Shawsheen Valley Technical High School Graduation June 4, 2015 Remarks of Charles Lyons, Superintendent Director

School Committee Chair Lambert, School Board Members, Representatives Lombardo and Gordon, fellow faculty members, guests, family members, friends and especially graduates.

I am honored to share some thoughts with you today. Thank you Michael for your very kind words and best of luck to you at St. Bonaventure's next fall. I'd like to begin thanking the Class of 2015 for adding to the reputation Shawsheen Technical has acquired - that is based upon the accomplishments of our students and our graduates. Today, you graduate with two educations in one – as a qualified technician, tradesman, or artisan – and with a high school diploma that allows you to seek any post-secondary option of your choice. You sought and acquired both academic and vocational/technical skills providing you multiple options upon graduation from high school. Today is your day to celebrate, and I am so happy for both you and your loved ones.

I graduated from high school 44 years ago. I was inspired by my teachers to make a positive difference. I know you feel as positive about the impact Shawsheen teachers have played in your lives as I do. So let's ask them all to stand so we can acknowledge their help in making this day possible. As the

poem illustrates, they build students with infinite and loving care. Four teachers will be retiring with you this year and I'd like to ask those four to stand and be recognized – please save your applause until they have all been introduced – Mr. James Sullivan, Plumbing Teacher and Department Chair of the Construction Trades Cluster; Arthur Holmes in Graphic Arts; Skip Ciccarelli in Carpentry; and Mr. Clay Bulmer, an aide in the Automotive Shop. They, along with Mrs. Sandy Cedorchuk from the Dean's Office - Thank you all for making a positive difference to Shawsheen and our students.

I join your classmates who will speak this evening - congratulating the Class of 2015 for all the successes you have had in our classroom, shops, SkillsUSA competitions, and in our athletic programs. Shawsheen's reputation is enhanced by the success of our graduates, and this class is exceptional. Over 70% of you have participated in the cooperative employment program – more than any high school in Massachusetts, proving to local businesspersons the quality of our programs their demands, and the expertise you have gained as students. Most of you are making decisions about your post-secondary plans in an informed and thoughtful way, augmented by the incredible experience you have gained here at Shawsheen and through the co-op education program.

Let me begin my remarks by again acknowledging the exceptional qualities of vocational and technical education as it is practiced here at Shawsheen Tech as well as at other vocational and technical high schools across the

Commonwealth. I have been a passionate champion of this educational model for more than four decades. And I will continue my advocacy for the growth and expansion of this type of education, the type that our graduates celebrate this evening, because I believe succeeding generations of young Americans will need the opportunity to begin their lives as productive citizens with a foundation in the technical skills. They will need to succeed in the 21st century economy, the same skills our nation will need collectively so that we can preserve and enhance the quality of life enjoyed by previous generations.

Our educational practice is uncommon at its core. It actually assesses students upon entry, and through a scaffolding process, builds upon those skills ensuring competencies respected by employers. If all of education worked this way, every child would feel valued and be a winner!

Let me also say that my passion and commitment to the Shawsheen model of education is rooted in my beliefs in what I will call the good economy. What do I mean by the good economy?

A good economy is one that provides opportunity all those who strive to be productive citizens.

A good economy is one that enables adults to apply their creative energies while also allowing them the time to enjoy the fruits of their labor.

A good economy is one that seeks to benefit the many and not just the few.

A good economy is one that affords every individual the opportunity to challenge his or her imagination and productive capabilities.

A good economy is one that leaves our planet whole and secure for generations to come.

I believe that we live at a time when the foundations of our good economy may be in peril. Now, I certainly recognize and appreciate the extraordinary opportunities made possible by new technologies, products, and services now available to growing numbers of people across the globe. For more than four decades I have sought to invest in educational resources aligned with this new global economy.

But while I marvel of the potential of technologies that some of us struggled to comprehend, we can see troubling signs of the erosion of the values and habits that once made the American economy the envy of many beyond our shores. I am concerned about the legions of young people lacking the skills necessary to lead a truly productive life. And sadly many of the same young Americans find themselves saddled with unbearable debt in pursuit of an education that will neither serve their interests nor the interests of our economy as a whole.

Today the aggregate sum of all college student debt in America is more than \$1.2 trillion dollars and growing.

This is why you, the graduates of the class 2015, are so very fortunate. And this is why you should thank all those who supported and guided your decision to pursue in education that blends the finest technical training with a strong academic

foundation. This is also why I believe a decade hence you and your classmates will appreciate even more the education and technical training provided you over the last four years.

