



Founded In 1885

NEW ENGLAND ASSOCIATION OF SCHOOLS & COLLEGES, INC.
COMMISSION ON TECHNICAL AND CAREER INSTITUTIONS

Commission Chair
JAMES J. BROSNIAN
Superintendent
McCann Technical School
70 Hodges Cross Road
North Adams, MA 01247

Director of the Commission
PAUL BENIO
781-541-5416
pbenio@neasc.org

Associate Director of the Commission
WILLIAM C. WARREN
781-541-5461
wwarren@neasc.org

Executive Assistant to the Director
CIBRYL O'CONNELL
781-541-5415
coconnell@neasc.org

April 13, 2011

Mary Jo Santoro
Superintendent/Director
Greater Lowell Technical High School
250 Pawtucket Boulevard
Tyngsboro, MA 01879-2199

Dear Ms. Santoro:

I write to inform you of deliberations of the Commission on Technical and Career Institutions at its April 7, 2011 meeting, at which time the Commission reviewed the report of its decennial visiting committee dated October 18-21, 2010, and voted continued accreditation for Greater Lowell Technical High School with a Two-Year Progress Report due October 1, 2012 and a Five-Year Focused Visit in the Fall 2015. The Commission's decision to continue accreditation confirms compliance with accreditation standards and does not require further action by the New England Association of Schools and Colleges Board of Trustees.

The 2011 New England Association of Schools and Colleges Membership Roster indicates 1980 as the date of initial accreditation and 2010 as the date of the most recent comprehensive review.

The Commission commends the administration and staff at Greater Lowell Technical High School for the many commendations identified by the visiting committee. The Commission wishes to highlight several of the accomplishments listed by the committee, although it does so not minimizing the many good things listed in the decennial visiting committee's report. These commendations are:

1. A dedicated faculty who are passionate about their subject matter and creative in their approach to teaching.
2. The effective program of student and support services that promotes a congenial, vibrant and dynamic school atmosphere.

Celebrating 125 years 1885-2010
Demanding Excellence, Honoring Difference

3. The implementation of a comprehensive harassment and bullying prevention program.
4. Fostering a feeling of safety and security for all students and staff.

The Commission referred to many other commendations in the evaluation report during its deliberations. It found a healthy school on the verge of excellence, with faculty, administrative staff and students working well together to the benefit of students.

The Commission also focused on several visiting committee recommendations that are of particular concern and to which the school should pay particular attention as it strives to reach excellence. These recommendations are:

1. Immediately address all recommendations relative to health, safety and physical accessibility.
2. Continue to upgrade the heating and ventilation systems throughout the building.
3. Develop a plan to repair and/or replace the roof, windows and doors throughout the building as recommended in the Facilities Study Report.
4. Replace the dust collection system in the carpentry shop.
5. Continue to pursue plans to expand the building to increase student enrollment.

The previous is an attempt to highlight points of discussion during Commission deliberations and in no way subordinates other valid visiting committee recommendations contained in the Report of the Evaluation Committee. The evaluation report contains many other suggestions that could improve the quality of programs offered by Greater Lowell Technical High School. A review of the enclosed *Standards of Membership Checklist* should also give the faculty and administration clear insight as to how others perceive the total operation of the school and the quality of the educational process.

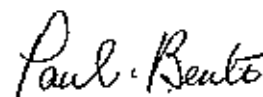
At the time of reporting, please be sure to complete all three parts of the enclosed document for the Two-Year Progress Report, which is due October 1, 2012. You should indicate the status of each recommendation submitted, as well as specific responses to the concerns and recommendations listed in this notification letter. You should classify each recommendation into one of five categories - Completed, In Progress, Planned for the Future, Rejected or No Action. Specific reasons should be noted when recommendations have either been rejected or for which no action has been taken.

The Greater Lowell Technical High School staff and administration should prepare for the Commission's mandated Fifth-Year Focused Visit in the Fall 2015. The focused visit report is due in the Commission office by September 15, 2015, but no later than one month prior to the scheduled visit. The Commission document *Focused Visit Guide for Superintendent/Principal/Director and Staff* is enclosed for your information; should you have questions about this review procedure, do not hesitate to contact this office. The Commission holds focused visit workshops, at which time a complete Focused Visit Guide will be provided, including a sample report. You can anticipate receiving an invitation to a workshop in 2014.

The cost for a focused visit is calculated at half your institution's dues at the time of the visit. As for any visiting committee, the institution will assume all costs in support of the focused visit. The visiting committee will consist of no more than 3 or 4 people and last 2½ days.

Finally the Commission trusts that the staff and administration at Greater Lowell Technical High School found the evaluation process interesting and profitable and especially directed to the benefit of students. The Commission believes that the evaluation report should provide guidance for the staff and administration as they work to build on past accomplishments. All those associated with Greater Lowell Technical High School can take pride in their collective commitment to improved vocational technical opportunities through regional accreditation.

Sincerely,



Paul Bento

PB/co
Enclosures

c: James J. Brosnan, Commission Chair
Charles A. Salerno, Visiting Committee Chair

**NEW ENGLAND ASSOCIATION OF SCHOOLS AND COLLEGES
COMMISSION ON TECHNICAL AND CAREER INSTITUTIONS**

DECENNIAL REPORT

**GREATER LOWELL TECHNICAL HIGH SCHOOL
TYNGSBOROUGH, MASSACHUSETTS**

EVALUATION DATES

OCTOBER 18, 2010 – OCTOBER 21, 2010

CHARLES A. SALERNO, CHAIRPERSON

KATHLEEN FINCK, CO-CHAIRPERSON

ELEIZABETH FISHER, CO-CHAIRPERSON

GREATER LOWELL TECHNICAL HIGH SCHOOL
TABLE OF CONTENTS

	<u>Page</u>
<i>Committee Members</i>	
<i>Committee Assignments</i>	
<i>Introduction</i>	i, ii, iii
 <i>Decennial Reports</i>	
1. School Philosophy and Goals	1
Appendix A - Mission Statement	2
2. School and Community Profile	3
School and Community Relations	4-5
3. Educational Program	6-7
Educational Program - <u>ACADEMICS</u>	
English Language Arts	8-9
English Language Learners	10
Mathematics	11
Physical Education	12
Science	13
Social Studies	14
Title I	15
Transitional Occupations Program	16
Educational Program – <u>TECHNICAL STUDIES</u>	
Automotive Collision Repair and Refinishing	17
Automotive Technology	18
Carpentry	19
Computer Aided Drafting and Design Technology	20
Cosmetology	21
Culinary Arts	22
Early Childhood Education	23
Electrical	24
Electronics	25
Fashion Technology	26
Graphic Communications Technology	27
Health Assisting	28
Heating Ventilation, Air Conditioning and Refrigeration	29
Hotel and Lodging	30
Machine Technology	31
Marketing Education	32
Masonry	34
Medical Assisting	35
Metal Fabrication and Joining Technologies	36
Office Technology	38
Painting and Design	39
Plumbing	40
Power Equipment Technologies	41
Programming and Web Development	42

GREATER LOWELL TECHNICAL HIGH SCHOOL

TABLE OF CONTENTS - Continued

	<u>Page</u>
4. Educational Media Services	43
5. Student Services	44
6. Student Records	47
7. School Staff	49
8. Administration	50
9. Finance and Business Operations	52
10. School Facilities	53
11. School Atmosphere	55
12. Post Secondary Programs	56
 SUMMARY AND CONCLUSIONS	 58

COMMITTEE MEMBERS

EVALUATOR	CERTIFICATION	SCHOOL
Charles A. Salerno	Chairman	Retired Administrator West Yarmouth, MA
Kathleen Flnck	Co-Assistant Chairman	Center for Technology Essex Junction, VT
Elizabeth Fisher	Co-Assistant Chairman	Mid Coast School of Technology Rockland, ME
Mary Lou Accetta	Special Education	McCann Technical School North Adams, MA
Raymond Adams	Printing/Graphic Communications & Design	Roger L. Putnam Vocational Technical High School Springfield, MA
Frances Audet	Early Childhood	Westbrook Regional Vocational Center Westbrook, ME
Bruce Baker	Carpentry	Capital Area Technical Center Augusta, ME
Joseph Baldyga	Physical Education	Pathfinder Regional Vocational Technical High School Palmer, MA
Janet Butler	Science	William M. Davies, Jr. Career and Technical High School Lincoln, RI
Shawn Carpenter	Programming and Web Development	Grasso Southeastern Technical High School Groton, CT
Donna DiCamillo	Guidance	Oliver Wolcott Technical High School Torrington, CT
Stephen Dockray	Administration	Tri-Country Regional Vocational Technical School Franklin, MA
Daniel Ducharme	Machine Shop	Old Colony Regional Vocational Technical High School Rochester, MA
Thomas Duda	Auto Body	North Shore Technical High School Middleton, MA
Karen Ellenwood	Practical Nursing	Diman Regional Vocational Technical High School Fall River, MA
John Ganss	Hotel Management	Cape Cod Regional Technical High School Harwich, MA

COMMITTEE MEMBERS - *Continued*

EVALUATOR	CERTIFICATION	SCHOOL
Michael Green	Masonry	Bay Path Regional Vocational Technical High School Charlton, MA
John Hicks	Air Cond/Heat/Ventilation	Franklin County Technical School Turners Falls, MA
John Hughes	Painting and Decorating	Assabet Valley Regional Technical High School Marlborough, MA
Peter Jennings	Electricity	Norwich Technical High School Norwich, CT
Brian Lehtinen	Mathematics	Blackstone Valley Regional Vocational Technical High School Upton, MA
Joanne Mack	Educational Media Services	Bristol-Plymouth Regional Technical School Taunton, MA
Jason McGarry	Social Studies	H. H. Ellis Technical High School Danielson, CT
Paul Mendez	Metal Fabrications	Greater New Bedford Regional Vocational Technical High School New Bedford, MA
Leeanne Monteiro	Culinary Arts	South Shore Vocational Technical High School Hanover, MA
Jose Polanco	Architectural Drafting, Mechanical Drafting	Bullard-Havens Technical High School Bridgeport, CT
Connie Pulley	Fashion & Design	Bullard-Havens Technical High School Bridgeport, CT
Robert Radley	Marketing	Westbrook Regional Vocational Center Westbrook, ME
Joanne Romanello	Medical Assistant Health Assistant	Greater New Bedford Regional Vocational Technical High School New Bedford, MA
Adrian Seborn	Network Installation Maintenance Computer Assembly/Repair	Southwest Vermont Career Development Center Bennington, VT
Brendan Smith	Automotive Technology/ Small Engine	Windham Technical High School Willimantic, CT

COMMITTEE MEMBERS - *Continued*

EVALUATOR	CERTIFICATION	SCHOOL
Janet Stratton	Office Technology	Randolf Technlcal Career Center Randolf, VT
Mary Torres	Engllsh/Remedial Reading	Emmett O'Brien Technical High School Ansonia, CT
Warren Rogers	Plumbing	Diman Regional Vocational Technical High School Fall River, MA
Yvonne Wolfer	Cosmetology	Center for Technology Essex Junction, VT
Robert A. Wood, Jr.	Electronics Telecommunications	Southeastern Regional Vocational Technical High School South Easton, MA

COMMITTEE ASSIGNMENTS

ADMINISTRATION

Kathleen Finck, Chair
Elizabeth Fisher
Stephen Dockray

AUTOMOBILE COLLISION REPAIR & REFINISHING

Thomas Duda, Chair
Brendan Smith
Peter Jennings

AUTOMOTIVE TECHNOLOGIES

Brendan Smith, Chair
Peter Jennings
Thomas Duda

BUSINESS AND FINANCE

Stephen Dockray, Chair
Brian Lehtinen
Michael Green

CARPENTRY

Bruce Baker, Chair
John Hughes

COMPUTER AIDED DRAFTING & DESIGN TECHNOLOGIES

Jose Palanco, Chair
Shawn Carpenter
Paul Mendez

COSMETOLOGY

Yvonne Wolfer, Chair
Connie Pulley
Janice Stratton

CULINARY

Leeanne Monterio, Chair
John Ganss
John Hicks

EARLY CHILDHOOD EDUCATION

Frances Audet, Chair
Joseph Bladyga
Robert A. Wood, Jr.

ELECTRICAL

Peter Jennings, Chair
Thomas Duda
Brendan Smith

ELECTRONICS

Robert A. Wood, Jr., Chair
Joseph Bladyga
Frances Audet

ENGLISH LANGUAGE ARTS

Mary Torres, Chair
Mary Lou Accetta

ENGLISH LANGUAGE LEARNERS

Mary Lou Accetta, Chair
Mary Torres

EDUCATIONAL MEDIA SERVICES

Joanne Mack, Chair
Raymond Adams
Adrian Sebborn

EDUCATIONAL PROGRAMS

Joanne Romanelli, Chair
Karen Ellenwood
Janet Butler

FASHION TECHNOLOGY

Connie Pulley, Chair
Janice Stratton
Yvonne Wolfer

GRAPHIC COMMUNICATIONS

Raymond Adams, Chair
Adrian Sebborn
Joanne Mack

HEALTH ASSISTING

Joanne Romanelli, Chair
Karen Ellenwood
Janet Butler

HOTEL & LODGING

John Ganss, Chair
John Hicks
Leeanne Monterio

HVAC

John Hicks, Chair
Leeanne Monterio
John Ganss

MACHINE TECHNOLOGY

Daniel Ducharme, Chair
Robert Radley
Jason McGarry

COMMITTEE ASSIGNMENTS – *Continued*

MARKETING EDUCATION

Robert Radley, Chair
Jason McGarry
Daniel Ducharme

MASONRY

Michael Green, Chair
Brian Lehtinen
Stephen Dockray

MATHEMATICS

Brian Lehtinen, Chair
Michael Green
Stephen Dockray

MEDICAL ASSISTING

Joanne Romanelli, Chair
Karen Ellenwood
Janet Butler

METAL FABRICATION

Paul Mendez, Chair
Shawn Carpenter
Jose Polanco

OFFICE TECHNOLOGY

Janice Stratton, Chair
Connie Pulley
Yvonne Wolfer

PAINTING & DESIGN

John Hughes, Chair
Bruce Baker
Warren Rogers

PHILOSOPHY & GOALS

Robert Radley, Chair
Jason McGarry
Daniel Ducharme

PHYSICAL EDUCATION

Joseph Baldyga, Chair
Robert A. Wood, Jr.
Frances Audet

PLUMBING

Warren Rogers, Chair
Bruce Baker
John Hughes

POST SECONDARY PROGRAMS

Karen Ellenwood, Chair
Joanne Romanelli
Janet Butler

POWER EQUIPMENT TECHNOLOGIES

Brendan Smith, Chair
Peter Jennings
Thomas Duda

PROGRAMMING & WEB DEVELOPMENT

Shawn Carpenter, Chair
Paul Mendez
Jose Polanco

SCHOOL ATMOSPHERE

Joanne Mack, Chair
Raymond Adams
Adrian Sebborn

SCHOOL & COMMUNITY PROFILE

John Ganss, Chair
John Hicks
Lecanne Monterio

SCHOOL & COMMUNITY RELATIONS

Janice Stratton, Chair
Connie Pulley
Yvonne Wolfer

SCHOOL FACILITIES

Brendan Smith, Chair
Thomas Duda
Peter Jennings

SCHOOL STAFF

Frances Audet, Chair
Joseph Baldyga
Robert A. Wood, Jr.

