptop computers in it for students to use for auto-cad, printer and a interactive white board

Students come from a diverse backgrounds and multiple sending towns. Student population over the past five years has shown moderate growth from an average of 12 students per grade to an FY 18 freshman class at capacity of 20 students. In FY18 a total of 66 students were enrolled across the four grades as follows: 20 sophomores (16 females 4 males), 20 juniors (all male), 16 seniors (all male) . Metal Fabrication has seen a tremendous shift over the past two year with non-traditional enrollment increasing from under 20% to more than 50% of the student roster. We have worked hard to create a safe environment that fosters learning for all as our current demographics for grade 9-12 demonstrate. The increase in students with disabilities is consistent with the trend for the school at large.

Instructors use a curriculum that is based on the Massachusetts Vocation Technical Education Frameworks for Metal Fabrication & Joining Technologies (CIP Code 480599). There are two instructors in the program with a full time aide with industry experience. One teacher is the lead for grade 9 and grade 10. One is the lead instructor for grade 11 and grade 12.

The Metal Fabrication curriculum covers the necessary knowledge and skills to prepare students for entry level positions in a variety of metal fabrication industries. Course content includes safety, including 10 hour OSHA certification, blue print reading, metal fabrication and CAD-CAM :hand tools, power tools, cutting & forming operations, welding processes: GTAW, GMAW, spot welding and soldering, machine operations, materials and process quality, and design process and material layout.

Based on advisory committee recommendations, some program improvements are being implemented. First, the program has implemented a pipe welding competition with an outside company. If successful with the welding procedure during the competition, the student receives pipe certification for high pressure gas and steam pipe welding. The program is also implementation a AWS D1.5 Structural welding certification. A well-defined blacksmithing component is being added to further student knowledge of metallurgy, heat treatment of metals, and hand working skills.

Every day, students have a related-theory lesson as well as hands-on applied practice in the shop. The curriculum is competency-based and focused on skill development through hands-on projects that allow students to master skills at their own pace. This is felt to engage student and empower them to take ownership of their own learning

The teacher's classroom instruction is evaluated 4 – 8 times per year by administration observations. As part of the Massachusetts Department of Education evaluation system, teachers set goals for personal performance that align with the school district and state curriculum standards. Instruction is given in a variety of ways, full class lectures, small groups, demonstration & modeling, and individual teaching techniques. Students are often taught individually, both in the shop and the theory classroom. Teachers provide different types of instruction for the differing kinds of learners. Teachers also provide daily lessons and tasks for the students on a white board for each grade. Teachers are notified by the Special Education Department of the students who are on IEP's or have 504 plans. Teachers provide accommodations and modifications as needed to those students.

Student progress is regularly assessed in a variety of ways. In the related classroom students complete classwork, homework, quizzes, tests, safety test, blue print reading and Cam-Cad drawings.

In the shop environment students are graded weekly grade sheets with a common multi-element rubric that includes conduct, productivity and workmanship. In addition all student competencies are tracked using Skills Plus, and all students must pass their OSHA 10 certification

All Metal Fabrication students are eligible to participate in Skills-USA and student participation rates have risen from less than 20% in the Class of 2018 to 100% for the Class of 2020. The nontraditional students participate in the nontraditional club. Throughout the year other things are offered to students. NOTCH Technologies, for example, has a pipe-welding competition that could lead to a certification and a 500.00 prize and trade tools. Currently, there are 12 students, both male and female, in the junior and senior classes that participate in this activity. Students also participate in a Massachusetts-based blacksmithing competition with typically about six to eight students participating.

The students in the Metal Fabrication program participate in the cooperative education program, although only 2 are presently involved.

The annual follow-up survey shows steady Chapter 74 positive placement with annual variations between post-secondary education and technically related employment.

There are two teachers in the Metal Fabrication program along with a full-time aide with welding industry experience. Both teachers are appropriately licensed by the Dept. of Elementary and Secondary Education. The teachers stay current in their field by taking part in trade professional development in addition to taking courses and workshops when available to earn PDPs. One teacher demonstrate professional collaboration with the district by facilitating summer renovation projects. Both participate in the Summer Exploratory program – which is a recruitment operation for our sending community's rising 6th – 8th graders. Both teachers demonstrate professional leadership by rotating the lead teacher role. Instructors demonstrate the importance of education by enrolling in continuing education classes and activities. Instructors have been involved with adult continuing education classes and worker retraining programs

All equipment meets or exceeds industry standards and is in safe working condition. Notes from Advisory committee meetings support this finding. Materials and supplies are ample and replenished in a timely fashion by the school

The Metal Fabrication Department does complete production work. Instructors work with students and sending towns on real world projects at local churches, Councils on Aging and fire departments. This allows students strong skill building opportunities while providing a valuable service to the community. Some of the recent projects completed include custom window grates for a local church, conversion of a "tow motor" vehicle to a train for local town parade use, fire pits of many sizes and shapes and various "customer" requested projects the customers supply all the materials for all jobs.

