

A. Overview

This program is driven by the current educational program offerings and those planned for the future as well as the lack of closed classrooms throughout most areas of the building and out-dated science facilities. It includes an explanation of the district's and school's curriculum goals and objectives as well as the teaching philosophy and methods being advocated. It includes school and grade configurations along with class size policies and guidelines, and descriptions for all instructional areas/programs. The educational program describes the instructional and general administrative support staff plans, both existing and proposed along with district and school organizational charts. Finally, a current fiscal year budget statement and four previous years' fiscal statements are provided in appendices to this document.

B. Methuen Public Schools' Curriculum, Instruction, and Assessment Initiatives

Curriculum, instruction, and assessment are inseparable and complementary components of a school system dedicated to helping all students learn at the highest possible levels. The Director of Curriculum, Instruction, and Assessment coordinates district and school improvement planning, oversees curriculum development and revision, monitors the district's teacher supervision and evaluation procedures, organizes district-wide professional development initiatives, and plans for and analyzes district student academic assessment.

Student assessment, curriculum renewal, and instructional improvement form a continuous cycle. Ongoing, systematic analysis of student achievement data, collected through effective classroom assessment as well as large-scale testing, provides the Methuen Public Schools with information that is used to revise curricula and improve instruction. All curricula in Methuen are aligned with the Massachusetts Curriculum Frameworks and are developed by teacher teams who work through an ongoing cycle of curriculum renewal. Curriculum implementation is supported through a professional development program that increasingly has been embedded within the teachers' contractual work year. Responsible for supervising teachers' curriculum implementation and instruction, the district's administrators follow protocols for formal observations and evaluations, as well as engage in informal classroom walkthroughs. Working as a team, the district's faculty and administration develop thoughtful, detailed improvement plans that address priorities in curriculum, instruction, and assessment.

By consensus of Methuen's leadership team, the most pressing district-wide priority is to quickly identify the needs of struggling learners and to investigate, improve, and/or expand support and intervention programs to meet those needs. While this initiative largely involves effective instruction, it also requires assessment and curriculum development, along with coordinated oversight by the Department of Pupil Services, in conjunction with the supervisors of Title I and the Language Acquisition Department.

Many of Methuen's struggling learners belong to one or more of the underperforming subgroups identified by Adequate Yearly Progress (AYP)—special education students, limited English proficient students, low-income students, and

Hispanic/Latino students. Data show that many struggling learners also have not consistently been schooled within the district, or in some cases schooled at all. Roughly 43% of the tenth graders who took the MCAS at Methuen High in 2008 had not been enrolled in the Methuen Public Schools continuously from grade 4 on. Roughly 29% of the tested eighth graders had not been enrolled from fourth grade on. To identify the needs of struggling learners, particularly those in the transient population, the district is developing an interim assessment system to provide quick and specific analysis of which students need intervention and in which particular areas of knowledge and skills. Making use of this ongoing assessment and analysis, the district is currently initiating a tiered intervention process consisting of these steps:

1. Differentiated instruction appropriate for students' readiness, learning styles, and interests provided by the classroom teacher.
2. Students in need receive additional in-class support, for example, from Title I personnel and tutors.
3. Students in need receive more individualized in-class support or short-term pull-out intervention.
4. Students in need receive more intensive individualized intervention.

By adopting a tiered intervention system and supporting it with appropriate staffing, curricula, and materials, the district can help struggling students to catch up with their peers.

As part of this more coordinated approach to intervention, the district has started to systematically evaluate and refine its existing intervention programs—Title 1, language acquisition, special education, and other grant-funded initiatives. Thoughtful program evaluation will enable these programs to function at maximum efficiency. Typically, resources for intervention have come from grants, some of which are diminishing. The district may thus need to dedicate more of its regular operating budget to these needs. With a coordinated, systematic approach from the district's full leadership, resources for intervention can be allocated efficiently to where they are most needed.

Another priority that spans the boundaries of curriculum, instruction, and assessment is improving vertical articulation, particularly from the grammar schools to the high school. In 2007, coordinators were hired to address the transition issue in grades 7 through 12: and they have been effective in leading curriculum revision and development of interim assessments, as well as some professional development for teachers. Similar positions are needed to improve articulation of curriculum, instruction, and assessment from grades K-6. In the short term, the district hopes to reorganize its administrative teams in order to create two additional coordinators—one to deal with English language arts and social studies, and the other to coordinate mathematics and science in grades K-6. They will not only lead the design of specific curricula and assessments but will directly supervise teachers' classroom implementation of curricula and their use of formative assessment data. As experts in the content areas, they will provide much-needed support to the grammar school principals in teacher observation/evaluation and onsite professional development.

1. Curriculum Initiatives

Developed during the 2007-2008 school year, the district's current *Curriculum Review and Revision Plan* describes curriculum initiatives and priorities from 2007 through 2012. The overriding goal is to establish curriculum design as a systematic process from preschool through grade 12, with a scope and sequence that clearly outlines the knowledge and skills taught in all disciplines. Annual priorities identified within this long-range curriculum plan will enable the district to deploy resources where they are most needed. With the plan as a guide, curriculum development teams are assembled in spring and early summer to address the prioritized needs. To ensure that all learners' needs are addressed, special educators and faculty from the Language Acquisition Department are invited to serve on curriculum teams across the disciplines. Teachers and administrators throughout the district have opportunities to provide input to these teams through surveys, discussions at grade-level and department meetings, and attendance at textbook/instructional materials presentations.

It is also important to make revised curriculum guides easily accessible to teachers and interested parents. Toward this end, the most recently developed guides have been posted on the district's web site. A technology specialist is invited to participate in each curriculum development team, so that curricula and supporting materials can be posted quickly. Ultimately, a system for curriculum mapping—through which teachers can map their lesson plans directly to curriculum objectives and share them online—will be instituted.

For 2009 through 2010, the district's specific curriculum development priorities are indicated in the following chart. Top priorities are those to which resources must especially be dedicated. Adjustments may be made as the Leadership Team identifies emergent student needs, particularly for intervention programs, or as budget constraints may limit purchases and stipends for curriculum design.

	CURRICULUM DEVELOPMENT FOCUS	TIME LINE
Pre-K - 8	<p>Top Priorities:</p> <ul style="list-style-type: none"> • Develop science curriculum guides for grades K-2. • Review the social studies curriculum standards for grades K-5, then investigate and purchase appropriate textbooks and materials. • Continue to review and update kindergarten curriculum. <p>Secondary Priorities:</p> <ul style="list-style-type: none"> • Review and make any necessary adjustments in the mathematics curriculum guide for grades K-8. • Revise/develop social studies curriculum guide for grade 8. • Investigate and purchase textbooks for grade 7. 	2010

High School	<p>Top Priorities:</p> <ul style="list-style-type: none"> • Review and/or develop common assessments in English, math, science, and social studies. • Review Methuen High’s program of studies in relation to the MassCore recommendations. • Revise the English grade 12 level 2 and 3 curricula. • Develop curriculum and purchase materials for integrated algebra/geometry course. • Review and update curriculum for physics courses and curricula for AP chemistry and biology. • Revise the Spanish 1 and 2 level 2 curricula. • Develop standards and materials for research documentation across the disciplines. <p>Secondary Priorities:</p> <ul style="list-style-type: none"> • Realign English curricula in grades 10 and 11 to accommodate AP English Language and Composition course. • Develop a half-credit course integrating mathematics and technology. • Revise Spanish 1 level 3 and American Sign Language curricula. • Update curricula in elective areas as needed. 	2009
	<p>Top Priorities:</p> <ul style="list-style-type: none"> • Implement MassCore recommendations as part of Methuen High’s program of studies. • Review and update the English grade 11 curricula. • Revise calculus and precalculus curricula for new textbooks. • Revise the curricula for environmental science and for anatomy and physiology. • Explore course options, to add another year of social studies as graduation requirement. • Revise the Spanish 2 level 3 curriculum. <p>Secondary Priorities:</p> <ul style="list-style-type: none"> • Explore development of interdisciplinary courses in the core academic areas. • Revise curricula for English elective courses and for ALPHA and night school English. • Revise Spanish 1 level 4 curriculum. • Update curricula in elective areas as needed. 	2010

2. Instruction Initiatives—Teacher Recruitment and Hiring

Methuen’s teaching force is relatively stable, but retirements and occasional resignations, as well as newly created teaching positions, necessitate an efficient system for recruiting and hiring new personnel. All new hires are expected to be appropriately

licensed under Massachusetts regulations and to meet federal requirements for highly qualified teacher status. In addition to advertising open positions, Methuen participates in teacher recruitment fairs, particularly the annual Merrimack Valley Teacher Recruitment Fair, and also contacts college career services offices. Teacher recruitment for the coming year will focus particularly on finding strong teachers in the areas of mathematics, science, foreign language, and special education, where there is typically a shortage of well-qualified candidates. An effort will also be made to diversify the teaching staff to reflect the cultural diversity of the community. To facilitate timely recruitment and expedite hiring of preferred candidates, the district hopes to streamline the budget development and hiring approval processes. If openings can be identified and posted in the early spring, the district will be more able to hire the best-qualified individuals in the job market.

3. Instruction Initiatives—Supervision

On the whole, Methuen’s teachers have outstanding educational preparation and teaching skills. For the 2008-1009 school year nearly all of the district’s teachers were highly qualified under No Child Left Behind guidelines. Focused supervision will continue to promote appropriate curriculum implementation and sound instructional strategies, particularly in the areas of differentiated instruction and use of assessment to improve student achievement.

Teachers in their first three years are formally observed three times annually and are evaluated twice annually. Teachers at professional status participate in a four-year cycle, with professional goal-setting in Years 1 and 3 and formal observations and evaluations in Years 2 and 4. A rigorous procedure, with frequent formal observations, addresses improvement needs of any professional-status teachers whose performance is not meeting expectations. With a small administration relative to the size of Methuen’s growing teaching staff, it has become increasingly difficult for supervisors to keep up with the demands of the formal observation/evaluation system. This problem is particularly evident at the grammar school level, where four administrators are responsible for supervising approximately ninety teachers. With the possible addition of curriculum coordinators for grades K-6, the district can ease this burden as well as provide expert supervision of curriculum implementation.

4. Instruction Initiatives—Professional Development

Continuous professional learning is the key to improved instruction. Methuen provides an array of professional development activities—both during and outside teachers’ contractual work hours. The Methuen Public Schools professional development program is well-planned, focused, and research-based. It centers on enhancing and increasing student achievement at all levels. It is designed to engage our teachers and administrators in continuous, effective curriculum development, instruction, and assessment and to have them understand the critical link among them. Teachers learn how to plan and deliver instruction effectively and how to assess students’ learning for formative and summative purposes. Additionally, training is provided to our non-professional staff as a reflection of our firm belief that their work supports what goes on in classrooms.

The Professional Development Council—now co-chaired by the Methuen Education Association Vice-President and the Director of Curriculum, Instruction, and Assessment— includes faculty from all five schools in a collegial decision-making process. This group surveys and regularly communicates with the faculty at large, in order to plan professional development activities that meet individual, school, and district needs.

Increasingly, the district recognizes a need for professional learning that is embedded in the teachers' work day. In addition to a full professional development day in November, four half-days for professional development have been added to the calendar. For 2008-2009 three of the half-days have been designated for building-based activities, while the other half-day and the full November day are dedicated to district-wide initiatives. Activities for all of this time are coordinated through the Professional Development Council. Teachers who attend all five days (15 hours) are rewarded with a credit toward movement on the horizontal salary scale.

Perhaps the most important move toward embedded professional development has been the addition of several new positions to support professional learning during the teachers' work day. These are the instructional coach and 7-12 coordinator positions.