SCIENCE

Janet Butler, Chair
Karen Ellenwood
Joanne Romanelli

SOCIAL STUDIES

Jason McGarry, Chair
Robert Radley
Daniel Ducharme

STUDENT RECORDS

Donna DiCamillo, Chair
Kathleen Finck
Elizabeth Fisher

STUDENT SERVICES

Donna DiCamillo, Chair
Kathleen Fink
Elizabeth Fisher

TITLE I

Mary Lou Accetta, Chair
Mary Torres

TRANSITIONAL OCCUPATIONS PROGRAM

Mary Lou Accetta, Chair
Mary Torres

INTRODUCTION

The U.S. Office of Education officially recognizes the Commission on Vocational, Technical and Career Institutions of the New England Association of Schools and Colleges as the regional accrediting agency for vocational technical schools and career institutions in New England. Membership in the Association is voluntary, and each school seeking continued accreditation must conduct a self-evaluation at least once every ten years and host a review committee appointed by the Commission. In addition, there are two and five-year reports that must be submitted regarding the completion status of recommendations made during this visit.

The Director of the Commission on Technical and Career Institutions appoints a chairperson and members of a visiting committee subject to the approval of the Chief Administrative Officer of the school scheduled for evaluation. Visiting committee members are selected from nominations submitted by member school administrators. The visiting committee spends at least three full days in a school reviewing the self-evaluation document, visiting classrooms, observing technical areas talking with staff and students, and conducting deliberations.

In the fall of the 2008 school year, the Greater Lowell Technical High School made a request for a decennial review to the Commission on Technical and Career Institutions and began a self-study utilizing the criteria recommended by the Commission. In the fall of 2010, a team of thirty-five (35) educators from various New England states was appointed by the Director of the Commission to conduct an on-site review of the school.

On October 18-21, 2010, the team visited the school and using the self-study and the Standards of Membership of the Commission as a guide, reviewed all aspects of the school's programs. During their visit members of the visiting team met with the administration, faculty, students and staff of the Greater Lowell Technical High School. The committee conducted individual as well as group interviews and observed the school in daily operation. The committee's review was based on the school's Philosophy and Goals, as well as their School and Community reports. The visiting committee members reported their findings to the entire team and each report was approved in turn. Those reports and related information are contained in this document. Commendations and recommendations are given as a source of pride for the school and as a guide to suggestions that may improve the quality of the educational programs at the school, both individually and as a whole.

The school, which was originally, named the Lowell Trade School, moved to its current location in 1974 and was, renamed Greater Lowell Technical High School. The school is actually located in the town of Tyngsboro in Northeastern Massachusetts in the Merrimac Valley. The school serves the communities of Lowell, Dracut, Dunstable and Tyngsboro. The campus is located just outside the city limits of Lowell, Massachusetts the largest city in the area. The school is located on seventy-nine (79) acres of land in the northwest section of Middlesex County and is approximately five hundred fifty-five thousand square (550,000 sq. ft.). The school is bordered by residential areas on one side, Scarlett Brook, a wooded buffer zone on another, Route 113 (Pawtucket Boulevard) and the north bank of the Merrimack River. The site was originally selected for accessibility to sewer and water services. Transportation is available through the Lowell Regional Transportation Authority which links the City of Lowell neighborhoods and the downtown areas to the campus. The site is also the approximate geographical center of the four towns served by the school.

Recent changes in demographics in the City of Lowell have caused the population to change at the school as well. Specifically, an increase in the Asian population has caused the school to add programs for English Language Learners as well as staff to assist in counseling the increase in this new diverse group.

The school is currently oversubscribed boasting eight hundred ninety-eight (898) applicants for their five hundred fifty-six (556) ninth (9th) grade openings. All entering ninth (9th) grade students are required to explore nine (9) career areas for three (3) weeks each. At the end of this exploratory cycle the students choose their career choices and are assigned a permanent trade area. Accommodations are available to students who may wish to change from this choice after assignment on an individual basis. All students are required to pass four (4) years of English, three (3) years of mathematics, three (3) years of science, three (3) years of social studies and four (4) years of their trade area to receive a diploma from the school. The school also requires all students to pass the Massachusetts Comprehensive Assessment System (MCAS) exam by their senior year in order to receive a high school diploma from the school.

The school serves both secondary and post secondary students. Students enrolled in the secondary program in grades nine (9) through twelve (12) receive instruction in one of the following twenty-five (25) technical areas: Medical Assisting, Health Assisting, Early Childhood Education, Automotive, Automotive Collision Repair, Electrical, Electronics, Graphic Communications, Programming and Web Development, Machine, Computer Aided Design and Drafting, Heating, Venting and Air Conditioning (HVAC), Plumbing, Carpentry, Cosmetology, Culinary Arts, Fashion Technology, Hotel and Lodging, Marketing, Painting and Design, Power Equipment Technologies, Office Technology, Metal Fabrication and Joining, Transitional Occupational Program or Masonry. Adult students are enrolled in the Licensed Practical Nursing Program.

Many curricular and co-curricular activities are available to students enrolled at the school including but not limited to SkillsUSA, Distributed Education Clubs of America (DECA) student government, debate club and a full array of athletic programs is available at the school at varsity, junior varsity and intramural level, including some sports that are not normally found in a technical school such as Glee Club and Swimming. Participation in the intramural program is not limited to just students but open to faculty and staff as well.

The enrollment of the school on October 1, 2010, its latest reporting date, was two thousand fifty-six (2056) students. The Licensed Practical Nursing Program conducts both day and evening courses. There are a total of eighty (80) student enrolled in this program; forty (40) in the day and forty (40) in the evening. The program maintains clinical placement agreements with two (2) hospitals and four (4) other medical facilities in the area.

The Greater Lowell Technical School currently has formal agreements of articulation with thirty-nine (39) institutions of higher learning. Graduates may earn varying amounts of advanced credits applicable at the institution. The amount of eligible credit varies by technical area but in some cases may be up to one full year's credit toward an associate degree.

The school's most recent graduate survey listed four hundred forty-eight (448) graduates of which fifty-seven percent (57%) were enrolled in institutions of higher learning, five percent (5%) had enlisted in the military, thirty percent (30%) were employed in their trade choice or a related occupation and seven percent (7%) were unreachable.

The Greater Lowell Technical High School operates some unique programs which prepare and support students at the school. Of significant note is their Summer Academic Program (SAP) which is open to incoming ninth (9th) grade students as well as students currently enrolled in grades nine (9) through twelve (12) and is designed to support Greater Lowell Technical High School students who have not passed MCAS. Students take, mathematics, language arts, health and wellness, and career development courses. Another program is the school's Work and Learning program in which eleventh (11th) and twelfth (12th) grade students are provided with after-school jobs. To help them achieve success in their assignments the school provides support to the students through a formal mentoring program.

The school is used extensively by the community as evidenced by the size of its continuing education programs which are offered evenings twice per year and the use of outside agencies such as the YMCA who take advantage of the fact that the school has a swimming pool to give swimming lessons for members of the community.

Section 1:

SCHOOL PHILOSOPHY AND GOALS

Greater Lowell Technical High School has a clearly stated Philosophy, Goals and Mission Statement (see Appendix I). The process of revision of its Philosophy and Goals began by asking for the school community's perception of the school followed by a rigorous process of discussion and development. The school's involvement in the 21st Century Skills initiative and the current technology plan greatly impacted the resulting document. The Mission Statement, Philosophy and Goals were reviewed and approved by the steering committee in December of 2008. It was then presented to the staff on January 12, 2009 for electronic submission of comments and approval. The administration reviewed the philosophy and goals prior to approval by the staff and school committee. The Mission Statement, Philosophy and Goals were presented to both the parent and student councils. On January 15, 2009 the school committee reviewed and unanimously approved the Mission Statement, Philosophy and Goals. The unity and purpose of all educational programs are emphasized through the bolding of the words "academic and technical" wherever they appear in the document. The Mission Statement, Philosophy and Goals appear in the student handbook, the teacher handbook, the school website and displayed in some classrooms. The Mission Statement is proudly displayed in the main entrance of the school.

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 1: Philosophy and Goals and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

1. Applying a high degree of effort and care in the completion and revision of the Mission Statement, Philosophy and Goals that serve as a constant reference point challenging the school community to achieve excellence.
2. Emphasizing the unity of academic and technical programs throughout the document.
3. Empowering the students by asking for their perception of the school's atmosphere which brought forth actions reinforcing their self respect, respect for diversity and respect for others.
4. Aligning individual professional goals to the Mission Statement, Philosophy and Goals.
5. Developing the Project Based Integrated Research program for all seniors that support the educational and technical goals of the Mission Statement, Philosophy and Goals.

RECOMMENDATIONS:

The Visiting Committee recommends:

1. Developing and implementing a written plan to conduct a thoughtful and careful evaluation of the Mission, Philosophy and Goals on an annual basis making changes as needed.
2. Including all groups and individuals responsible for the direction of the school and all those who are ultimately affected by the outcomes of the education provided at the school in the ongoing review and revision of the Mission, Philosophy and Goals.
3. Displaying the Mission Statement, Philosophy and Goals in instructional and common areas throughout the school.

APPENDIX I

Mission Statement

Greater Lowell Technical High School commits to ensure students' readiness for career, college, and citizenship in the 21st century. We challenge and support students as they realize their individual potential for personal and professional success.

Philosophy

Greater Lowell Technical High School believes in the philosophy and goals of the Massachusetts Common Core of Learning, the Massachusetts Curriculum Frameworks, and the Massachusetts Vocational Technical Education Frameworks to ensure that students attain the **academic and technical** skills required to secure employment, to continue post-secondary studies, or to pursue a combination of both.

Greater Lowell Technical High School provides students with distinct **technical and academic** experiences in a supportive and safe environment to realize a focus for their future.

Greater Lowell Technical High School actively strengthens community and business partnerships with service programs, career and employment opportunities, mentoring programs, advisory boards, grant partnerships, field placements, and volunteerism.

Greater Lowell Technical High School's faculty commits to the highest quality of instruction in both **technical and academic** areas and the design of extra and co-curricular activities that positively influence students' intellectual, physical, social, and emotional development, to develop leadership, teamwork, and problem solving.

Greater Lowell Technical High School promotes and enhances the learning process by providing academic, technical, and personal/social counseling to facilitate positive student development.

Greater Lowell Technical High School believes that all students regardless of race, color, national origin, sex, disability, religion, or sexual orientation have the opportunity to succeed through **technical and academic** programs and extracurricular activities.

Goals

Commit to a learning environment that increases student achievement and develops confident learners.

Develop staff and students to think critically and to communicate effectively through educational experiences that exercise teamwork, problem solving, and individual responsibility and pride in teaching and learning.

Incorporate proven instructional resources and technology into our technical and academic curriculum to prepare students to adapt to technological change and to broaden their awareness of career opportunities.

Encourage and facilitate increased parent/guardian involvement in the educational process, including extracurricular activities.

Staff and students will model standards of behavior that cultivate community, respect, and professionalism.

Section 2:

SCHOOL AND COMMUNITY PROFILE

Greater Lowell Technical High School serves a student body of over two thousand (2000) students. The region is comprised of four (4) towns: Dracut, Dunstable, Lowell and Tyngsboro. The school serves a very diverse population. They are currently experiencing a demographic shift in student population, but they continue to effectively foster growth and offer creative programs and initiatives which strengthen community connections.

The committee recognizes the intense effort of the staff to engage students both in and out of school. Over the past three years, three-quarters (3/4) of the school population has been involved in some of the proffered co-curricular student activities.

While a Technical schools' success greatly depends on a strong community connection, it is the committee's assessment that the Greater Lowell Technical High School exceeds in this regard as evidenced by community based learning, cooperative work experience and numerous clubs and activities that all serve to strengthen the bond between the school and the community at large.

The visiting team agrees that the Greater Lowell Technical High School meets the Standard 2: School and Community Profile and is engaged in the process of continual improvement relative to that standard

COMMENDATIONS:

The visiting team commends the Greater Lowell Technical High School on:

- 1.) Developing an effective communication system which informs, encourages and educates student in all activities offered in the school and community.
- 2.) Continuing its efforts to serve an increasing student population that is both financially and socially challenged as evidenced by the number of students participating in the free and reduced lunch program

RECOMMENDATIONS:

The visiting team recommends:

- 1.) Continuing with current methods and procedures in addressing and adapting to this ever changing area.

Section 2:

SCHOOL AND COMMUNITY RELATIONS

Greater Lowell Technical High School is a three story building constructed in 1974. It contains grades 9 – 12 and is located on seventy-nine (79) acres in the town of Tyngsboro, MA, which is one of the four towns served by the school. Of the area's total population of 148,000, nearly 70% are residents of the city of Lowell. The remaining 30% are residents of Dracut (20%), Tyngsboro (8%), and Dunstable (2%). Between 2000 and 2007, the latter three towns saw population increases of 2.9%, 4.1%, and 13.9% respectively, while Lowell's population decreased by 1.9%.