The instructors and the students work collaboratively and professionally. There are seldom any student disciplinary issues in the shop or classroom areas. Students have clear set boundaries and expectations for behavior and performance. They do a good job meeting the expectations. One strategy being used to create a more inclusive culture in which all students feel welcome and validated is to use upperclassmen as tour guides and “peer instructors” with the underclassmen. We have also included a variety of creative sculpture projects that allow students to explore the curriculum.

Outside input is provided by the Metal Fabrication Program Advisory Board that is made up of nine members. The programs advisory board is active and diverse coming from all areas of the trade, including technicians, shop owners, and parent and student representatives. The advisory committee keeps the instructors up to date with changes in the industry and makes recommendations to modify curriculum. All three program instructors participate in the semi-annual advisory meetings. An Advisory Board dinner and meeting is held in the fall where discussion on program needs and standards are laid out with a plan of any changes or recommendations put in writing. A follow up meeting takes place in the spring to confirm and discuss what changes have been or should be implemented.

# **Welding / Metal Fabrication and Joining Commendations**

---

## **Commendation**

The school and department for a high number of non-traditional students enrolled in the program which promotes an equitable and diverse environment. (5.1)

## **Commendation**

The Welding/Metal Fabrication and Joining department for creating an active Advisory Committee which promotes strong industry partnerships. (2.9)(7.8)

## **Commendation**

The Welding/Metal Fabrication and Joining department for a steady increase of the number of enrolled students as evidence of a practice of continuous improvement throughout the program (2.7)(3.1)(4.7)



# **Welding / Metal Fabrication and Joining Recommendations**

---

## **Recommendation**

Ensure the existing mezzanine walkway is suitable for its storage use and for the safety for the students and staff (7.3)

## **Recommendation**

Repair the hole in the north wall to stop the fumes from the auto shop. (7.2)

## **Recommendation**

Ensure that all safety equipment is in good working order for the safety of the students (7.2)

# Automotive Collision Repair and Refinishing

---

## Narrative Program Summary

The Collision Technology program is located in room 708 of the Bristol-Plymouth Regional Technical School's (B-P Tech). The shop and adjoining related room are approx. 10,000 sq. ft. The related room is shared with CAD/CAM and Metal Fabrication. The shop is comprised of a small office and 6700 sq. ft. work area, tool crib and locker area. There is also a mezzanine area utilized for storage of materials. The office has three computers and a printer for each instructor. The work area is well equipped with two spray booths with a fully enclosed paint mixing room between them, a frame machine, vehicle lift, and two prep areas. The program has the most up-to-date hand, welding, refinishing, and repair tools available. The classroom is equipped with one computer, a printer and a SmartBoard. There is a laptop cart available for various assignments, although the visiting team found it underutilized due to a need for updated estimating software. The shop is equipped with both a boys and a girl's locker room, each with its own restroom located in an area of the shop with an obstructed view to it. All the necessary signage for evacuations, bathrooms, health and safety such as Safety Data Sheets (SDS) are clearly marked and available.

B-P Tech students come from diverse backgrounds. Student population over the past ten years has shown moderate growth with the FY18 freshman class at capacity of 22 students. In FY18 a total of 66 students were enrolled across the four grades. A quarter of this population is non-traditional, with the exception of the Class of 2019 which is all male. The increase in students with disabilities is consistent with the trend for the school at large.

Instructors use a curriculum that is based on the Massachusetts Vocation Technical Education Frameworks for Automotive Collision Repair & Refinishing. There are three instructors in the program. One instructor is the lead for grade 9 and 10. One is the lead instructor for grade 11 and grade 12. The third instructor co-teaches all grades and provides extra support to students who require extra help or direction.

The Collision Technology program has received National Automotive Technicians Education Foundation (NATEF) Master Accreditation. The curriculum and training is designed to prepare students for work or further education. The Collision Technology program prepares students' for employment in the collision industry as well as several related fields. The program runs from the middle of ninth grade through twelfth. The program teaches welding, panel repair, painting, and culminates with the ability to use the frame machine. The construction of the automobile from its earliest development up to current and future technological advancements are covered. Related trade areas covered include automobile detailing and insurance adjusting. The use of Mathematics, Science and English skills are integrated into the course curriculum to make the students more employable and well-rounded in the trade.

