

**Panel Report
Candidate Compass School Review
Indian Head Elementary School
Whitman-Hanson Regional School District**

INTRODUCTION

The Program

The Commonwealth Compass Schools Program is one part of the Massachusetts School and District Accountability System. The purpose of the Compass Schools Program is to recognize and celebrate improvement in Massachusetts' schools, and to disseminate information and encourage networking and sharing of ideas, effective practices, and models for success. The program is intended to provide a means for the schools to share their expertise with other schools in the state.

Based on the Cycle II (2001-2002) School Performance and Improvement Ratings issued in December 2002, the Department identified 291 elementary, middle and high schools that showed significant improvement over their Cycle I MCAS test results. These schools were invited to participate in the program by applying for consideration as candidates to serve as 2003 Commonwealth Compass Schools. One hundred and forty-four schools chose to apply by submitting completed two-part applications. Part 1 of the application asked for written responses to three questions on the initiatives they have undertaken to improve student performance that they think have had the most positive impact on their students' performance. Part 2 of the application was an on-line survey asking for a more detailed profile of the school and information on significant changes in recent years. Five high schools and six elementary schools were selected as finalists. Those eleven schools were scheduled for closer review to learn more about their highlighted programs and to determine willingness and capacity to serve in the program. Data and information gathered from the applications, surveys and review process of these schools will be published in a report this fall.

The Commissioner will designate up to eleven schools to serve as 2003 Commonwealth Compass Schools. Compass Schools receive special recognition and a \$10,000 grant to support the participation of their administrators and staff in information sharing and dissemination activities over the next year.

The Report

This report summarizes the findings and analyses of a small team of education professionals during a one-day visit to the Indian Head Elementary School on May 6, 2003. The report will assist the Commissioner in determining which schools from among those visited will be designated to serve as 2003 Commonwealth Compass Schools.

The Panel evaluated data and written information on the school's performance and improvement efforts, including the school's two-part Compass School application; and then visited the school

to meet with school leaders, staff, parents and students and visit classrooms in order to answer the following two key questions:

1. Is this school using effective improvement initiatives that could be replicated in other similarly profiled schools?
2. Are the conditions in place for this school to serve as a model of effective practices and successful improvement initiatives?

The Panel's responses to these two questions frame the report. In the process of answering these questions, the report focuses primarily on the initiatives that the school identified in its application as having had the most positive impact on student performance.

The findings and conclusions presented here are the product of analysis, discussion, and observation, and are based on the evidence made available to the Panel before and during their visit. A list of Panel members who participated in the school review is provided in Appendix A. A detailed schedule of the Panel's activities is provided in Appendix B.

Indian Head Elementary School Profile

Enrollment

Indian Head Elementary School is one of eight schools in the Whitman-Hanson regional school district and one of five elementary schools in the district. In 1999, the Indian Head Elementary School was reconstituted and many of the students from the Maquan Elementary School were moved to the former. The data reported in this section begins with 2000, the first full year of the newly reconstituted school.

Enrollment at the Indian Head School between 2000 and 2002 averaged 480 students. Ninety-seven percent of students at the school were White, with only 12 percent low-income. In 2000 and 2001 attendance at the school averaged 96 percent. The average number of days absent per student was seven. There were no students retained, excluded, or suspended in school or out of school.

Staffing

At the Indian Head Elementary School, there are 21 classroom teachers, seven specialist teachers, five paraprofessionals, one principal, one half-time assistant principal, and one school adjustment counselor. All teachers at this school are certified to teach in their respective subjects. Seven teachers at this school have five or fewer years of experience, while 16 have been teaching for more than 15 years.

MCAS Overview

Students at the Indian Head Elementary School are tested in grade 3 in English language arts (ELA) and in grade 4 in ELA and mathematics. In Cycle II (2001-2002), the school was found to have made Adequate Yearly Progress (AYP) in both content areas.

Student Performance in English Language Arts

In Cycle II, the Indian Head School received a performance rating of *High* for its Proficiency Index (PI) of 88.8 in ELA. The school received an improvement rating of *Above Target* for its 9.4-point increase over its Cycle I (1999-2000) performance. Participation rates in the ELA portion of the MCAS tests in Cycle II were 99 percent in 2001 and 98 percent in 2002.

Due to various factors, including student reorganizations and school reconstitution at the district level, subgroup data for 1999 for this school are not reported separately. In 2000, one percent of Regular Education students at the Indian Head School were Advanced, 55 percent Proficient, 38 percent in Needs Improvement, and six percent scored at Warning. In 2001, 17 percent of students scored at the Advanced level, 52 percent were at Proficient, 29 percent at Needs Improvement and two percent at Warning. In 2002, 13 percent of all Regular Education students performed at the Advanced level of performance, 67 percent were found Proficient, while 19 percent scored at the Needs Improvement level and one percent at Warning.

In 2000, 25 percent of Special Education students scored at the Proficient level of performance, while 50 percent were at the Needs Improvement level, and the remaining 25 percent at Warning. In 2001, four percent of students were Advanced, 56 percent performed at Proficient, and 40 percent were in Needs Improvement. In 2002, 33 percent of students in this subgroup were Proficient, 58 percent score in the Needs Improvement category and eight percent at Warning.