Dunstable, Dracut, and Tyngsboro are predominantly white. Lowell boasts a very diverse ethnicity. Twenty-two percent of its residents are foreign born. Of these, 48.4 % are from Asia, including the second-greatest concentration of Cambodians in the US. Latin American and African immigrants comprise 18.4% and 5.2% of the foreign born residents. In addition to English, languages spoken by students in Lowell include Spanish, Khmer, Portuguese, and Laotian. Greater Lowell Technical High School is reflective of this diversity. Approximately 60% of the student body is white, 16% is Asian, 7% is African, and 17% is Latino/Hispanic. The unique characteristics of this student body have resulted in all Greater Lowell Technical High School teachers receiving training in ways to support Limited English Proficient students. Students who demonstrate a need receive English Language Education (ELE) through two licensed instructors and a paraprofessional.

Of the approximately two-thousand (2,000) students in Greater Lowell Technical High School, fifty-two percent (52%) are from families with incomes below the poverty level. The unemployment rate in the area increased in all four towns between 2006 and 2008, with Lowell reporting the highest rate at 8.4% in 2008, compared with the 5.2%, 5.4% and 6.7% respectively of the other three towns. Greater Lowell Technical High School students, however, have been relatively successful in locating employment, as evidenced by the follow-up data for the class of 2009. At the time the report was written, 64% of these graduates were employed, and 60% were in a postsecondary school. As these numbers indicate, many students were working while attending college.

The towns in the Greater Lowell area provide students with many ways to prepare for these employment opportunities, and Greater Lowell Technical High School takes full advantage of them. Upper level students have access to cooperative education experiences in every discipline. Each year, approximately 150 students are actively engaged in a paid cooperative placement. Many additional students participate in unpaid internships. Students also participate in many community service activities, which introduce them to the community beyond the walls of the school. Music and theater groups, youth organizations, service organizations, festivals, and outdoor recreation facilities are all available and utilized.

(continued next page)

Section 2:**SCHOOL AND COMMUNITY RELATIONS – (continued)**

Partnerships exist between Greater Lowell Technical High School and many community facilities, agencies, and businesses. In addition, the community is welcomed into Greater Lowell Technical High School in many ways. Advisory boards are active, services such as auto repair, child care, and cosmetology are open to the public, and an alumni association has recently been organized. Parents are included in their children's experiences through many print and phone communications, school events, and projects.

A summer program for students who have not met MCAS has been instituted off campus in the city of Lowell to insure that all parents have ready access to their students' educational opportunities. Access to school information reaches the community through the Coordinator of School Information, who utilizes paid advertising, standard mail, e-mail, a web page, cable broadcasts, and informational functions such as the Municipal Dinner. The relationships between GLTHS and its towns are strong and multifaceted.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on the following:

- 1.) Having a variety of communication links between the school and the community
- 2.) Using campus programs to entice parents to become more involved in their students' education
- 3.) Having a Coordinator of School Information to ensure steady and consistent distribution of school public relations materials

RECOMMENDATIONS:

The Visiting Committee recommends:

- 1.) Expanding the Alumni Association which has recently been initiated

The Greater Lowell Technical High School provides academic and technical programs designed to challenge students of all abilities. This is achieved through a school wide commitment from the staff, which serves to provide students with a strong work ethic and social skills. The overall goal of the school is to mold technically competent young adults that are either ready to enter the workforce directly or go on to college.

The Greater Lowell Technical High School's core curriculum is under constant scrutiny, and continues to evolve over time to meet the needs of an ever changing world and workforce. Curriculum changes are driven by data collected by individual departments and technical areas, as well as being influenced by the Program Advisory Committee. Care is taken to include pertinent items such as the condition of the local labor markets, advancements in technology, and improving methods of training. Students are provided with a variety of instructional methods including hands-on applications, critical thinking and real world problem solving skills. Instructors carefully choose from a variety of methods to ensure the engagement of all levels of students. Grades ten (10) through twelve (12) follow an alternating week schedule; they attend technical programs for one (1) week (A) and the opposite week they are scheduled into academic programming(X).

Approximately five Hundred (500) students are classified as English Language Learners (ELL) in varying stages of English language acquisition. The current Limited English Proficient (LEP) numbers are approximately ninety (90), while Former Limited English Proficient (FLEP) students number thirty-five (35). FLEP students are monitored biannually for two (2) years, with a mailing of the reports to parents. The ELL program is comprised of two (2) instructors and one(1) paraprofessional. There is a support network for LEP students throughout their tenure at Greater Lowell Technical High School.

Coordination of the curriculum is the responsibility of each technical/academic program in cooperation with the Director of Technical Studies. Once the proposed changes are submitted and approved, they are shared through the Sharepoint folder on the computer network. Updated curriculum is easily available through the computer network at the school. A Technology plan is utilized to make improvements to the widespread technology available. The plan was developed by the Technology committee and approved by DESE. It is comprehensive, and there are clear expectations for students and staff with respect to the use and mastery of the technologies available.

Presently there are twenty-five (25) technical areas which are organized into five (5) clusters, each of which has a cluster chairperson.

Freshmen programming involves two (2) periods of technical instruction followed by six (6) periods of academic instruction daily. Freshmen students rotate through nine (9) of the twenty-four (24) technical programs that the school offers for the first two quarters of the year. Each student makes their choice of tech programs, and spends three weeks in each of these areas. Once these rotations are complete, students choose a technical program to follow for the remainder of their time at the school. Placement is based on their personal choices as well as their performance data from that specific technical area.

(continued next page)

SECTION 3:**EDUCATIONAL PROGRAMS- (continued)**

All students are required to take four (4) years of English, Mathematics, Science, and are encouraged to take four (4) years of History. Program adjustments may be made for students who require remedial help in Mathematics and English (MCAS). Students must earn a minimum cumulative credit total in order to be promoted to the next grade and pass their technical program. Technical programs require four hundred (400) hours of instruction in grades ten through twelve (10-12). Greater Lowell Technical High School also provides a dual enrollment program for students to take Spanish, Math and English at Middlesex Community College. Students in this program have the potential to earn college credit.

The criteria for receiving a technical high school diploma are based on the following:

- (1) Earn one hundred sixty-five (165) credits total, with thirty-nine (39) required during the senior year.
- (2) Students must pass ELA all four (4) years, and two (2) years of both science and mathematics to be eligible for a diploma. Students with an IEP or 504 plan may require special consideration for graduation, and all decisions are based on Special Education state regulations
- (3) Pass the Massachusetts Department of Education MCAS state test

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 3: Educational Program and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1.) Increasing the use of Career Cruising program to begin developing a portfolio program
- 2.) Developing a wide range of articulation agreements/affiliations that benefit more than half of the technical programs
- 3.) Implementing comprehensive harassment and bullying prevention programs.
- 4.) Initiating the "Problem Based Integrated Research" course at the senior level

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Increasing integration activities between academic and technical programs beginning at the ninth (9th) grade level
- 2.) Exploring the possibilities of portfolios as a graduation requirement
- 3.) Continuing to provide training to promote teacher use of technology

The English Language Arts department of the Greater Lowell Technical High School is staffed by nineteen (19) instructors. The department is located throughout the building. The curricula for the English Language Arts course covers information beginning with ninth (9th) grade English which encompasses conventions and mechanics of the language through context reading and writing. The ninth (9th) grade curriculum objective is also designed to develop skills necessary to meet MCAS requirements. The tenth (10th) grade curriculum focuses on the development of oral and written response through various student reading and writing assignments. The MCAS emphasis is carried through until tenth (10th) grade students meet the requirement. The focus of grade eleven (11) is on American Literature and authors. Eleventh (11th) grade studies develop critical thinking and writing skills which are necessary for success beyond the high school level. The twelve (12th) grade course studies concentrates on British and World Literature. Students in this grade also study various types of writing ranging from persuasive and descriptive essay to research papers to college essays.

The program goals conform to the school's Statement of Philosophy and Goals by promoting high expectations for every student attending Greater Lowell Technical High School. For those students who are high achievers an honors program has been implemented from grades nine (9) through eleven (11) with plans to expand to grade twelve (12) in the 2011-2012 academic year. The program currently has a total of one thousand nine hundred fifty-four (1954) students enrolled: five hundred fifty-three (553) in grade nine (9); five hundred two (502) in grade ten (10); four hundred eighty-seven (487) in grade eleven (11) and four hundred fifty-two (452) in grade twelve (12).

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 3: Educational Program and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1.) Creating a learning environment to actively engage students in the classroom with real life experiences.
- 2.) Incorporating different modalities and styles of teaching and learning, i.e. Music, poetry, real-life experiences, technologies and artistic creations.
- 3.) Promoting collaboration between and among the English, Special Education and the assistant teachers in the inclusion classes which was evidenced by impossibility of telling which instructor held which role.
- 4.) Promoting a feeling of comfort to students enabling them to utilize the skills of each teacher to enhance their learning.

(continued next page)

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Adding an honors class to grade twelve {12}.
- 2.) Developing and implementing electives in grades eleven {11} and twelve {12}, i.e. technical writing and/or communications.
- 3.) Implementing common planning time within the department's cohort group, (teachers working on same grade level.)

Section 3: ACADEMICS

ENGLISH LANGUAGE LEARNERS

The English Language Learners (ELL) department of the Greater Lowell Technical High School is staffed by two (2) academic instructors and one (1) paraprofessional who is responsible for the vocational technical areas.

The curriculum is designed to help students obtain proficiency in the oral and written English language. The two (2) instructors also provide assistance to students in their respective content area.

Students are placed in the ELL classes by MEPA and MELA-O scores as required by state regulations. Students are exited from the program by test scores and/or teacher recommendation. Those exited students are then monitored for progress for two academic years. Some ELL students receive TITLE I or Special Education services.

The program goals conform to the school's Statement of Philosophy and Goals by providing an environment where the students can develop and strengthen their emerging English oral and written skills with confidence. Currently there are eighty-seven (87) students enrolled in the ELL program: forty-five (45) in grade nine (9); twenty-two (22) in grade ten (10), fifteen (15) in grade eleven (11) and five (5) in grade twelve (12). There are presently an additional thirty-five (35) former LEP students who are in the two (2) year monitor program

The Visiting Team agrees that Greater Lowell Technical High school meets Standard 3: Educational Program and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

1. Advocating strongly for the ELL to become self reliant in academic, vocational and community settings by having the teacher communicate on behalf of the student.
2. Implementing ELL training for all staff which has benefited all students in this track.

RECOMMENDATIONS:

The Visiting Committee Recommends:

1. Providing skills to ELL students so as to become self advocates in a variety of environments such as teaching students to address problems independently.
2. Examining the student groupings to ensure grade levels are similar enough to deliver specific targeted instruction to the ELL student.

The Mathematics department of the Greater Lowell Technical High School is staffed by twenty (20) math instructors separated into curriculum teams for each subject with additional support from six (6) Title One teachers and eight (8) Special Education Support teachers. The curriculum for the mathematics course covers information beginning with Algebra and proceeding progressively to Geometry, Applications of Algebra and Geometry, Algebra 2, Discrete Mathematics, and Precalculus. The mathematics curriculum is revised continuously through scope and sequences on the basis of the outlined learning standards from the Massachusetts Curriculum Frameworks. The major activities of this program include: early identification of at-risk students, increase in MCAS help and support for at-risk students, team teaching classes, both special education and Title One classes, and honors programs for students above grade level that help prepare them for college. The program goals conform to the school's Statement of Philosophy and Goals by meeting the Massachusetts Curriculum Frameworks with all students having the opportunity to succeed through support structures and proven instructional and technological resources. The program currently has a total of two thousand thirty-one (2,031) students enrolled: five hundred fifty-one (551) in grade nine (9); five hundred thirty-two (532) in grade ten (10); four hundred seventy-nine (479) in grade eleven (11) and four hundred sixty-nine (469) in grade twelve (12).

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 3: Educational Program and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1.) Creating access to online texts for students
- 2.) Creating common quarterly exams with assessment item analysis that identifies classroom and individual strengths and weaknesses
- 3.) Developing a comprehensive procedure, including MyStudents software, to effectively place incoming students appropriately
- 4.) Implementing SharePoint, that allows sharing of common assessments and resources

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Increasing the integration of mathematics in the academic and technical areas through a formal integration program that strengthens and supports technical curriculums
- 2.) Positioning math classrooms in the same area of the building
- 3.) Completing implementation of SmartBoards for all classrooms with SmartBoard training for instructors
- 4.) Promoting participation in the student Math Team

SECTION 3: ACADEMICS

Physical Education

The Physical Education department of the Greater Lowell Technical High School is staffed by seven (7) instructors. The curriculum for the Physical Education course covers information beginning with class expectations and safety procedures and a Games Unit (Ultimate Frisbee, Fitness Circles, and Speedball) proceeding progressively to Project Adventure (ropes course, high and low elements, rock climbing, team building, leadership, problem solving, and critical thinking) and promotes healthy life-long activities. Major activities of this program include: Swimming, Health (C.P.R. training), Fitness, Golf, and Team Sports. The program goals conform to the school's Statement of Philosophy and Goals by preparing their graduates in employability and accountability, 21st century citizenship as well as critical thinking and problem solving skills. This is evidenced by completion of the American Red Cross First Aid, AED and/ or C.P.R. courses and Project Adventure course, and presentation of awards for physical fitness. The program currently has a total of one thousand four hundred fifty-five (1455) students enrolled: four hundred twenty-eight (428) in grade nine (9); four hundred ten (410) in grade ten (10); three hundred four (304) in grade eleven (11) and three hundred thirteen (313) in grade twelve (12).

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 3: Educational Program and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1.) Having a diversified physical education program
- 2.) Creating an active Intramural sport league that encourages all students and staff to participate
- 3.) Developing a Project Adventure site with many obstacles, elements, and tasks
- 4.) Employing a highly qualified and enthusiastic staff who promote physical education in a fun and productive way

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Repairing or replacing the roof on the gym to prevent leaking on stairs and electronic physical education equipment
- 2.) Replacing the divider curtain in the gym.
- 3.) Developing a multiuse area designed to include a larger weight room with updated free weight equipment, extra space for storage and a health classroom with a white board.

SECTION 3: ACADEMICS

SCIENCE

The Science department of the Greater Lowell Technical High School is staffed by thirteen (13) instructors. The curriculum for the science department covers information which includes two levels of Biology, College Chemistry, Conceptual Physics, Anatomy and Physiology and Applications of Science. The major activities of this program include: general safety practices, hands-on activities, problem solving, specific content and critical thinking skills.