In the shop environment the students perform live-work to better imitate a true collision shop. The visiting team observed the shop in full operation with all 10th and 12th grade students in the shop spaces. There was not a large number of students taking advantage of any cooperative learning opportunities. The space is limited when all students (almost 40) are assigned projects working in the shop. The collision shop has adequate tools to allow students to be able to complete their tasks efficiently.

Each day students receive a related-theory lesson as well as hands-on applied practice in the shop. The curriculum is competency-based, focused on skill development through hands-on projects that allow students to master skills at their own pace. This model engages students and empowers them to take ownership of their own learning.

The teacher's classroom instruction is evaluated four to eight times per year by administrative observations. As part of the Massachusetts Department of Elementary and Secondary Education (DESE) evaluation system, teachers set goals for personal performance that align with the school district and state curriculum standards. Instruction is given in a variety of ways, full class lectures, small groups, demonstration & modeling, and

individual teaching techniques. Students are often taught individually, both in the shop and the theory classroom. Teachers provide various types of instruction to students requiring differentiated instruction methods to understand concepts and processes. The visiting team found the instructors to be very attentive to student needs and witnessed instructors working closely with students in shop spaces. Teachers are notified by the Special Education Department of the students who are on IEP's or have 504 plans. Teachers provide accommodations and modifications as needed to those students. Recently all three Instructors were provided laptops to utilize throughout their shop observations and assessments.

Student progress is regularly assessed in a variety of ways. In the related classroom students complete classwork, homework, quizzes, and tests. Time cards are completed by the students on a daily basis at the end of the day to reflect on what they learned and what work they completed.

In the shop environment students are graded daily with a multi-element rubric that includes conduct, effort, productivity, workmanship, safety, related and cleanup. In addition all student competencies are tracked using SkillsPlus, and all students must pass their OSHA-10 certification.

All of the Collision students are eligible to participate in SkillsUSA. The nontraditional students participate in the nontraditional club.

The students in the Collision Technology program participate in the cooperative education program. In FY18 three students secured cooperative education employment positions.

The annual follow-up survey shows steady Chapter 74 positive placement with annual variations between post-secondary education and technically related employment.

There are three teachers in the Collision Technology program, and all are DESE licensed. Additionally, all three teachers maintain current Automotive Service Excellence (ASE) Master certifications. The teachers stay current in their field by taking part in trade professional development opportunities in addition to taking courses and workshops when available to earn PDPs. One instructor demonstrates professional collaboration with the district by facilitating summer renovation projects. Another instructor by participating in the Summer Exploratory program, which is a recruitment operation for the community's rising 6th – 8th graders. All three instructors work collaboratively to create a positive classroom/shop environment and working atmosphere.

Teachers and students have the adequate tools, equipment and supplies to engage in meaningful and productive educational learning experiences.

The Collision Technology Department is a production shop. Members of the community can have their vehicle repaired/refinished by the department. This allows students strong skill building opportunities while providing a valuable service to the community. The department faculty coordinate vehicle repair assessment and the scheduling and billing of production work.

The instructors and the students work collaboratively and professionally. There are seldom any student disciplinary issues in the shop or classroom areas. Students have clear set boundaries and expectations for behavior and performance. The visiting team observed all students on task and utilizing proper safety equipment. Students were also observed following directions, stopping at given checkpoints and approaching the instructors for further directions.

Outside input is provided the Collision Technology Program Advisory Board that is made up of seven members. The programs advisory board is active and diverse coming from all areas of the trade, including technicians, shop owners, insurance adjuster, vendors and parent and student representatives. The advisory committee keeps the instructors up to date with changes in the industry and makes recommendations to modify curriculum. All three program instructors participate in the semi-annual advisory meetings. An Advisory Board dinner and meeting is held in the fall where discussion on program needs and standards are laid out with a plan of any changes or recommendations put in writing. A follow up meeting takes place in the spring to confirm and discuss what changes have been or should be implemented.

# Automotive Collision Repair and Refinishing Commendations

---

## Commendation

The Automotive Collision Repair and Refinishing teachers for adjusting their instructional practices to meet the needs of each student by strategically differentiating tasks. (3.3)

## Commendation

The school and the Automotive Collision Repair Department for ensuring the program is equipped with a wide range of up-to-date equipment to fully implement the curriculum. (2.6)

## Commendation

The school and the Automotive Collision Repair Department for offering a program that is both ASE and NATEF-certified to best prepare students to meet industry requirements. (2.10)

# Automotive Collision Repair and Refinishing Recommendations

---

## Recommendation

Provide students with consistent estimating writing software across their curriculum to best prepare them for industry requirements. (2.6)

## Recommendation

Create and implement a plan to better monitor and supervise shop areas outside the instructors line-of-sight to ensure student safety. (3.3)