Each grammar school now has an English language arts and a mathematics instructional coach, and the four grammar schools share two English language-learning coaches. Their responsibilities include providing demonstration lessons, modeling, and coaching for teachers in the implementation of curriculum and effective instructional strategies; leading initiatives, such as literacy and math teams, to support teacher collaboration in instructional planning and lesson design; and guiding the collection of classroom assessment data and assisting teachers in its analysis and interpretation for formative assessment purposes. They were particularly helpful last spring and this fall in the design of a new interim assessment system. A program evaluation of their work was conducted in spring 2008. Using data from surveys of the full teaching staff as well as administrator and coach interviews, the evaluation shows widespread appreciation of the coaches' work with teachers. As a result of feedback from the evaluation, the district has more fully publicized the various types of support available from the coaches and is exploring the possibility of hiring additional coaches.

In the higher grades the district has converted the major high school department chair positions to coordinators. As experts in their subject areas, the coordinators of English, mathematics, science, and social studies support professional learning for teachers in grades 7 through 12. They facilitate communication and collaboration of teachers regarding curriculum, instruction, and assessment; assist in the ongoing development, implementation, assessment, and revision of grade 7-12 curricula; and advise the grade 7-12 staff in regard to new instructional strategies and curricula.

For the past four years the district has worked with the Northeast Consortium for Staff Development to develop professional development courses that are offered in Methuen and mostly taught by Methuen personnel, for which participants can earn graduate credit from Salem State College. These courses directly support curriculum

implementation and programmatic needs in Methuen. Participation is free of charge for professional development points and costs a nominal fee for Salem State credit. A key professional development course is *Building Teaching Skills*, based on Saphier and Gower's *The Skillful Teacher*, a well-researched analysis of teaching skills that provides the foundation for Methuen's observation and evaluation system. This course is now mandatory for all teachers new to the district. Also, the Language Acquisition Department annually offers multiple sections of the Category 1-4 ELL courses, one of which can be taken for college credit.

Additionally, after-school and summer seminars and workshops, run by Methuen faculty, have been offered for professional development points in various content areas and related pedagogy. Faculty are also encouraged to attend off-site workshops and conferences and to share the information acquired with their colleagues when they return.

The district has also expanded professional development for its current and prospective leaders. In conjunction with Salem State College, the district offers a Certificate of Advanced Graduate Studies (CAGS) program in administration. The third CAGS cohort began its coursework in the spring of 2008. Since 2006, the district has run a Leadership Academy for all administrators, designed to foster K-12 collegiality and perspective among leaders, strengthen leadership knowledge and skills, and help shape the vision and goals for the district. Eight sessions are held throughout the school year, and in August the Academy meets for three full days. The major focus for the Academy during the 2008-2009 school year was to explore intervention for struggling learners, particularly those in the underperforming subgroups identified in the district's AYP report.

The following goals will guide Methuen's professional development program for 2009-2010:

1. Work with the Methuen Education Association to define how the newly negotiated half-days and the November in-service day can best serve the learning needs of teachers and the student achievement goals of the district. In particular, the interaction of the district-wide Professional Development Council and the school Teacher Leadership Councils needs to be clarified. At a minimum, the district leadership and teachers' association will need to define for coming years which of the half-days will be designated for district-wide professional development and which can be used for school-based professional development.

Research shows that school-based professional development, particularly in the form of professional learning communities, is likely to have the strongest impact on student achievement. During the 2008-2009 school year Methuen High School piloted the professional learning community process. In early summer 2008 eleven members of the faculty attended a week-long institute at Harvard University on restructuring high schools. Throughout this school year those individuals have led small groups of the entire faculty through a process of building school culture and identifying topics for professional learning and improvement. Research on this initiative is being conducted by a consultant from the Harvard summer Redesigning High Schools program. The research will be

used to evaluate and modify Methuen's implementation of this professional learning community. This model, if successful, may be useful in establishing school-based professional learning communities in the grammar schools as well. In general, the district has identified a need to foster professional learning communities through study groups, demonstration classes, reciprocal classroom visits, and teacher walkthroughs—all of which are best served by a school-based approach to professional development.

2. Ensure that the roles of the in-school professional development providers are clearly publicized to all faculty and that their services are efficiently deployed. Beginning with the 2007-2008 school year the district has employed an English language arts coach and a mathematics coach at each of the grammar schools, and the roles of four high school department chairs—in English, mathematics, science, and social studies—were expanded to grade 7-12 coordinators. For the 2008-2009 school year two ELL coaches were added, to divide their time among the four grammar schools and assist teachers with strategies for instructing second-language learners. Additional coaches may be hired, to follow up on needs expressed by faculty and administration. The roles of the grade 7-12 coordinators were more fully defined during the 2008-2009 school year, with schedules devised for their attendance at grade 7 and 8 grade-level meetings and classroom walkthroughs, as well as monthly meetings with the Director of Curriculum, Instruction, and Assessment. Through the grade-level meetings the coordinators have been available to address content-based professional learning needs of the teachers.
3. Monitor the impact on performance of first- through third-year teachers of the mandatory *Building Teaching Skills* course. Based on Saphier and Gower's *The Skillful Teacher*, the foundation of Methuen's observation/evaluation system, this course has been offered for many years and has been popular with the faculty, but 2008 marked the beginning of its status as a contractually mandatory course. The district will need to explore options for offering the course at varied times, including weekends and summer as well as after school, and will need to formally evaluate its effectiveness in introducing teachers to the *Skillful Teacher* knowledge base.

In addition, the district needs to provide a refresher course for administrators in the *Skillful Teacher* parameters. Using the regular Leadership Academy sessions or time outside of the school day, administrators could more fully explore this knowledge base in order to deepen their formal classroom observation analyses.

4. Evaluate and expand the content-based professional development opportunities available for district faculty outside of their work day. During the summer of 2008, through a Title I Regional Grant, a group of Methuen teachers participated in professional development initiatives in mathematics and English language arts, which entailed learning new content-specific pedagogical techniques and utilizing them with students in a summer school setting. In January 2009 twenty math teachers from the Tenney and Timony Grammar Schools participated in similar professional development, as a continuation of this grant. For English language

arts instruction the district currently has five graduate courses available to teachers. In fall 2008 a popular course for grammar school teachers on integrating manipulatives into the mathematics curriculum was offered. Additional courses, or possibly more short-range seminars, could be developed to address the content areas of science, social studies, the arts, health and physical education, as well as English and math in the higher grades.

5. Expand professional development opportunities for administrators. Currently, the district offers a CAGS program for aspiring administrators, coordinated with Salem State College and the Northeast Consortium for Staff Development. The third cohort began its studies in spring 2008, and future cohorts are planned. If feasible, the district could also offer stand-alone graduate courses in supervision for its existing administrators. Additionally, to increase its effectiveness, the Leadership Academy—provided during the three-day August session and monthly half-days—could benefit from a more sustained annual focus on a topic of critical need.

5. Instruction Initiatives—Teacher Induction and Mentoring

To assist teachers new to the district and profession, the district offers an induction and mentoring program. Teacher induction begins with a four-day program prior to the new school year, orienting newcomers to district procedures and providing them with workshops on Methuen’s curricula and on instructional skills drawn from Saphier and Gower’s *The Skillful Teacher*. As of fall 2008, all teachers new to the district are required to take *Building Teaching Skills*, a full graduate course offered onsite that explores *The Skillful Teacher* in more depth. New teachers are then encouraged to expand their knowledge base by participating in the district’s professional development program.

Induction continues in the mentoring program, staffed by a coordinator and twelve building-based teacher mentors. A consultant from the University of Massachusetts Lowell serves as advisor to the program. The work of the twelve building mentors is also supported by curriculum, instruction, and assessment (CIA) coaches. Each new teacher is paired with a CIA coach—a master teacher in the same grade-level or discipline who offers help with lesson-planning and assessment to teach the curriculum. In addition to providing support to new teachers and opportunities to observe and be observed teaching, the mentor program includes meetings addressing a wide range of topics. Typical topics for each month are shown as follows:

6. Assessment Initiatives

With a growing amount of available assessment data, the district will continue to emphasize the formative uses of assessment. Increasingly, classroom teachers will participate in the systematic use of assessment data to meet their students’ learning needs. The major new initiative for 2009 is in the area of interim assessment, a project recommended by the Department of Elementary and Secondary Education (DESE) for districts in corrective action as well as in Methuen’s 2007-2008 Office of Educational Quality and Accountability (EQA) report.

During spring 2008 a planning group consisting of the grammar school coaches, 7-12 coordinators, the Director of Assessment and Instructional Personnel and Director of Curriculum and Grantsmanship met regularly to explore options for interim assessments—large-scale assessments to be administered a few times yearly prior to MCAS, in order to give teachers more timely information on their students’ progress toward the Massachusetts learning standards. The group decided to begin by developing and administering one-hour interim assessments in English language arts and mathematics according to the following schedule:

Grade	Content Area	Schedule	Format
2	Mathematics	January, May	Multiple-choice questions, one open-response question with scoring rubric
3	Reading/Literature	January	3 reading passages, with multiple-choice questions and one open-response question with scoring rubric Writing prompt, with rubric
	Writing	January	
	Mathematics	Early fall, January	Multiple-choice questions, one open-response question with scoring rubric
4-10	Reading/Literature	Early fall, January	3 reading passages, with multiple-choice questions and one open-response question with scoring rubric Writing prompt, with rubric
	Writing	Early fall, January	
	Mathematics	Early fall, January	Multiple-choice questions, one open-response question with scoring rubric

To design, administer, and analyze the interim assessments and develop a database to store and display the results, the district signed a three-year agreement with SchoolBrains for the use of its testing and performance assessment module. SchoolBrains offers a test item bank stocked with more than 11,000 English language arts and mathematics items developed by Measured Progress, the company that also designs the MCAS exams. The items can be easily sorted by Massachusetts curriculum standards and by levels of complexity identified through Bloom’s taxonomy and Webb’s Depth of Knowledge (DOK) categories. With the flexibility to use and modify these items as well

as locally developed questions, Methuen can craft assessment tools that directly address not only Massachusetts curriculum standards but also the district's prioritized needs. Multiple-choice answers will be scanned and instantly scored, while open-response items will be scored by teacher teams. Once uploaded to the SchoolBrains system, the scores can quickly be aggregated and disaggregated in a variety of ways. It will be possible to generate analyses for individual students, classes, grades, schools, and the full district, with the option of disaggregating by subgroups as well. Item analyses will show students' progress toward specific curriculum standards, and students' progress from year to year can be tracked. For the first time, each Methuen teacher will be able to view a more immediate analysis of his/her individual students' and class's performance on a wide-scale standards-based assessment from his/her computer.

This interim assessment schedule is the first phase of an ambitious plan to generate more specific formative assessment data for use by both teachers and administrators. Kindergarten screening includes use of the Brigance, along with procedures developed by a kindergarten screening task force during the fall of 2008. For English language arts in grades K-3, teachers continue to use the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) and the Developmental Reading Assessment (DRA) to identify students' needs in reading skills. DIBELS and DRA scores will eventually be added to the SchoolBrains database. Interim assessments in science and social studies are planned for the future. Once the interim assessment system is fully operational, coaches and coordinators will work with teachers to help them to interpret the data and adjust their teaching accordingly. Interim assessment results will also be useful for revising curricula and monitoring curriculum implementation.

The Director of Curriculum, Instruction, and Assessment will continue to provide the principals and other members of the district's leadership team with specific analyses of large-scale assessment results. These include detailed MCAS analysis books that are individualized for each school and that include specific objectives analyses and data to support the work of the Performance Improvement Mapping (PIM) teams. MCAS scores can now be downloaded into the SchoolBrains database, so that teachers will be able to identify the needs of their individual classes and students not only through interim assessments but through MCAS item analyses as well. Grade distribution analyses are provided after each quarter and at the end of the year, to help principals to focus on problematic issues, as shown through classroom grading patterns. Annual analyses of SAT and Advanced Placement results are also given to the high school administration.