The program goals conform to the school's Statement of Philosophy and Goals by continually collecting and analyzing student assessment data at every grade level. The program currently has a total of two thousand thirty-one (2031) students enrolled: five hundred fifty-five (551) in grade nine (9); five hundred thirty-two (532) in grade ten (10); four hundred seventy-nine (479) in grade eleven (11) and four hundred sixty-nine (469) in grade twelve (12).

The Visiting Team agrees that Greater Lowell Technical High meets Standard 3: Educational Program and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1.) Exhibiting increased levels of cooperation between technical and academic disciplines.
- 2.) Utilizing technological resources to analyze data for systematic program review in order to facilitate changes to existing curricula.
- 3.) Achieving consistent improvement of student MCAS scores.

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Prioritizing changes to undersized learning environments
- 2.) Upgrading existing ventilation system in science department lab areas
- 3.) Reorganizing space to dedicate specific areas for either classroom or lab use.
- 4.) Upgrading drenching facilities within science lab areas.

The Social Studies department of the Greater Lowell Technical High School is staffed by eleven (11) full time instructors and one (1) part time instructor. The department is located throughout the building. The curriculum for the social studies courses covers Information beginning with the American Revolution, United States History I, and proceeding progressively to the present day in United States History III. United States History I, II, III is taught to grades nine (9), ten (10) and eleven (11) respectively and a Contemporary Issues Course is offered in grade twelve (12). The curriculum is aligned with the Massachusetts History and Social Science Curriculum Framework.

The program goals conform to the school's Statement of Philosophy and Goals by promoting the highest level of expectations for every student attending Greater Lowell Technical High School based on 21st century skills and standards. The program currently has a total of one thousand four hundred fifty-seven (1457) students enrolled: four hundred twenty (420) in grade (9); four hundred eighteen (418) in grade (10); three hundred ninety-seven (397) in grade eleven (11) and two hundred twenty-two (222) in grade twelve (12).

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 3: Educational Program and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1.) Obtaining and incorporating Smart Boards and/or Interactive Whiteboards for all classrooms.
- 2.) Adding college prep classes to the curriculum.
- 3.) Modifying curriculum based on language level of students through differentiated instruction.

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Updating textbooks to match varied reading levels in grades nine (9) ten (10) and eleven (11)
- 2.) Providing inclusion classes and techniques via coordinating through the Special Education Department.
- 3.) Developing and implementation of honor level classes in all grades.
- 4.) Increasing the variety of subject choices in courses as described in the Massachusetts History and Social Science Curriculum Frameworks.

The TITLE I Reading Program of Greater Lowell Technical High School is staffed by four (4) instructors and one (1) director and supported by two (2) paraprofessionals, one (1) of which is bi-lingual. The curriculum for the Title I Reading Program is designed to provide literacy skills to eligible students. Grade nine (9) implements the technology based READ 180 program and has been expanded to ninety (90) minutes during the last year in order to maximize student gains. The tenth (10th) grade reading class is a supplemental class for students who are at risk in regards to ELA MCAS. In grades eleven (11) and twelve (12) TITLEI operates as an academic support class to help students succeed in their regular English class.

The program goals conform to the school's Statement of Philosophy and Goals by incorporating instructional resources and technology to increase student achievement. The program currently has a total of three hundred sixteen (316) students enrolled: one hundred thirty-three in grade nine (9); one hundred seventeen in grade ten (10); fifty-eight in grade eleven (11) and eight (8) in grade twelve (12).

The Visiting Team agrees that TITLE I Reading Program of Greater Lowell meets Standard 3 Educational Program and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the TITLE I Reading Program of Greater Lowell Technical High School on:

- 1.) Implementing a research based technology program -READ 180.
- 2.) Integrating instructional strategies using differentiated teaching methods to better meet students' needs.

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Increasing classroom space to eliminate crowded conditions, particularly in the first floor classroom in the blue wing.

The Transitional Occupations Program (TOP) within the Special Education Department of the Greater Lowell Technical High School is staffed by four (4) full time and three (3) part time instructors, one (1) worksite aide and five (5) paraprofessionals. The curriculum is comprised of career readiness, life skills and functional academics. The goal is to prepare each student in the program for competitive employment at their ability level. Another goal is to assist each student in becoming productive and valued members of the community.

The major activities of this program include internship in community programs such as daycare centers and senior centers. Students are included in technical areas and academic classes to the maximum extent that is appropriate for them. TOP students also participate in weekly events in the community.

The program currently has a total of sixty students enrolled ranging in age from fourteen (14) to twenty two (22). The faculty works closely with the Massachusetts Rehabilitation Commission and the Department of Developmental Services to transition students from high school to the world of work.

The Visiting Team agrees that the Transitional Occupations Programs meets Standard 3 Educational Program and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the TOP of Greater Lowell Technical High School on:

- 1.) Creating a program that exemplifies best practices of special education for this population.
- 2.) Involving all stakeholders (administrators, academic and vocational teachers, assistants, parents, guardians and students) in actively participating in the program
- 3.) Involving the school and community through programs such as internships, the greenhouse and the proposed recycling program

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Implementing the proposed recycling program as well as the Document Imagery Program with the Graphic Arts Department
- 2.) Scheduling meeting time for the department to collaborate and support the great sense of collegiality and enthusiasm of its faculty and staff.

SECTION 3: TECHNICAL STUDIES

AUTOMOTIVE COLLISION REPAIR AND REFINISHING

The Automotive Collision Repair and Refinishing department of the Greater Lowell Technical High School is staffed by three (3) Instructors. The curriculum for the course covers information beginning with basic tool usage, safety and refinishing techniques and procedures and proceeding progressively to more advanced levels of panel repairing, parts replacement, frame straightening, welding and color matching. Students work on shop tasks as well as on real live work supplied by the general public. The major activities of this program include refinishing using the newly acquired water borne paint system and the use of the I-CAR Collision Repair curriculum.

The program goals conform to the school's Statement of Philosophy and Goals by graduating seniors employed in the trade, advisory committee input and curriculum that is current with industry standards. The program currently has a total of eighty-one (81) students enrolled: twenty-three (23) in grade nine (9); twenty-six (26) in grade ten (10); fourteen (14) in grade eleven (11); and eighteen (18) in grade twelve (12).

The visiting team agrees that Greater Lowell Technical High School meets Standard 3: Educational Program and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends Greater Lowell Technical High School on:

1. Demonstrating teamwork between teachers, particularly in regards to the organization of instruction and meeting of curriculum goals.
2. Updating to the National Automotive Technical Education Foundation (NATEF) certification.
3. Maintaining a state-of-the-art facility with sufficient tools and equipment.

RECOMMENDATIONS:

The Visiting Committee recommends:

1. Acquiring and installing air blower units in the spray booth for drying water borne paints.
2. Obtaining and maintaining MSDS sheets in binders in the shop.

SECTION 3: TECHNICAL STUDIES

AUTOMOTIVE TECHNOLOGY

The Automotive Technology Department of the Greater Lowell Technical High School is staffed by four (4) Automotive Service Excellence (ASE) master certified instructors. The curriculum for the automotive course covers information beginning with shop safety and basic maintenance techniques and proceeds progressively to advanced drivability diagnosis. The major activities of this program include: live production work for outside customers and field placement opportunities for automotive students.

The program goals conform to the school's Statement of Philosophy and Goals by ensuring that the necessary skills and standards needed to be successful in the trade are being taught. The program currently has a total of sixty four (64) students enrolled: fifteen (15) in grade ten (10); twenty seven (27) in grade eleven (11) and twenty two (22) in grade twelve (12).

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 3: Educational Programs and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1.) Utilizing state-of-the-art technology and equipment to teach trade skills including but not limited to the Automotive Youth Education System (AYES) curriculum, Megatech, IDENTIFIX and smart boards.
- 2.) Having a program for work based learning that allows more advanced students to work in the field during normal school time.
- 3.) Earning and maintaining National Automotive Technicians Education Foundation (NATEF) and AYES certification.
- 4.) Accurately tracking the student's progress using competency based tracking charts.

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Repairing or replacing the lighting fixtures in the shop to make the areas on the outside walls brighter.
- 2.) Allowing more students to apply their education through the cooperative education program.
- 3.) Exploring ways to provide more work time in shop for students.

SECTION 3: TECHNICAL STUDIES

CARPENTRY

The Carpentry department of the Greater Lowell Technical High School is staffed by four (4) instructors. The curriculum for the Carpentry course covers information beginning with basic measurement and mathematics and proceeding progressively to performing individual and cooperative live work tasks, as well as allowing students to participate in cooperative work experiences in the Greater Lowell community.

The major activities of this program include: Individual woodworking projects, house building and cooperative learning opportunities.

The program goals conform to the school's Statement of Philosophy and Goals by providing a learning environment that fosters critical thinking, provides safe and respectful learning spaces, models enthusiasm for learning, and encourages all learners.

The program currently has a total of seventy-four (74) students enrolled in the program: twenty-seven (27) in grade nine (9), thirty (30) in grade ten (10), twenty-two (22) in grade eleven (11) and twenty-two (22) in grade twelve (12)

The Carpentry program has access to computer technology labs, employs smart board technology and current building construction equipment. The program staff is developing student training employing green technology and building practices.

The house building component occurs in the outdoor environment and employs safety features and building techniques found in industry. Some building materials are stored outdoors without cover.

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 3: Educational Program and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1.) Participating in further training to enhance skills to provide their curriculum to a multi-cultural student body
- 2.) Developing new curriculum to reflect state standards and new technology in green building initiatives
- 3.) Modeling enthusiasm and passion for their professional craft and encouraging students to aspire to excellence

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Replacing the existing dust collection system
- 2.) Providing additional storage space for material and equipment
- 3.) Recruiting active advisory committee members
- 4.) Coordinating shop schedules to accommodate student activities to minimize congestion

The Computer Aided Drafting and Design (CADD) department of the Greater Lowell Technical High School is staffed by two (2) instructors. The shop is split into a shop instructor who teaches hands on projects and a related instructor who teaches theory and exploratory. Both instructors work with multiple grade levels. The curriculum for the CADD course covers information beginning with Introductory AutoCAD and proceeding progressively to Real World Architectural Projects and is especially strong in critical thinking and problem solving. The major activities of this program include: the development of a concept or idea look for problems and needs and finding possible solutions, brainstorming, preliminary sketches, creating final designs, and then producing CAD drawings. Once a drawing is complete students will look at material selection, testing, manufacturing, production possibilities and redesign, if necessary, and redo the drawing. Students present their final drawings to the client and then produce a mockup or final product.

The program goals conform to the school's Statement of Philosophy and Goals by following the Massachusetts Common Core of Learning, the Massachusetts Curriculum Frameworks, and the Massachusetts Vocational Technical Education Frameworks in a supportive and safe environment that provides real-world skills that will assist students to become employable in their field. The program currently has a total of thirty-eight (38) students enrolled: twenty-five (25) in grade nine (9); twelve (12) in grade ten (10); twelve (12) in grade eleven (11) and fourteen (14) in grade twelve (12).

The Visiting Team agrees that Greater Lowell Technical High School meets Standard (3): Educational Programs and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1.) Providing the technology to allow teachers to teach industry standard practices to their students
- 2.) Engaging their students fully in their learning as evidenced by the number that are planning to pursue further education within their trade through the articulation agreements with local institutions and community colleges
- 3.) Developing students that are prepared with the necessary tools to meet the challenges of the world of work through project based learning and co-operative opportunities
- 4.) Utilizing the experience and recommendations of their advisory committee to improve the equipment, content and cooperative opportunities

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Repairing or replacing the Canon ip610 wide format color inkjet so students can utilize its full capabilities.
- 2.) Providing timely professional development when new software is acquired
- 3.) Continuing to develop and maintain an updated curriculum that meets industry standards.

SECTION 3: TECHNICAL STUDIES

COSMETOLOGY

The Cosmetology department of the Greater Lowell Technical High School is staffed by (4) instructors and one (1) assistant. It is a four (4) year program. The curriculum for the cosmetology course covers information beginning with exploratory and proceeding progressively to introduction of basic cosmetology competencies, then moves on to introduction of advanced cosmetology techniques as well as intro to salon management. Finally, seniors operate a school based salon "Senior Shears". The major activities of this program include: practical and theory applications of cosmetology as well as trade shows, non-traditional guest speakers, Skills USA leadership and skill competitions and co-op opportunities.

The program goals conform to the school's Statement of Philosophy and Goals.

The program currently has a total of one hundred eight-(108) students enrolled: twenty (20) in grade nine (9); thirty-two (32) in grade ten (10); thirty-two (32) in grade eleven (11) and twenty-four (24) in grade twelve (12).

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 3: Educational Programs and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1.) Having non-traditional students successfully enroll in and complete the program
- 2.) Installing various technological tools to support instruction in the related and shop area
- 3.) Developing strategies within the program resulting in a statistical increase in MCAS scores.

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Alleviating congestion and overcrowding in the shop
- 2.) Moving and updating Senior Shop into the Mall area next to other school based enterprises to allow for more effective instruction based on industry standards
- 3.) Providing sufficient resources to obtain necessary supplies

The Culinary Arts department of the Greater Lowell Technical High School is staffed by four (4) instructors. The department is located in the middle of the building adjacent to the mall on the first floor. The curriculum for the Culinary Arts course covers information beginning with safety and proceeding progressively through the Massachusetts Career and Technical Educational Framework Strands.

The major activities of this program include: food preparation and running of restaurant, bakery and special functions. Training in management and entrepreneurship also play a major role in the program.

The program goals conform to the school's Statement of Philosophy and Goals in that the very structure of the program lends itself to developing confident learners. The instructors are available at a moment's notice to give immediate feedback to the students. The level of experience that the instructors have coming into the program is also beneficial. The program currently has a total of eighty-two (82) students enrolled: sixteen (16) in grade nine; twenty-two (22) in grade ten (10); twenty-two (22) in grade eleven (11); and twenty-two (22) in grade twelve (12). This program has a waiting list.