## Recommendation

Create and implement a plan to expand the opportunities for authentic learning opportunities (Co-Op) both inside and outside of the school environment. (2.3)

# Automotive Technology

---

## Narrative Program Summary

The visiting team observed that the Automotive Technology instructional facilities at Bristol-Plymouth Regional Technical School's (B-P Tech) include a 9,000 square foot (75' x 120') area workshop, combined with a separate 960 square foot (30' x 32') related instruction classroom. The main shop layout is a 7,500 square foot open space with nine two-post above-ground lifts placed along both long the outside walls of the shop. The teachers office is found in one corner of the open space. State-of-the-art tire mounting and balancing equipment is found at one end of the shop on a perimeter wall. An up-to-date alignment machine and rack system is also situated in this area. Around the perimeter of the shop they have workbenches in every lift bay. Along one of the long walls they also have an additional tire mounting/dismounting machine and two additional wheel balance machines, as well as a part washing station, a freestanding bench grinder station, and a freestanding drill press. On one end of the main shop area, two rooms comprised of about 1,000 square feet, house most of the portable tools and equipment for working on the vehicles. An additional 500 square feet is dedicated to a locker room and wash basin for the students use. The related instruction classroom is well equipped with books, desks, props and multi-media technology to support the instructional program. Overall the facility completely meets the needs of the program to implement a National Automotive Technicians Education Foundation (NATEF) eight-area certified automotive diagnosis and repair curriculum. All the necessary signage for evacuations, bathrooms, health and safety such as Safety Data Sheets (SDS) are clearly marked and available.

The visiting team found that the Auto Tech students come from a diverse backgrounds. Student population over the past ten years have been relatively steady with the FY18 freshman class at capacity (22 students). In FY18 a total of 68 students were enrolled across the four grades. In grades 10-12, 90 percent of the students were male.

The visiting team observed the instructors using curriculum that is based on the Massachusetts Vocation Technical Education Frameworks for Automotive Technology. There are three instructors in the program, with all of the teachers co-teaching the four grades.

The Automotive Technology Department utilizes a competency-based curriculum established through its affiliation with NATEF and the Massachusetts Frameworks for Automotive Technology. The NATEF task list is an exemplary model of competency based education through a defined list of tasks to meet current industry standards.

The Automotive Department staff develops, implements and utilizes a variety of creative delivery techniques in their efforts to train new, successful entry level automobile technicians. The automotive instructional teachers employ audio/visual instruction, lecture based instruction, demonstrative instruction, group instruction, individual instruction and production-based learning experiences in attaining successful transfer of information from source to student.

The Automotive Technology Department curriculum is entirely competency based, allowing for students of all learning styles and ability levels to effectively utilize the available resources in their efforts to become automobile technicians. Automotive Department instructional materials are selected with regard to input from industry leaders, the advisory committee, school administration, and automotive department staff. Textbooks have a copyright no older than five years as mandated by NATEF standards of automotive program. The Automotive Technology Department curriculum provides annual safety instruction and testing at the beginning of each school year for all grade levels. SDS materials are reviewed on a regular basis and stored on the school server. Safety practices and instruction are continuously attended to during shop operation and issues are addressed on an as needed basis.

The teacher's classroom instruction is evaluated four to eight times per year by administrative observations. As part of the Massachusetts Department of Elementary and Secondary Education's (DESE) evaluation system, teachers set goals for personal performance that align with the school district and state curriculum standards.

Instruction is given in a variety of ways, full class lectures, small groups, demonstration & modeling, and individual teaching techniques. Students are often taught individually, both in the shop and the theory classroom. Teachers provide different types of instruction for the differing kinds of learners. Teachers are notified by the Special Education Department of the students who are on IEP's or have 504 plans. Teachers provide accommodations and modifications as needed to those students.

The design of the Automotive Technology Department's instructional program supports the mission of the school by adequately training students to become entry-level automotive technicians, the majority of whom find gainful employment within the industry and enjoy the use of their learned skills for a lifetime. Statistics that support the placement of students in their trade area can be found in the follow-up surveys which are done through the Student Services Department. Computers are utilized in the Automotive Department Program to train students for repair information retrieval using ALLDATA software, customer information database formation, and repair parts acquisition.

Student assessment measures employed in the Automotive Department include daily and weekly time card review, formal written testing, instructor/student oral conversation assessment, NATEF task list maintenance and review, and student competency report maintenance and review. Student performance reporting is executed quarterly throughout the school year and on an as needed basis in cases where more attention is required. All student competencies are tracked using SkillsPlus.

The Automotive Technology program is NATEF Master certified. Students are able to demonstrate their skill levels through the practical hands on operation and experience of live production work on actual customer vehicles scheduled during the school year as it applies to subject areas currently being taught in program. Required licensing or certification does not apply to the Automotive Department at this time. All students are required to complete the OSHA-10 certification for cooperative education eligibility.

