

2015 ANNUAL REPORT
SHAWSHEEN VALLEY REGIONAL
VOCATIONAL/TECHNICAL SCHOOL DISTRICT

The Shawsheen Valley Regional Vocational Technical School District (SVTHSD) is pleased to submit its 2015 Annual Report to the citizens of Bedford, Billerica, Burlington, Tewksbury, and Wilmington. Located on Cook Street in Billerica next to the towns of Burlington and Wilmington, the school celebrated its 45th anniversary this year, perpetuating the highest quality in vocational technical education to area youth and residents.

The representatives of the 10-member Regional School Committee that governs the District are: Donald Drouin and Glenn McIntyre from Bedford; Kenneth L. Buffum and Paula McShane Lambert, Chair, from Billerica; Paul V. Gedick and Robert Gallagher, Vice-Chair, from Burlington; Patricia W. Meuse, Treasurer and Lisa Puccia from Tewksbury; and James M. Gillis and Robert G. Peterson, Secretary, from Wilmington. Charles Lyons retired as Superintendent/Director of the District on September 30, 2015, after 28 years, and was succeeded by Timothy Broadrick on October 1, 2015.

Shawsheen Valley Technical High School (SVTHS) is one of 26 regional vocational technical school districts in Massachusetts. One thousand three hundred sixty-two (1,362) high-school students were enrolled in SVTHS's day school programs in October of 2015, and more than 400 adults participated in the school's various adult and continuing education courses.

In June of 2015, SVTHS graduated 334 seniors. Fifty-four percent (54%) of the graduates planned to attend college or other post-secondary schooling in the fall. Thirty-nine percent (39%) of the students intended to continue working in their trade with another one percent (1%) working in another field after graduation. In addition, two percent (2%) entered the armed forces and four percent (4%) were undecided about their future plans.

The SVTHS faculty is an exceptional group of talented academic and vocational-technical educators who are highly qualified to teach in their respective disciplines and occupational areas. SVTHS employs one hundred forty-four (144) full-time teachers as well as eleven (11) paraprofessionals. Of those full-time teachers, fourteen (14) are department chairs, and seventeen (17) are lead teachers. All SVTHS teachers exhibit the character, health, personality, and professional competency worthy of serving the needs of District students.

Academic Programs

Fifty-four percent of the Class of 2015 transitioned to either 4- or 2-year post-secondary programs. Shawsheen graduates were accepted at and are currently attending the following schools.

Alaska Pacific University
Anna Maria College
Arizona State University
Bay Path University

Nichols College
North Shore Community College
Northeastern University
Northern Essex Community College

Becker College	Parsons New School for Design
Benjamin Franklin Institute of Technology	Plymouth State University
Boston University	Porter & Chester Institute
Bridgewater State University	Regis College
California State University, Long Beach	Rhode Island School of Design
California State University, Sacramento	Rivier University
Castleton State College	Robert Morris University
Central Maine Community College	Rochester Institute of Technology
Champlain College	Saint Anselm College
Colby-Sawyer College	Salem State University
Curry College	Salve Regina University
Dean College	Savannah College of Art & Design
Emerson College	Southern New Hampshire University
Endicott College	Springfield College
Fisher College St.	Bonaventure University
Fitchburg State University	St. Francis Xavier University
Framingham State University	St. Michael's College
Franklin Pierce University	Suffolk University
Full Sail University	UMASS Amherst
Johnson & Wales University Miami	UMASS Boston
Keene State College	UMASS Dartmouth
Lasell College	UMASS Lowell
Lesley University	University of Connecticut
Massachusetts College of Art & Design	University of Hartford
Maryland Institute College of Art	University of Maine Orono
Mass Bay Community College	University of New Hampshire
Mass Maritime Academy	University of New Haven
MA College of Pharmacy/Health Sciences	University of Rhode Island
Merrimack College	University of Southern Maine
Middlesex Community College	University of Southern New Hampshire
Montserrat College of Art	University of Vermont
Mount Ida College	Wentworth Institute of Technology
Nashua Community College	Western New England University
New England College	Western State Colorado University
New England Institute of Technology	Westfield State University
New Hampshire Technical Institute	Worcester State University
Newbury College	

Outstanding MCAS Achievement and Growth Scores. En route to maintaining the school's level-one status in the Spring of 2015, Shawsheen sophomores continued to outperform all vocational sophomores on MCAS measures of (a) achievement, measured by the Composite Performance Index (CPI), and (b) growth, measured by the Median Student Growth Percentile (MSGP).

Shawsheen has consistently attained level-one status since the state introduced the five-tier rating system for school performance three years ago. The most recent CPI scores (ELA, 99.8; Math 92.2; and Science 96) were strong, and the MSGP scores, conspicuously pre-eminent. A typical school or district in the Commonwealth would have an MSGP of 50. Shawsheen's ELA MSGP of 75 ranked eleventh *among all schools* in the Spring of 2015, and its Mathematics MSGP of 65 ranked in the top twenty percent *among all schools*.

With respect to objective, statewide measures of student performance, Shawsheen must certainly be considered a "Dream School," as it was recognized by the Boston Globe in September of 2013.

Adams Scholars. Shortly after recognizing the superior performance of Shawsheen's sophomores, the Department of Elementary and Secondary Education lauded the school's senior class by naming ninety-one (91) of its members recipients of the John and Abigail Adams Scholarship Award.