Professional development in standards-based assessment continues as a priority in the district. Since the 2005-2006 school year, the district has provided teachers with varied opportunities for professional development in the effective design and use of classroom assessment. The goal has been to foster an understanding of standards-based assessment as a tool for adjusting instruction to meet the needs of diverse students. The onsite graduate course *Using Assessment to Improve Student Achievement* has been offered annually by the Director of Curriculum, Instruction and Assessment. The director and other staff has also provided after-school and in-service workshops for teachers—on topics such as standards-based assessment, diversifying assessment tools and procedures, using classroom assessment formatively, creating valid selected-response and constructed-response

instruments for classroom use, designing performance assessments with accompanying rubrics and task lists, and learning styles.

Performance Improvement Mapping (PIM) is Methuen's system for developing School Improvement Plans. PIM is a continuous cycle of data examination, causal analysis, goal setting, and action planning. Each fall, with the guidance of the Director of Curriculum, Instruction, and Assessment, PIM teams from all five schools assemble to review student achievement data; set performance goals, student learning objectives, and improvement objectives for the coming year; and develop action plans with benchmarks to assess outcomes and implementation. The work of each PIM team is documented in a detailed School Improvement Plan, which guides the school through the year. In the spring the PIM teams reassemble to monitor implementation of their improvement plans and make adjustments where necessary.

C. Methuen High School's Mission and Expectations for Student Learning

The school's mission statement represents the school community's fundamental values and beliefs about student learning and the purpose of the school and is consistent with the district's goals. The school also has established high expectations for all students in academic, civic, and social areas that are reflective of its mission and specifically state what all students should know and be able to do by the time they graduate, taking into account the skills, competencies, concepts, and understandings identified by district, state, and national standards and by professional organizations. The mission and expectations were developed by the school community and approved and supported by the faculty, the superintendent of schools, and school committee. The following is Methuen High School's mission statement and expectations for student learning:

Methuen High School is a community of lifelong learners committed to excellence. We actively encourage learning in a safe and supportive atmosphere. Our dynamic school, in partnership with parents and the community, promotes high achievement and inspires pride, respect, and success in all. We believe all students should be college ready and be able to successfully succeed and compete in the global economy. We further believe that the school must offer a comprehensive, personalized educational program to meet the diverse needs of all of its students.

ACADEMIC EXPECTATIONS

All students at Methuen High School should know and be able to do the following:

- Read at grade level.
- Write effectively across the curriculum.
- Communicate effectively in both speaking and listening.
- Problem-solve effectively, using multiple strategies.
- Utilize critical thinking skills across all disciplines.

RUBRIC FOR ACADEMIC EXPECTATIONS

Advanced

- Student consistently reads above grade level.
- Student consistently writes effectively.
- Student consistently communicates effectively through speaking and listening.
- Student consistently solves problems effectively using multiple strategies.
- Student consistently uses critical thinking skills.

Proficient

- Student frequently reads at the appropriate grade level.
- Student frequently writes effectively.
- Student frequently communicates effectively through speaking and listening.
- Student frequently solves problems effectively using multiple strategies.
- Student frequently uses critical thinking skills.

Needs Improvement*

- Student reads just below grade level.
- Student infrequently writes effectively.
- Student infrequently communicates effectively through speaking and listening.
- Student infrequently solves problems effectively using multiple strategies.
- Student infrequently uses critical thinking skills.

Failing

- Student reads far below grade level.
- Student seldom writes effectively.
- Student seldom communicates effectively through speaking and writing.
- Student seldom solves problems using multiple strategies.
- Student seldom utilizes critical thinking skills.

* Needs Improvement is the acceptable level of attainment for the academic expectations.

CIVIC AND SOCIAL EXPECTATIONS

Each student at Methuen High School is expected to:

1. Commit to punctuality, attendance, preparation, and participation.
2. Understand and accept the relationship among rights, responsibilities, and consequences in school and society.
3. Explore, develop, and express his or her own creativity.
4. Work effectively alone or in a group.
5. Participate in activities that create a positive academic and social atmosphere for all students.
6. Establish cooperative and healthy relationships with others.
7. Achieve a positive self-image by setting and attaining goals.
8. Accept diversity and be receptive to other cultures and ideas.
9. Develop conflict resolution skills.
10. Understand how to create and respond to necessary change.

D. Methuen Public Schools' Goals

Based on student achievement data, the district goals for the school's improvement plan for the calendar year 2009 were established through collegial dialogue that involved all of the district's administrators, representatives from all units of the Methuen Education Association, and all cost center managers. In order to improve student achievement at all levels and across the curriculum, the district has set the following goals and priorities which form the basis of the high school's mission and expectations for student learning:

1. Continue curriculum development and revision and ensure appropriate classroom implementation of new curricula.
2. Provide, supervise, and support effective instruction that communicates high expectations and that meets the needs of all learners.
3. Improve classroom assessment practices and use of assessment data for formative and summative purposes.
4. Expand parental communication and involvement in the schools.
5. Support our students' learning by organizing effective organizational structures, nurturing a healthy culture, and providing well-maintained facilities.
6. Review and refine the district's business and financial practices, including budget preparation, to ensure that they identify and effectively deploy resources to support the student achievement goals.

E. Methuen High School's Process to Develop Its Annual School Improvement Plan

Every year the Commonwealth of Massachusetts mandates that each public school develops an improvement plan that is consistent with state and district policies and that addresses the following:

- Improving student performance
- Professional development for staff
- Parent and community involvement
- Issues of tolerance, safety, and discipline in the school environment
- Meeting diverse learning needs, including those of special needs and language minority students.

The School Improvement Plan (SIP) of Methuen High School is developed through the collaborative efforts of district and MHS administrators and teachers. A leadership team is formed annually to implement an intensive, data-driven, results-oriented school planning process, the goal of which is to raise student performance in English language arts (ELA) and mathematics. This process, known as Performance Improvement Mapping (PIM) with an overview provided at the end of the Methuen

Public School's Curriculum, Instruction, and Assessment Initiatives section, is designed to:

- Set goals to align with state and federal expectations for Adequate Yearly Progress and improved student performance
- Analyze recent MCAS data to assess student academic performance and determine strengths and weaknesses
- Identify skills that students lack
- Analyze root causes of low student performance
- Appraise current practices to determine what is and is not working
- Select new research-based strategies
- Evaluate implementation and outcomes.

PIM is a model of a continuous improvement process. The goal is to embed the principles of the ten PIM steps into the everyday work of MHS, creating a culture of ongoing investigation and improvement. The PIM team hopes the process can achieve the following:

- School staff will become more involved in making informed decisions on program development.
- Teachers will find new ways to interpret data and use it to inform their own teaching.
- Communication about data will increase at the grade, team, subject and school level; and data will be used as the basis for decision making.
- School staff will look for root causes before attempting to solve problems.
- Data on program implementation and outcomes will be collected regularly, shared with staff, and used to modify programming.

The high school's improvement plan is the result of the PIM process. It contains student performance goals in English language arts and mathematics and learning objectives in all content areas, with detailed emphasis on ELA and mathematics. These learning objectives then present benchmarks to measure the implementation of the plans and the effect of the plans on student achievement and performance. The SIP is developed for a calendar year since MCAS results are not available until early fall.

1. Report on 2008 Student Performance Goals as Developed through the PIM Process

The 2008 Student Performance Goals expressed desired levels of improvement in MCAS scores in English language arts and mathematics. Methuen High School in 2008 met its target in the aggregate but not in some of the subgroups: special education in English language arts and special education, low income, and Hispanic in mathematics. As a result and in contrast to 2007, the school did not make Adequate Yearly Progress (AYP). The following is a brief report on the 2008 student performance goals:

English Language Arts

From 2007-2008, the overall percentage of students scoring *Advanced/Proficient* stayed the same at 68%. Failures decreased by 2% from 2007-2008. The Composite Performance Index (CPI) for the aggregate increased slightly to 88.6.

Mathematics

From 2007-2008, the percentage of students scoring *Advanced/Proficient* decreased by 5% to 57% while the percentage of failures increased by 4%. The CPI for the aggregate decreased by 3.3 to 79.7.

2. 2009-2010 Student Performance Goals as Developed through the PIM Process

The Composite Performance Index (CPI) is a measure used by the Department of Elementary and Secondary Education to assess a school's progress toward achieving proficiency for all students in English language arts and mathematics by the year 2014. Each year the school must meet either a state performance target or its own improvement target.

To meet the school's aggregate improvement targets for 2009:

Methuen High must increase its English Language Arts CPI from 88.6 to 90.5.

Methuen High must increase its mathematics CPI from 79.7 to 83.1.

To meet the school's aggregate improvement targets for 2010:

Methuen High must increase its English Language Arts CPI to 92.4.

Methuen High must increase its mathematics CPI to 86.5.

These Student Performance Goals express desired levels of improvement in MCAS scores in English language arts and mathematics. The following projections, derived from 2008 MCAS baseline data, show the percentages of improvement needed for the school to meet its aggregate Adequate Yearly Progress (AYP) improvement targets.

English Language Arts Student Performance Goals

2009

1. Increase the percentage of students scoring *Advanced, Proficient, or Progressing* by 6%, to a total of 75%.
2. Decrease the percentage of students scoring *Needs Improvement or Failing* by 5%, to a total of 27%.

2010

1. Increase the percentage of students scoring *Advanced, Proficient, or Progressing* to a total of 79%.
2. Decrease the percentage of students scoring *Needs Improvement or Failing* to a total of 23%.

Mathematics Student Performance Goals

2009

1. Increase the percentage of students scoring *Advanced*, *Proficient*, or *Progressing* by 6%, to a total of 64%.
2. Decrease the percentage of students scoring *Needs Improvement* or *Failing* by 6%, to a total of 38%.

2010

1. Increase the percentage of students scoring *Advanced*, *Proficient*, or *Progressing* to a total of 71%.
2. Decrease the percentage of students scoring *Needs Improvement* or *Failing* to a total of 30%.

Subgroup Student Performance Goals

To meet its special education improvement targets for 2009:

Methuen High School must increase its English language arts CPI from 69.1 to 74.3.
Methuen High School must increase its mathematics CPI from 59.4 to 66.2.

To meet its LEP improvement targets for 2009:

Methuen High School must increase its English language arts CPI from 69.2 to 74.3
Methuen High School must increase its mathematics CPI from 59.6 to 66.3

To meet its low-income improvement targets for 2009:

Methuen High School must increase its English language arts CPI from 81.8 to 84.8.
Methuen High School must increase its mathematics CPI from 68.2 to 73.5.

To meet its Hispanic/Latino improvement targets for 2009:

Methuen High School must increase its English language arts CPI from 81.4 to 84.5.
Methuen High School must increase its mathematics CPI from 65.5 to 71.3.

Again, the PIM process is very much a collaborative effort by staff to ensure that all students are academically successful. The collaboration piece is an integral part of the high school's professional development initiative. It is anticipated that the 2009 MCAS results will improve enough so that the school will make Adequate Yearly Progress (AYP) under the federal legislation, No Child Left Behind. Preliminary figures for English Language Arts (ELA) indicate the school is on target.

F. Methuen High School's Current Professional Development Initiative

The high school's professional development plan, in concert with the district's plan as outlined in the district's curriculum, instruction, and assessment initiatives' section previously described, is based upon the belief that teaching is a highly skilled craft and that all students can learn at high levels, given the right learning opportunities in the classroom setting. It needs to support teachers in developing curriculum, delivering instruction effectively, and assessing students' learning on a continuous basis. Specifically, the school's professional development plan expands teachers' knowledge of

their subject matter; increases their knowledge of standards-based curriculum, instruction, and assessment; and analyzes and reduces the gap between goals for student achievement and students' actual progress.

Methuen's instructional delivery model calls for well-designed lessons which connect with the world of students and offers clear, smoothly paced instruction that engages student interest. Lesson clarity is enhanced through the careful provision of the "big picture," explanatory devices, questions to check for understanding, and unscrambling of confusing points. The model further emphasizes that teachers being well-provisioned with overlapping management routines and varied instructional activities will result in few classroom interruptions to the momentum of lessons. Consequently, entire class time is utilized in very productive, academic engagement time. The importance of varying classroom activities to meet the different learning styles of students and to tap into their multiple intelligences is paramount for effective learning to take place. The high school utilizes Bernice McCarthy's *The 4MAT System* which provides a systematic approach to organizing instruction based on the four major learning styles and hemispheric preferences of students. Connections also need to be made on an ongoing basis among content, delivery, and assessment so that all students achieve their maximum potential. Finally, Methuen's instructional delivery model emphasizes that instructional strategies and techniques must be adjusted to reflect recent research and best practices in teaching and learning in order to meet the changing needs of students. The Methuen High School professional development plan emphasizes an understanding that the effective interaction between student and teacher is the essence of quality education.