The Automotive department is involved in SkillsUSA, Massachusetts Automobile Dealers Association (MADA) Student Skills, and co-curricular activities. All students are encouraged to participate by the instructors in the program. Assessment of their students' success can be measured by their performance while competing against students from across the state/country.

All the 10th, 11th, and 12th grade students are invited to attend their after school preparation programs that are offered on a weekly schedule January through May. This is a great way for underclassman students to enhance their skills even though they might not yet meet all of the qualifications to participate at the state level. The after school sessions allow them to expand their curriculum and enhance the instruction by addressing the individual automotive interests of the participants that may fall outside of our regular curriculum. The instructor also will act as a mediator to make sure that the topics covered are relevant to their goal of preparing students to industry standards as well as preparing them for participation in the co-curricular events.

Sophomore students are introduced to the programs as the juniors and seniors prepare and participate in the various activities associated with these curriculum enhancing contests. This peer mentoring strategy has consistently resulted in a high level of interest and participation by their students every year.

The Automotive Technology Program is an active member of Automotive Youth Educational (AYE) initiative. This initiative partners local businesses (new car dealerships, used car dealerships, and independent repair facilities) with the Automotive Technology Program and facilitates paid cooperative education student placements.

The Automotive Technology Program encourages qualified individuals to enroll in the cooperative education program for students whom meet the requirements after second term of junior year to enhance student performance in technical and related integrated academic areas.

- 2017-2018 - currently 10 students
- 2016-2017 - 7 students
- 2015-2016 - 13 students
- 2014-2015 - 4 students

The Automotive Technology program currently has articulation agreements with New England Institute of Technology, Universal Technical Institute, University of Northwest Ohio, Benjamin Franklin Institute of Technology, Massachusetts Bay Community College, Bristol-County Community College, and Massasoit Community College.

The annual follow-up survey shows steady Chapter 74 positive placement with annual variations between post-secondary education and technically related employment. The information given to the team for the class of 2018 Auto Tech is Work (68%) 4-Yr Private College (12.50%) 2-Yr Post-Secondary (6.25%) Military (12.50%)

There are three teachers in the Automotive Technology program. All are licensed by the DESE. Additionally all three teachers maintain current ASE certifications. The teachers stay current in their field by taking part in trade professional development in addition to taking courses and workshops when available to earn PDPs.

Teachers and students have the adequate tools, equipment, and supplies to engage in meaningful and productive educational learning experiences.

The Automotive Technology Department is a production shop. Members of the community can have their vehicle repaired by the department. This allows students strong skill building opportunities while providing a valuable service to the community. The department faculty coordinate the scheduling of production work

The instructors and the students work collaboratively and professionally. There are seldom any student disciplinary issues in the shop or classroom areas. Students have clear set boundaries and expectations for behavior and performance. They do a good job meeting the expectations.

Outside input is provided the Automotive Technology Program Advisory Board that is made up of nine members. The programs advisory board is active and diverse coming from all areas of the trade, including technicians, shop owners and managers, vendors, parent, and student representatives. The advisory committee keeps the instructors up to date with changes in the industry and makes recommendations to modify curriculum. All three program instructors participate in the semi-annual advisory meetings. An Advisory Board dinner and meeting is held in the fall where discussion on program needs and standards are laid out with a plan of any changes or recommendations.



# Automotive Technology Commendations

---

## Commendation

The Automotive Technology teachers for offering after-school assistance programs to help meet the needs of each student. (3.3)

## Commendation

The school and the Automotive Technology Department for offering a program that is both ASE and NATEF-certified to best prepare students to meet industry requirements. (2.10)

## Commendation

The Automotive Technology Department for its multi-year efforts to increase the number of students participating in cooperative learning placements expanding the range of authentic learning opportunities for students. (2.3)

## Commendation

The school and the Automotive Technology Department for ensuring the program is equipped with a wide range of up-to-date equipment to fully implement the curriculum. (2.6)

# **Automotive Technology Recommendations**

---

## **Recommendation**

Continue efforts to continue non-traditional enrollment in the Automotive Technology program. (2.1)

# Major Commendations from the Team (Critical Strengths) Listed by Standard

---

## Major Commendations

### Standard 1- Core Values and Expectations

The visiting team commends the school for its orderly, research-based approach to creating learning expectations and accompanying rubrics.

### Standard 2 - Curriculum

The visiting team commends the school for the use of data to inform the development of high-quality academic programs, which have resulted in high levels of student achievement.