Curriculum Revision. In compliance with course-content changes promulgated by the Massachusetts Core Curriculum and in anticipation of specific modifications in state-mandated testing aligned with those changes, SVTHS completed a 4-year phase-in of College Preparatory (CP) courses—each aligned with Massachusetts Core standards and each offered at three levels of ability in grades 9 (Algebra 1), grade 10 (Geometry) and grade 11 (Algebra 2). Most recently, the CP curriculum has been broadened with the addition of (Level-3) Introduction to Trigonometry among grade-12 electives.

The ELA curriculum continues to emphasize persuasive writing in response to informational text. To that end, it has conducted in-house professional development training in specific reading strategies. In parallel fashion, the Social Studies Department continues to implement a strong writing-across-the-curriculum component that requires persuasive written response to primary-source and other documents.

New Staff. In the Fall of 2015, Electrical Engineer Al Chase joined the Shawsheen faculty as an Electronics instructor, Michael Carter joined our Automotive Technology faculty, Scott Hewitt joined us as a Graphic Arts instructor, and electrician James Largenton joined our Electrical teaching faculty.

Also, veteran Mathematics teacher Patrick Kelly joined the Shawsheen faculty. He was joined by Lauren Merrill (Social Studies), Edward O'Mara (Biology and Chemistry), and Jessica O'Neill (Biology and Physics).

Technology Improvements. As a component of a thoughtfully-planned capital budget process that pays close attention to academic resources and evolving needs, the installation of ceiling-mounted LED projectors, interactive white boards, and mimio technology continued throughout the building. In addition, the district migrated from a combination of Microsoft Office sitelicensing with Google Docs and various other online collaboration tools to a unified Microsoft Office 365 cloud-based software and collaboration environment for all faculty, staff and students.

Summer School. In the summer of 2015, the SVTHS Summer program remediated Shawsheen students in courses that they failed during the school year in order to recover credit required for promotion. All courses were on-site, face-to-face offerings that provided the frequency and depth of teacher interaction necessary for regular and special education students who revisit and master content during the summer.

Clubs and Organizations

Classes. Culminating a yearlong series of successful social events and fundraisers, each of the four classes held memorable formal and semi-formal events. Under the direction of their co-

advisors, Ms. Angela Caira and Ms. Beverly Robinson, the senior class planned and enjoyed a promenade in the school gymnasium followed by an elegant prom at the Andover Country Club. Junior-class advisors Ms. Catherine Comeau and Mr. Peter Udstuen held a gala prom at the Westford Regency. The sophomore class, advised by Ms. Marygrace Ferrari and Ms. Maria Baker, collaborated with the Freshman class, advised by Ms. Bethany Keane, on the annual Spring Fling semiformal, which was held at the school.

The Sixteenth Annual Shawsheen Turkey Bowl—the much anticipated flag-football game between the junior and senior girls—was once again a successful holiday event, which raised donations of cash and food for local charities. Behind the strong offensive performances by Michelle Faraher and Kayla Porzio, the senior girls dominated the juniors 20-0.

Literary Magazine. For the eighth consecutive year, Shawsheen’s literary magazine, *Ramblings*, received awards for excellence by a major educational organization—including the New England Scholastic Press Association (NESPA) affiliated with Boston University’s College of Communication, and the American University Scholastic Press Association. These distinguished awards recognize the special talents of the SVTHS students who supplied the content and designed the layout of the annual publication under the supervision of Ms. Stacy LaBella of the English Department and Mr. Doug Michaud of the Design and Visual Communication Program.

School Newspaper. In a model school-wide collaborative effort, Ms. Kerry O’Brien of the English Department, Mr. Michael Azevedo of the Design and Visual Communication Shop, and Mr. Tom Struthers of the Graphics Art shop produced six editions of the *Rampage* that presented the school year’s major events in artistic design and thoughtful narrative.

National Honor Society. Under the advisorship of Ms. Shannon Becker of the English Department, the SVTHS chapter of the National Honor Society inducted 33 eleventh graders and four twelfth graders on March 11th during its 25th annual induction ceremony. The keynote speaker was Mr. Charles Lyons, who addressed the group for the final time as Superintendent prior to his retirement in September after 28 years of extraordinary service to the District. Throughout the year, members of the Honor Society thoughtfully and enthusiastically participated in a broad array of community service and participated in team-building activities at various outdoor sites.

Student Council. The Student Council continued its energetic paper-recycling program throughout the year under the direction of faculty advisor Ms. Ellen Mountain. In 2015, Ms. Mountain continued the Council’s recently-expanded efforts to recycle plastic, toner cartridges, and cell phones. In addition, the Council sponsored fundraisers for the American Cancer Society, local animal shelters, the Billerica Food Pantry, the Teens for Jeans program, and the Nike sneaker recycling initiative. The Council traveled to the Boston Aquarium in June on its annual field trip.

The Traveling Rams. Throughout the year, Ms. Kristin Doucette and her enthusiastic globe trotters raised funds in anticipation of their Spring 2016 trip to Greece—which they will visit during April vacation. Any parents or students interested in information about the Spring 2016 trip to Greece should contact Ms. Doucette at kdoucette@shawtech.org or 978-667-2111 x577.

Oratory Club. Coached by faculty advisor Ms. Kristin Doucette of the English Department, the club was represented by five contestants—one from each District town—at the district level of the Lions Club Championship. Megan Barnes-Neal, a Metal Fabrication student from Burlington, advanced to the state championship, where she captured third-place honors. Abygayl Marsh, a senior from Design and Visual Communications, earned a second-place regional award in the Voice of Democracy Youth Speech competition.