In order to improve MCAS scores in English language arts and mathematics and meet Adequate Yearly Progress (AYP) under the federal legislation No Child Left Behind, teachers and administrators are provided training in best instructional practices, particularly in assessment strategies, both formative and summative. Research indicates that a well-planned, focused, and sustained professional development program in these areas will enhance student achievement. Bruce Joyce and Beverly Showers book *Student Achievement through Staff Development* clearly endorses this. Research also points to evidence that student performance is directly proportional to the level of investment students feel the school is making in their education.

Based on identified needs, the high school staff and administration, working with Central Office through the 2008-2009 school year, developed a school-wide professional development plan for immediate implementation. The collective focus of the plan centers on teaching, learning, and assessment, with the goal of individual, collegial, and organizational improvement, especially as it relates to improving standardized test scores.

The pre-planning phase began in the spring and summer of the 2007-2008 school year. Methuen High School sent a delegation of administrators and teachers, eleven individuals in all, to the national week-long conference "Redesigning American High Schools for Improved Instruction," held at the Cambridge campus of the Harvard Graduate School of Education. The Professional Development Guide of the Methuen Public Schools states: "People who grow professionally reach out actively to the knowledge bases about how students learn and what teaching strategies work best. They both benefit from and contribute to research on effective instruction." The Harvard

initiative afforded the high school cohort of eleven the opportunity to share an intensive and stimulating experience with some of the most distinguished educational researchers of our times, along with over one hundred other practitioners from around the nation. One of the institute presenters was subsequently retained by the Methuen Public Schools as a consultant for academic year 2008-2009. His role was to nurture faculty capacity by working with the eleven individuals who attended the Harvard institute. The consultant facilitated several follow-up training sessions with those who participated in the Harvard institute, and gradually interdisciplinary faculty/staff study groups were established, each facilitated by a member of the core group, starting in September 2008. The plan has provided for the interdisciplinary study groups to assemble on four early-release in-service days and one full in-service day. The trained facilitators share knowledge and insights gained at the summer institute, introduce group members to formal protocols aimed at building a professional learning community, and orchestrate professional dialogue around teaching and learning. This format supports the Methuen Public Schools' Professional Development Program Guide's contention that "the norms of the workplace need to change from relatively isolated teaching environments to collegial and cooperative relationships where teachers can regularly share their experiences and craft knowledge." It is a widely accepted belief that one of the most powerful forms of professional development is shared expertise. This direction is strongly supported by the work and research of Richard DuFour, Rebecca DuFour, Robert Eaker, and Thomas Many as outlined in their book, *Learning by Doing*. As Methuen High School embarks on a multi-million-dollar renovation/rebuilding project, this cohesive professional development plan with the primary goal of enhancing student achievement for all students should help to establish a school climate conducive to cutting edge teaching and learning, with formal collaboration between professionals and collective internal accountability for student achievement. Again, the primary goal of this initiative is to spread reflective practice across the entire faculty in order to enhance best professional practices, to build a shared vision for teaching and learning, and to enhance student learning for all students.

It is the intention of Methuen High School to continue to support individual, collegial, and organizational growth through substantive, sustained, job-embedded professional development, based on district goals, data-driven needs of students and career fulfillment of staff. As stated in the aforementioned Professional Development Program Guide, "School leaders both support and model professional growth. They facilitate professional development activities by securing resources, offering appreciation and recognition for professional growth, and democratically planning and participating equally with faculty in projects for professional development." With the strong support of the Superintendent of Schools, another cohort of teachers and administrators attended the 2009 Harvard summer institute.

The school is currently assessing the effectiveness of the Harvard initiative by administering surveys to both staff and students. The initial survey to staff was given in June 2008. A follow-up to this survey was done in May 2009. Students also were surveyed in February 2009 and will be again in the 2009-2010 school year. Both surveys are designed to measure the effectiveness of the Harvard initiative. The initial results have been positive.

G. Redesigning Methuen High School Initiatives

As outlined in the high school's Professional Development Initiative section, the primary goal of this initiative is to spread reflective practice across the entire faculty in order to enhance best professional practices, to build a shared vision for teaching and learning, and to enhance student learning. Training in facilitative leadership skills to examine instructional practice, student work, and assessment took place through workshop sessions in the spring of 2008 and continued with the Harvard Institute "Redesigning the American High School" in the early summer of 2008, with two additional training sessions taking place in August. The core group was deployed during the 2008-2009 school year to facilitate groups of about a dozen staff each, called study groups. Each study group is a diverse mix of departments, teachers/administrators, program assistants, men/women, and a range of experience. These groups met four times in the fall of 2008 and through the spring of 2009, again with the goal of fostering a school culture of collaborative reflective practice. Much of the high school's restructuring effort is based on *Breaking Ranks II: Strategies for Leading High School Reform*.

To create a physical structure conducive to implementing professional learning communities and movement towards the MassCore, several initiatives were undertaken during the 2008-2009 school year. Inter-disciplinary teams from Methuen High School visited approximately 15 other Massachusetts high schools that had been renovated/added to or newly constructed. Staff was provided with research-based literature relevant to high school restructuring, and several focus groups were conducted with administration and staff. This plan incorporates the findings of those investigations.

In redesigning Methuen High School, the plan is to create two separate "houses" within the school, similar to the lower and upper school model at the four PK-8 grammar schools in Methuen. One house will serve students in grades 9 & 10, while the other school/house will serve grades 11 & 12. Having "two schools within the school" will provide students with membership in a smaller learning community that is developmentally aligned with the needs of students, as supported by the research reviewed by Jay Feldman, M. Lisette Lopez, and Katherine G. Simon in *Choosing Small: The Essential Guide to Successful High School Conversion*, among others. Currently, class size guidelines recommend that the average class size not exceed 25 students. During the 2008-2009 school year, the average class size at Methuen High School was in the 22-23 student range. Based on research and experience on how students learn, class sizes should be kept small.

The grade 9 & 10 house programming will be more highly structured and focus on developing core academic skills. During the 2008-2009 school year, a plan was developed to increase time on learning in English language arts and mathematics in grades 9 and 10 in order to better prepare students for MCAS. It will be implemented in the fall of 2009. The grade 11 & 12 house programming will be more flexible and allow for students to explore areas of interest for future careers and post-secondary study and to participate in a number of programs such as dual-enrollment with area colleges, externships, distance learning options, etc. Each school will have its own schedule and primarily separate physical location, although some educational programs will be shared.

Within each house, academic disciplines will be aligned to facilitate inter-disciplinary collaboration according to a humanities cluster consisting of English, social studies, and foreign language; a STEM (Science, Technology, Engineering, and Math) cluster; and a wellness cluster comprised of physical education, health, family & consumer science, and JROTC departments. Centrally located and shared between schools would be fine arts, including media production to facilitate inter-disciplinary collaboration across all academic areas. The main office reception area should be located at the main entrance designed to receive all visitors to the building. The principal, Guidance and a Colleges & Careers Center, special education, the Media Center, nurses, and vocational programs will be centrally located to share between the two schools/houses. Assistant principals' offices will be situated to establish a presence throughout the school, with two being assigned to the grade 9 & 10 school/house and two being assigned to grade 11 & 12 house. In the case of a two floor design, one would be located on each floor of each of the school/houses. Alternative education options (dual-enrollment and developmental college courses, distance learning, Horizons, Alpha, Night School, Summer School, etc.) will preferably be self-contained with a separate entrance to the building.

One such alternative program is the Northern Essex Community College (NECC)/Methuen High School College Transition Project. The overarching purpose of this project is to implement effective strategies to maximize college readiness and to enhance the success of students at the high school and college levels. To accomplish this purpose, the college readiness initiative will provide early assessments and enrollment in developmental and college-level math courses. In addition to early assessment and enrollment, the project will also engage college and high school faculty in a collaborative dialogue regarding curriculum building to promote college readiness. Outcomes of this initiative will serve to inform the long-term plan to identify viable strategies which will reduce the number of students who will require developmental course work upon college entrance. It is the goal to have all students ready to do college-level work. The high school has also partnered with UMass Lowell in the Science, Technology, Engineering, and Math project (STEM) with dual enrollment for which students receive college credit.

The College Transition project design called for Northern Essex to provide early assessment of an estimated 450 juniors on site at Methuen High School during the spring semester of 2008, with subsequent testing undertaken in the spring of each year. Costs of the assessments include the following activities: ongoing training and consultation to Methuen High School MCAS instructors and administrators in CPT assessment, collaboration with Methuen High School technical support, and provision of comprehensive statistical reports to Methuen High School regarding the placement results of students. As a result of the 2008 testing, Methuen High School identified 40 students who participated in two sections of a developmental math course at NECC during fall 2008. The identification was determined by the students' scores on the Accuplacer state college system test. The students were selected by the high school career counselor and the high school vice-principal. Students identified were contacted before the end of the school year to work with guidance to hand-schedule their courses for 2008-2009. The schedules consisted of five Methuen High School courses and the Northern Essex basic course that was scheduled at the end of the high school day at the college.

During the 2008 fall semester, Northern Essex offered a dual enrollment college-level math course to 10 students who scored high on the state college system's Accuplacer assessment. The college also offered a dual enrollment course during the 2009 spring semester in English language arts for students who scored well on the placement test. Students received both college and high school credit. Students who successfully completed the developmental math course in the 2008 fall semester enrolled in two sections of college-level math at the college during the 2009 spring semester.

H. Parent Involvement at Methuen High School

Increasing parent involvement in the high school is critical to the school's success. Effective home/school communication is another key component of enhancing achievement for all students. As a result, several initiatives are in progress.

Five parents elected for a two-year period are members of the School Council, which meets monthly. They, along with the other members including teachers, students, and a community representative, advise the principal on matters such as the budget and new initiatives.

The high school's Parent Teacher Organization (PTO) has set several goals: providing parents with increased information about the school, including changes within it; providing an opportunity for parents to express their ideas and opinions on educational and policy decisions; and increasing the number of scholarships going to seniors at graduation. The PTO sponsors a number of parent nights around topics such as college finances and preparing a child for college, and it sponsors a staff appreciation breakfast in the spring. The school also has two additional very active parent support groups—The Methuen Ranger Boosters Association (MRBA) and the Methuen Ranger Band Parents Association.

During the 2007-2008 school year, an initiative to actively address the needs of the school's minority population was started. Two new staff hired in the Guidance Department are bilingual and bicultural and serve in a variety of functions. A student support counselor is available to all students, including those who may feel more supported by a bicultural service provider. She brings her fluent Spanish-language skills to her work with students and parents as needed. Likewise, a new bilingual parent liaison has three responsibilities, including offering ELL support to students in classrooms, providing outreach to parents regarding school attendance and other issues, and acting as interpreter throughout the building.

While the addition of these staff positions has enhanced service delivery to our minority students, the student support counselor has been at the forefront to develop programs and opportunities specifically for minority students through a variety of programs. She is the faculty advisor for the Voices of the Culture Students Club, which spearheads initiatives to promote an appreciation for diversity and provides a social network for minority students and others interested in promoting diversity. This group meets weekly. She also supervises student interns who act as ambassadors to new students who are transitioning to the high school. "Ritmo Latino" is a newsletter mailed

to students and parents in Spanish on a regular basis to keep them informed about school practices and to offer a calendar of events to encourage student and parent participation. The student support counselor hosts evening meetings for Spanish-speaking parents, focusing on the freshman transition to the high school and school policies and practice. These meetings are attended by various school administrators and other staff as well. In addition to these formal initiatives, she and the parent liaison have worked on translating many of the existing school documents to improve parent communication and continue to provide translation as new mailings and documents are developed. They also encourage minority parents to participate in both PTO and School Council meetings and activities.

