

## Efforts to Increase Student Outcomes

Prepared for School Committee December 2, 2008

“The early years of life matter because the ongoing interaction between early [educational] experiences and gene expression affects the architecture of the maturing brain.” “As it emerges, the quality of that architecture establishes either a sturdy or a fragile foundation for all the *learning and behavior that follows*.” “Brain plasticity and the ability to change decreases over time.” “Brain circuits stabilize with age, making them increasingly more difficult to alter.” “It is more efficient, both biologically and economically, to get things right the first time than to try to fix them later.”\*

### Full Day Kindergarten

Extensive brain research has continually indicated that the earlier children are exposed to quality early education opportunities the better the outcomes.

Clearly the most extensive District wide program initiated in 2008 will be the all day kindergarten initiative. All day K will double the time on learning for kindergarten age children for the vast majority of entering Milton Public School students. The range of academic advantages including:

- ✓ Positive relationships between participation in FDK and later school performance.
- ✓ More opportunity to develop language and pre literacy skills, the building blocks of learning.
- ✓ FD kindergarteners exhibit more independent learning skills, classroom involvement and productivity
- ✓ FD kindergarteners exhibit more positive behaviors.
- ✓ FD kindergarten allows children and teachers time to explore topics in depth.
- ✓ FD kindergarten provides for greater continuity of day-to-day activities.

### Pre-School

Quality pre-school instruction is critical for brain development. The earlier this occurs, the better for later academic achievement.

This year we added an additional 15 students in a new half day integrated pre-school classroom.

Pre-school instruction for students' ages 3-5 diagnosed with a disability is a mandated responsibility of public school districts. The Milton pre-school currently services 129 children (71 with disabilities and 58 model students).

\*Jack Shonloff M.D. is a pediatrician who has done extensive research into early brain development and its effects on life long learning

## **Tucker Title I Saturday Program**

This program provides students with additional time for focused, intense instruction. Ten Saturday sessions starting January 10<sup>th</sup> and runs through April 4<sup>th</sup> from 9:00-11:00 will include one hour of mathematics instruction and one hour of English Language Arts instruction. An optional third hour from 11:00-12:00 is for physical activities. Drawing upon disaggregated data, the focus of these sessions have been carefully crafted and designed. Particular attention will be focused on open-ended response questions.

## **Pierce Middle School Special Education Language Based Model**

The Pierce Middle School completely restructured the Language Based special education program for the 2008-2009 school year. The new structure is designed to focus in on the areas of need as disaggregated from MCAS data and includes the following revamped structure:

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- ✓ All 6<sup>th</sup> grade students with language based learning disabilities receive a double period of Literacy/Language Arts and a double period of Mathematics. Small class size at the 6<sup>th</sup> grade level in particular is designed to ease the significant adjustment coming from the elementary level. Each double period is taught by a certified special educator and there is a qualified aide in each class.
- ✓ At the 7<sup>th</sup> and 8<sup>th</sup> grade levels students are fully included in all classes. A special educator goes into the Math and English classrooms each day, the special educator then has a follow-up pull-out class to reinforce the skills/concepts taught in the regular education classroom. A highly qualified paraprofessional accompanies students to their history and science classes for support.
- ✓ All special educators are now connected to one content area (Math or English) and therefore are now able to attend curriculum meetings, training and concentrate in one content area.
- ✓ Math teachers (regular and special education) will participate in a 21 hour professional development opportunity: Addressing Accessibility in Mathematics through the Educational Development Center in Newton. Focus of this program is to make mathematics instruction more accessible to a wide range of student, particularly those with special needs, and to promote collaboration between mathematics teacher and special educators.
- ✓ Teacher-Student Mentoring Program – To provide additional support 28 teachers have signed up to serve as student mentors. Mentors meet with their mentee once per week to help with organization, test taking, and study skills. They will also serve as a contact person between teachers and their students' parents.

## **Pierce Saturday Academic Enrichment Program**

A 9 week program starting on January 17, 8:15-11:00 the Pierce Saturday Enrichment Program is designed for students who are most at risk for poor performance on MCAS testing. Through the formal assessments of current curricula offerings and the analysis of student MCAS data, critical areas in Math and English Language Arts have been identified and will serve as the focus of the instruction during the extended Saturday sessions.