Robotics Club. Under the direction of Electronics teacher and advisor extraordinaire Mr. Paul Blanchette, Shawsheen's robotics team is annually one of the top high school programs in the state. The young but innovative Shawsheen squad opened its season with yet another first place finish at the annual Trebuchet Tournament and then split the squad to compete in December against Boston University Academy, Northeastern University, and several other schools at an event in North Andover. Two Shawsheen teams competed in North Andover—one, a group of freshmen and sophomores; and the other, a group of juniors. The freshmen and sophomores reached the semifinals of the event. The juniors won the competition, qualifying for the New England championship in March as well as the international CREATE tournament in Iowa in April. In addition to capturing top honors, Shawsheen's veteran team received a trophy for design and workmanship that exceeded professional standards.

After a series of other successful outings, Shawsheen's robotics team competed against 47 other teams in a tournament at Quinsigamond Community College in Worcester. At the conclusion of the competition, the veteran team of juniors was awarded three trophies—the first as Tournament Champions, the second for Engineering Excellence (the highest award given to any team), and the third for Robot Skills.

At the New England finals, the Robo Rams qualified for—and eventually competed in—the world championship competition in Kentucky, where they finished the competition season ranked among the top 23 high school teams in the world.

Science Club. The Science Club, advised by Ms. Kristen Lamarre of the Science Department, continued to engage participants in co-curricular activities complementing their study within the discipline. Club members conducted lab experiments, maintained reptile terrariums and fish tanks, and fostered carnivorous plants—in general observing, recording, and discussing laboratory results and animal behavior that broadened their understanding of scientific theory and its applications.

Outdoor Club. The Outdoor Club, advised by Ms. Jessica Cook of the Social Studies Department and Mr. Brian Considine of Culinary Arts, took four overnight trips to the White Mountains. Students learned outdoor safety and leadership skills while snowshoeing and climbing mountains. Interested students should contact Ms. Cook at jcook@shawtech.org or Mr. Considine at bconsidine@shawtech.org

Ski Club. The Ski Club, advised by Mr. William Lannon of the Carpentry shop, planned a series of after-school ski trips to the Mt. Wachusett Mountain Ski Area in Princeton, MA. Interested skiers or boarders of any experience level should contact Mr. Lannon at wlannon@shawtech.org

Sportsmen Club. Under the direction of Electrical teacher and eminent sportsman Mr. John Bagni, members of the Sportsman Club honed their archery skills during the late fall and winter, fished the Shawsheen River in April, competed with rod and reel at the Burlington Reservoir in May, and capped their season with a deep-sea fishing outing originating in Gloucester. Avid or budding sports archery or fishing enthusiasts should contact Mr. Bagni at jbagni@shawtech.org.

Parent Advisory Council. The SVTHS Parent Advisory Council, under the direction of its faculty advisor, Mr. Ronald Fusco, and its co-chairs, Dawn Panarotti and Cathy Carlin, sponsored another successful all-night graduation party—which, throughout the years, has kept the newest Rams alumni safe and entertained during the night following the commencement ceremony. Parents interested in assisting with this year’s traditional fete should contact party chair Carla Duffy at Carla.duffy@comcast.net.

Teen Dating Violence Awareness Group (TDVAG) and Anti-Bullying Club. Shawsheen’s social consciousness and collective voice of principled young adults speak most clearly through two clubs—TDVAG led by Ms. Christine Tobin of the Dean’s office, and the Anti-Bullying Club, led by Ms. Angela Caira of the Guidance Department.

TDVAG conducts regular meetings and participates in community activities to lend support to issues that pose harm to the physical and emotional well-being of young adults. In October, members of the club provided assistance for a REACH event at the Boston Waterfront. Project REACH (Racial and Ethnic Approaches to Community Health) has earned an outstanding reputation in the local and public health community for its work in raising awareness of racial and ethnic health problems. In April, Ms. Tobin and TDVAG members extended their community involvement by participating in a 5K Walk for Change sponsored by BARCC (Boston Area Rape Crisis Center.)

In collaboration with Wilmington Public Schools, Ms. Caira and Shawsheen student leaders promote anti-bullying awareness through the CARES (Children’s Art, Recreation, and Enrichment Services) program. Ms. Caira and members of the Anti-Bullying Club visit Wilmington intermediate schools throughout October and November to promote self-confidence, self-respect, self-advocacy, responsible choice making, and friendship-building among children. Shawsheen students who would like to participate in the enrichment of children’s lives should contact Ms. Caira in the Guidance Department.

Book Club. The Reading Rams met monthly throughout the year to discuss their respective club selections. In May, the club enjoyed an in-house movie and pizza evening in lieu of their annual field trip.

Art and Chess Club. Students with talents ranging from prodigious to casual participated in both the Art and Chess Clubs—the former advised by Mr. Michael Azevedo of the Design and Visual Communication Shop; the latter, by Mr. Gerry Perriello of the Bakery.

Alumni Association. In one of her final and typically masterful organizational efforts, Alumni advisor and retired English teacher Ms. Gail Poulten collaborated with her successor and P.E. Chair, Mr. Jason Tildsley, to organize the Alumni Association inaugural Athletic Hall of Fame

event at the Montvale Plaza in Stoneham, MA. During the memorable evening, the Alumni Association inducted seven individuals and one team into the Hall's inaugural class.

The honorees included Donald Tremblay (1978: track, cross country); Louise Smith Barriss (1981: softball, basketball, soccer, swimming, cross country, tennis); Jody Ochab Bergstrom (1981: swimming); David Smith (1993: football); Jennifer Elwell Lyons (2004: softball); Kyle Marzeoti (2006: football, hockey, lacrosse); the D3 state champion 1984 boys' ice-hockey team; and William Gordon, coach of the 1984 state champs.