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 3: Educational Program and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1.) Offering Junior students the opportunity to become certified in sanitation through the "Serve-Safe Certification Course".
- 2.) Creating modified quizzes and tests for students with IEPs with assistance from Special Education staff.
- 3.) Continuing to offer a challenging and exciting program that recruits more students than available space allows.
- 4.) Achieving reaccreditation from the American Culinary Foundation (ACF).

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Requiring the use of work safe shoes in the Culinary kitchen and Bake shop.
- 2.) Providing a clear process for the removal of surplus unused and outdated equipment from the shop area.
- 3.) Purchasing a steam kettle to enhance the shop experience.
- 4.) Developing a clear grading system (rubric) for students in the culinary kitchen.
- 5.) Increasing student work space in the bake shop.

The Early Childhood Education department of the Greater Lowell Technical High School is staffed by three (3) instructors and two (2) pre-school supervisors. The curriculum for the Early Childhood Education course covers information beginning with observation and overview of child related careers through the Career Cruising Program. Senior students are allowed to choose their own field placement according to their child related career goals and location. The major activities of this program include: operating a pre-school program with approximately twenty (20) 3-5 year olds, keeping an online portfolio, writing a journal based on the DESE Early Childhood Frameworks, constructing a resume folder, and creating lesson plans for pre-school centers.

The program goals conform to the school's Statement of Philosophy and Goals as demonstrated by teamwork in a pre-school setting. Students model 21st century citizenship through volunteer work in the community, as is evident through the Safe House Painting Project and the Mitten Project. Professionalism is demonstrated by adherence to an appropriate dress code by students and staff, and maintaining child confidentiality. The program currently has a total of nine-two (92) students enrolled: twenty-four (24) in grade nine (9); twenty-four (24) in grade ten (10); twenty-three (23) in grade eleven (11) and twenty-one (21) in grade twelve (12).

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 3: Educational Program and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1) Having a highly qualified and enthusiastic teaching staff
- 2) Developing a program that led to increased enrollment
- 3) Developing a collaborative relationship with other trades to complete community service projects

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1) Reconstructing the pre-school house-keeping area, allowing it to be handicapped accessible
- 2) Refurbish or replacing the playground equipment to prevent injuries
- 3) Developing and implementing a common meeting time between the three instructors and two pre-school supervisors, to better coordinate high school and pre-school curriculum.

SECTION 3: TECHNICAL STUDIES

ELECTRICAL

The Electrical Department of the Greater Lowell Technical High School is staffed by three (3) instructors and one (1) aide. The curriculum for the electrical course covers information beginning with Ohms law, electron theory and proceeding progressively through DC/AC theory, culminating with motor controls. Theory is intrinsically a part of the electrical curriculum and continues throughout the four (4) years of the Program. The major activities of this program include: wiring the schools construction home, participation in schools green technology training home, and extensive safety training.

The program goals conform to the school's Statement of Philosophy and Goals by the repetitive and consistent placement of students in the cooperative education program. The program currently has a total of one hundred and nine (109) students enrolled: twenty one (21) in grade nine (9); twenty seven (27) in grade ten (10); thirty one (31) in grade eleven (11) and thirty (30) in grade twelve (12).

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 3: Educational Program and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1.) Having all juniors participate in and earn certificates for completing the 10 hour OSHA Safety Course conforming to the OSHA 1926 standard.
- 2.) Implementing a Lockout/Tagout Safety Program for student work stations.

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Completing the implementation of the Lockout/Tagout Safety Program throughout the shop, including an arc flash safety personal protective safety equipment (PPE).
- 2.) Providing an additional licensed instructor to lower the student teacher ratio.
- 3.) Providing additional storage space for more efficient use of the instructional area.
- 4.) Improving the ventilation in the theory room.
- 5.) Providing new text books to keep in line with the 2011 revision of the National Electrical Code

The Electronics department of the Greater Lowell Technical High School is staffed by three (3) instructors. The curriculum for the Electronics course covers information beginning with general shop safety and continuing with a core curriculum of DC, AC, Semiconductors and Digital Electronics. Then, it proceeds progressively to the A+ certification, programming, networking and robotics. The major activities of this program include: Career Cruising, Cisco Discovery Academy, and SkillsUSA. Additionally, the program includes project-based learning, the opportunity to work toward receiving nationally recognized certifications, and the ability to earn college credit through articulation agreements. Students are also encouraged to participate in a peer-led Robotics Club.

The program goals conform to the school's Statement of Philosophy and Goals by providing students with the readiness for career, college, and citizenship in the 21st century in a high-tech atmosphere. This learning environment also promotes critical thinking and problem solving skills. Finally, a competent and hard working staff works to adapt their program to the ever-changing world of technology. The program currently has a total of seventy (70) students enrolled: twenty (20) in grade nine (9); twenty-two (22) in grade ten (10); fifteen (15) in grade eleven (11); and thirteen (13) in grade twelve (12).

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 3: Educational Program and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1.) Implementing a core curriculum of DC, AC, Semiconductors and Digital Electronics which creates a solid foundation for its students
- 2.) Employing teachers willing to adapt to changing technologies
- 3.) Maintaining articulation agreements with colleges which provide college credit for the students

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Providing additional funding support for the program to allow updates and growth as rapidly as industry standards change
- 2.) Updating course material including textbooks, lab experiment materials and the latest software (i.e. a Circuit Analysis program)
- 3.) Implementing curriculum development to create different pathway opportunities within the Electronics trade
- 4.) Refurbishing rooms to include more storage space

The Fashion Technology department of the Greater Lowell Technical High School is staffed by two (2) instructors. The curriculum for the course covers information beginning with exploratory and proceeding progressively to Level 4 with major focus on pattern modification, draping the design silhouette, couture techniques, and industrial embroidery technology. The major activities of this program include the introduction of basic techniques combined with theory and application in the construction of a myriad of projects. Assignments include, tailoring, evening and bridal, fashion accessories, and monogram designs.

The program goals conform to the school's Statement of Philosophy and Goals by providing all students with valuable life skills to build upon. The program currently has a total of forty-seven (47) students enrolled: sixteen (16) in grade nine (9); ten (10) in grade ten (10); ten (10) in grade eleven (11) and eleven (11) in grade twelve (12).

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 3: Educational Program and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1.) Utilizing the support of the Technical Trade Advisory Committee in the acquisition of computerized embroidery machines both commercial and domestic.
- 2.) Integrating their efforts with the Graphic Arts department and the Office Technology department to provide students with technology needed to succeed in college and careers.

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Improving the regulation of the temperature in the shop
- 2.) Providing improved lighting in the embroidery room
- 3.) Ensuring adequate supervision of students in the embroidery room
- 4.) Placing safety feet on all industrial lockstitch machines
- 5.) Displaying MSDS sheets

The Graphics Communication Technology program at Lowell Technical High School is staffed by seven (7) instructors: four (4) in the shop area and three (3) in related. Students are provided with an opportunity to earn certification in Introduction to Graphic Arts and Digital File Preparation PrintEd. In addition a student will earn a ten (10) hour OSHA certification. The Vocational Technical Competency Tracking System is used to follow and report student progress in acquiring specific competencies.

The program has both design and visual elements along with pre-press and printing technologies. Articulation agreements exist with Northern Essex Community College and the New England Institute of Arts through which students may earn three(3) credits for drawing and an additional three (3) credits for computer graphics while still at Greater Lowell. Students also participate in the Boston Globe Scholastic Art Competition, the 5th Congressional District Art Competition and SkillsUSA where they have won two national gold medals. Co-op programs and internships afford students the opportunity to gain valuable work experience while still enrolled in Greater Lowell.

The shop currently has total of one hundred thirty-nine (139) students enrolled: twenty-five (25) in grade nine (9); forty-seven (47) in grade ten (10); thirty-four (34) in grade eleven(11) and thirty-three (33) in grade twelve (12).

The visiting team agrees that Greater Lowell Technical High School meets the Standard 3: Educational Program and is engaged in continual improvement relative to that standard.

Commendations

The Visiting Committee commends Greater Lowell Technical High School for the following:

1. Employing a dedicated, innovative and highly motivated faculty.
2. Maintaining a successful partnership with local industry.
3. Effectively using the network technologies to keep parents and students up to date on progress and upcoming events.
4. Using the data from PrintEd certification exams to identify and address areas where teaching effectiveness may be improved.

Recommendations

The Visiting Committee recommends:

1. Arranging the space in the shop to a separate VPN (Virtual Private Network) to its own network
2. Inviting large corporations such as Adobe to participate on the program's advisory board.
3. Restoring the in-school co-op positions for special needs students
4. Implementing digital print technology.

The Health Assisting department of the Greater Lowell Technical High School is staffed by (5) instructors including shop and related instructors. The curriculum for the Health Assisting course covers information beginning with Nursing Assistant skills in tenth (10th) grade and proceeding progressively to Home Care, Alzheimer Care, EKG skills and Pharmacy Technician overview in the eleventh (11th) and twelfth (12th) grades. Students are tested by the Department of Health in the junior year for the Nurse Assistant Certification Examination. The school is the test site for the examination.

The program goals conform to the school's Statement of Philosophy and Goals by evidence of their one hundred percent (100%) pass rate for the Certified Nursing Assistant Examination. The program currently has a total of one hundred seventeen (117) students enrolled: thirty (30) in grade nine (9); thirty-one (31) in grade ten (10); twenty-nine (29) in grade eleven (11) and twenty-seven (27) in grade twelve (12).

The Visiting Team agrees that Greater Lowell Technical High School meets Standard (3): Educational Programs and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1.) Having strong community connections with various health care entities
- 2.) Promoting the involvement of students with Health Occupations Students of America (HOSA)
- 3.) Having a high percentage of seniors involved with cooperative education
- 4.) Implementing a pharmacy technician overview to the curriculum to enhance the marketability of the students in the labor market

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Purchasing an automatic blood pressure cuff
- 2.) Providing classrooms in close proximity to one another
- 3.) Exploring cross training between Medical Assistant and Health Assistant in senior year for those students not involved in cooperative education

The Heating Ventilation Air Conditioning (HVAC) department of Greater Lowell Technical High School is staffed by three (3) instructors. The major activities of this program include: implementing a frameworks-based curriculum beginning with basic shop safety, hand tool usage and proceeding progressively to diagnostic equipment usage, industry practices, standards and expectations. Of special note was the amount of hands on training witnessed in the shops. The students were involved in a variety of projects such as: soldering and brazing with copper tubing and various refrigerant coils, steel pipe construction, electrical theory and wiring projects that range from simple circuit board projects to very complex HVAC electrical control circuits. Students foster team building skills by working annually with other construction cluster shops in building a functioning school "house" project on the premises.

The program goals conform to the schools' Statement of Philosophy and Goals by continuing to update the curriculum, to reflect emerging HVAC technologies such as installing solar thermal collectors on the schools' "Green" house project.

The program currently has a total of sixty-seven (67) students enrolled: twenty (20) in grade nine(9); twenty-one (21) in grade ten (10); twenty-four (24) in grade eleven (11) and twenty-two (22) in grade twelve (12). Six (6) of the grade twelve (12) students are currently on Co-op.

The Visiting Team agrees that Greater Lowell Technical School meets Standard 3: Educational Program and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1.) Having peer students assist fellow students with shop assignments throughout all grade levels.
- 2.) Modeling enthusiasm and passion for their professional craft and encouraging students to aspire to excellence.
- 3.) Providing students the opportunity to test for the EPA 608 Refrigeration handler's license and preparing students for the Massachusetts Oil Burner technician exam.
- 4.) Having a highly active advisory committee that has been instrumental in procuring new equipment and tools
- 5.) Having one (1) instructor who is also a licensed electrician who teaches the basic electrical theory and controls components of the program

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Installing an exhaust venting system for oil and gas furnaces and boilers
- 2.) Providing a covered outside material storage area to protect materials from the elements.
- 3.) Having access to computers with associated HVAC software to facilitate the learning process
- 4.) Providing an area in the main shop to deliver related theory lessons as needed
- 5.) Providing a safe and permanent storage tank for heating equipment fuel oil
- 6.) Repairing hanging electrical drops in exploratory portion of the shop

The Hotel and Lodging department of the Greater Lowell Technical High School is staffed by (2) instructors. The curriculum for the Hotel and Lodging course covers information beginning with safety and proceeding progressively to management concepts in the lodging industry. The major activities of this program include theory-based certification attainment and hands-on training in all facets of operations in local hotels.

The program goals conform to the school's Statement of Philosophy and Goals by providing a realistic technical training area and employing a knowledgeable, committed staff. The program was recently recognized as the best in the nation by the American Hotel and Restaurant Association. The program currently has a total of fifty-two (52) students enrolled: twenty-two (22) in grade nine (9); ten (10) in grade ten (10); ten (10) in grade eleven (11) and ten (10) in grade twelve (12). Enrollment is limited due to off-site training hotel capacities.

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 3: Educational Programs and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1.) Attaining the recognition of being the top hotel management program in the nation
- 2.) Certifying students in grades ten through twelve (10-12) in the Lodging Management Program, a nationally-recognized model
- 3.) Maintaining a supportive, positive Advisory Committee through constant contact and a consistent, trained workforce
- 4.) Utilizing the latest technology in classroom instruction (SmartBoard, V-Brick)

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Continuing the process of engaging students in the lodging industry through industry-standard training and authentic instruction.

The Machine Tool and Technology program at Greater Lowell Technical High School consists of three (3) instructors, one (1) predominately working as the related or theory instructor and the other two (2) working with students in the shop area. The program spreads its curriculum out over four (4) years beginning with basic shop and tool safety and progressing sequentially to Computer Numerical Controlled production. The Cartesian coordinate system is taught on the Pro Light Machine because it is more user friendly and aids students in the transition to larger CNC equipment.

The Machine program recently updated the department with computers and Cad/Cam software in the shop and related class room. The department also updated the shop with six (6) new Computer Numerical Controlled (CNC) machines (three lathes and three milling machines) all of which were recommended by the Program Advisory Committee.

As a result of the Advisory Committee recommendations, two (2) older lathes have been sent out for refurbishing, and two (2) machines will be sent each year alternating between lathes and milling machines until they are all refurbished.

The Machine program has implemented the National Institute of Metalworking Standards Certification Program (NIMS) for five (5) years. The school is awaiting their five year reaccreditation of the program scheduled for December 2010.