You leave here tonight full of optimism and confidence in your future. And well you should.

So it has come to the moment when, as your commencement speaker, I need to offer you some humble advice.

Advice Number 1 – don't just follow your passion.

From my experience, quality leadership requires both a passion and a clear vision. You not only have to be emotionally committed to a cause, you actually have to know where you are going. Passion - without a clear vison, an informed direction, will be disappointing, and maybe a waste of money.

Changes are taking place in every corner of our economy. Take careful note of at the changes in every industry and career path. You should not be immune to the disruptive forces in every labor market in every industry.

Case in point – there are too many students majoring in criminal justice in our colleges. There just aren't that many jobs to match the numbers majoring in those program – and remember – there are very few NCIS and CSI jobs in America. TV shows do not reflect labor market demand

Hubert Humphrey, the great Senator from Minnesota, ran for President when I was in high school. One of his greatest quotes was "The best social program in America is a job". The world of work today is very different than it was in 1968, when Humphrey ran for President.

YouTube, Facebook and eBay barely existed a decade ago. Skype was released in 2003, and the iPhone was first introduced in 2007. We live in a digitalized world, and it is changing very rapidly, replacing many occupations.

Let me give you a couple of examples of changes in labor markets since you were born.

- 1. Fifteen years ago, the majority of stock orders were traded manually on a physical trading floor. Today, 95% of all stock executions are now electronic. The result, a 50% headcount reduction in stock traders over the past 10 years.
- 2. Kodak in 1998, that iconic camera and film manufacturer employed 86,000 people. In 2014, after emerging from bankruptcy, it had a skeleton workforce of 8,000. Apple, arguably one of the firms most responsible for Kodak's death spiral, has but 47,000 employees, two-thirds of whom are earning below-middle-class wages.
- 3. Years ago, cities were served by multiple newspapers. But since 1999, although U.S. employment in the Internet-publishing, broadcasting and search-portals sector has increased by 87,000 jobs; the number of jobs in newspaper publishing was halved, with a decline of

212,000 positions. New Orleans does not have a daily newspaper.

The Telephone needed 75 years to get to fifty million users; it took the video game Angry Birds only 35 days to reach 75 million users. The WhatsApp gained more followers in six years of existence, 700 million, it took Christianity 19 centuries.

Oxford researchers predict that 47% of the work we preform today may be replaced by machines during the next decade. Your employment success may indeed depend largely on whether you are a substitute or a complement to the robot working next to you.

Moreover, according to the Bureau of Labor Market Statistics, in the 2000's employment among the least-skilled workers soared whereas the share of jobs held by middle-and high-skill workers declined. Work involving complex but manual tasks, like cleaning or driving trucks, become more plentiful. At the same time, high-skilled workers are now taking on jobs traditionally performed by low-skilled workers, pushing low-skilled workers even further down, and sometimes even out of the workforce.

Last year, The U.S. has 115,000 janitors, 83,000 bartenders, 323,000 restaurant servers, and 80,000 heavy-duty truck drivers all with bachelor's degrees.

I care about you, so I'm not going to sugar coat my remarks and tell you everything will be okay if you only follow your passion!

Advice Number 2 – Feel free to Dream, but get real

A recent study entitled "Technology at Work" published at Oxford indicated the following:

- Retail and sales occupations may become susceptible to computerization due to the rise of big data. Walmart's databases contain more than 2.5 petabytes of information. The algorithmic recommender systems used by Netflix, Amazon and Spotify are built on big data characterizing the preferences and spending patterns of their large customer bases. These recommender systems use sophisticated machine learning techniques to compare a particular customer's purchases to those of other customers, and, with instant recall of large product catalogues, can provide product recommendations that, in many instances, may be more useful than those of a human salesperson.
- Legal services are also being affected by the ability of computers to store and process big data. Algorithms are increasingly substituting for tasks performed by paralegals, contract and patent lawyers. Symantec's e-Discovery platform is able to perform all tasks "from legal hold and collections through analysis, review and production", and proved capable of analyzing and sorting more than 570,000 documents in two days.