In addition to the Hall of Fame evening, the Association organized a third annual Thanksgiving-eve social and a second-annual Texas Hold 'Em Tournament—both at the Billerica Elks. Any SVTHS alumni interested in planning future events should contact Mr. Tildsley at jtildsley@shawtech.org

Support Services

The SVTHS Support Services Department services one of the largest populations of students with special needs in Vocational Education within Massachusetts, approximately 344 students and comprising about 25.2% of our student body. The most frequently occurring area of need is the category of Specific Learning Disability which reflects that many students have a history of academic difficulties upon their arrival at Shawsheen. Nevertheless, SVTHS has had a strong graduation rate of this group of students with 95.2% of seniors graduating in June, 2014, among the highest of any high school in Massachusetts. This compares to a state average of 69.1% percent for special needs students. All Shawsheen special education students who did not graduate are due to grade retentions and remain in school.

Shawsheen's special education students also demonstrated outstanding success on the spring, 2015 MCAS examinations. These results have occurred as a result of a "team" effort on the part of Academic, Vocational/Technical, and Support Services staff to address the needs of our special education population. The rate of special education students who attained either Advanced or Proficient MCAS scores was extremely high on two of the three examinations: English Language Arts (97% vs. 67% statewide), Mathematics (41% vs. 39% statewide), and Biology (69% vs. 35% statewide). There was some decline in the percentage of students attaining Advanced or Proficient in Mathematics. However, the initial failure rate remained very low (11% vs. 31% statewide). All special education students eventually attain graduation status through the district's MCAS remediation programs and re-taking the examination.

Parents of special education students at SVTHS are very highly involved in the IEP Team process. Although statistics are not computed, parent attendance at scheduled IEP Team meetings approaches 100%. Prior to the IEP Team meeting, parents are forwarded forms which request their input for current concerns regarding their student's educational progress. Responses are documented in the IEP's.

A program evaluation of Student Support Services was conducted during the summer of 2015. Three hundred thirty (N = 330) parent questionnaires consisting of 30 questions were mailed. A good response rate of 19.1% occurred (63 out of 330). Ten items focused specifically on the IEP

Team Process. In response to a summary question which asked, "Overall, I am very satisfied with my student's IEP Team meeting", 95.3% responded "Strongly Agree" or "Agree". The remaining ones indicated no opinion and no respondents disagreed. Results were similar for each of the other nine items focusing upon specific aspects of the IEP Team process.

Efforts occur to accommodate parent requests for IEP Team meeting dates to ensure their participation. Typically, a one-hour time period is scheduled to allow sufficient time to address any topics of clarification or concern. A written IEP draft is usually developed by the time of the IEP meeting. This draft is reviewed at the meeting so that the parents can fully understand all the elements of the IEP and initiate any questions. Any necessary revisions to the draft are then incorporated into the proposed version of the IEP. Two copies of the document are forwarded home with the directive to indicate their response and return to the district. The signature page of the IEP also has space for additional comments and parents sometimes use this opportunity to communicate any qualifications to their response.

As noted above, the parent questionnaire included a number of questions on the IEP Team process and meeting. Parents indicated a strong sense of agreement to the following questions: "School representatives responded well to the questions and issues I raised at the team meeting", "Discussion at the IEP Team meeting was well organized", "Points of disagreement (if any) were clearly described and treated respectfully", "Enough time was scheduled for the meeting to discuss necessary issues", and "Follow-up activities to complete necessary forms and documentation were clearly described". These findings lead to a strong level of confidence that parents are actively participating in the development and understanding of the IEP which is produced.

Athletics

The three seasons comprising the 2015 athletic year were memorable and unique for Shawsheen Athletics. Over 500 Shawsheen students participated in interscholastic athletics, earning seven league championships and six state vocational championships.

The overall winning percentage of the varsity teams ranked among the highest in school history. Fourteen teams, in fact, qualified for post-season play. Dozens of students were honored with All Star recognition by the CAC (Commonwealth Athletic Conference) and the *Lowell Sun*. Wrestler Jake Ferri was a Division 1 State Champion and earned All American Honors. Emily Irwin became the sixth player in school history to score 1,000 points in Varsity Basketball. Molly Harrington and Ryan Phelan broke numerous longstanding individual school records in swimming and the Girls 200 Freestyle Relay also broke a longstanding school record in swimming. The Boys Spring Track 4x400 Relay team also broke a longstanding school record.

Overall, it was clearly one of the most successful Athletic years in Shawsheen Tech history!

Community Services

Adult Evening School: The Adult Evening School offered a wide variety of vocational/technical courses for adults interested in expanding their knowledge and skills for the 21st century

workplace. In addition to our vocational and occupational courses offered during two semesters from September to June, the community education program offers a wide variety of enrichment classes including culinary arts, cosmetology, home repair, basic woodworking and metal working, to name a few. Interested residents should contact Dr. Russ Eckel, Workforce Development and Community Services Coordinator, at (978) 671-3788 for information and/or a brochure.

Billerica House of Correction: The Billerica House of Correction's (BHOC) Education Director leads all prison education initiatives beyond the already established culinary arts program. SVTHS continues to collaborate through Workforce Development and Community Services Coordinator, Russ Eckel, with BHOC to expand its educational goals to inmates. SVTHS looks forward to maintaining its relationship with BHOC by providing technical assistance and end-of-course assessment services that will validate inmate achievement of course objectives.