The visiting team agrees that the Greater Lowell Technical High School meets Standard 3: Educational Program and is engaged in continual improvement relative to that standard

COMMENDATIONS:

The Visiting Committee commends Greater Lowell Technical High School for the following:

1. Owning Industrial Standard Computer Numerical Control Equipment.
2. Providing a Computer laboratory with updated computers and cad/cam software.
3. Maintaining a Nationally Certified (NIMS) Program.
4. Planning for the systematic maintenance and refurbishing of equipment as recommended by the Advisory Committee.

RECOMMENDATIONS:

The Visiting Committee recommends:

1. Providing funding for educational field trips with transportation appropriate for class size.
2. Acquiring a second Pro Light Machine 1000 (PLM 1000) to be used to facilitate the transition from smaller CNC equipment to larger CNC equipment and for use at SkillsUSA.

The Marketing Education department of the Greater Lowell Technical High School is staffed by three (3) instructors. The curriculum for the Marketing Education course covers information beginning with basic customer service and business procedures, and proceeding progressively to business management activities and is especially focused on retailing and customer service.

The major activities of this program include: Operation of the Marketing Education Mall, Career Safe Training, Lowell 5 Bank internship, Participation In DECA and SkillsUSA, Marketing Achievement Ceremony, an internal program internship and Co-op with over twenty (20) employers. The program goals conform to the school's Statement of Philosophy and Goals by providing a performance based program that meets current industry expectations. Related instruction correlates and reinforces industry standards and builds upon prior knowledge. The program currently has a total of forty-seven (47) students enrolled: twenty-three (23) in grade nine (9); seventeen (17) in grade ten (10); twelve (12) in grade eleven (11) and eighteen (18) in grade twelve (12).

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 3: Education Program and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1.) Having a Career Safe Trainer within the department.
- 2.) Utilizing Point of Sale Systems that replicates current industry standards.
- 3.) Offering an internal student internship to advanced students.
- 4.) Providing the Lowell 5 bank internship.
- 5.) Maintaining articulation agreements with Johnson and Wales University and Middlesex Community College.
- 6.) Providing a realistic lab experience in the Marketing Mall labs.

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Including an internal closed circuit security system.
- 2.) Remodeling the mall lab area to current industry expectations and providing for handicap accessibility and adequate egress.
- 3.) Providing national certification opportunities for students.
- 4.) Providing adequate common planning time within the department.
- 5.) Developing level 4 curriculum opportunities for students not participating in the Co-op component.

(continued next page)

RECOMMENDATIONS: (continued)

- 6.) Considering revision and/or replacement of the Competency Based Vocational Education curriculum still in use in the program.
- 7.) Documenting advisory committee members input with more detail in the minutes of these meeting.

The Masonry department of the Greater Lowell Technical High School is staffed by three (3) instructors. The curriculum for the Masonry course covers information beginning with shop safety and proceeding progressively to fireplace construction and is especially creative in providing meaningful shop projects. The major activities of this program include: construction of fireplaces, chimneys, retaining walls, patios and walkways; concrete finishing; tile setting; stonework; and brick and concrete block cavity wall construction.

The program goals conform to the school's Statement of Philosophy and Goals by adhering to the Massachusetts Vocational Technical Education Frameworks, providing a safe and secure learning environment, and strengthening community and business partnerships. The program currently has a total of fifty-two (52) students enrolled: twenty-five (25) in grade nine (9); thirteen (13) in grade ten (10); seventeen (17) in grade eleven (11) and twenty-two (22) in grade twelve (12).

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 3: Educational Program, and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1.) Having successfully certified students in the OSHA 10 hr. Construction Course;
- 2.) Creating a partnership with industry and the community through a strong and active Advisory Committee;
- 3.) Developing a technology plan through the use of a related theory program that provides new textbooks and smart board technology in the classroom;
- 4.) Continuing a strong participation in Skills USA, and MTTA competitions:

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Completing needed electrical work in shop areas
- 2.) Providing adequate supervision in all work areas

The Medical Assistant department of the Greater Lowell Technical High School is staffed by (6) instructors including shop, related, office and business procedure teachers. The curriculum for the Medical Assistant course covers information beginning in exploratory with safety procedures, basic medical assistant procedures and proceeding progressively to more technical skills and a one hundred percent (100%) externship experience. The major activities of this program include: lab technology, safety procedures (including OSHA), office procedures and other clinical procedures such as electrocardiograms. The program goals conform to the school's Statement of Philosophy and Goals as evidenced by their post graduation placement rate. The program currently has a total of one hundred twelve (112) students enrolled: twenty-five (25) in grade nine (9), thirty (30) in grade ten (10); twenty-eight (28) in grade eleven (11) and twenty-nine (29) in grade twelve (12).

The Visiting Team agrees that the Greater Lowell Technical High School meets Standard 3: Educational Program and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1.) Supporting and promoting organizations such as SkillsUSA, NHS, and Destination Imagination.
- 2.) Creating the "Debate" exercise for current medical issues for the senior class curriculum.
- 3.) Developing the "Choices" experiment to increase interest and enrollment of Freshmen students.

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Increasing the pass rate of the National Healthcare Association (NHA) certification exam on the first attempt.
- 2.) Providing the related classroom with a SMART board to enhance the learning experience for the student and complement the preparation of the NHA certification exam.
- 3.) Increasing the number of co-op opportunities for senior students.
- 4.) Continuing to expand future career opportunities and current technologies to reflect student interest and high demand jobs in the market. I.e., ultrasound skills.

SECTION 3: TECHNICAL STUDIES

METAL FABRICATIONS AND JOINING TECHNOLOGIES

The Metal Fabrication and Joining Technology department of the Greater Lowell Technical High School is staffed by three (3) instructors. The curriculum for the Metal Fabrication and Joining Technology course covers information beginning with safety, basic welding processes, oxy-fuel welding and cutting, plasma cutting, and proceeding progressively to TIG, MIG and arc welding, forming, bending and cutting machinery utilizing various projects which use those subjects. The shop is especially involved in work both within the school and for outside customers. The major activities of this program include: SkillsUSA "Chapter Display," regional/state welding competition, fixing stair railings for a neighboring school, and various repair work for other districts and towns as well as Greater Lowell Technical High School. The students are constantly tested on the safe use of each piece of machinery within the shop as they move from project to project. Every student must complete the ten (10) hour OSHA certification to be eligible for Co-op.

The Metal Fabrication and Joining Technology is both well-equipped and maintained. New ventilation and improved lighting has been installed thanks to the efforts of the advisory committee. This committee numbers around twenty-five (25) and is composed of representatives from numerous companies in the greater Lowell area. Many of the members of the committee are former students who are excited to be assisting the department.

The program goals conform to the school's Statement of Philosophy and Goals by following the Massachusetts Vocational Technical Education frameworks, partnering with numerous local businesses, taking part in co-curricular activities (e.g. SkillsUSA) and following the American Welding Society standards. The program currently has a total of eighty-four (84) students enrolled: twenty-eight (28) in grade nine (9); twenty-three (23) in grade ten (10); eighteen (18) in grade eleven (11) and fifteen (15) in grade twelve (12).

The Visiting Team agrees that Greater Lowell Technical High school meets Standard 3: Educational Program and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1.) Having a strong advisory committee that provides support and direction to the shop and its projects and job/co-op placement
- 2.) Having a good collaborative team of instructors that show a great deal of interest in the safety and well-being of their students
- 3.) Employing instructors that make an extraordinary effort to increase their knowledge and skills related to new trade processes and industry standards.

(continued next page)

SECTION 3: TECHNICAL STUDIES

METAL FABRICATIONS AND JOINING TECHNOLOGIES – (continued)

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Implementing a plan to add new welding machines and booths to help alleviate congestion based on the increase in student enrollment
- 2.) Adding student computers in the shop to utilize appropriate software (CAD, user manuals, video tutorials, etc.) that meets current industry standards
- 3.) Addressing safety issues involving the shop floor (i.e. electrical plate covers, uneven concrete pads, and uneven wooden floors)
- 4.) Painting yellow safety lines around machinery and defining walkways

SECTION 3: TECHNICAL STUDIES

OFFICE TECHNOLOGY

The Office Technology department of the Greater Lowell Technical High School is staffed by two (2) full time instructors. Five (5) additional full time teachers instruct the related courses of database management, accounting, web design, technology integration, and other specialties. The curriculum for the Office Technology course covers information beginning with career exploration and an introduction to the computer operating system and proceeding progressively to projects requiring the full integration of all program software. Office Technology is especially successful in placement of students in the Greater Lowell community. The major activities of this program include: automated accounting, developing expertise in the use of Microsoft Office Suite and multimedia software, and specialized training in a field of choice (medical, banking, finance).

The program goals conform to the school's Statement of Philosophy and Goals by placing their students as interns ready for the world of work or advanced learning.

The program currently has a total of one hundred three (103) students enrolled: twenty-five (25) in grade nine (9); thirty (30) in grade ten (10); twenty-four (24) in grade eleven (11) and twenty-four (24) in grade twelve (12).

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 3: Educational Programs, and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School for:

- 1.) Placing one hundred percent (100%) of their seniors in cooperative education experiences
- 2.) Achieving a one hundred percent (100%) student success rate on the Microsoft Office Specialist certification program
- 3.) Providing a program that allows students to test out of introductory college courses
- 4.) Maintaining a very active and effective advisory committee
- 5.) Employing exciting, engaging, dynamic instructors

RECOMMENDATIONS:

The Visiting Committee recommends:

- 1.) Continuing to financially support the state-of-the-art hardware and software replacements that are required for the program to remain current in a constantly changing technology field

The Painting and Design department of the Greater Lowell Technical High School is staffed by three (3) instructors. The department is located on the first floor of the building. The Painting and Design program covers a wide array of knowledge and skills that reflect a strong creative work ethic. The curriculum for the course covers information beginning with an introduction to shop safety, shop tools and equipment, and proceeds progressively to interior and exterior painting procedures, drywall finishing, and decorative faux finishing. The program includes training in blueprint reading, interior design and computer-aided sign making. The major activities of this program include: the creation of a parade float, and a house building project that provides real world experience and a chance to work collaboratively with other programs in the construction cluster.

The program goals conform to the school's Statement of Philosophy and Goals by preparing students for career and college opportunities through community based live work, cooperative placement, and rigorous math and English integration projects. Assessment methods include exams and quizzes, written research papers, oral presentations utilizing PowerPoint and SmartBoard technologies, technical reading assignments, and projects. The program currently has a total of eighty (80) students enrolled: twenty-four (24) in grade nine (9); twenty (20) in grade ten (10); twenty (20) in grade eleven (11) and sixteen (16) in grade twelve (12).

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 3: Educational Program Standard and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1.) Providing opportunities for leadership development through community service projects
- 2.) Continually updating curriculum to reflect current technology and industry standards
- 3.) Offering an integrated technical and academic learning experience

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Replacing the existing spray booth with an enclosed spray booth
- 2.) Providing interior design textbooks and software
- 3.) Increasing the size of the shop
- 4.) Updating MSDS book to current standards

The Plumbing department of the Greater Lowell Technical High School is staffed by three (3) instructors. The curriculum for the Plumbing course covers information beginning with occupational safety and proceeding progressively to include the Massachusetts State Plumbing Code. The major activities of this program include: drainage, and piping for waste, venting, water and gas.

The program goals conform to the school's Statement of Philosophy and Goals by providing integrated academic skills in the related portion of the program. Instructional resources and technology used in the program reflects current industry standards in the region. Students work in teams on hands-on projects that develop problem solving skills. The program currently has a total of fifty-four (54) students enrolled: twenty (20) in grade nine (9); ten (10) in grade ten (10); nineteen (19) in grade eleven (11) and twenty-five (25) in grade twelve (12).

The plumbing program is evolving in its staffing organization and changing its instructional direction. There are two (2) new instructors and one (1) experienced instructor in the program. The plumbing facility is small for the amount of students utilizing the instructional space, especially regarding the number of students, in the exploratory phase of the training, but instructors have dedicated areas of the shop for juniors and seniors to provide students with greater individual work spaces, allowing for greater visibility by the junior-senior instructor.

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 3: Educational Program, and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1.) Redesigning the shop area to enhance student learning and safety
- 2.) Creating innovative projects that increase student learning
- 3.) Developing teamwork through group projects
- 4.) Increasing use of technology in instruction

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Providing adequate numbers of instructors for students to work on campus and in the community
- 2.) Providing adequate lighting in the tenth (10th) grade instructional space
- 3.) Updating MSDS book to current standards
- 4.) Providing additional materials and supplies for program
- 5.) Recruiting active advisory committee members
- 6.) Increasing community resources for cooperative work opportunities

The Power Equipment Technologies department of the Greater Lowell Technical High School is staffed by one (1) instructor. The curriculum for the Power Equipment Technology course covers information beginning with safety and basic maintenance and proceeds progressively to advance troubleshooting, parts ordering, and major equipment repairs. The major activities of this program include: equipment service, small engine and transmission repairs.

The program goals conform to the school's Statement of Philosophy and Goals by preparing and placing students in the workforce. The program currently has a total of thirty-eight (38) students enrolled: nineteen (19) in grade nine (9); five (5) in grade ten (10); six (6) in grade eleven (11); and eight (8) in grade twelve (12).

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 3: Educational Program and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1.) Providing a large variety of tools for the students
- 2.) Developing a balanced curriculum to meet a wide variety of different equipment repairs and student needs
- 3.) Contributing to the upkeep of the property by maintaining the grounds equipment

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Increasing the number of students enrolled in the program
- 2.) Providing a way to fund new technology within the department
- 3.) Implementing Power Sport Equipment Technology into the program
- 4.) Increasing licensed instructional staff to insure a reasonable student-teacher ratio

The Programming & Web Development department of the Greater Lowell Technical High School is staffed by two (2) instructors. The curriculum for the Programming and Web Development course covers information beginning with introductory web development with Microsoft Expressions Studio and proceeding progressively to higher level programming languages and is especially strong in Java Script and Visual Basic application development. The major activities of this program include: Web development with MS Expressions, game programming, robotics, Java, Visual Basic .Net, and both A+ and Cisco networking utilizing the Electronics Technology on an ongoing basis.

