

Increasing Student Achievement

A Blueprint for Action
2007-2012

In December I presented an analysis of the this school district's performance in a number of critical areas, the report suggesting the leverage points through which we could improve student achievement, school culture, communication, and the system operations that support learning. The report suggested that with some key investments of time and focus and some key investments of money over the next five years, we can see dramatic gains and improvements in many areas, most importantly, student achievement--- our CORE MISSION.

This report is a follow-up to that initial analysis and identifies selected leverage points from the larger scope of the December report.

This Blueprint for Action has selected key budgetary items identified in the December report. This report does not give discussion to many very important action steps that are needed but that do not have significant budget impact or are not of the most immediate priority.

This report focuses on 5 key investments of time, focus, and money that are critical now to raise the performance of our schools in the area of our CORE MISSION.

Visioning 5 Years Out

- Guaranteed and Viable Curriculum
- A Best Practices Literacy Program K-6
- Reading and Writing and Critical Thinking Across the Curriculum 7-12
- A Redesigned Mathematics Program Grades 5-9
- A Sustainable Technology Integration Plan

I see the Newburyport School System, 5 years from now, performing in the top third of MA districts in all MCAS tests across all grade levels. I see our school district having made dramatic improvements in important internal benchmarks correlated with high performance and high performing districts. These benchmarks include tests other than MCAS, graduation and persistence rates, # of students taking high level math, # of students accepted to highly selective colleges, performance in academic competitions in science, math and other academic areas and many more benchmarks at all levels.

I see students and parents using the internet to access the system's guaranteed and viable curriculum, viewing clear learning expectations for each unit in each grade and subject area. I see teachers comparing student work and common assessments in their classes and deriving data about who is learning what and adjusting instruction for individuals on the basis of that data.

I see student performance rising in all disciplines in direct response to a best practices literacy program and upper grade reading and thinking strategies where students benefit from state of the art pedagogy and outstanding literature. I see students ability to read, write, listen critically, speak well, and discern the relative value of different media improving steadily.

I see the results of a retooled and more vigorous Middle School math experience with test scores rising and many more students progressing to higher level math and performing better at the High School.

I see technology positively impacting instruction and learning in every subject at every grade level with the capacities of students and teachers rising dramatically.

Guaranteed and Viable Curriculum

- What is it?
- Why do we need it?
- What does it cost?

A Guaranteed and Viable Curriculum

1. Guaranteed means that all teachers agree with WHAT will be taught and that WHAT is aligned with the MA Curriculum Framework. All teachers teaching the same WHAT use the same assessment to measure student learning at frequent intervals. These common assessments inform teachers about who is getting it, who isn't, who's beyond the content and skills and needs more challenge, and, helps teachers to infer why some students are behind others and what teachers need to do to bring everyone up to the clear learning expectations that are established. The WHAT is the curriculum, what is being taught, that is knowledge and skills, how students will be measured (and there will be alternative ways for students to demonstrate competence or mastery). This will all be published to the web for the use of students, teachers, and parents. It will be a living document and teachers will meet regularly to decide what is effective, what not, and what needs to be changed.

2. Viable means that teachers have the time to teach the curriculum in depth to develop a depth of understanding far beyond memorization or rote learning. Viable means the focus is on understanding, not covering too many topics.

We need it to ensure that all students are exposed to the same content and skills, that it is not dependent on what teacher you get. It helps to ensure that everybody is teaching the right things, that's critically important. Students need to know what is expected of them and how they will be evaluated. A guaranteed and viable curriculum drives higher student and teacher performance.

3. It costs time and is included in my recommendation for 9 additional half-day release days each year with additional transportation costs of up to \$10,000 yearly.

A Best Practices Literacy Program K-6

- What is it?
- Why do we need it?
- What does it cost?