Middlesex 3 Coalition. The Shawsheen Technical Institute is an active and founding member of the Middlesex 3 Business Coalition contributing in particular to the Coalition's subcommittee on Workforce Development. Committee members have been working to bring innovative training programs to businesses throughout the region while also providing much needed information about funding for employee training through the Workforce Training Fund.

Wentworth Institute of Technology and STI Partnership. STI has joined forces with the Wentworth Institute College of Professional and Continuing Education offering WIT adult evening certificate programs in welding and machining. These advanced workforce development programs greatly enhance the opportunity for adults to train for good jobs in the advanced manufacturing sector. Employees and employers alike are benefiting from this new training partnership.

School of Practical Nursing. The 2014-2015 year graduated 37 Practical Nurses (PN). Since its inception, a total of 714 students have successfully continued on to a rewarding career as Licensed Practical Nurses. This intense ten-month program offers a combination of evening and weekend coursework and clinical externship experiences. Preparation for the National PN examination is included. A review of prior graduates revealed 100% successfully passing NCLEX-PN and 90% placement as an LPN. Residents interested in applying to the PN program are urged to contact the Director of the School of Practical Nursing, Ms. Patricia Noonan, at (978) 671-3646.

Project Explore. Nearly 450 middle-school students from the District participated in after-school career awareness activities during the 2015 winter semester. Students explored a variety of career path options. This program is coordinated with area middle school guidance counselors. The program is free of charge and busing is provided by SVTHS. For registration materials or general information, interested residents should contact Ms. Jobee O'Sullivan at 978-671-3612.

Swim Program. SVTHS energetically continued its water aerobics, lap swim, parent-and-me swim class and swim lessons during the 2014-2015 year. The Shawsheen pool also continues to serve as the home site for interscholastic high-school swim teams from Billerica, Bedford and

Burlington public schools. Individuals seeking swim program information should contact Mr. Jay Tildsley, Aquatic Director, at (978) 671-3699.

Computer Services

During the 2015 year, Computer Services completed all DESE data collection requirements. These reports included SIMS (Student Information Management System) data, EPIMS (Education Personnel Information Management System) data, SCS (Student Course Schedule) data, and the SDR (School Safety and Discipline Report) data. In addition to these required state reports, Shawsheen submitted the CRDC (Civil Rights Data Collection) which is a recently required submission by the US Office for Civil Rights.

The district is now fully transitioned to a new Student Information System. Computer Services completed its data conversion from iPass to Aspen and has facilitated training for all departments utilizing the system. Staff have been gradually introduced to the new features of Aspen over this year while teachers continue to utilize the built-in Gradebook function. Aspen supports effective communication between district and family through its Family Portal Access.

Student progress can be tracked anytime through almost any computer or mobile device via the Aspen Family Portal. Access to this portal was distributed in a two-phase process. Students were given access to the Aspen system by mid-year. During the second rollout, Parents/Guardians were granted access for all users that had existing access or a completed application on file.

Computer Services continues to improve the Aspen system by making additional customizations as needed by the Shawsheen district. Family portal access has been streamlined by providing an electronic method of accessing and completing applications through the district's website. New Aspen components will continue to be implemented in future years starting with the Sped module in 2016.

2015 saw the Director of Technical Programs and the Director of Network Services join forces to research a mobile device and cloud solution. The goal was to maintain office compatibility, provide access to files anytime, anywhere, improve collaboration among teachers and students, and develop a mobile device initiative. Together they proposed a three-year plan.

During the summer, the software environment, Microsoft's Office 365, was implemented as Shawsheen Tech's platform of the future as part of this plan. For the first time, students now have email at the school. Teachers and students can access their files at school as well as home. Most importantly, per our Microsoft license agreement, faculty and students are allowed to install Office on up to five (5) devices each. To help our staff with the transition to the new cloud environment, an "Office 365 Champion" group was trained. Weekly "Snack & Solve" Sessions, manned by our Champions, were devised as a means to answering all questions.

Computer Services continues to maintain its virtualized server solution to run a more energy efficient infrastructure. Our main ESX servers, which control 90% of the school, were upgraded

over the summer. VMware, the software that runs our virtual environment, was upgraded to VSphere 6.0.

In 2014, a wireless network infrastructure was implemented within the building. In 2015, in order to continue the transition of our staff towards a more mobile workforce, we distributed laptops to Physical Education teachers, and computer upgrades occurred in Carpentry, Cosmetology, Machine Technology, and Metal Fabrication. Also, eleven laptops and two carts were purchased and added to already existing carts and laptops, providing our Support Services, Title One, and English programs with a mobile device pilot of 41 laptops and 4 carts for student use.

Guidance

Admissions. Approximately 500 applications were received for the class of 2019. This year, presentations occurred at our district town middle schools in Billerica, Wilmington, Tewksbury, Bedford and Burlington. Students, parents and community members were invited to events on site including the Guidance-Admissions Luncheon on January 15th, 8th Grade Career Night on January 21st, and Community Open House on November 2nd.

9th Grade Orientation. The Class of 2019 participated in SVTHS 9th grade orientation program, Fresh Start. This exceptional program gave new students an opportunity to meet each other and become familiar with the school, its programs and staff through an interactive and fun day of events. Since the Guidance Department implemented the freshman transition program in 2006 with the support of the superintendent and school committee, attendance has continued to improve and withdrawals have decreased substantially. A mentoring program, comprised of student leaders who ran orientation day, was implemented to assist with new student transition.