Teachers will continue to be encouraged to communicate frequently with parents, not only to discuss problems but also to report on student successes, using phone calls, notes, and emails. Moreover, the automated phone message system Connect Ed is used to further enhance home/school communication.

10. Methuen High School Curriculum and Methodology Goals

The following section describes high school methodology goals for specific curriculum areas and program elements as they relate to high school instruction and operations.

1. Mathematics Department

The Mathematics Department has reformatted its curriculum to put an emphasis on multi-step equations, factoring, and problem solving, focusing on depth of understanding over breadth of coverage. As a department, mathematics has integrated the use of computer labs and a variety of math software, acquired calculators for classrooms, and held workshops for professional development and instruction. Some of the workshops for faculty include instruction and support using PLATO software in the computer lab, use of Smart Boards, use of TI-84+ calculators, and differentiated instruction. The Math Department has also utilized visiting consultants to work with faculty in the area of differentiated instruction, initiated field trips, and offered elective courses in mathematics beyond the required ones. Teachers differentiate instruction through the assignment of projects and labs. Many teachers also use previous MCAS problems as openers to expose students to the types of problems they will be asked to answer.

2. Social Studies Department

The Social Studies Department has reformatted its curriculum to emphasize depth of understanding over breadth of coverage. The department requires students to take a three-year sequence of courses to meet the state's realignment of the social studies framework. As of the 2005-2006 school year, U.S. History I has been required for all sophomores. As of the 2006-2007 school year, U.S. History II has been required for all juniors. Both curricula, U.S. History I and U.S. History II, were written during the summers by teachers under the supervision of their department coordinator. As freshmen, students start the sequence of courses with World History II. This enables a smooth transition from eighth grade, where World History I has been implemented. This

sequence also allows students to choose electives of special interest during their senior year. Teachers are implementing quarterly formative assessments for sub-areas of the curriculum to ensure that learning standards and benchmarks are met. Exam View Test Maker software is in place for teacher use. The implementation of the reformatted social studies curriculum provides course sequencing from eighth grade through high school, which emphasizes depth of understanding and mastery of content.

3. English Department

The English Department curriculum is designed to address all learning styles. Activities and instruction reflect both the Massachusetts English Language Arts Curriculum Framework and the Methuen High School Mission and Expectation for Student Learning. Instruction for all courses is designed to aid students in achievement of learning outcomes, while a variety of assessment tools measure the extent of their achievement. Towards that end, all instructors use a multi-modal approach in an attempt to engage all students. The English Curriculum Guide includes specific assignments and lists of materials. Every genre study is complemented by various activities such as diverse writing assignments, oral presentations, research activities, senior memory books, student-generated performances, creative analyses, peer teaching/coaching, journals, debates, role play, symposia, field trips, etc. In these ways, the department continues to emphasize depth of understanding. The department also encourages a multi-step approach to critical thinking.

4. Science Department

The Science Department reformatted the entire curriculum in 2008-2009. Biology is now a two-year course to allow for more depth in coverage. Freshmen take a full year of Microbiology and sophomores take Macrobiology, a sequence which allows students to more adequately prepare for the MCAS exam in the spring. Student-centered laboratories have been designed for each subject, many of which are common for each class, and project-based learning is being applied, with each student required to complete at least one science project over the course of a year. Write-ups of labs are required to demonstrate breadth of understanding. Teachers have also started implementing more hands-on and interactive lesson plans including the use of Smart Boards for activities such as virtual dissections, computer programs, science projects, the Science Fair, labs, and the Science Club. Teachers have also been preparing their students to pass the MCAS by giving sample problems in each class, steering lessons towards addressing concepts on the MCAS, and reviewing for the MCAS during the end of sophomore year. The vision for the next decade is to have labs updated for a variety of activities, including basic lab activities, desks and chairs for classroom work, and options to integrate current technology now and in the long term. The science department identified the following requirements for science facilities necessary to provide effective instruction and appropriate student safety:

1. Six laboratory stations self-contained within the biology, chemistry, physics, and elective classrooms.
2. Classroom/laboratories approximately 46' x 26'.
3. Fume hoods that vent outside in all science classrooms/laboratories.

4. One teacher lab prep area between two adjacent classroom/laboratories.
5. Dishwasher and refrigerator in all science prep labs.
6. All storage cabinets with glass fronts (easy viewing) and shelving with lips (to minimize potential spills).
7. Eye wash stations in the labs that fold up into the walls (saving space).
8. Each lab should contain one handicap sink for easy wheel chair access. This would be a shallow sink area relative to the standard deep sink areas.
9. Physics labs/classrooms have an exposed beam to mount physics lab equipment.
10. Physics lab outlets should be on more than one circuit.
11. Each of the six laboratory benches/work stations in an eight sided octagon shape to accommodate the maximum amount of students comfortably.
12. Four gas jets should come out of the two mains positioned at right angles to each other.
13. Each octagon bench has open corner shelving and cabinet and draw storage area.
14. All classrooms/laboratory combos have six octagon lab benches and one octagon teacher demonstration bench area to accommodate up to six students each.
15. Biology lab areas should have multiple outlets at each station (for hot plates).

Classroom space

1. Traditional desks at the front of the classroom (lab area in the rear).
2. Wall mounted smart board between two marker white boards and ceiling mounted projector.
3. Each teacher computer station is attached to a SMARTboard, DVD-CD-VCR combo player.
4. Phones in each classroom for internal call purposes only.
5. Motion sensor lighting (conservation).
6. Green cabinetry and waste water conservation.

5. Foreign Language Department

The Department believes that competency in a foreign language is a valuable and necessary skill in today's global society and, as a result, has reformatted its curriculum over the past two years to design a curriculum that is spiraled and multi-modal and that emphasizes differentiated instruction. The Foreign Language curriculum reflects the philosophy of the Foreign Language Department, which is in line with Massachusetts Frameworks and Methuen District Goals and Expected Learning Outcomes. Last year, the Foreign Language Department reformatted all final exams to standardize curriculum and will continue endeavors to write additional benchmark assessments. Instruction is geared to build communicative proficiency in the target language while gaining an appreciation of the many cultures where the language is used. With the addition of the Smart board last year, many teachers have incorporated its use into the classroom as another means to facilitate interactive activities. This year the Foreign Language Department will be adding an introductory course in Arabic with the intention of adding on an additional level each year. Students will have the option of choosing one or more of five possible languages to study. A Spanish course for native speakers will also be introduced this year to address the particular needs of Spanish speakers in advancing their skills in the language. Such a course will serve to further enhance the Advanced Placement program in Spanish language which has grown from an on-line program of five students when it started in

2007 to a class of nineteen native and non-native speakers enrolled for September 2009. The addition of a language lab would further enhance this and all of our language programs. Yet another course that will be added this year is a course on the cultures of Spain and Mexico. This course will be conducted primarily in English and is offered to students who have completed two years of study and wish to explore these cultures in more depth. Struggling language learners interested in pursuing a third year with more of an emphasis on culture may find this a viable option.

Sixty-seven percent of the student population enrolls in a language course at Methuen High School. This summer a committee was formed to look at the Massachusetts Department of Elementary and Secondary Education's CORE requirements for student learning. The committee recommended that two years of a foreign language be introduced as a graduation requirement within two to three years. Adding this requirement would greatly increase enrollments and create the need for additional staffing, classroom and office space. The addition of language lab facilities is also necessary in order to meet the goal of building communicative proficiency, the overarching goal of foreign language instruction.

6. Guidance Department

The Methuen High School Guidance Department assists students in making informed decisions that will help them to excel academically, meet state mandates and graduation requirements, and prepare students for post-secondary experiences. Guidance counselors provide individual, small group, and classroom support during the selection and college application process. Counselors provide resource materials, scholarship information, financial aid information, and career counseling. The Colleges and Career counselor oversees an externship program that provides seniors with career exploration, hands-on experience relating to their potential post-secondary interests, and worksite development. In the fall, college admissions representatives visit Methuen High School on a daily basis to discuss post-secondary options with seniors and their parents. In order to continue to deliver effective services to students, the guidance department identified the following requirements necessary to appropriately address student needs:

- A central location to accommodate eight (8) guidance counselor offices, two support counselor offices, and an office for the Director of Guidance Services. Each office requires at minimum a phone and computer as well as adequate space for groups of four or five students and/or student/parent/teacher clusters. There is a further need for two (2) similarly outfitted offices for Student Support Counselors.
- A full-size state-of-the-art classroom with a work area within the space provided for the Colleges and Careers teacher. On the perimeter of the room should be computer stations/laptop cart for student use and space for Colleges and Careers Center materials.
- Two (2) guidance secretary stations, with phones and computer access. Substantial filing areas should flank either side of the entrance to the guidance suite, allowing the secretaries to control access to the area. One of the two

secretarial stations, for the records and registration secretary, needs to accommodate approximately four (4) seats for students and parents who are registering or withdrawing students. A locked area is required for student record storage, and this room should ideally be located behind the records and registration secretary.

- A space for locking wall units to layout MCAS, Advanced Placement and other testing materials during testing timeframes is essential.
- A reception area that can accommodate ten (10) people or more should be placed outside the guidance suite, where visitors can wait until they are admitted into the guidance suite to meet with various personnel, etc. Once admitted to the area, the meeting spaces and classroom/career center spaces should be centrally located and enclosed.
- Two (2) flexible, dividable meeting/conference rooms/multipurpose spaces that include phone and computer access so that these spaces can be used as career/student work centers. These spaces will also be used for college representative visits, mini college fairs, counselor seminars, and community agency representatives and outside therapists, as needed.
- Office and dividable rooms that are sufficiently sound-proof are needed to ensure confidentiality.

7. Fine Arts Instructional Programs

Methuen High School offers a comprehensive program of studies in the Fine and Performing Arts, servicing ninety-four percent (94%) of the student body in courses ranging from advanced placement and honors courses to introductory electives. These courses are designed to meet the curriculum frameworks outlined by the Massachusetts Department of Elementary and Secondary Education and to fully prepare students for college coursework and careers in the arts. The department currently has nine full time staff – three in music, one in theatre, and five in visual art.

Music courses are offered in performance of vocal/choral music and instrumental music. Smaller ensembles (Chamber Singers, Jazz Ensemble) range in size from fifteen to thirty students, while larger ensembles – concert choir and symphonic band have from seventy to one hundred twenty students typically participating. In addition, students in the department may take introductory courses in music to advanced theory and composition in courses of ten to twenty-five students. The department has a marching band of about one hundred fifteen students that marches competitively and performs roughly thirty to forty times per year, and many students (twenty-one this year) are selected by audition for state and district festivals. Housed near the auditorium, the performing arts have been hampered by the serious lack of instructional space. The department currently has only one rehearsal room for the band, and that room only accommodates half of the band's full numbers. Others use hallways or spill over into the auditorium. The choirs and vocal classes meet in the auditorium, as there is no available rehearsal space, frequently being displaced by testing, assemblies, and meetings. Music theory is taught in the band room, which lacks the necessary space and technologies

(computer/keyboard workstations, SMARTboards) or adequate writing surfaces. Larger musical instruments, including marching and concert percussion, tubas and sousaphones, along with the music library are stored in the hallways and on the stage in the auditorium. There are no individual or small group practice rooms available for student use.

Theatre courses provide students with a wide variety of courses from introductory acting and improvisation to advanced production, theatre development, and musical theatre and comedy. With the recent addition of staff, future course offerings will include scriptwriting, set and costume design, and choreography. In addition, the department sponsors and supervises co-curricular productions – a large musical production, the senior class play, and the drama club. Typically, two hundred fifty to three hundred students will participate in either courses or after-school productions yearly. Space considerations again hamper the department, as there is one classroom, no storage space for costumes or props, and sets are stored in a trailer outside the building. The auditorium has a small, narrow stage that does not lend itself to large productions and is inadequate for large performing groups.

