To: School Committee
From: Mary Sterling
Re: Update on Work Related to Achievement Gaps
Date: April 18, 2013

Over several years, district administrators and teachers have intensified focus on understanding where achievement gaps exist in our students' performance and have increased measures to address those gaps in ELA and Mathematics. For detailed information, please see reports to School Committee issued on January 13, 2011, September 30, 2011, and March 21, 2012. The strategies to address achievement gaps -- described in those reports -- have become part of our district's commitment to raise achievement for all students and to narrow the gap for those students who show evidence of low performance.

During the 2012-13 school year, we have continued efforts already begun and we have tried to move forward on some new thinking and efforts.   Some of what we intended has been carried out; other intentions have been met with some challenges. At the School Committee meeting on April 25, we will discuss the following points with additional information on slides:

Three efforts have furthered our students' learning and advanced our thinking:

1. We have refined our approach to specific interventions for students whose performance lags behind their classmates, particularly in ELA and math: Goal-Focused Intervention Plans (GFIPS) in grades PreK-5, and Academic Extensions in grades 6-8. A total of 58 students in the Lincoln School and 95 in the Hanscom schools receive direct services through GFIPS from literacy and math specialists based on identified needs. In the Academic Extensions for grades 6-8, 66 students in the Lincoln School and 49 students at Hanscom were enrolled in Terms 1 and 2 for specific instruction in ELA and Math

2. Members of the district – Mary Sterling, Sharon Hobbs, and Cheri Wing-Jones – have participated in professional sessions through the Greater Boston Students of Color Network (GBSOCAN) to develop specific criteria for determining evidence of cultural proficiency in teaching and learning. The intended outcome of the GBSOCAN work is a set of criteria to be used with the new educator evaluation rubric.

3. "Root cause analysis" has been undertaken at Administrative Council meetings this year as part of strategic thinking about how to narrow achievement gaps. This process began by identifying the symptoms and indicators that demonstrate that achievement gaps exist within the Lincoln Public Schools. We then used a protocol to develop our hypotheses as to why these gaps exist in order to better focus our efforts on behaviors that will have an impact on narrowing these gaps. Initial conclusions focused on instruction as a primary area of focus.

In addition to providing targeted services, defining cultural proficiency, and delving into root causes of achievement gaps, we have been working on assembling data to show trends of performance over time. This effort has been met with a number of challenges and we are not yet satisfied by the information available to us nor with the tools for analyzing and depicting the results of student performance. We have made some progress and will continue to deal with the barriers we have encountered to make further progress in using data to determine patterns of performance.

Five measures interest us in measuring our efforts to narrow achievement gaps: state MCAS results, district common assessment results in reading level, writing growth, and mathematics, and scores on report cards. We have been able to gather some information from these sources but there are several issues that have prevented us from effective data analysis about specific subgroups in which achievement gaps are most evident.

- **MCAS Results**: The state's provision of charts and graphs for MCAS results has been of limited use. We can access graphs of comparative data for our students' performance in groups where achievement gaps exist but only in "Scatterplots: of individual scores and in bar graphs of Student Growth Percentile in an "all grades" view. Charts provide details on each group but again in an "all grades" display, usually because the groups are too small to be reported by grade level. (See sample charts in the 2012 MCAS results report, October 18, 2013). Our discussion and slides of these results on April 25th will amplify what we can and cannot determine from these state charts and graphs.

- **Reading Level**: Our District Literacy Assessment Plan calls for a common assessment of reading level twice a year for students in grades K-5: the Fountas and Pinnell Benchmark Literacy Assessment. For the past two years, results have been gathered by classroom teachers and submitted to the curriculum leader for ELA, Judy Merra. Teachers and literacy specialists have been using the data productively to determine needs for services, to track progress at a grade level in a given year, and as a data point for report card scores. This year, teachers have tried entering the data into the Aspen database, our student information management system, so that we can bring together results by grade level, in subgroups, and over multiple years. The data entry process has proved to be time-consuming and the flexibility of the reports that can be generated is limited. A sample of results will be discussed on April 25th.

- **Writing Growth**: For three years, K-8 teachers have administered the district writing prompts and collected data on student performance in September and May. These data have been used by classroom teachers and grade level teams to inform decisions about instruction, to select students in need of services, and as a data point for report card scores. In the interest of bringing together results over several years and in subgroups, teachers have been asked to enter the writing scores in the Aspen data base. Again, the entry process is time-consuming and any small error has a large impact on the accuracy and formatting of a report generated by Aspen. In the case of progress in student writing, we are most interested in the amount of growth within the school year. Teachers can readily determine that growth on an individual class roster but we have not yet found a data analysis tool that could sort the data entered by classroom into larger grade-

level and target groups and then report out the patterns of growth between September and June.

- **Math Assessments:** For several years, teachers have compiled data from the mid-year and end-of-year *Everyday Math* exams, grades 1-5, and the *Impact Mathematics* exams, grades 6-8. Results have been submitted to the math curriculum leaders and have been used to inform instruction. Despite a lengthy attempt, we have not been successful in entering this mathematics performance data on a database which would then generate useful reports. Furthermore, we have not found that the data in the *Everyday Math* exams yield useful information to compare whole group to subgroup performance across several years. We have been researching more objective and useful math assessment tools -- aligned to the common core standards – which could be used as a source of district data to monitor yearly progress and to use in analyzing performance trends for students in groups where achievement gaps tend to exist. We will continue to research options until we find a suitable assessment. One district measure has been developed and will likely be an important measure of progress in mathematics: the Open Response common assessment questions for grades 1-8. As referenced in the report to School Committee on March 7, 2013, these questions are being piloted this year and will be fully implemented next year.

- **Report Card Scores**: Our standards-based assessment system uses a 4 point scale and is now fully implemented in grades K-8. The report cards show achievement on key outcomes in every subject area using this scoring system. We are interested in discerning patterns of performance between students who are in identified groups where achievement gaps tend to exist and students who are in typically performing groups. Although the report cards are generated through the Aspen student information management system, it does not appear possible to generate a report that depicts the frequency of scores for a given report card descriptor by groups of students. We are working with representatives of Aspen to explore future possibilities for customized reports to display patterns in scores on standards-based report cards.

Despite the difficulties in pulling together the data from these five measures, we still believe that these assessments, taken together, are valuable progress indicators. Teachers have been able to utilize this data inform their work with individual students and to monitor the progress of their own classes We intend to continue trying to find ways to input the results into a database and develop reports that depict broader patterns of performance for students in the aggregate and students in subgroups where achievement gaps have been a concern. Administrators will work with the new technology director to explore the possibilities in our current student information management system and other options for entering and using data from student assessments more powerfully.