1. The Reading Panel of 2000, a federal initiative to answer age-old questions about how children learn to read and how they are best taught to read changed reading instruction at the very beginning of this millennium. The world's best researchers and teachers formed consensus around the best way to teach reading ended, to a very large degree, decades of competing theories. The comprehensive approaches recommended avoid the "went to far" approaches of whole language instruction, phonics-based linguistic programs, and other approaches that over-emphasized some skills and under-emphasized other. Since NCLB required that all reading programs and approaches be constructed on "scientifically-based research, new standards for methods and materials have emerged.
2. Our 12 year old reading program is out-dated and falls far short of our students' needs. Creative and dedicated teachers continue to make this program work, barely, but this cannot be sustained. Our students most basic and critical instruction is compromised. Reading explains 40% of the test variance for all achievement tests at all levels. We need to have best practices and the best available literature to get children started in their learning on the best possible footing.
3. \$500,000 over the next 4 years

Reading, Writing & Critical Thinking Across the Curriculum 7-12

- What is it?
- Why do we need it?
- What does it cost?

1. Using strategies that most teachers did not learn in their initial training, teachers lead students to read, write and think critically to learn and apply the content of the course. The philosophy is reflected in the adage “every teacher is a teacher of reading, writing, and thinking.” Learning just the content is a too common objective in education today, especially when content is looked at as factual recall or rote application of operations in math, for example. This training can radically shift teacher perceptions about what content instruction can look like. MCAS tests demand critical reading and writing skills. Employers are more interested in employees who can read, write, and think critically than they are in students who know a lot. The *known* in the world is changing so fast, one’s ability to process new information in print and other media is much more valuable than acquired knowledge and skills. The global economy has accelerated this need geometrically.
2. We need to prepare students for the future by focusing on critical *processing* of content rather than *knowing* content. It is good to know, but it is not enough. This training can fundamentally alter instruction in the middle and secondary classroom and lead to higher achieving and better prepared students.
3. \$20,000 per year over a four year period.

A Redesigned Mathematics Program Grades 5-9

- What is it?
- Why do we need it?
- What does it cost?

1. Middle School math instruction has not been aligned with the MA Curriculum Framework and the current sequence of program and instruction has contributed to poor results. Middle School math teachers have been working intensively on understanding the shortcomings of how the program has been implemented. The Connected Math Program used in grades 5-8 is a reform program and one of the best and most proven published programs. The publisher has republished the program to reflect 10 years of teacher and parent feedback and a great deal of experience with what works and what has not. The republished program has received rave reviews from many districts that have replaced the old version and who struggled with the old version. We need to acquire the new version and re-implement with the needed teacher training. You just heard about the larger design of retooling the M.S. math curriculum. The new version of CMP is important to offering algebra to 8th graders and to increasing the rigor of the 6-8 program.

2. The current program, sequence, and materials, have not produced the desired results. The new program and needed re-implementation is needed to raise student achievement to acceptable levels and to provide the preparation of Middle School students necessary to take advantage of High School math and science opportunities. This is, of course, all important to positioning students advantageously for college and careers.

3. \$40,000. for materials and \$20,000 in training each year for three years.

A Sustainable Technology Integration Plan

- What is it?
- Why do we need it?
- What does it cost?

1. Technology hardware needs to be replaced every 5-7 years to maintain a status quo of access to teachers and students. Don't replace your computers and other technology on a regular and cyclical basis, and your enterprise crashes or provides significantly less access and usability. Using technology to enhance instruction and learning is the end game of having technology in the first place. It is important to have technology integration teachers strategically placed in the school system to provide training and support to classroom teachers. All districts that have well integrated technology have these positions.

2. Three of five technology integration teachers have been eliminated in previous budget cuts leaving the ratio of integrators to teachers far below what is acceptable according to state standards. Use of computers to enhance instruction by elementary teachers has declined this year due to reduced access (poor performing machines and connections) and a lack of support. High School computers, purchased in the bonding of the renovation project are beginning to fail and go out of warranty in July. There is no funded replacement plan for any equipment in the district. This is a disaster waiting to happen.

3. \$348,100 in 2007-2008 and \$381,342 annually in subsequent years, not adjusting for inflation.

Investment Required

- Guaranteed and Viable Curriculum
- A Best Practices Literacy Program K-6
- Reading and Writing and Critical Thinking
Across the Curriculum 7-12
- A Redesigned Mathematics Program Grades 5-9
- A Sustainable Technology Integration Plan

Quick Review

COMBINED MATERIAL, TRAINING AND SALARIES

2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
568,100	481,342	481,342	361,432	301,342

See separate spreadsheet for costs broken out.