No courses in dance are offered because there is no instructional space currently available.

Visual art courses are open and available to students in primary two and three-dimensional media – *drawing* and *painting*, *photography*, *ceramics*, *sculpture* and *computer art*. As with the performing arts, courses range in level from introductory to advanced placement portfolio. Methuen High School students have placed prominently and been recognized in regional competitive exhibits, particularly the Globe Scholastic Art Awards. Classes typically range in size from fifteen in advanced or honors courses to upwards of twenty-five to thirty in introductory classes. Using the inclusionary model, developed in Methuen, these courses are available and service large populations of special learners, often with eight to ten students in each class. Again, as with the performing arts, space is an instructional issue. The visual arts share a large open area that has been divided by cabinets and portable dividers into four classrooms. The nature of visual art is such that students need larger spaces to work, whether in drawing and painting to sculpture and ceramics. Finding open workspaces is a challenge as ever larger numbers of students, particularly in the introductory courses, are packed into small makeshift spaces. Visual art carries with it a heavy concentration in supplies and materials, and the necessary storage is not available to us at the present time. Computer art, media, and graphic art all are in need of updated equipment and technology as the current lab no longer meets the demands of our students as it lacks storage capacity and will not run the newest software.

8. Media Center

The Media Center is an active part of Methuen High School. It is not unusual to find up to three classes running simultaneously in the center. Currently there are two areas available for classes. Teachers sign up and are assisted by the two media specialists. There is also a media center computer lab run by the technology department. The media center services students starting at 7 AM until the close of school. Students arrive individually or as part of a class.

As each new school year begins, several freshman orientations are held to acquaint new students to the facility and all the available resources. There is also an active book club which holds monthly meetings in the center. Media Specialists are available throughout the school year to consult with teachers on projects and lessons, assist when classes are in the center, and help with technology. The media center assists students with research (using databases, the Internet and books.) The center partners with the social studies and English departments, working to build a unified model among the departments for research projects. This research model helps to stream-line the research projects and keep all departments on the same page.

Best practices and research indicate that there should be seating for 12-30% of the student population in the media center. In the future, three teaching areas are needed within the media center, with two classroom setups within the center for classes. An additional third area would be a computer lab enclosed with a glass wall. One of the teaching areas within the center should have a SMART Board and the enclosed lab area would also house a SMART Board. SMART Board areas would have ceiling projectors. Additionally, an institutional archives room is necessary to house old school records, both academic and athletic, programs of studies, yearbooks, alumni records, etc.

Locating the Media Center on the first floor would make it more assessable to the public before and after school. Having a comfortable seating area for leisure reading is also important, as the school strives to keep its students' love of literature alive.

9. Special Education Department

In accordance with Chapter 766 of the Massachusetts General laws and Federal Law, IDEA, Methuen High School's Special Education Program provides services for qualifying students who are unable to make effective progress within the regular education program. Services include academic support, study skills instruction, team-taught as well as self-contained classes. Special education staff works closely with students, parents, and regular education teachers to monitor student progress and to modify and support academic programs to meet student needs.

a. *PAVE -- Prevocational Advancements to Vocational Experiences*

The PAVE Program serves students with moderate to severe developmental delays including those with physical challenges. The curriculum addresses goals in the areas of social/interpersonal skills, communication skills, prevocational/vocational skills, activities of daily living, and functional academics that adhere to the Massachusetts Curriculum Frameworks. Students work toward increasing their independence in these areas to prepare them for successful transition to adult programs/settings.

The PAVE Program offers a consistent daily schedule in which students rotate between work stations within a self-contained classroom setting. Students are reinforced for correct work completion with a token-economy system. Applied Behavior Analysis techniques are implemented and closely monitored on an as-needed basis. Skill training is delivered to students through a low instructor to student ratio (1:1, 1:2, or 1:3, based

upon student need). New skills are taught using task analysis of steps and gradual fading of cues. Staff members are trained in utilizing augmentative communication styles with our students (sign language and picture symbols). Support staffing includes consultation and, if IEP specified, direct services from a speech therapist, an occupational therapist, and a physical therapist. All PAVE students are offered Adaptive Physical Education from a certified APE teacher.

This substantially separate program within Methuen High School offers its students opportunities to interact with other high school students across each school day through: eating meals in the cafeteria, attending general assemblies, and having high school student interns assist in the classroom at scheduled times daily. Integrated classes are also offered to some students, as determined in individual TEAM meetings. This program is offered to students in grades 9-12 and until students turn 22. Transitional planning for adult services occurs throughout the entire high school career of the student.

b. *PASS -- Program for Achieving Student Success*

The PASS is a self-contained classroom for emotionally disabled and behaviorally challenged students in grades 9 – 12 located in Methuen High School. The PASS is a supportive and structured environment that provides for the emotional and behavioral needs of students on Individual Education Programs (IEP) while ensuring a research based education that parallels that of the general education curriculum. Students in PASS receive direct instruction in all of the core academic areas from certified special education teachers. In addition, students have the support of a behavioral teacher (special education certified), program assistant, and two at-risk counselors. Students in PASS receive all of their content area instruction in the PASS classroom while having the opportunity to take elective classes in the general education setting when appropriate. In addition to the content curriculum, students also participate in a Social Skills class designed to teach socially appropriate behaviors and healthy coping strategies as well as an Academic Support class that provides MCAS preparation and homework help and tutoring.

The mission of PASS reflects the mission of Methuen High School. The program works to prepare students for returning to the least restrictive setting within the school community. This mission is achieved through a program that offers a challenging parallel curriculum enhanced by behavioral and counseling services.

Students who are placed in the PASS typically fit into some or all of the following profiles:

- low average to superior IQ,
- behavioral/emotional issues that negatively impacts school success,
- exhibits mild anxiety,
- unable to negotiate the larger school setting,
- poor impulse control,
- low self-esteem,
- low frustration tolerance,
- difficulty forming meaningful relationships with peers and adults,
- overly argumentative,

- frequently tests limits,
- responds well to the structure of a high staff/low student environment,
- diminished motivation,
- responds well to a structured setting,
- unable to consistently make appropriate choices,
- gives up control rather than appropriately deal with uncomfortable situations,
- experiences emotional outbursts when feeling emotionally charged or overwhelmed.

Students enter and exit PASS through the Individual Education Program (IEP) process. Students who have demonstrated an inability to function successfully within the general education setting and have not responded to other interventions are placed in PASS based on the recommendations and decision of the IEP Team. Conversely, students leave the PASS after consistently demonstrating an ability to manage their behaviors and emotions within the general education setting. Students practice the social skills learned in the PASS by participating in electives and internships. Once a student has mastered their social skills, the IEP may be amended in order to place the student out of the PASS for increased academic periods. Any changes to the placement are done with the approval of the student's IEP Team.

In addition to the content area subjects (math, science, history, and English) taught in the Program, students also attend and participate in two Skills classes. The Social Skills curriculum focuses on helping students develop previously learned skills and/or acquire new and appropriate skills necessary for healthy functioning within the high school setting, at home, and in the workplace.

PASS provides an 8:3 student/teacher ratio. There are currently 16 students in the program. This program gives students the support and structure necessary for success during the early stages of their placement and throughout the placement. Students who have trouble within the classroom setting are given the opportunity to work one-on-one with the behavior teacher or program assistant. Students can also access either one of the at-risk counselors assigned to the program.

The program also works on a reward contingency system with three levels of privileges. The higher the level the more privileges a student will have. Students have the opportunity to earn points throughout the day in each of their assigned classes in order to move up the privilege ladder. Every attempt is made to help students manage their behaviors in constructive and socially appropriate ways.

On occasion, the reward contingency system may prove ineffective for some students. In such cases, students who continuously misbehave by refusing to follow staff directions or redirection may require alternative interventions. These interventions may include but are not limited to a phone call home or parent/teacher conference, time after school, or a referral to their respective principal. Students whose inappropriate behaviors are not a direct result of their disability may face disciplinary actions as outlined in the Methuen High School Student Handbook.

In order to maintain a safe environment where all students have equal access to the learning process, the PASS classroom maintains a simple but clear set of classroom

expectations. Additionally, students are expected to abide by all of the rules and regulations as outlined in the student handbook.

c. LIP -- Language Intervention Program

LIP is designed for students with language based disabilities. It consists of three classes, LIP English, LIP History, and a LIP Skills class. The curriculum is based on the Massachusetts Curriculum Frameworks and is modified to meet the individual needs of the students. Students in this program may have difficulty with reading comprehension and/or difficulty with their expressive and receptive language skills, as well as written expression. Students are typically of average ability level. This is not a behavioral intervention program and LIP students are generally well motivated to learn and succeed academically.

Language Intervention Program classes are self-contained classes and provide services for students in grades nine through twelve. Class sizes, on average, run between six and twelve students. Classes are taught by a special education teacher that is highly qualified in English or Social Studies. In addition, a Program Assistant is assigned to each LIP course. Specially designed instruction is delivered at a pace that meets the needs of the students enrolled in the classes. A multi-modality approach and frequent repetition are emphasized. Textbooks are designed for age appropriate interest and curriculum level but with a lower than average reading level to meet the needs of the students. Classic novels are also delivered in abridged form. Assessment is varied to meet the needs of the students and may include options for hands-on, oral or scribed assessments in addition to or as an alternative to more traditional forms of assessment. Students may be enrolled in one, two or all three Language Intervention Program classes depending on the recommendation of the IEP Team.

Language Intervention Program students, regardless of the number of Language Intervention Program classes they may be in, are commonly mainstreamed in inclusion math and science class with in-classroom support provided by LIP staff. Based upon the individual needs of the student, students may also be placed in a substantially separate math and/or science class. Additionally, they have the opportunity to participate in all elective courses offered by Methuen High School. Students are transitioned out of the program as their skills develop.

d. SPIN -- Specialized Program for Intensive Needs

The philosophy of the SPIN Program is to provide a positive and loving environment, treat each student with respect and dignity, to foster their unique individuality by focusing on their strengths. The goal of the SPIN Program is to enhance the student's strengths to be as independent as they can to perform functional life skills and express their needs, wants & desires in their own unique way.

Communication is a top priority of students in the SPIN Program. Students are exposed to a multi-sensory approach to learning and communicating via all types of augmentative communication devices, (modified) sign language, communications boards and/or picture symbols.

Functional Life Skills are taught to enhance each student's ability to care for themselves at their fullest potential. Functional life skills include personal care and hygiene, simple cooking opportunities, housekeeping (washing dishes laundry, vacuuming) chores, and safety awareness. Functional Academics adhere to the Massachusetts Curriculum Frameworks. Students work towards increasing skills in these areas to prepare them for successful transition to the adult programs/settings.

The MCAS Alternate Assessment is required to assess special education students in this program in all subject areas (English Language Arts, Automatics, US History & Science & Technology).

Specialists' services are provided to students according to their specific IEP requirements, and may include speech and languages, occupational therapy, physical therapy, deaf/hard of hearing services, and/or services from a teacher of the visually impaired. Behavior modification programs may be implemented on an as-needed basis.

e. *GCP -- Graduated Curriculum Program*

Over the past several years, the dynamics of the program, formally known as STRIVE, changed in order to best meet the many academic and social needs of the students entering this program. The curriculum has been tremendously changed and enhanced, social and vocational programs have become more detailed and comprehensive, and the level of staff support and instruction has increased and become more tailored and targeted.

As a result of these many improvements and program growth, GCP has been afforded the opportunity to move into a more in-depth level of academic service. The 2008-2009 school year enabled teachers to become curriculum specialists in core subject areas and allowed for students to take part in a graduated level of instruction that bridges the gap where they are when they enter high school. Adding this to existing vocational exploration, assessment and placement services, as well as an extensive focus on gradually increased independence and successful social interactions, has resulted in a new overall program, exceeding the goals originally set when STRIVE was first developed many years ago.