The visiting team commends the school for the development of a robust Advanced Placement Program resulting in steadily increasing the number of students participating, holding two courses in technical programs, and having 34.3% of exams taken in 2018 earning a qualifying score.

### Standard 3 - Instruction

The visiting team commends the school's academic and technical teachers for the creation and implementation of instructional practices that engage students as active learners.

### Standard 4 - Assessment

The visiting team commends the school for their high level of achievement on the Massachusetts Comprehensive Assessment System assessments which serves as evidence that the entire school continuously assesses areas for improvement.

The visiting team commends the school for its large number of students who participate in cooperative education which enhances the learning experience for the students during the junior and senior year.

### Standard 5 - Culture and Leadership

The visiting team commends the school for its school-wide efforts in promoting equity and non-traditional enrollment in technical areas.

The visiting team commends the school for consciously and continuously building a safe, positive, respectful, and supportive culture through various initiatives, programs, and clubs that promote student leadership, diversity, and recognition of student achievement.

### Standard 6 - Student Services and Support

The visiting team commends the school for its efforts on post-secondary transition programs and initiatives such as Career Showcase, Credit for Life, and the Senior Projects which help students achieve the school's learning expectations.

### Standard 7 - School Finance and Community Relations

The visiting team commends the school and district for collaboratively preparing and providing sufficient funding for programs, equipment, activities, technology, and maintenance of facilities, including programs after-school and during the summer.

The visiting team commends the school and district for its collaborative efforts in completing a three-year building project of a 7800 square foot facility on site to house the Early Childhood and Care program to increase the number of programs offered to students and the community.

# Major Recommendations from the Team (Focus Areas for Improvement) Listed by Standard

---

## Major Recommendations

### Standard 1 - Core Values and Expectations

Develop a plan to ensure the mission statement, core values, and learning expectations drive curriculum, assessment, and instruction in every classroom and guide the school's policies, procedures, decisions, and resource allocations.

### Standard 2 - Curriculum

Continue to transition technical curriculum to common format utilizing units of study with essential questions, concepts, content, and skills, school's learning expectations, developmentally appropriate instructional strategies, and a variety of developmentally appropriate assessment practices.

### Standard 3 - Instruction

Continue to support teachers in adjusting their instructional practices to meet the needs of all students by providing additional support and alternative strategies.

### Standard 4 - Assessment

Continue to develop the process of reviewing the results and structures of all high stakes assessments to modify and improve instructional practices in both academic and technical areas.

### Standard 6 - Student Services and Support

Continue to examine ways to support students who are transitioning back into school after extended absence to help each student achieve the school's learning expectations.

# **Visting Team Response (Narrative) to SSR Section 2**

## **Visiting Team Response (Narrative) to SSR Section 2**

Bristol-Plymouth Regional Technical School (B-P Tech) lists about 45 critical strengths across the seven standards. The visiting team has recognized virtually all of them as a commendation within a standard or subject-area reports, or in our own critical strengths identification. The visiting team identified a number of critical strengths we believe act as an umbrella to explain the success of the school and district in many of the strengths identified by the school in the self-study. In Standard 2 we cite the school's "high-quality of academic programs" and "high levels of student achievement." In Standard 3 we cite the entire teaching staff for "implementation of teaching practices" that support student achievement. In Standard 4 we cite student achievement as well. In Standard 5 we cite school-wide efforts in "building a safe, positive, respectful, and supportive culture." In Standard 7, we do the same in citing the school and district's success in "providing sufficient funding for programs, equipment, activities, and maintenance of facilities, including programs after-school and during the summer." The visiting team believes that the view of the school community aligns closely with that of the visiting team as regards the strengths of B-P Tech.

The alignment is not quite as close on the Focus Areas for Improvement. The self-study has more and sometimes different focus areas from the recommendations of the team. However, the levels of achievement rightly cited in our recommendations, including evidence of ample funding of programs and facilities, sometimes caused the team to reconsider a certain recommendation as they might contradict each other. We point out that the school's self-study was thorough and contains a good amount of thoughtful introspection. indeed, reflective practice is woven throughout the standards, and the school's ability to identify its own needs helps explain many of its commendations above. For addressing future needs, the school can use both its own self-study and the recommendations of the visiting team to maintain continuous improvement.

