Career Technical Education, Career Exploration, and Community Partnerships in the Shrewsbury Public Schools

May 10, 2023



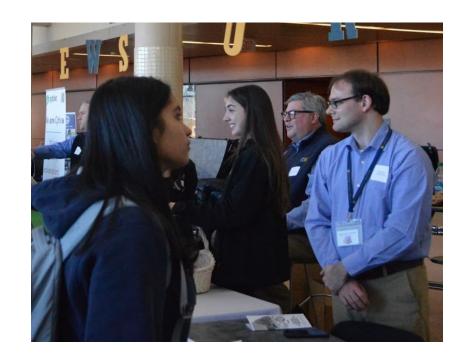
Student Voice and Choice

"The future depends on what you do today."

Mahatma Gandhi

Student Presenters:

- Adam Harris, Grade 12
- Luiza Saldanha, Grade 12



Overview of Our Day

We arrived at the MA Fire Academy early in the morning and had a quick briefing. We then practiced donning and doffing gear. After a quick tour of the fire trucks, we watched a live propane fire and learned how water and different chemicals react. We practiced search and rescue drills and experienced a simulated fire on the top floor of a burning building. We used 1½ hose lines to simulate extinguishing the fire.





Why I find this learning important

The field trip to the MA Fire Academy helped me decide what I wanted to do in life, and gave me a new learning opportunity to an exciting career path. If Shrewsbury incorporated more career days like this, it would benefit all students at SHS.



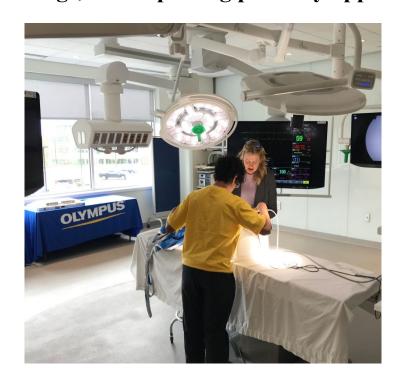


SPS is committed to developing career technical education options for SHS students, while actively engaging them in the process, as **student voice is foundational** to this work.



SPS 2023-2027 Strategic Plan:

Advance Career and Technical Education: Strengthen all students' postsecondary preparedness by expanding access to career and technical education, evaluating course offerings, and exploring pathway opportunities.





Advance Career and Technical Education

Action Steps:

- Expand opportunities for career exploration, job shadowing, and internships.
- Create multiple career and technical pathways for high school students, including coursework sequences followed by authentic field training experiences.

Advance Career Technical Education Options

Rising Grade 9 Student Pathways

39 students, 6 pathways:

2	Biomedical
16	Business
2	Childcare
13	Computer Science
5	Engineering
1	TV Production & Film

Rising Grade 10 Student Pathways

22 students, 6 pathways:

2	Biomedical
5	Business
5	Childcare
5	Computer Science
4	Engineering
1	TV Production & Film

Researching Potential Programs & Partnerships for Career Technical Education



- DESE Innovation Career Pathways Planning Grant
- Collaborating with Blackstone Valley Hub for Workforce Development
- Funding through Colonial Fund, donors, and DESE Innovation Career Pathways Grant

Increasing Access to Project Lead the Way at SHS

This table illustrates student requests for courses within PLTW at SHS

PLTW Courses: Engineering	First Choice	Alternate	Total
Principles of Engineering Honors (Project Lead the Way)	16	19	35
Intro to Engineering Design (Project Lead the Way)	28	96	124
PLTW: Biomedical Courses	First Choice	Alternate	Total
Principles of Biomedical Science (Project Lead the Way)	32	0	32
Human Body Systems (Project Lead the Way)	21	0	21
Engineering courses not PLTW	First Choice	Alternate	Total
Explore Technology (Semester)	20	106	126
Robotics/Electronics	43	121	164

Increased Student Demand for Business Courses

	First :		
	Choice	Alternate	Total
Personal	85	53	138
Finance			
Introduction to	211	309	520
Business			
Marketing	58	135	193
Accounting	13	95	108

Challenges

Space

Currently SHS utilizes 98% of available space for existing programming.