The instructors are currently reworking curriculum to better conform to industry standards based on input from advisory committee and cooperative work providers. Three years ago, this trade and Office Technology were part of a larger "Information Technology" trade. The split provided programming students the opportunity to specialize, greatly benefitting the students. As a member of Microsoft Academic Alliance the instructor is capable of obtaining updated software to keep current to industry standards. Also, instructors can provide students with software to continue projects at home at no cost.

The program goals conform to the school's Statement of Philosophy and Goals by following the Massachusetts Common Core of Learning, the Massachusetts Curriculum Frameworks, and the Massachusetts Vocational Technical Education Frameworks in a supportive and safe environment. The program currently has a total of forty-one (41) students enrolled: twenty-five (25) in grade nine (9); eighteen (18) in grade ten (10); fifteen (15) in grade eleven (11) and eight (8) in grade twelve (12).

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 3: Educational Program and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1.) Improving instructors' knowledge and expertise through ongoing professional development. Including but not limited to summer coursework to keep abreast of changes in programming techniques.
- 2.) Creating an updated curriculum to not only include the latest updates in software and languages but also address the needs of their cooperative work providers and advisory committee.
- 3.) Utilizing the electronics departments' expertise to provide programming students with the opportunity to learn A+ certification in their junior year and Cisco networking during senior year further enhancing student opportunities.
- 4.) Getting students into cooperative work experiences with IBM and internships within the school with the Information Systems Department Staff.

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Replacing the aging hardware to conform to software advancements. Both computers and monitors should be addressed.
- 2.) Increasing female enrollment by developing exploratory curriculum that fosters non-traditional enrollment

SECTION 4:

EDUCATIONAL MEDIA SERVICES

Educational Media Services are provided by a staff of seven (7) people. The school has a well stocked library that offers a variety of media with a wide diversity of subject matter. In addition to the media provided in the library, the school has successfully implemented a number of media Initiatives accessible via intranet and internet. These include Aqua Browser, OPAC, Proquest Databases, eLibrary, eLibrary Curriculum Edition, SIRS Issues Researcher, SIRS Discoverer, SIRS Decades, Proquest Platinum, Culturegrams, eLibrary Science, Proquest Historical Newspapers, Follett Teen Health and Wellness Database, Smart Notebook Software, BrainPop, and V-Brick, a video-on-demand system. The department has worked diligently with the school's IT department in order to implement these services.

Both the print and non-print materials provided through the media center provide information for academic and technical education programs. The Educational Media center supports both bi-lingual and ESL populations. Care has been taken to ensure that the collection meets the needs of students of all ability levels and encourages life-long learning.

The Educational Media Services staff is responsible for the production of all ID badges. In addition the library has a small television production facility used for making promotional and informational videos for the school.

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 4: Educational Media Services and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends Greater Lowell Technical High School for the following:

1. Applying new technologies in a way that is accessible to all users
2. Having an extremely versatile staff capable of handling a wide variety of tasks
3. Maintaining diversity in the print and non-print media collections.

RECOMMENDATIONS:

The Visiting Committee recommends:

1. Establishing an advisory board of industry representatives
2. Establishing a position for an integration specialist to facilitate the process of merging new technology into curricula.
3. Implementing an assessment process to evaluate student competencies in the application of media services beginning with freshman orientation and progressing through the senior year.
4. Acquiring an electronic media inventory control and tracking system capable of providing trend data for reference in making new acquisitions which will reduce demands on staff who presently do this task manually and will reduce losses due to inadequate tracking
5. Securing a secondary storage center in order to provide backups as a safeguard for valuable data

Student Services at Greater Lowell Technical High School includes but is not limited to the following areas; Guidance, Special Education, Health and Safety, Transportation, Auxillary and Support Services. These services are staffed as follows: one (1) Guidance Director, eight (8) guidance counselors, two (2) adjustments counselors, three (3) nurses (two full-time registered nurses and one LPN assistant school nurse), three (3) school psychologists, one (1) co-operative education coordinator, one (1) Internship Program Manager, one (1) career counselor, eighteen (18) special education instructors, nine (9) special education instructional aides, eighteen (18) security personnel, one (1) student testing coordinator, one (1) student/family liaison. One (1) adjustment counselor, Internship Program Manager and the three (3) school psychologists are assigned to the special education department.

The guidance department is located on the third floor in a suite with a separate office for each counselor and a reception area supervised by the Guidance Director's administrative assistant. The Director of Guidance has no direct caseload and oversees all guidance and scheduling functions within the school. Each of the guidance counselors works with students in specific programs with a caseload of approximately two hundred seventy-five (275) students each. This work with specific "clusters" or programs enables each guidance counselor to work with teachers and students on classroom/lab environment as well as academic, behavioral or emotional issues. Two (2) adjustment counselors, all with school social worker certification, work within the guidance department. The Guidance Director also serves as the 504 coordinator for ninety-one (91) students.

Academic support is provided through support classes for reading and for study skills. This is built into students' schedules. There is also a peer tutoring program in the library after school. In the summer there is an academic support program, Work and Learning Program and students have MCAS tutoring along with a work experience.

Students may qualify for paid co-op placements or unpaid co-op internships beginning in their eleventh (11th) or twelfth (12th) grade year. The Co-op coordinator finds employment opportunities in the community for approximately one hundred fifty (150) students each year.

The Internship Program Manager works with the local career center to place up to twenty-five (25) special education students in subsidized work placements in the local area with the goal of placement in unsubsidized employment. This individual also works with the students on supportive skills, like using local transportation.

No evidence of bias exists in the admissions process. A written admissions policy clearly states the criteria for admission and applicants are given priority for admission from highest to lowest scores on the evaluation. The policy contains no quotas or allotments for any high school or town.

There are four hundred sixty-six (466) special education students at Greater Lowell Technical High School. The Transitional Occupations Program (TOPS) serves about seventy (70) students with significant cognitive deficits. There are about 22.7% IEP students and about 4.4% on 504 plans for about a 27% special needs population. The schools in the Greater Lowell Technical High School region have a special education population of approximately fifteen to twenty percent (15% to 20%). The special education caseload for each of the eighteen (18) case managers is about thirty (30) students. An icon on the student management system alerts a teacher to the presence of an IEP or 504 plan. The teacher then must open and read the document, then sign a form indicating that the document has been read and that the teacher understands the confidentiality requirements and the modifications to instruction needed. Speech and language services are provided by a full-time speech and language pathologist.

Nontraditional enrollment in technical programs is one hundred fifty-nine (159) (7.7 % of the total student population). Although this is less than the ten percent (10%) goal set by the state, it is greatly increased from the twenty-two (22) nontraditional students in programs in 2004 when the gender equity coordinator joined the school.

Health and Safety:

There are two (2) school nurse offices; one (1) each on the first and second floors of the building. The second floor office has separate private patient or examination rooms for student or physician use. Student health records are maintained in the second floor office. The nursing staff assures that each teacher has necessary and appropriate information about a student's health concerns. A medical icon on a student's record indicates a medical issue of which all staff should be aware.

OSHA certification training is available to students every year. CPR and blood-borne pathogen training is offered by certain school staff.

All rooms are connected via phones. Wireless radios also connect security, administrators and school safety monitors. Safety is also enhanced by video camera monitoring of all public areas of the school buildings and grounds. In addition, a security office at the entrance to school grounds ensures that visitors are appropriate, identified and provided with a visitor pass.

Auxiliary

Student transportation is provided by a private bus company called First Student. Greater Lowell Technical High School has a minibus and six (6) vans at the disposal of school staff.

(continued next page)

SECTION 5:**STUDENT SERVICES – (continued)**

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 5 and Student Services is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends Greater Lowell Technical High School for the following:

1. Maintaining a strong relationship between the philosophy and goals and the implementation of extensive and individualized student support services,
2. Implementing a new system that assigns student by trade areas to specific counselors;
3. Installing a state-of-the-art security system to monitor all parts of the campus, impressive grounds security, and enforced student security
4. Providing a gender equity coordinator whose responsibilities include conducting training in prevention of harassment and bullying

RECOMMENDATIONS:

The Visiting Committee recommends:

1. Initiating a system to supervise students in patient rooms that are out of sight and isolated from the nursing office on the second floor;
2. Assessing need for alcohol/drug support services for students and implementing needed services.

Students' cumulative files are kept in locked cabinets in each of the Guidance Counselor's offices. Additionally, Guidance Counselors have electronic access to the IEP's and 504 Plans for the students that they serve. An electronic database, the X2 Aspen, is the primary source of electronic student records data for the school and includes demographic information, contacts, scheduling, grading/transcripts, assessments, attendance, conduct/discipline, 504 plans, health information and other associated data.

Grades are reported through the Student Information System at the end of each term and progress reports are completed and sent from the teachers' electronic grade books to the X2 Aspen. From that database progress and grade reports are printed and mailed to parents/ guardians.

Attendance is recorded by the homeroom teachers in their electronic grade books and exported to the Student Information System. The Attendance Office enters student tardy and dismissal information and disseminates it immediately through the Student Information System. Teachers can view attendance through a networked Grade book.

Student health records are kept in locked file cabinets in the second floor Nurse's office. The students that participate in the Transitional Occupations Program (TOPS) have their records stored in the first floor nursing station due to its closer proximity to the TOPS program areas. The nurses are responsible for entering health information from the incoming students' previous schools into the Student Information System on X2.

Medical emergency information is displayed in the individual teachers' Grade books through a medical icon. All health records are kept confidential and medical information can only be released with the consent of the parent or guardian. The health records are maintained in the Health office until graduation when they become the property of the graduating senior.

The Excent Terra system is used by the Special Education Department to create and maintain the instructional modifications and accommodations required for special education students. The system is logon restrictive and password protected. It can only be accessed by authorized members of the Special Education staff. Teachers have an icon identification in their Grade book that alerts them to the fact that there are "student instructional considerations" for this student.

Special education instructors have access to their students' records in locked files located in the Special Education Workroom. There is a sign out procedure for them to remove a file from this room.

If a regular education teacher wishes to review a file, the file must first be authorized for removal by the special education director and must be read in the workroom and not removed.

SECTION 6:**STUDENT RECORDS – (continued)**

There is no specific icon used for 504 students in the teachers' Grade book. The Guidance coordinator is also the 504 coordinator and these files are maintained in the Guidance office.

The Co-Op Director collects data from graduating seniors through surveys. After one year's time a follow-up survey is completed to obtain new information from graduates. This survey is conducted by phone. There is an initiative in guidance to extend student follow-up beyond one year's time

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 6: Student Records, and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1.) Tracking student attendance quickly and consistently and providing rapid information to teachers.
- 2.) Creating a notification system for teachers for students who have IEP modifications or health issues that may manifest in the classroom
- 3.) Implementing an electronic grading and record system that allows parents to view their student's grades, assignments and attendance on a timely basis
- 4.) Upgrading electronic systems to enable better data analysis and dissemination

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Providing increased security measures for records in the Special Education Workroom
- 2.) Integrating the Special Education Module into the Student Information System, X2 Aspen
- 3.) Providing scanning technology to the nurses to enable precise entry of documentation for incoming students
- 4.) Developing and implementing an electronic alumni tracking data base that can be utilized to improve planning of programming and curriculum

SECTION 7:

SCHOOL STAFF

There are three hundred twenty-nine (329) employees including: twenty-five (25) administrators, one hundred eighty-six (186) teachers, forty-three (43) other professional staff members (counselors, special education, Title I, psychologists, library and media specialists), eleven (11) aides and other paraprofessionals, thirty (30) clerical support, six (6) maintenance staff, fourteen (14) custodial staff, and fourteen (14) security staff employed by the Greater Lowell Technical High School.

The staff at Greater Lowell Technical High School is qualified and approved for their areas of responsibility. There are four (4) instructors who are on waivers until 2011. The staff stays current with a school plan crafted by a Professional Development Advisory Committee led by the Professional Development Coordinator. This plan establishes professional development at Greater Lowell Technical High School and is aligned with state of Massachusetts expectations and licensure requirements.

New teachers are required to participate in a four-day induction program held before the start of the school year. The agenda for the workshop is developed by the Director of Curriculum and Instruction and the Student Activities Coordinator. Every new teacher is assigned a mentor to work with them and is given a copy of the New Employees Handbook which is supplied through the school's Human Resource Department. Weekly mentoring logs are kept and a mandatory monthly meeting is conducted on various topics.

The visiting team agrees that Greater Lowell Technical High School meets Standard 7: School Staff and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1.) Having a four-day induction program for new teachers followed by a structured mentoring program
- 2.) Implementing an extensive Professional Development Plan for teachers and administrators
- 3.) Increasing the number of inclusion teams
- 4.) Developing a positive school climate through involvement in extracurricular activities, athletic events, and school and student meetings

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Increasing custodial/maintenance, information systems support, cafeteria and clerical staffing
- 2.) Developing and implementing a plan to reduce overcrowding during the lunch periods

The administration/leadership team at Greater Lowell Technical High School is currently staffed with sixteen (16) administrators and seven (7) cluster chairs. The organizational model includes a School Committee that oversees the Superintendent/Director, general counsel and district treasurer. All other members of the administrative and leadership team report directly to the Superintendent/Director. Under the direct supervision and evaluation of the Superintendent are the Assistant Superintendent/Principal and eight (8) central office administrators. Under the direct supervision and evaluation of the Assistant Superintendent/Principal are five (5) directors and two deans (2). Two (2) of these directors oversee three (3) or four (4) program or academic "clusters"; the director of technical studies oversees four (4) clusters of technical programs and the director of curriculum and instruction oversees three (3) academic clusters. This is a recent reorganization that also resulted in hiring new administrators as well as promoting staff from within the organization.

Administrative offices are located in multiple locations on the first, second, and third floors of the building. The Superintendent is responsible for all decisions made in the school while implementing a vision and mission that impacts the school community as a whole. The Superintendent meets monthly with the school committee to discuss school policy and to discuss anticipated changes within the school. The governing board maintains written policies and procedures and makes them available to all personnel and to the public on the Greater Lowell Technical High School's website.

The leadership team is evaluated annually in accordance with the professional standards for administrators delineated in the "Principles and Standards of Effective Administrative Leadership", a document developed by administrators and staff and approved by the school committee in 2003. With newly hired Superintendent, Assistant Superintendent, Director of Curriculum and Instruction, Director of Technical Studies, and Cluster Chair for Transportation and Manufacturing, it will be important to establish these procedures for new members of the administrative team.