# Concluding Comments

---

## **The essential features of the team's view of the school/center**

Bristol-Plymouth Regional Technical School (B-P Tech) is in an attractive park-like setting. The building is very well-maintained both inside and out. Although security is more than sufficient, visitors check in at a large reception area and quickly feel welcome in the building. Student movement throughout the building is orderly and quiet. Features like the restaurant, the hair salon, a school store, and new outbuildings for programs reveal connections with the community and a dynamic learning environment. The visiting team found the technical areas to be well-equipped and safe. Academic classrooms were generally grouped together and the use of digital technology common. The visiting team was especially impressed by the commitment of the entire teaching staff - both academic and technical - to what went on in their classrooms. There were a number of initiatives throughout the building to provide students with extra help, before and after school, and even in the summer. Administration has set a number of parameters to focus on student achievement - through behavioral expectations, scheduling, and curricular, instructional and assessment priorities. Results from this showed in a number of areas from MCAS scores to cooperative learning numbers. Support services and extra-curricular offerings were more than sufficient. The visiting team was impressed as well by the district's financial commitment to the school's programs and the successful fiscal management of those programs.

## **Overall comments on the visit**

The visiting team felt that the visit was a success. The school was well-prepared for us and the self-study was thorough and thoughtfully prepared. Staff assigned to help us were extremely accommodating and extremely knowledgeable about all aspects of the school community. School administration was always at hand and visited frequently to answer questions or provide support. Again, the visiting team was impressed with the faculty and its commitment to student success. Visits to classrooms and shops always found students engaged in learning activities. Non-teaching staff were welcoming and provided additional perspectives helpful to the visiting team. All administration, faculty and staff appeared very proud of their school and with good reason to be so.

## **The extent to which the school/center is driven by its core values and beliefs**

The visiting team found that the school had prioritized expectations, practices, and policies over time in such a way to maximize student success. The school is presently in the process of revising core values and beliefs and hopefully these new documents reflect elements related to their successes. As mentioned earlier in this report, it is recommended that the school will continue to implement and use the new core values, beliefs, and learning expectations to drive all components of the school.

## **The extent to which the school/center is focused on student learning and well-being**

Clearly, the school has prioritized student learning. The use of assessment data to adjust instruction, scheduling to support such instruction, behavioral expectations which support a positive learning environment, before and after-school programs, summer programs, a commitment to the effective use of digital tools in the classroom, and technical programs with positive climates are all evidence how the school focuses on student learning. The school does not ignore other aspects of student well-being. Support services are an integral part of the school community and input from parent and trade advisories assist in making the school a positive place to be for

students. The visiting team would also like to point out that the school district and its provision and management of resources for school programs also reflected the school's priorities on student well-being and learning.

## **Some concluding advice and encouragement**

As stated earlier in this report, the school should not hesitate to use their own self-study and this report together to set priorities for future actions. The visiting team found school faculty and staff to be aware of current needs and challenges and we have little doubt that the school will address them. We hope the visit and this report will assist you to confirm what you are doing well and to help you set future priorities for growth and improvement.

## **Thanks to the school/center and the Visiting Team**

Finally, the visiting team would like to thank the entire school center for its hospitality and help for the visit. The Team had plenty of resources to accomplish its task - perhaps the hardest part was processing all the information with which we were provided. The school's self-study leaders were always available to answer our questions, and of course, the self-study was of great value to the visiting team and we cannot thank the school enough. The visiting team chair would like to thank the members of the visiting team for their hard work. Volunteering to take time out of their own schedules and work four long days to help colleagues in another school is a professional act of the highest order and the visiting team chair sends them the deepest gratitude.



# **FOLLOW-UP RESPONSIBILITIES**

---

This comprehensive evaluation report reflects the findings of the school/center's self-study and those of the visiting team. It provides a blueprint for the faculty, administration, and other officials to use to improve the quality of programs and services for the students in this school/center. The faculty, school board, and superintendent should be apprised by the building administration yearly of progress made addressing visiting team recommendations.

Since it is in the best interest of the students that the citizens of the district become aware of the strengths and limitations of the school/center and suggested recommendations for improvement, the Committee requires that the evaluation report be made public in accordance with the Committee's Policy on Distribution, Use, and Scope of the Visiting Team Report.

A school/center's initial/continued accreditation is based on satisfactory progress implementing valid recommendations of the visiting team and others identified by the Committee as it monitors the school/center's progress and changes which occur at the school/center throughout the decennial cycle. To monitor the school/center's progress in the Follow-Up Program, the Committee requires that the principal submit routine Two- and Five-Year Progress Reports documenting the current status of all evaluation report recommendations, with particular detail provided for any recommendation which may have been rejected or those items on which no action has been taken. In addition, responses must be detailed on all recommendations highlighted by the Committee in its notification letters to the school/center. School/center officials are expected to have completed or be in the final stages of completion of all valid visiting team recommendations by the time the Five-Year Progress Report is submitted. The Committee may request additional Special Progress Reports if one or more of the Standards are not being met in a satisfactory manner or if additional information is needed on matters relating to evaluation report recommendations or substantive changes in the school/center.