## **Elementary Language Based Model**

We are developing and promoting a significant increase in the inclusion of students in our elementary language based classrooms this year. The three language based classrooms located at the Collicot School were designed to provide remedial academic instruction to approximately 24 students with significant intellectual disabilities in a pull-out model. It is well-documented that efforts to include disabled students with their non-disabled peer as much as possible with access to the general curriculum is a highly valuable endeavor which has been shown to increase academic outcomes.

This effort has taken on increased urgency this year. The Collicot staff has dramatically increased the number of classes and hours students are included in general academic instructional periods. Either the special education teacher or the classroom aide accompanies students in small groups into each general education classroom. Subject matter is pre and post taught when students return to the special education classroom to ensure mastery of the material.

## **Elementary Open Response Initiative**

All elementary schools are implementing an Open Response Initiative to improve student performance on written assessments. Commencing in January 2009 students will practice at least one open response per week across all grade levels and content areas. Every teacher will submit 2 scored Open Response questions, each with 2 student responses per month that are aligned to a Massachusetts Standard and scored using a standard rubric.

The goals of this initiative are:

- ✓ to promote higher levels of thinking
- ✓ gain a better picture of student understanding and thinking
- ✓ improve student performance
- ✓ promote high expectations for all students
- ✓ develop skills necessary for academic success
- ✓ raise student achievement

## **Co-taught Elementary Model**

The co-taught model housed at the Glover and Tucker Schools are a series of progressive elementary classrooms grades k-4 specifically structured, designed and staffed to meet the academic needs of students with a range special needs. The goals of the program are to provide an academically rich and challenging regular classroom curriculum while providing the students with special needs the supports and services necessary to access the curriculum at a normal pace and quality to develop socially and academically. Much has been made of the need for students to have as much access to the regular education curriculum with their non-disabled peers in the least restrictive environment as possible. The Milton Public School has committed much in term of resources, training and support to expand this program over the past 5 years. This year the program was extended by two classrooms, one 4<sup>th</sup>. grade co-taught classroom at Glover and a 2<sup>nd</sup>. grade classroom at Tucker. There are a total of 7 co-taught classrooms at this time. There are plans to expand this program to the 5<sup>th</sup>. grade next year as well.

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We believe that with the total integration of 56 students with special needs currently included in this model that we will see increased student outcomes in later grades. It is well documented that students with disabilities benefit academically and socially by being fully included in the general curriculum. All students in the co-taught classrooms benefit from the small class size and the attention of two highly trained full time teachers, one a general education teacher and the other a special educator.

## **Special Education Extended Year Services**

Approximately 200 students with disabilities receive summer services. The program runs for 5 and 6 weeks depending upon need. Services are designed to prevent regression of academic skills acquired during the school year. All classrooms and individual services are provided by certified special educators and therapists.

## **High School Transitions Program**

Initiated in September, the Transitions Program services students who will benefit from receiving their core academic subjects in a small group provided by a certified special educator. English Language Arts, Math and Social Studies are taught by a dual certified teacher. Biology is provided in a regular science class taught by a certified science teacher and supported by a special educator.

This program was designed to meet the needs of disabled students who were struggling with the academic demands and pace of the regular high school education courses and whose needs required a more remedial approach.

## **Personnel**

The key to increasing academic outputs for all students is the quality of the instruction. The District is making a consistent and concerted effort to recruit, train and retain the finest teachers and therapists we can find. This ongoing endeavor is the most important effort we focus on at all times to increase student outcomes.

## **Personnel and Supervision and Evaluation Program**

Initiated this year, the new staff evaluation program will for the first time encourage new and exciting ideas to be developed by a broad cohort of professionals from the “bottom up”.

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Current examples include:

A psychologist will be studying how the effects of identified spatial disabilities correspond to the math MCAS questions which require spatial thinking.

Two teachers will be evaluating our pre-school math curriculum and make recommendations which will improve and standardize that curriculum.

## **Professional Development**

Tufts University Center for applied Child Development

Readers’ and Writers Workshop training for all kindergarten, grade 1 and grade 2 staff focuses on early reading skills. Training includes two 7 hour mini courses and 12 hours of demonstration lessons and lab/coaching sessions at each of the four elementary schools. Next year the plan is for the expansion of this training to include sessions for grades 3-5.

Empower

All middle school Special Education, English and History teachers have been trained in the EmPower writing program. “Empower is a step-by-step method that a student follows when writing an essay: the method makes clear the kinds of thinking, subroutines and strategies needed to develop a well written text.