This more comprehensive program is designed to have each student achieve optimum academic and life success based on personal strengths, limitations, and academic abilities. Instruction in all target areas is provided along a graduated continuum of curriculum challenge, and students are placed and instructed at a level commensurate with their ability and strengths. Ultimately, students are placed and taught on one of four skill and ability levels according to formal test scores, teacher observations, classroom performance, and IEP Team recommendations. These are global levels providing a general basis for each student, with individual modifications and accommodations always being made as students require.

The Graduated Curriculum Program is primarily designed to meet the needs of students entering the high school from the 8th grade Learning Centers. Typically, these

students have formal standardized test scores of 70 or below, and present with moderate to severe learning delays. This criterion is a general guideline for determining possible placement in the program. As with all students receiving special education services at Methuen High School, individuals are ultimately scheduled and placed according to IEP Team recommendations. It is not unusual to have students “generally” placed in one program, while simultaneously scheduled for classes in another, or even within the general education population. The ultimate goal is to have every student placed and supported in the least restrictive fashion, and with as much independence and opportunity for individual growth as possible.

The Graduated Curriculum Program maintains a level of support and staffing consistent with DOE requirements for self-contained and supported inclusion classes. This allows for a staff to student ratio of at least one staff member for every eight students. Typically, the staff to student ratio is 1:6.

In addition, the GCP offers a full range of support services for all of the students. These include OT, PT, and Speech/Language therapists, Vision and Hearing specialists, as well as social work/adjustment counselor services. As students get older and face the prospect of moving to post secondary settings, they may receive additional services from vocational specialists and coaches, and access to adult transition services providers such as representatives from DMR, DMH, and Mass Rehab.

The Core Academic Material used in the GCP is drawn from the same Level-2 academic curriculum used with every student at Methuen High School. This material is then modified to allow for presentation and instruction across the four levels used in the program. Each of these successive levels represents a step in-between the grade level ability typically demonstrated by students, and the grade level ability typically demonstrated by high school students in general. As a result, the curriculum seeks to bridge the gap between what students are capable of accomplishing and what they can ultimately achieve. The GCP Program has developed, in concert with the overall school curriculum, and has integrated into the overall high school schedule and day-to-day demands.

Instruction and activities in the program utilize a multi-modal teaching approach for all areas of concentration. Lessons take place within the classroom, throughout the school, and in the community. Students are ultimately involved in a variety of hands-on activities that allow them to acquire new information and abilities, and to practice their skills in both simulated and real life experiences. Core academics, vocational aptitude and local experiential trials, independent living skills and social interactions are all targeted components of the program, and all utilize the multi-modal instructional approach across a curriculum of graduated challenges and demands.

f. Special Education Vocational Specialist Program

The Vocational Specialist Program is currently servicing students from the GCP, PAVE and SPI N. programs. There are two master level intensive special needs teachers who service the program. The program currently services approximately 25-30 students.

Students are referred to the program as part of the IEP process. Students begin with an initial assessment including the WRIOT2, as well as a prevocational checklist completed by someone who knows the student well. This process also includes an interview with the student and sometimes an observation. Following testing, students are serviced according to the goals and objectives outlined in the IEP, including service delivery times.

Students typically rotate through several vocational training sites both internal to the high school and external in the community. Students learn job and job readiness skills in a variety of real world settings. Jobs may fall into one or more of the following domains: clerical, kitchen, housekeeping/custodial, retail support. Students may have more than one job at the same time. All jobs are volunteer positions as the community setting becomes an extension of their classroom setting. Students may work individually on a job site or in small groups. Levels of supervision and instruction vary based on the needs of the students and the job sites. Program sites for the 2008-2009 school year included:

Methuen High School Kitchen 2 days per week	4 students
MSPCA	2 students
Methuen City Hall	2 students
Clerical MHS	4 students
Market Basket	1 student
Timony Pre-School	1 student
Vending Machines Timony School	2 students
Borders Books	3 students
Mail Delivery Timony School	1 student
Joanne Fabrics	3 students
Methuen Senior Center	1 student
Ranger Land MHS	1 student
Not Your Average Joe's	1 student
Career Development	5 students

Data is collected on each student through the use of task analysis, checklist, feedback from employer and student self evaluations. Data is used to assess strengths, weakness, job readiness and interest and ability. Students receive quarterly progress notes based on their IEPs and an annual review.

An important component of the program is teaching skills in order to assist students in their search for employment. This may include but is not limited to seeking job openings, filling out job applications, interview preparedness and interview follow up. Students also work on computer skills for on-line job searches.

The program works closely with Methuen High School staff, DMR, MRC and adult agencies as requested to assist in transitioning students to post high school placements.

10. Vocational Education/Emerging Technologies

Starting in the 2010 school year, the following proposal is set forth for the vocational education component of the curriculum:

The Massachusetts Chapter 74 recognized programs (Programming/Web Design and Marketing) will be expanded to include Early Childhood Education and Care. The current Early Childhood Education and Care Program will be expanded to accommodate the district-wide preschool programs so that they can be used as classroom laboratories to support and supplement the high school's early childhood and care curriculum offerings. The Programming/Web Design and Marketing Programs will be expanded in the coming years to include a technical writing and functional mathematics courses to enhance these programs.

In addition, electives now offered at Methuen High School as well as new course offerings will be channeled into five major curriculum areas. The business and retailing program will include courses such as fashion technology, economics, and facilities and business management along with starting a student/staff bank in partnership with a credit union or bank. The culinary arts offerings will include nutrition, a chef's course and restaurant management, running an in-school café or restaurant, in conjunction with the school district's food service program. The architectural design program will include a computer aided drafting (CAD) course and engineering technology. The media and video production program will be housed in a TV studio where students will learn about television broadcasting and a course will be offered in design and visual communication. This program will be linked to the other curriculum areas in the high school to incorporate advanced technologies in the classrooms and support interdisciplinary teaching instruction. The existing emerging technologies program will also be expanded to include graphic communication, office technology, and electronics.

11. English Language Acquisition

This department supports English language acquisition for multi-lingual students. Through a screening process, students are selected for services. Students are then assigned to a Sheltered English Immersion (SEI) program. There are two components: a new comers program which focuses on the development and improvement of English development and content classes which are taught at the early intermediate, intermediate, and transitioning proficiency levels with English skills continuing to be reinforced and enhanced. With demographics in Methuen changing, the population of students requiring these services is increasing.

12. Instructional Technology

Understanding the importance technology plays in a student's education, in June 2005 the Massachusetts Department of Education added science and technology/engineering to the state's Competency Determination. Former Commissioner of Education, David P. Driscoll echoed the sentiment of educational leaders when he noted, "Any student's ability to effectively contribute to her or his community is greatly

enhanced by achieving proficiency in these areas. The Commonwealth's economy and continued quality of life depends on our ability to recruit students into these fields.”

The Methuen School District must make a commitment if technology is to play a major role in this reformation. If the school wants to prepare students of today for the world of tomorrow, it must develop a technology-powered curriculum that not only enhances and enriches the existing curriculum, but extends it as well. Technology can be used not only to enhance the enjoyment of learning but also to allow staff to use a variety of teaching technologies (and training to use these technologies) must be made available for teachers to use if they are to transform the classroom curriculum into one that reflects the development of infusion of technology. It supports the following:

- strong basic skills and mastery of core content
- one's ability to think critically and creatively
- one's ability to work collaboratively and cooperatively, as well as independently
- one's ability to become an effective problem solver
- a commitment to life-long learning

The district is committed to providing students with the skills, knowledge and attitudes necessary to be contributing citizens in an independent, diverse and technologically complex world. To do this, technology must become an integral and routine part of the learning experience in the Methuen educational system.

It is the Instructional Technology department's vision that, as the year 2011 approaches, the Methuen School District will have transformed learning environments through the integration of technology. This technology must be used on a regular basis by students and staff as a tool to facilitate the integration of the educational reform principals into the curriculum. The school vision includes linking education reform and technology by:

- using appropriate tools to help change our approach to teaching and learning by redirecting the focus from traditional textbook-based curriculum to student centered learning.
- giving teachers the opportunity to expand their role from knowledge-sharers to discovery leaders.
- moving away from content specific facts and information and re-focusing attention on understanding and students' involvement in discovery and real life problem solving experiences.
- giving students the ability to access and utilize information using state of the art technology in the areas of communication, information access, inquiry, analysis and synthesis.
- providing teaching and learning situations that allow not only for a variety of approaches, but integrated and interactive experiences as well.

By utilizing technology to help create a more effective and diverse teaching and learning environment, upon graduation, our students will have the confidence they will need to become capable and lifelong learners.

In order to accomplish the above, a technology network support system must be maintained which will:

- allow all students and faculty, regardless of their school building, grade, ability, race or gender, to have equal access to a wide range of technology tools in their classrooms and staff workrooms.
- improve communication between and among district buildings, as well as between the school and community.
- provide access to an “information highway” that will remove walls from the students’ educational environment thus expanding their opportunities to learn and grow.

An integrated administrative software and hardware system will be employed so that data entry duplication and delay in processing will be eliminated. In order to enhance teaching and learning, an ongoing staff training and professional development program will be provided and sufficient staff will be available to provide the necessary support for the effective integration of technology into our curriculum.

Since technology continues to change, a provision must be made for maintaining and upgrading the equipment, as well as the program it supports.

a. *Facilities and Network/Telecommunications Capabilities*

There is currently one district-wide computer network for the school system. This network connects all eight buildings and last year was upgraded from a T1 service to a leased fiber service in order to provide a faster Internet speed connection with more reliability.

This high speed Internet connection, with an increase in Internet Bandwidth from 3 Mbps to 5Mbps was necessary not only to support Internet based administrative applications (*IPASS*, the student management system program, *BudgetSense*, the financial administrative software, *ESPED*, the district special education administrative software, and *PANDA*, the food service program) but web-based applications supporting for teaching and learning. Methuen also has added 10Mbps fiber connections between buildings for WAN connectivity. Schools, in general, use these types of connections to improve quicker and reliable access of applications such as distance learning, VOIP, student information databases, etc.

This network provides a district-wide e-mail capability, with every teacher and administrator able to communicate using *Microsoft Outlook*. There are four computer labs in each of the grammar schools and 8 labs at the high school. High school staff received new Dell computers two years ago.

There is one satellite dish on site. In order to reduce phone costs, last year the school system converted their phone system to VOIP and uses T1 lines for phone connection between buildings and to the outside world. There are few outside phone lines for staff to access in private. The four grammar schools and the district administrative office have internet access through Methuen High School which gets its access through a recently upgraded leased fiber line from Merrimack Education Center.

Each school, as well as the district office has a web site that is maintained on a regular basis during the school year by the technology staff on an as need basis.

b. *Software and Hardware Inventories*

Software

The Methuen Public Schools presently has a software collection that is supported predominately by the PC platform, with minimal Macintosh software at the high school level. For administrative functions the following DOE compliant, Internet based programs have been adopted:

<i>IPASS</i>	Student Information Management Software
<i>ISTAFF</i>	Human Resource Management Software
<i>BudgetSense</i>	Financial Management Software
<i>eSPED</i>	Special Education Management Software
<i>PANDA</i>	School Lunch
<i>School Brains</i>	Student Testing & Performance Assessment Software
<i>TestWiz</i>	Student Performance Assessment Software
<i>Skills Tutor</i>	MCAS Support Software

Microsoft Office, which includes word processing, spreadsheet, data base, electronic communications and desktop publishing capabilities is used as the administrative productivity software solution as well as part of the Technology Curriculum taught to students. Since the PC software collection is minimal, computer and multimedia software must be purchased to support the educational curriculum. Within the collection will be appropriate software to address bilingual, multi-cultural and special education programs.

Software Services

Connect-ED	Internet based communication service for administrators
Connect EDU	Internet based communication service assisting students, parents & guidance counselors to successfully transition students to post secondary education and careers.

Hardware

The computers used in the Methuen Public Schools are almost exclusively PCs (IBM or Dell PCs) for both instructional and administrative use. Of the approximately 2200 computers in the school system, only 29% of them are less than three years old. Of the remaining 71% of the inventory, 35% are considered low-end functionality and have limited capabilities. All five of the schools in the district have computers in the teacher's workrooms available for staff use.