College and Career Planning. Shawsheen students continue to expand their options and opportunities after graduation. Studies conducted this year show a growing trend for SVTHS students to attend and retain at 4-year colleges and universities. In addition, SVTHS met federal benchmarks this year for graduates in all programs. This included positive placement in employment, college and military careers. SVTHS offered preparatory programs for both Accuplacer and SAT college exams. Over seventy-five percent (75%) of the senior class participated in one or the other. SVTHS continues to offer a foreign language to students pursuing college programs that have this requirement. The course is offered after school and evenings. Our annual College & Career Fair hosted over 85 colleges, universities, technical schools, military representatives and financial institutions. There were over 300 attendees and each received a copy of our College & Career Planning Guide reflecting the new PSAT/SAT format and updated admissions standards for the Massachusetts State University System and the University of Massachusetts. Senior guidance counselors were available to answer student and parent questions.

Scholarships and Awards. SVTHS students were awarded 148 scholarships totaling over \$118,442 in scholarship funds.

Cooperative Education Program. SVTHS had 223 seniors (66% of the class) out on co-op positions and 116 juniors (34% of the class) out on co-op at the end of June, 2015. Cooperative education built momentum this fall with many of the vocational/technical programs increasing cooperative education placement by 50% or more. As of December 31, 2015, 62% of the seniors were working in co-op positions.

Mental Health. With the significant rise in mental health issues impacting schools, our School Psychologist provided a Mental Health Overview training for all faculty members as part of our opening day professional development.

Student Health. SVTHS complied with the state mandate to conduct BMI testing for all 10th graders. In response to a state-wide opioid crisis and through affiliation with the Billerica Substance Abuse Task Force, the SVTHS health office provided faculty with area-wide informational events focusing on substance abuse awareness and prevention. Events included: “*If Only*” movie premiere on May 27th in Tewksbury (prescription medications); *Improbable Players* on May 27th in Lowell (prescription medications, opioids, and heroin); and *Substance Abuse Forum* on May 28th in Billerica (drugs and alcohol). We also hosted a *Substance Abuse Overview presentation* for faculty on June 25th. This fall, events have included: *DIRT* and *Hidden In Plain Sight* in Billerica on October 21st (opioids and drug paraphernalia); *Dr. Potee, Opiate Addiction Presentation* in Billerica on October 27th; *In Plain Sight and Opioid Epidemic Forum* in Wilmington on October 28th; “*If Only*” movie premiere and *Hidden in Plain Sight* in Lowell on November 9th; and *Underage Substance Abuse* in Wilmington on November 10th. We will also be hosting a *Substance Abuse follow-up* for faculty on December 4th.

School Council

School Council. Under the direction of its co-chairs—school principal Dr. Robert Kanellas and parent member Gayle Razzaboni—the 13-member Council met throughout the school year to discuss operating-budget items and school-policy issues. Discussions of the latter issues resulted in revisions to the Student Handbook and the drafting of the 2015-2016 School-Improvement Plan.

Vocational/Technical Programs

SkillsUSA: SkillsUSA is a national non-profit organization preparing students for careers in trade, technology, and skilled-service occupations. SVTHS earned an unprecedented eighty medals at the 2015 District competition and thirty-four medals at the State competition, including nine gold medals. Eleven Shawsheen students represented Massachusetts at the National Competition in Louisville, Kentucky. Winning national gold medals were a team of sophomores from the Electrical program consisting of Aaron Bennett, Justin Duprez and Jacob Williams, all from Billerica, competing in Career Pathways for Industrial and Engineering Technology. Senior Taylor McNeil won Shawsheen’s 4th gold medal for Medical Assisting and Jeannette Lavine came in fourth place for Medical Math. Hannah Benning from the DVC program won the Pin Design for Massachusetts and represented Shawsheen at the National conference. The team of Joseph Taylor, a junior from Billerica, and Steven Wink a junior from Tewksbury, represented Shawsheen in Mobil Robotics. Junior Isabel Galinos represented Shawsheen in

Masonry. Isabel was one of only three women in the masonry competition placing 9th overall. In addition, Shawsheen was represented in the state officer category with Lauren Liscio, who served as the Massachusetts State President for the year 2014-2015 and Nicolas Troisi who attended as an Officer Elect for the 2015-2016 school year.

National Accreditation. SVTHS has twenty-two vocational and technical programs, seven of which are nationally accredited by their respective industries. The programs include: Automotive Technology; Automotive Collision Repair & Refinishing; Machine Tool Technology; Metal Fabrication & Joining Technologies; Culinary Arts; Drafting Technology; and Heating, Ventilation, Air Conditioning, and Refrigeration.

Transportation Cluster

Automotive Collision Repair and Refinishing. Shawsheen's Auto-Collision Program is known throughout the community as the place for residents to go when accidents or mishaps create dents, dings, or cause serious damage to their vehicles. The relationship provides the students an endless supply of vehicles to work on to learn their craft. During the year the program was featured in the Vocational School Spotlight section of the New England Automotive Report Magazine. Molly Brodeur, President of AASP Massachusetts (Alliance of Automotive Service Providers), interviewed instructors and students for the article. Eight students competed at the SkillsUSA District Conference where two students advanced to the State Conference as a result of receiving a gold medal in Automotive Refinishing Technology and a silver medal in Collision Repair Technology. The program had great success with four members of the junior class entering the cooperative education program. Over the summer the shop was re-painted white to give it a clean-professional appearance.