A new school improvement plan has been implemented resulting in an increase in MCAS test scores and removal of Greater Lowell Technical High School from the state "watch" list for low performing schools.

All students are provided opportunities to participate in leadership roles through participation in school activities such as student government, student council and SkillsUSA. The Greater Lowell Technical High School's calendar is coordinated with sending communities' school calendars with regard to school openings, school closings, school vacations, graduations, and other critical events and dates.

(continued next page)

SECTION 8:**ADMINISTRATION**

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 8: Administration and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends Greater Lowell Technical High School for the following:

1. Reinstating the position of Assistant Superintendent/Director and adding leaders to oversee instructional accountability and student performance;
2. Reorganizing technical clusters to more appropriately group program offerings;
3. Instituting an electronic management system (Sharepoint) in order to support curriculum development and documentation;
4. Focusing attention on increasing student performance on MCAS testing;
5. Providing training and technical support for staff as they implement new software products.

RECOMMENDATIONS:

The Visiting Committee recommends:

1. Maintaining regular leadership team meetings to discuss challenges, problems, and new ideas to improve curriculum and instruction;
2. Providing greater consistency between departments in teacher expectations, curriculum and instruction requirements and deadlines;
3. Focusing on the attainment of one or two goals yearly;
4. Monitoring goal attainment before advancing new initiatives;
5. Ensuring that all staff achieve, maintain and update appropriate professional credentials and competencies;
6. Revising the supervision and evaluation instrument for teachers to align more closely with current best practices.

SECTION 9:**FINANCE AND BUSINESS OPERATIONS**

The major financial resources of Greater Lowell Technical High School are 1) town assessments and 2) state aid. Within the past two years there has been a 3.8% decrease in the State of Massachusetts funding, and Greater Lowell is one of the few schools that operates on minimum contributions from member towns

The Business Manager holds a Bachelors Degree from the University of Lowell. He has been employed at Greater Lowell for the past six and a half (6 ½) years. Greater Lowell's Business Manager is also certified as a School Business Administrator and as a Massachusetts Certified Public Purchasing Official (MCPPO) by the Inspector General's Office.

In addition, the District employs a part-time Treasurer and six (6) full time administrative staff to manage the accounting system and collect/ disburse revolving account funds and regular budget expenses associated with the school's program. Funds are recorded in the general fund, thirty six (36) special revenue funds, forty one (41) trust funds and twenty six (26) student activity funds.

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 9: Business and Finance Operations and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

1. Preparing a comprehensive budget report with multiple financial reports and charts.
2. Pursuing funding through the Massachusetts School Building Authority (MSBA) for capital improvements of over \$40M.
3. Having no Management Letter Findings during the past 3 years Single Audits.
4. Bringing payroll processing in house and integrating with Munis financial system.

RECOMMENDATIONS:

The Visiting Committee Recommends:

1. Posting the school district's budget on the school's web site.
2. Expanding program budgeting to include more than one year.
3. E-mailing approved purchase orders to vendors.

Greater Lowell Technical High School is located at 250 Pawtucket Blvd., in the town of Tyngsboro, Massachusetts, just over the town/city line of Lowell in Northern Middlesex County. The facility is approximately five hundred fifty thousand (550,000) square feet and is situated on seventy-nine (79) acres of what was once meadows and farmland. To the north, it is bordered by Sherburne Avenue and several residential properties. Scarlet Brook, a wooded buffer zone, makes up the east property line which abuts more homes. On the south, it is bordered by additional residential properties, Rte.113 (Pawtucket Blvd.) and the north bank of the Merrimack River. The entire western line of the property is abutted by the Vesper Country Club.

The school is centrally located in a school district consisting of the towns of Tyngsboro, Dunstable, and Dracut as well as the city of Lowell. Greater Lowell Technical High School has a capacity of two thousand four hundred (2,400) students, with a present enrollment of two thousand fifty-six (2,056). There are five (5) parking areas containing seven hundred ninety-four (794) total spaces, eight (8) of which are handicapped. All parking areas are well lit.

The building was constructed in 1974 and has three (3) floors with two hundred eighty-eight (288) rooms. Of that, two hundred thirty-two (232) are classrooms for all areas, including shops. The school has a total of twenty-five (25) different shops. Technical areas, which require regular deliveries of large bulk materials and supplies, or that operate loud equipment, are located on the first floor. The second floor consists of a combination of both "office-type" technical programs and some academic classrooms, along with the administrative offices. Most academic classes are on the third floor, along with the Guidance Department, Library Media Center, a testing center, and a lecture hall. The school campus also includes athletic facilities such as: a Project Adventure course, a track, tennis courts, a football stadium, baseball and softball fields, soccer fields, basketball courts, a swimming pool and numerous practice fields.

The maintenance staff consists of five (5) people on the day shift, including a licensed plumber and a licensed electrician. There are three (3) full time day-shift custodians and eleven (11) working on the evening shift.

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 10: School Facilities and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1) Employing licensed trade personnel as part of the regular maintenance staff.
- 2) Continuing to maintain the building and grounds to high standards.
- 3) Creating an extensive capital budget plan for maintaining buildings and grounds.
- 4) Implementing an extensive camera monitoring system for the school's facility and grounds.
- 5) Initiating an extensive facility study using an outside company to proactively identify and address building issues.

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Replacing the slide-bolt door locks throughout the building with keyed locks that can be opened only from the inside.
- 2.) Investigating the possibility of creating a single common cafeteria area that is more logistical for handling food service.
- 3.) Upgrading the fire alarm panel for the school
- 4.) Increasing the number of handicapped and visitor parking spaces in the parking lot.
- 5.) Upgrading the remaining electrical panels as recommended in the Facilities Study report (original panels are obsolete and no longer reliable).
- 6.) Continuing to upgrade the heating and ventilation system throughout the building.
- 7.) Replacing the roof, windows, and doors as recommended in the Facilities Study report
- 8.) Adding an additional licensed electrician to the building facilities staff
- 9.) Continuing to follow the capital expense plan
- 10.) Replacing the dust collection system in the Carpentry program.
- 11.) Installing a new down draft spray booth in the Painting and Design program.
- 12.) Updating and centralizing MSDS sheets in all areas.

SECTION 11:

SCHOOL ATMOSPHERE

The general atmosphere at Greater Lowell Technical High School can well be described as a safe and secure environment that is conducive and supportive of its educational mission. Both students and staff are comfortable in their environment and a mutual respect between the two groups is evident. Student priorities, when asked about what could be done to improve the school, were focused more on class size and individualized attention than on safety or comfort issues. Students were confident that support was available to them in dealing with problems and that they knew where to go to get help when needed.

Faculty members were focused on academic and technical issues when asked about how improvements could be made. Few if any issues were expressed concerning the work environment, disciplinary problems or concerns over personal safety.

A wide variety of clubs and sports activities are available to students with the majority being involved in one or the other if not both. Other support structures such as peer mentoring and homework help are available to students after school. Students felt that they had ready access to both guidance and administrative personnel but could also freely approach teachers with their issues.

When asked about bullying, smoking, drug and alcohol related issues the students were aware of the schools policies on these matters and thought that the structures in place were effective in promptly dealing with them.

In general, students and faculty expressed a sense of belonging and loyalty to the school. Many students have family members who have previously attended the school and expressed that they would encourage friends and family members to apply to the school.

The school enjoys a positive reputation within the community as reflected by the fact that there are more applications for enrollment than the school can accommodate.

The Visiting Team agrees that Greater Lowell Technical High School meets Standard 11: School Atmosphere and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends Greater Lowell Technical High School for the following:

1. Maintaining a dedicated faculty and staff who are committed to providing a safe and secure learning environment for their students.
2. Having students who show pride in their school and are a credit to their community.
3. Implementing an effective program of student services and support structures that promotes a congenial, vibrant and dynamic atmosphere.

RECOMMENDATIONS:

The Visiting Committee recommends:

1. Maintain the high standards that have already been so effectively established.

SECTION 12:**POST SECONDARY PROGRAMS**

The Post Secondary department of the Greater Lowell Technical High School consists of the Practical Nurse Program, which is staffed by three (3) full-time, nine (9) part-time instructors and one (1) non-teaching director. All practical nurse instructors are registered nurses licensed by the State of Massachusetts. The Practical Nurse Program provides practical nurse training for two groups of up to forty (40) students; one (1) during the day and one (1) in the evening. The program length is forty (40) weeks. Upon completion each student is eligible to sit for the national licensure exam to become a licensed practical nurse. The curriculum for the course of study covers information beginning with Basic Sciences, Mental Health Concepts and Fundamental Nursing Care skills, and proceeds progressively to the delivery of safe competent nursing care and the ability to function in the role of an entry level practical nurse.

The major components of this program include: development of therapeutic communication skills, the ability to provide holistic nursing care to clients across the lifespan, the ability to organize and deliver culturally competent care to a variety of clients, the ability to demonstrate critical thinking skills in a variety of client care situations, and the recognition of the role of the licensed practical nurse within the 21st century health care system. It should be noted that the practical nurse program received a ten (10) year accreditation from the Massachusetts Board of Registration in Nursing (BORN) in of June 2010.

The program goals conform to the school's Statement of Philosophy and Goals by continuing to prepare students for participation as productive, innovative and relevant members of the 21st century health care system.

The program currently has a total of seventy-nine (79) students; forty (40) in the day program and thirty-nine (39) in the evening program.

The Visiting Team agrees that the practical nurse program at Greater Lowell Technical High School meets Standard 12: Post Secondary Programs and is engaged in the process of continual improvement relative to that standard.

COMMENDATIONS:

The Visiting Committee commends the Greater Lowell Technical High School on:

- 1.) Demonstrating continued success as evidenced by the community demand for the practical nurse program graduates in various health care facilities
- 2.) Completing a successful program review conducted by the Massachusetts BORN and maintaining continued accreditation
- 3.) Demonstrating awareness of the unique social and educational needs of the adult learner
- 4.) Developing a large and active program advisory board

RECOMMENDATIONS:

The Visiting Committee Recommends:

- 1.) Providing increased activities to familiarize the practical nurse student with the technological resources currently utilized with the 21st century health care system.
- 2.) Continuing to explore resources to provide academic support to meet the needs of the ESL practical nurse students

SUMMARY AND CONCLUSIONS

The visiting committee wishes to express their sincere appreciation to the faculty, staff and administration of the Greater Lowell Technical High School for the high level of hospitality and cooperation shown to them throughout their visit. To say that the school was prepared and receptive to our visit would be understating the level of commitment and cooperation that they exhibited. The accommodations and service of the Radisson Inn in Chelmsford and the dinner and lunches served to us by the Culinary Department and the staff of the Artisan Restaurant served during our visit was exceptional.

The visiting committee spent three day reviewing the self study document presented by the school, interviewing teachers, staff and administration, reviewing records, plans and curriculum and generally becoming familiar with the operation of the school. At the conclusion of their visit the committee compared the results to the Standards of Membership of the Commission on Technical and Career Institutions (CTCI) of the New England Association of Schools and Colleges (NEASC). The committee was asked to determine whether the school met, exceeded or needed improvement in each area of the standards of membership. The school as a whole substantially met or exceeded each standard. In those very few cases where it was determined that the school was in need of improvement, suggestions for bringing the school into compliance were made in individual reports. In addition to the Standards, the committee also made area-by-area recommendations for improvements, which if implemented, would improve program delivery and opportunities for students.

The Greater Lowell Technical High School is a magnificent structure located on meticulously kept grounds. The facility boasts state-of-the-art equipment in many of the areas of the school. The facility is well designed to support and enhance the teaching/learning environment. The school has a clearly defined Mission Statement and Statement of Philosophy and Goals that is extremely broad based and was developed utilizing a broad spectrum of stakeholders. The school is well received in the community and enjoys vast support among the education business and parents of the four (4) towns it serves. The school enjoys articulation agreements with thirty-nine (39) institutions of higher learning. In some cases graduates may be eligible for up to one year's credit toward an Associate Degree. The latest graduate follow-up survey reported fifty-seven percent (57%) of its graduates enrolled in a program of higher education while thirty percent (30%) were working in their occupational choice.

There is a genuine spirit of cooperation and support prevalent between and among the faculty, staff and students. There is a very high degree of professional and personal expectations demanded by the faculty which is demonstrated in the behavior of the students throughout the building. The students find faculty and administration open to their ideas and approachable.

The visiting committee believed that there were few problems that need immediate attention at the Greater Lowell Technical High School. Most of those revolve around the age of the building and the need for more space in the light of current industry standards and a growing and diverse population. These issues and the fact that the school is over subscribed by almost double its incoming student capacity make a strong case for expansion. There currently exists a plan for a forty million dollar (\$40,000,000) expansion to the building and grounds which would help to alleviate some of the problems of space and time and the visiting committee strongly recommends this plan be funded. It was the committees' hope that if this were done many more opportunities would be made available for existing students and many more students would be able to take advantage of an outstanding educational program.

The committee noted many commendable aspects of the school program. Here are a few of the most significant:

- 1.) Maintaining a dedicated faculty and staff who are passionate about their subject matter and creative in their approach to delivering it to students.
- 2.) Implementing an effective program of student and support services that promote a congenial, vibrant and dynamic school atmosphere.
- 3.) Fostering a feeling of safety and security for all students and staff.
- 4.) Instituting an extensive and effective public information program throughout both the school and community
- 5.) Implementing a comprehensive harassment and bullying prevention program.
- 6.) Having a creative and expansive instructional program for special needs students (TOP program)

The committee also had a number of recommendations to help improve those standards that needed adjusting and to generally improve areas of the educational program. Here are a few of the most significant:

- 1.) Reorganizing the MSDS information sheets to be current, centralized and identifiable.
- 2.) Instituting an inventory control system in the Educational Media Center
- 3.) Continuing to upgrade the heating and ventilation systems through the building
- 4.) Replacing the roof, windows and doors as recommended in the Facilities Study Report.
- 5.) Increasing handicapped accessibility both within the building and in the parking areas surrounding it.

In conclusion, the visiting committee agreed unanimously that the Greater Lowell Technical High School is an institution of quality and should be recognized for its high level of educational accomplishment. It was the sincere desire of the visiting committee to make recommendations, which it believed would improve the school with an eye to its future.