- Student population and varying student learning and behavioral needs far exceed building design.
- Most educators share classroom spaces with others throughout the day, as classroom space is very limited.

Equipment

As we continue to explore potential additions to CTE programming at SHS, new resources will be needed.

- The need for new equipment is likely. For example, if we were to implement other Project Lead the Way course options in existing engineering spaces (such as advanced manufacturing equipment) or enhance current programming (such as with a virtual dissection table for biomedical science), we would need to purchase the requisite equipment, and this can be expensive
- New equipment will require staff to participate in training to learn how to operate it.

Personnel

Future growth of CTE requires more personnel.

- Staff who would teach these courses need to have strong technical skills and strong teaching skills. We need to provide personnel with specialized training to ensure we implement PLTW curriculum with fidelity.
- Expansion of internships and job shadowing programs require personnel resources to coordinate partnerships and schedules.

Transportation

Transportation challenges raise questions about equitable access.

• While vocational technical schools typically do not provide transportation to off campus internships and training, we need to consider options for any off-campus experiences that we provide to meet the needs of students who are interested in career technical experiences who may not otherwise have access without transportation.

Student Engagement

Ongoing communication is needed.

Student participation has proven challenging at times, despite numerous efforts to engage students and families in job shadowing and other workforce opportunities. We have experienced no-shows after signing up, and a general lack of response despite multiple efforts to communicate.

Career Exploration

- OMS and SHS Career Fairs
- SHS Job Fairs (fall and spring)
- Job Shadowing
- External learning experiences
- Internship
- Jobs for Students site
- Paid Employment



Local Business Support



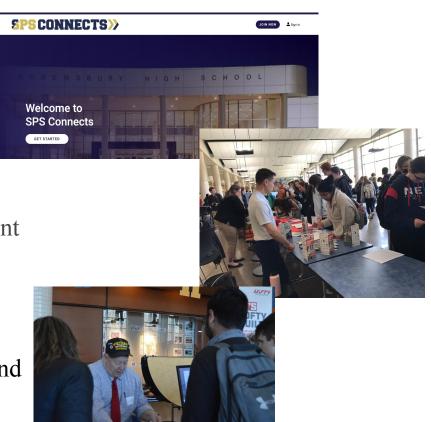




- Business and Community
 Partnerships Summit
- 60+ businesses engaged
- SFCU, Charles River Labs, Lofty Homes, Creedon Catering consistently supporting/mentoring students
- Charles River Labs created
 Open Houses for SHS students
- Olympus went above and beyond, creating STEM day

Alumni Support

- Classroom Speaker series
- Job Shadowing, Career and Job Fairs
- New Alumni Networking Platform:
 - o connect with one another
 - find classmates
 - o offer and look for jobs and internships
 - provide mentoring
 - o drive engagement
 - enhance mentoring and career development programs
 - grow our pool of future volunteers and donors
- Goal to double the number of alumni by the end of the year



Funding for Career Exploration

- Since the start of the school year, the Colonial Fund has raised \$61,183 for career exploration programming (including Win Waste Innovations' donation)
- Colonial Fund paid for:
 - Additional resources needed to manage student attendance and participation in events
 - Transportation for external learning experiences that exceeded the capacity of the van
 - Registration fees for external learning experiences, such as Worcester Sports Management Summit
 - Community Partnership Breakfast
- End of year appeal to fund programs for next year



Summary

- Students will continue to be provided with school and career readiness opportunities to learn and practice the core skills and competencies needed for school and career success in the 21st century.
- We are optimistic that we can provide students with career technical education opportunities that extend beyond the classroom walls by creating partnerships with area organizations and businesses, such as Blackstone Hub.

- Continued collaboration will occur during the summer months, as members of the SHS leadership and counseling teams will work to design student specific career pathways course schedules.
- We will continue to identify companies and businesses with whom we can closely partner to expand internships, job shadowing, and capstone experiences as students progress through their high school education.

Questions and Conversation