- There are an increasing number of businesses, including Talent Party, Jobandtalent, Knack and Electronic Insight, using big data to automate recruitment. The power of algorithms to work with this big data, in a way that is impossible for humans, is likely to threaten employment in recruitment.
- In health care, the increasing availability of big data is leading to the automation of diagnostics tasks. For example, IBM's Watson system is being employed by oncologists at Memorial Sloan-Kettering Cancer Center to suggest treatment options for cancer patients. These suggestions are informed by data from 600,000 medical evidence reports, 1.5 million patient records and clinical trials, and two million pages of text from medical journals. Watson can personalize a treatment plan with reference to a given patient's individual symptoms, genetics, and family and medication history. In critical domains such as health care, algorithmic recommendations, such as Watson's, may serve as inputs to human operators; in other circumstances, algorithms will themselves be responsible for appropriate decision-making.
- The trend is clear: algorithms built upon big data will play in increasingly large role in an ever-growing share of employment.
- Automation will continue to be a very important driver in change of retail banking, in banks' back and middle offices in general, and on the front end as well. The future of finance is more machines, more mobile interaction, fewer people and more advisory staff. Certain banks have

identified that branch transactions have seen a 30% drop since 2010, while other banks have indicated that over half of all consumer lending is now transacted without the customer ever visiting a branch.

My last advice to you — Is to value others the way you were valued here. If there is one thing I have tried to do as Superintendent, I have tried to recognize the value in every employee and every student.

I reject the notion that children can acquire greatness though state mandated testing

I reject the notion that schools become great because lofty college professors and the federal government dictate curricula, that is obsolete the day it is published.

And I especially reject the notion that teachers and schools are responsible for the widening divide in America today

The greatest beneficiaries of the digital age have been shareholders.

In last Sunday's Boston Globe, there was a concerning story about the giant networking company Cisco. It recently fired 6000 employees, or 8% of its labor force, despite a cash stockpile of \$53 billion, the fifth-largest among US companies, according to Moody's Investors Service.

Its chief executive officer, this month called the Cisco a "cash and profit machine."

Eight hundred Boxborough workers who were eliminated from employment at the same time the company was continuing to spend billions of dollars to buy back its own stock. This stock buyback move is designed to reduce the number of shares on the open market and boost its relatively share price.

Cisco is not alone. The Globe article asks? - Why are so many companies spending record sums of money buying back their shares instead of reinvesting more of their profits in their business and their workers?

The Globe story continued "The raw numbers are startling and revealing. Since the early 1980s, the nation's top publicly traded companies have gone from having 70 percent of their profits available to reinvest in their business (and assumingly invest in business expansion and employees) to just 2 percent in 2014."

The Globe article reveals that CEO pay is often tied to stock values.

Today, thanks largely to stock options, the 200 top-earning CEOs at large publicly traded companies made more than \$12 million in 2014, and the top 20 made more than \$33 million apiece, according to compensation analysis firm Equilar. That helps explain why CEOs today earn 354 times as much as rank-and-file workers, compared with 20 times as much in 1965.

America needs a level playing field. American workers deserve fairness and justice in our communities, laws to protect the middle class and new regulations that encourage businesses to invest in employees and job growth. We need to restore hope for all of our citizens.

Dr. Paul Harrington of the Center of Labor Markets and Policy at Drexel University, recently published a study indicating the employment of young black teens between the ages of 16-19 in Philadelphia was 10%, meaning 90% had no job to go to. These are depression era numbers. Similar rates exits in many urban cities, including Baltimore, Detroit, and Los Angeles. Eighty percent of Hispanic teens in Philadelphia also had no job to acquire.

During the 1990's, the fastest growing communities in America were either gated communities, or communities of concentrated property. Public schools today in the Greater Boston area are more racially segregated then they were before passage of the 1965 Civil Rights Act. Two months ago, Auditor Suzanne Bump published a study that indicated 10 communities in Massachusetts – out of 351 – housed 68% of our homeless children.

You are so fortunate to live in communities where strong partnerships between schools and industry are possible. Not true for all communities.

We need to replicate schools Shawsheen Valley Technical, and applaud assessments that value our mission. Students here are both challenged and nurtured. There should not be a one size fits all mentality when judging schools, and we need strategies to stop segregating children by race and class through zip codes. We need practical solutions to lessen the divides, both in Massachusetts and throughout America.

Seniors, you can make a difference. Like we have done here for you, value the ability and quality every human being you meet has within them. Reject arguments that encourage an 'us versus them mentality'.

I know that only 20% of American adults believe that the generation currently entering the workforce will have better lives than themselves. I reject that hypothesis too.

Class of 2015. Make a difference. Follow your passion with intelligence, dream but beware of the changes in the economy, and respect the dignity of every human being. Demand for others what you have demonstrated – that everyone can be productive, that everyone is valued, and everyone should enjoy a better tomorrow.

My hearty Congratulations to all!