Automotive Technology. The Shawsheen Community benefits immensely from the outstanding service provided by the Automotive Technology program. Many Automotive students excelled in extra-curricular trade activities – eleven students participated in SkillsUSA and three went on to Districts. The upperclassmen continue to receive certification from ASE Student Certification, ASE Refrigerant Recovery programs, as well as obtaining their OSHA-10 cards. Through the capital budget process the program acquired a new vehicle fluid flush station. Mr. Clay Bulmer, a dedicated member of the staff for nineteen years, retired at the end of the 2014-15 school year. A very promising aide, Mr. Timothy Francis, was hired to replace him. The department also hired an enthusiastic new automotive instructor, Mr. Michael Carter, who is teaching our freshmen and sophomore programs.

Health Cluster

Medical Lab Assisting. The Medical Assisting program has a robust curriculum for shop and related across all four grades. The Medical Assisting Program is now certified through the American Medical Technologists (AMT), which is a nationally recognized organization. All seniors are gaining clinical experience either through the co-operative education program or through the new clinical partnership with Lahey Hospital and Medical Center in Burlington. The program continues to build its partnerships for cooperative education opportunities and has placed a number of students in a variety of medical offices.

Health Assisting. Health Assisting successfully certified 26 students via the Department of Public Health as CNA's (Certified Nursing Assistants). One hundred percent (100%) of the students successfully passed both the written and performance test on their initial attempt. The program continues to maintain solid relationships with area nursing homes and clinical sites for student on-site practice. Partnerships include Tewksbury Hospital, Lahey Clinic, Concord Health Care and Rehabilitation Center and Woodbriar of Wilmington. Students enjoy co-operative placement in area assisted living centers and long-term care facilities. The majority of graduating students are enrolled in Bachelor of Science in Nursing programs.

Dental Assisting. Dental Assisting's first senior class graduated in June 2015. Most of the students are attending post-secondary programs, with the intent of being dental hygienists or dentists. Ten of the current 15 senior students are presently on co-op. The program continues to be oversubscribed with first-choice freshman students. Six of the students have successfully passed the Dental Assisting National Board certification exams. The three Dental Assisting teachers are continuing to work on building partnerships to provide clinical experiences for senior students as well as junior students during the fourth-quarter.

Services Cluster

Culinary Arts. Culinary Arts maintains articulation agreements with Central Maine College, Lincoln Institute of Hartford, Middlesex Community College and Cambridge Culinary Institute. Numerous guest speakers from all aspects of the trade have presented to the seniors with regard to industry expectations. The Sophomores and Juniors tour Johnson and Wales and The Culinary Institute of America during the school year. The restaurant and bakery continue to serve the public daily with continued high volume of guests.

Cosmetology. The Cosmetology students served hundreds of patrons from the community in the on-site student clinic that continues to provide training for student success in the trade. The students also had the opportunity to provide services to local Senior Groups during scheduled outings to the school. Catherine Hinds Institute of Esthetics welcomed SVTHS students back this year for tours of their facility and a complimentary service in order to broaden student interest in pursuing licenses in related fields. Elizabeth Grady, another skin-care institute, offered complimentary services to junior and senior students. The Junior and Senior students took part in a field trip to the Rhode Island Convention Center for a Cosmetology trade show. The entire graduating class of 2015 passed their State Board exam and are licensed Cosmetologists in the State of Massachusetts.

Construction Cluster

Carpentry; Plumbing; Electrical; Heating, Ventilation, Air-conditioning & Refrigeration and Masonry. The Construction Cluster's mission is to put into practice a style of learning that encourages students to create tangible products using all of their senses to maximize their learning experience. The best way for students to gain both real-life experiences and mastery of competencies is by working on both on and off-campus community projects. This year's projects included the following:

- Habitat for Humanity – Billerica single family dwelling - Carpentry, Electrical, Plumbing and HVAC&R programs built a 1,232 square foot single family dwelling. These dwellings, once completed, are intended to help families and build long-term financial security.
- Wilmington – Carpentry, Electrical, Plumbing, HVAC&R and Masonry programs completed the scope of work requested on the construction of a 42'x 30' building which will serve as a concession stand and bathroom facilities for the athletic complex.
- Tewksbury Senior Center – The construction of a 32' x 21' building to serve as an Arts & Crafts annex is now in the final stages of construction. When completed the Arts & Craft Center will incorporate *pottery* and *ceramic* activities for the senior citizens of Tewksbury. The Carpentry, Electrical and HVAC&R programs were involved in this project.
- On-campus project – The construction of a 77'x 37' block building that will serve as a field house for the soccer, lacrosse and softball teams as well a concession stand has been completed. All five construction programs participated in this multifaceted project that will benefit the school and community long into the future.
- On-campus project – The installation of a solar array in the area located behind the new field house. This solar array will provide a renewable energy source to help reduce the energy cost of heating, lighting and air conditioning for the field house. The Electrical and Masonry programs were both involved with this project.

The Construction Department Chairperson and Plumbing instructor, Mr. Jim Sullivan, retired in June after twenty-seven years of employment. Mr. Brian Smith, an instructor in the Electricity program, has taken over the responsibilities of the Department Chair. A new Electricity instructor, Mr. James Largenton, was hired to teach the sophomores in shop and to assist with the juniors.