To ensure that it has current information about the school/center, the Committee has an established Policy on Substantive Change requiring that principals of member schools/centers report to the Committee within sixty days (60) of occurrence any substantive change which negatively impacts the school/center's adherence to the Committee's Standards for Accreditation. The report of substantive change must describe the change itself and detail any impact which the change has had on the school/center's ability to meet the Standards for Accreditation. The Committee's Substantive Change Policy is included on the next page. All other substantive changes should be included in the Two- and Five-Year Progress Reports and/or the Annual Information Report which is required of each member school/center to ensure that the Committee office has current statistical data on the school/center.

The Committee urges school/center officials to establish a formal follow-up program at once to review and implement all findings of the self-study and valid recommendations identified in the evaluation report. An outline of the Follow-Up Program is available in the Committee's Accreditation Handbook, which was given to the school at the onset of the self-study. Additional direction regarding suggested procedures and reporting requirements is provided at Follow-Up Seminars offered by Committee staff following the on-site visit.

The visiting team would like to express thanks to the community for the hospitality and welcome. The school/center community completed an exemplary self-study that clearly identified the school/center's strengths and areas of need. The time and effort dedicated to the self-study and preparation for the visit ensured a successful accreditation visit.

# **SUBSTANTIVE CHANGE POLICY**

---

## **NEW ENGLAND ASSOCIATION OF SCHOOLS & COLLEGES Committee on Technical and Career Institutions**

Principals of member schools/centers must report to the Committee within sixty (60) days of occurrence any substantive change in the school/center which has a negative impact on the school/center's ability to meet any of the Committee's Standards for Accreditation. The report of a substantive change must describe the change itself as well as detail the impact on the school/center's ability to meet the Standards. The following are potential areas where there might be negative substantive changes which must be reported:

- elimination of fine arts, practical arts, and student activities
- diminished upkeep and maintenance of facilities
- significantly decreased funding - cuts in the level of administrative and supervisory staffing
- cuts in the number of teachers and/or guidance counselors
- grade level responsibilities of the principal
- cuts in the number of support staff
- decreases in student services
- cuts in the educational media staffing
- increases in student enrollment that cannot be accommodated
- takeover by the state
- inordinate user fees
- changes in the student population that warrant program or staffing modification(s) that cannot be accommodated, e.g., the number of special needs students or vocational students or students with limited English proficiency

# Roster of Team Members

---

## Chair(s)

**Chair: Mr. Richard Shellman**

*Principal*

Oliver Wolcott Technical High School  
Torrington, CT

**Assistant Chair: Mr. Christopher Comeau**

*Mathematics / Computer Science Teacher*

Southeastern Regional Vocational Technical School  
South Easton, MA

## Team Members

**Mr. Scott Botelho**

*Culinary Arts & Science Instructor*

Diman Regional Vocational Technical High School  
Fall River, MA

**Ms. Julie Bowen**

*Early Childhood Education Instructor*

Weymouth High School  
South Weymouth, MA

**Ms. Angela Caira**

*Guidance/Student Services*

Shawsheen Valley Technical High School  
Billerica, MA

**Mr. William Collins**

*Auto Collision Repair Instructor*

Southeastern Regional Vocational Technical School  
South Easton, MA

**Ms. Brenda Graminski**

*Science*

Vinal Technical High School  
Middletown, CT

**Ms. Margaret Griffin-Sarmiento**

*Graphic Arts*

Greater Lowell Technical High School  
Tyngsboro, MA

**Ms. Andrea Kelly**

*Bus Mgmt/Office Tech*

William M. Davies Jr. Career and Technical High School  
Lincoln, RI

**Mr. Jeffrey Levinson**

*ELA*

Bullard-Havens Technical High School  
Bridgeport, CT

**Mr. Paul Mendez**

*Welding / Metal Fabrication Instructor*

Greater New Bedford Regional Vocational Technical High School  
New Bedford, MA

**Ms. Patricia Murphy**

*Mathematics Instructor*

Blue Hills Regional Technical School  
Canton, MA

**Mr. Paul Perreault**

*Automotive Technology*

Blackstone Valley Regional Vocational Technical High School  
Upton, MA

**Ms. Betty Poppo**

*Cosmetology*

Center for Technology, Essex  
Essex Junction, VT

**Ms. Deborah Rauli**

*Social Studies Instructor*

Bay Path Regional Vocational Technical High School  
Charlton, MA

**Ms. J. Renana Rottner**

*Health Technology Department Head*

Eli Whitney Technical High School  
Hamden, CT

**Mr. William Tierney**

*Plumbing*

Oliver Wolcott Technical High School  
Torrington, CT

**Ms. Gabriella White**

*Director of Curriculum & Grants*

Nashoba Valley Technical High School  
Westford, MA