All the schools in the district have computers designated exclusively for staff use. These are in addition to student computers located in the classrooms, computer labs and media centers.

Methuen High School also has a mobile Apple Macintosh lab and a mobile PC lab available for teachers to reserve.

The Methuen Public Schools currently has a technology curriculum for grades K-12 which was developed in 2006 by a group of teachers and Instructional Technology Specialists. It was aligned to the Massachusetts Recommended Technology Standards. This plan was reviewed in 2009 and adapted to reflect the new Massachusetts Technology Literacy Standards. Appendix A contains the Instructional Technology objectives for grades 9 through 12.

In addition to the standards, the Instructional Technology Staff supports the integration of technology into the classroom curriculum through the use of applications such as Plato and Discovery Education Streaming. District advancements have been made with SMART Boards, online learning using Moodle software, and mobile computer labs.

The Director of Mathematics and Computer Technology is responsible for the educational and administrative functions of the school system. A Network Manager is responsible for maintaining the Wide and Local Area Networks of the schools. The high school has a Network Operator and an Instructional Technology Specialist, whose added responsibility is to maintain the Methuen Public Schools web page. Two audio/visual technicians maintain and repair technology, audio visual and telephone equipment.

c. Administrative and Management Five-Year Goals

Goal A: The District will provide electronic communication among all school buildings and the Administration office in order to improve communication and reduce waste.

Goal B: The District will upgrade their administrative and management software solutions to enhance all record keeping and sharing in order to allow educators to make better informed decisions.

Goal C: The school system will purchase a test building and performance assessment system that can be used as an interim assessment tool that will give the MPS community of educators the ability to use both summative and formative test data to create useful analysis that leads to real-life data-driven decision-making. This should help the school system realize their goal of constantly improving the learning experience and educational performance of each and every child.

d. Communications and Information Access Five –Year Goals

Goal A: Upgrade the wide area telecommunications network within the district and between each building. This network supports voice, video and data applications, and connects all district and school offices to sites outside the district as well as all classrooms, teacher work areas, computer labs and the library-media center thus allowing all students and staff equal access to a wide range of instructional technology including computer software.

This will permit the schools to not only work with the numerous web based administrative applications without disruption but allow for the use of such educational applications as distance learning and streaming video in the classroom.

Goal B: Improve one and two way communication between the school system and parents as well as the community. This will be done by insuring that all administrative software solutions acquired will allow for bidirectional communication, purchasing a calling system that can allow administrators to communicate with parents and redesigning and maintaining an up to date web page.

Goal C: Maintain adequate technology personnel to provide support for staff as well as maintenance, troubleshooting and updating of network(s), hardware, software and telephone system.

e. Instructional and Curricular Technology Integration Five-Year Goals

Goal A: At least 85% of grade 8 students will be able to demonstrate proficiency in the use of computers and applications as well as understanding of concepts underlying hardware, software, and connectivity (Standard 1 of the *Massachusetts Technology Literacy Standards* and Expectations for grades 5 – 8 students).

Goal B: At least 85% of grade 8 students will demonstrate responsible use of technology and an understanding of ethics and safety issues in using electronic media at home, in school, and in society (Standard 2 of the *Massachusetts Technology Literacy Standards* and Expectations for grades 5 – 8 students).

Goal C: At least 85% of grade 8 students will be able to demonstrate the ability to use technology for research, problem-solving, and communication (Standard 3 of the *Massachusetts Technology Literacy Standards* and Expectations for grades 5 – 8 students).

f. Professional Development Five-Year Goals

Goal A: Administrative staff will continue to develop the skills that are necessary to use technology to improve administrative and management effectiveness.

Goal B: Teachers and support staff will use technology and telecommunications to enhance curriculum and instruction and to improve communications with parents and other educators (See *Goal C* below). Technology will also be used to encourage and support joint development and dissemination of curriculum aligned with the Curriculum Frameworks and the Common Core of Learning.

Goal C: Teachers will improve their technological competency skills to help insure student mastery of grade level competencies. By 2011, 90% of the teachers will have acquired the following technology competencies that are necessary to teach student technology competencies outlined below:

- Identify and use basic features of a computer operating system.
- Manage files to save, locate, & organize files on local & remote network spaces.
- Operate peripheral equipment (e.g., scanner, printer, projector).
- Resolve basic technical difficulties.
- Connect a computer to a peripheral device.
- Use intermediate features of application software (e.g., word processing, spreadsheet, data base and multimedia and graphics programs).
- Differentiate among browser, email program, and Internet service provider.
- Identify & use basic search strategies on the Internet & use *Bookmarks & Favorites*
- Create an address book in an email program & send, open & save an email attachment.
- Ensure equitable access to technology resources for all students in the class.
- Use basic assistive technology resources effectively.
- Ensure responsible uses of technology by students.
- Validate a Web site for authenticity.
- Design & develop lessons and activities that integrate technology in a variety of instructional settings for all students.
- Identify & locate technology resources including online curriculum resources.
- Facilitate technology-enhanced lessons that address content standards & student technology standards.
- Manage student technology activities to optimize learning with available resources
- Use appropriate technology to differentiate instruction for all learners.
- Apply technology in assisting student learning of subject matter using a variety of district, school, or individual assessment tools & strategies (Test Wiz, grading programs).
- Integrate results of electronic research into classroom instruction.
- Locate & enroll in appropriate technology professional development activities offered by the district, online or local colleges.

13. Physical Education, Health, and Athletics

The high school is moving towards a wellness program, which will integrate the current physical education, ninth grade health, portions of the family and consumer science curricula, and health services (the nurses). There is a need for additional teaching stations in the field house (a fitness center, a dance studio, and gymnastic and wrestling areas) to support an expanded curriculum, graduation requirements, and the large number of students to be served. Also, bringing the health education classrooms into the field house area will ease the transition to an integrated wellness program. Additionally, since there are no female team rooms, an appropriate number need to be constructed to provide equality for athletic teams. The current men's team rooms on the first floor need to be updated with new showers and lockers. Other needs are:

- replace current curtains in the field house that separate teaching stations
- replace the sound system in the field house which has been problematic
- increased storage area for the physical education and athletic programs
- surface the fields by the bus loop with synthetic turf

14. Army JROTC

The Army JROTC program is a popular and integral part of the high school's educational program. It serves a diverse student population, many of whom are from the school's minority groups, particularly the Hispanic sub-group. The program provides academic and skills courses as well as military training. Some of the activities for students include the Military Ball, the Annual JROTC Review in May, and participation in parades. The following are JROTC space requirements:

- one classroom large enough for 60 students that can be divided into two classrooms to accommodate an enrollment of 200 cadets in the program (50 feet wide by 40 feet long with a 15 foot high ceiling)
- office space for three instructors (20 feet by 20 feet)
- supply room/arms room (36 feet by 36 feet with at least a 12 foot high ceiling)
- target range (possibility of converting the classroom area to marksmanship training area so that no additional room is required)
- indoor drill area (conducting stationary drills in the classroom area could occur if wheeled and folded tables are provided)

15. Food Services

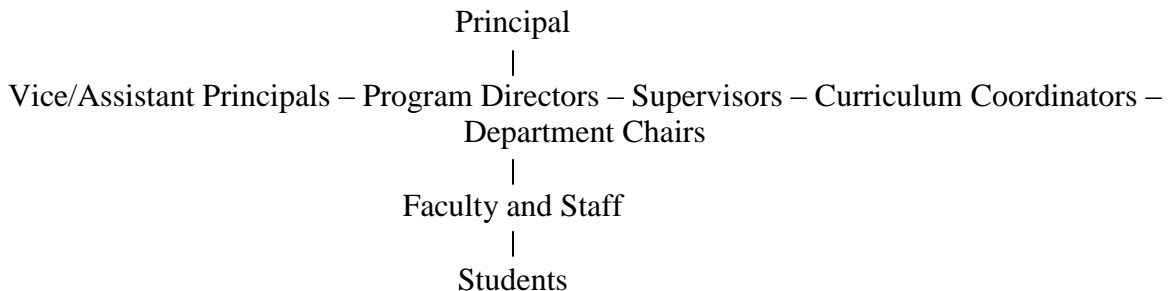
It is anticipated that future scheduling and grade configuration at Methuen High School will be in a two- house design, one house being grades 9 and 10 and one being grades 11 and 12. Small schools research support breaking large comprehensive high schools into smaller units. Within this model, each house will have its own pair of assistant principals. Lunch services will consist of three periods for each of the two houses (approximately 1000+ students in each house), requiring a central kitchen/preparation area will be necessary to serve two separate dining wings.

16. Transportation

Public school bus transportation is supplied in two ways: 20 full size buses which deliver and pick-up students by the field house entrance and seven mini-special education vans which deliver and pick-up students at the entrance nearest to Timony Grammar School. Buses also service athletic teams leaving from the field house area. Current traffic flow and parking will be a significant issue for any renovation or modification to the high school. The chief concerns are overhangs of any new/modified structures where the large buses travel, and wheelchair accessibility for all sidewalks. A protective overhang would be beneficial and allow for more efficient drop-off and pick-up of handicap students.

J. Methuen High School Instructional/General Support Staff

Methuen High School currently has a principal, vice-principal, and three assistant principals who have administrative responsibility for the entire school. Supporting this team are program directors in physical education, health, and athletics; emerging technology, family and consumer science, and vocational education; as well as guidance; supervisors in fine arts, media, and language acquisition; curriculum coordinators in English, math, social studies, and science; and departments chairs in foreign language and special education. All of these administrative positions directly support teaching and learning through the supervision and formal evaluation process. As Methuen High School is restructured and ultimately redesigned in a two house configuration, there will be a reallocation of administrative personnel with two assistant principals being assigned to the grade 9 & 10 house, and the other two to the grade 11 & 12 house. The following is the high school's general organizational chart:



An organizational chart for the entire Methuen Public School system is provided in Appendix B.

K. Budget

The high school budget, including the current one for 2009-2010, has continually provided sufficient funding to support a quality educational program as well as support services. Funding sources include local taxes, Chapters 70 and 74 monies, grants (such as MCAS remediation, Perkins, Massachusetts Math and Science Initiative (MMSI)), and revolving accounts. The Methuen School District has generally not cut staff or programs over the years, although for the upcoming fiscal year there have been some belt-tightening measures that do not directly impact teaching and learning.

The budget sufficiently supports and maintains the following:

- the centrality of classrooms with staffing levels to ensure appropriate class sizes so that quality instruction can be provided
- administrative/instructional support
- program offerings in all departmental areas
- instructional and support technology
- instructional supplies, materials, and equipment, computers, SMARTboards, textbooks, and AV supplies
- professional development opportunities for all staff
- curriculum renewal

- student support services (special education, guidance, English language learners, etc.)
- media center services as the center of the academic program to support teaching and learning
- interventions and alternative services for struggling learners

Appendix C provides five years of Methuen High School budgets, including the current approved budget for 2009-2010.

L. Summary Statement

In closing, the focus of this educational program centers around teaching and learning (the centrality of the classroom). A well thought out, articulated school mission, in concert with district-wide goals, drives curriculum (what all students should know and be able to do), instruction needing to be differentiated based on the various ways students learn, and assessment, both formative and summative. The three need to be effectively interconnected in the classroom if the desired outcomes for all students are going to be achieved. Without question, professional development plays a critical role in this equation of excellence in teaching. Again, a climate of high expectations and effective developmental instruction will create a reinforcing message to all students which indicates that they are capable, that they must work hard, and that the faculty and administration will support them as they strive for success. Everything else must support and enhance that effort, including effective student support services, sufficient community resources for student learning (adequate budgets and facilities), strong district/school leadership and organization, and up-to-date instructional and support technology. It is hoped that with the opportunities provided by a new/renovated high school in Methuen, student achievement will be greatly enhanced for all students. A continuing commitment to excellence is crucial in this new century.