Arts and Communication Cluster

Business Technology & Marketing. Business Technology added an approved Chapter 74 Marketing program last year, including the addition of a new teacher. This resulted in expanded enrollment, for which the department has implemented new course offerings and schedules. The school store operation has expanded via a new Point-of-Sale system and has participated in various school events. Research into facilitating an online version of the school store is still continuing. The store is developing a “Traveling Rams Pride School Store” curriculum/project, which will involve retail kiosks that can be placed at various locations in the building. This will allow the store added flexibility to attend additional school events, and allowing students to earn added shop hours. Our accounting students continue to augment their problem-solving skills, analytical thought processes, and understanding of executive-level business decisions. This further enhances their impressive list of competencies. Ethics is also a prominent theme infused throughout our curriculum. The program’s Microsoft certification testing lab continues to thrive. Through this testing lab, students have the opportunity throughout the school year to certify in Microsoft applications that are industry-based, enhancing their employability skills. These certifications not only provide valuable skills but give the students a high level of confidence as they prepare for the next step in their career path. These certifications will continue to build the

development of students into highly productive professionals in today's ever-changing business world.

Information Support Services & Networking (ISSN); Programming & Web Development. This department has completed its second year with a Programming and Web Chapter 74 program. For the second straight year the program has welcomed four volunteers through the Microsoft TEALs program to teach Advanced Placement (AP) Computer Science A (Java) to the junior class. Several students took the AP Computer Science exam in the Spring. Schedules and course offerings have been adjusted so students are able to spend instructional time in both ISSN and Programming & Web content areas to gain a foundation of knowledge in all areas of computer science.

Design & Visual Communications. The Design & Visual Communications (DVC) program had another very productive year in 2015 with a few DVC firsts. Students continued to act as designers in many real-world community projects for schools, town governments, and non-profit organizations. A DVC student was Valedictorian for the class of 2015 and sixteen DVC students were accepted to many private and public colleges. In the SkillsUSA State competition, DVC received a gold medal in pin design, a silver medal in t-shirt design and a bronze medal for the promotional bulletin board and at the District competition received a gold medal in photography.

Graphic Communications. The Graphics program enjoyed a year of great success in the pressroom and in its community partnerships. Graphics produced a record number of live jobs for schools, town governments, and non-profit organizations. Through these endeavors, students had an excellent opportunity to experience the real-world pressures and rewards of working in a printing company. The program received a national literary magazine award for their publication of Ramblings. The program also acquired and implemented into its curriculum new embroidery equipment, which has opened new avenues for student cooperative education placements. Overall the graphics shop had 8 students placed in 6 different companies for co-op, including printing companies, screen printing and on-demand copy centers. In the SkillsUSA District competition, graphics came away with a gold medal in the screen printing competition as well as the SkillsUSA Massachusetts State president.

Advance Manufacturing Cluster

Drafting. Drafting started the year off with 16 out of 19 students participating in the cooperative education program (Co-op). In addition to the senior Co-op effort, eleven juniors began working in the fourth quarter. The senior class graduated with thirteen attending a four-year college and one entering the United States Marine Corps. Drafting had a strong representation at the SkillsUSA State Competition, sending two students to participate in Technical Drafting, two to Architectural Drafting and two to Automated Manufacturing. Throughout the year the drafting students supported a number of community service efforts including the library hall construction project, the carpentry house project and the field house rendering.

Electronics / Robotics. Again this year the program expanded itself by incorporating more applied hands-on work projects around the school. Some of the projects included repair of classroom/shop liquid-crystal display (LCD) projectors. The students in Electronics continue to

excel in many areas - 100% of Electronics Seniors, who applied for the J-STD -001E IPC Course, passed and received their official IPC Certificate. At the SkillsUSA District Competition, students received gold and silver medals in Mechatronics; a gold medal in Mobil Robotics; and a gold medal in the Urban Search and Rescue Challenge. For the sixth straight year Electronics competed in the New England Trebuchet competition, this year coming in second place. Off-campus, the Electronics students had an exhibition and displayed a robot at a Providence Bruins game and mentored the Locke Middle School students in Robotics. A new Electronics Instructor, Mr. Alfred Chase, was hired to teach sophomore shop and sophomore and senior related.

Machine Tool Technology. The program has formed a strong partnership with the Manufacturing Extension Partnership (MEP). Most upperclassmen continue to participate in obtaining certifications. Many local companies, including Pace Industries and Excell Solutions, C.R. Machine and Kennametal Tooling Company, continue to send representatives from industry to visit the shop and speak to the students about the latest technology and career opportunities including cooperative education opportunities. The Program is also a great asset to the school district by manufacturing the following items: clocks and cribbage boards as gifts for golf tournaments and fundraisers; annual cleaning and lubrication of the Bakery dough cutter; air handler parts for maintenance and other repair of mechanical tools and equipment throughout the school. Through the capital budget process the program purchased a \$50,000 CNC Turning Center.

Metal Fabrication & Joining Technologies. The Metal Fabrication shop received a state grant for \$250,000 that provided funding to up-grade twelve welding stations and improvements to the stations' ventilation system. State-of-the-art equipment was also purchased that included six new welders, a horizontal band saw, and a pipe and tube bender.

Conclusion and Acknowledgement

The SVTHS Committee, staff, and students gratefully appreciate the support that they receive from the residents of the five-member District. The SVTHS family especially acknowledges the continued financial support of the local town managers, finance committees, and town meetings, who collectively ensure and perpetuate the highest quality in vocational technical training opportunities for area youth.

The District is grateful for the significant contributions provided by SVTHS staff and employees and acknowledges the many contributions of the SVTHS staff who retired during 2015. Those retirees are: Clayton Bulmer, Automotive Aide; Sandra Cedorchuk, Dean's Assistant; Arthur Holmes, Graphic Arts; Susan Levy, Library Aide; James Sullivan, Construction Cluster Department Chair, as well as the retirement of Charles Lyons, Superintendent-Director.