Student Performance in Mathematics

In Cycle II, the Indian Head School received a performance rating of *High* based on its proficiency index of 83.9 in mathematics. Participation rates in mathematics in Cycle II were 99 percent in 2001 and 98 percent in 2002. For its 13.8-point improvement over Cycle I, the school received an improvement rating of *Above Target*.

In 2000, six percent of Regular Education students were Advanced, 33 percent Proficient, 53 percent in need of improvement, and 8 percent were at Warning. In 2001, 16 percent of scores fell in the Advanced category, 41 percent in Proficient, 39 percent in Needs Improvement, and four percent in Warning. In 2002, 21 percent of all Regular Education students were Advanced, 40 percent were Proficient, 32 percent in need of improvement, and 7 percent of scores were in the Warning category.

At the Indian Head School in Cycle II, the number of Special Education students scoring in the Warning category decreased. In 2000, 3 percent of students in this subgroup scored in the

Advanced category, 24 percent were Proficient, 38 percent in need of improvement, and 34 percent in Warning. In 2001, 24 percent of Special Education students were Advanced, 44 percent scored at the Proficient level, 28 percent were at Needs Improvement and 4 percent in Warning. In 2002, six percent in this subgroup scored in Advanced, 31 percent were Proficient, 47 percent were in need of improvement, and 17 percent scored in Warning.

PANEL RESPONSES TO THE KEY QUESTIONS

KEY QUESTION 1: Is this school using effective improvement initiatives that could be replicated in other similarly profiled schools?

The Panel concluded that the Indian Head Elementary School is employing effective improvement initiatives that could successfully be replicated in similarly profiled schools. The initiatives judged by the Panel to be positively impacting student performance include the district-wide adoption and implementation of an inquiry-based math curriculum, a comprehensive group of school-developed math support services that include math labs, before and after school academic support services, and a highly effective parent outreach program. Resources that support these efforts include ongoing professional development, support in mathematics from the district, and a dedicated staff that collaborates to support the school's change efforts.

A. Which improvement initiatives have had the greatest impact on student performance results?

The initiatives with the greatest reported impact on student performance include the school's recently implemented math curriculum, improvements in math instruction and school-wide academic support services for math. While student performance data shows sustained improvement in both math and English language arts, the school requested that the Panel limit its examination of programs to mathematics, since the school's ELA improvement efforts are reportedly less fully developed.

From across the school community, Panelists heard parents, teachers, administration and even students credit the new methods of teaching and learning math with higher achievement. Although faculty report that the math program initially presented a significant challenge, contributions by the district eased the transition. These efforts include comprehensive training for math program implementation (including professional development for all staff), on-site training and follow-up support. The district also developed a math-sequencing schedule that indicates, for each grade level, the math lessons that are to be taught each month of the year. Other district resources include annual mapping of the math curriculum to the state frameworks, Research for Better Teaching and standards-based training, and instructional coaches to assist teachers with program delivery.

Teachers interviewed during the review credit the math program's use of inquiry-based teaching and learning, spiraling curricula, manipulatives, multiple approaches to problem solving, and emphasis on verbal communication skills with helping raise student achievement. When asked to provide evidence that student performance has improved as a result of these efforts, teachers

consistently referenced the improved quality of students' classroom work, end of unit assessments within the program, student math journals, and the quality of student portfolios.

Initiatives developed by the school that support implementation have extended the reach of the program beyond the math classroom and were characterized by teachers as providing the resources and conditions necessary to improve student achievement. Effective efforts include regular school day "math labs" for each grade; a before and after school academic support program; frequent communications from teachers and administrators to parents; and a comprehensive parent volunteer program. Together, these efforts support learning by making information, resources and opportunities available to all stakeholders in the community to help them collaborate in meeting the needs of learners.

School day academic support is offered through two conduits. First, in the classroom, special needs or struggling students get extra help from certified teachers or teacher's aides in small group or individual instruction. Secondly, outside of class, math labs make the regular education curriculum more readily available to special education and struggling regular education students. Based on a pull out model, the math lab was proposed and piloted by a special education teacher. The model requires that students who are referred by teachers be assigned a "flex group" of six to eight students (determined by area of need) to receive one hour per week of targeted instruction delivered by a math specialist and a teacher's aide. Teachers are kept advised, on an informal basis, of the progress students are making, and since labs instruction is aligned to the classroom schedule, students return to classes without having missed significant instructional content.

An equally effective academic support initiative for raising student achievement in math is the school's before and after school math tutorial sessions. Help is made available for all students on a referral basis through parent volunteers, teachers, and a 21st Century Grant for tutoring in reading, writing and math. Due to an extensive parent outreach effort (discussed below), parent volunteers work with faculty on a regular basis to tutor students in foundation reading, writing and math skills. Additionally, the teachers' collective bargaining agreement provides for two hours tutoring per week during the extended day. Since all staff received training in the math program, responsibility for staffing the tutorial sessions is shared across the school. Additional support comes through the 21st Century Grant which provides 30 hours of faculty tutoring per week for students scoring in the Needs Improvement or Warning category.

A comprehensive parent outreach and education effort is the third strategy that the review team judged to have provided resources and conditions that support improvement in mathematics. The outreach effort at the Indian Head School includes parent newsletters from teachers and administrators, parent nights, family math nights, home "math kits" for parents and students, and resource books for parents. Although all parent outreach and education resources are not devoted to math support, the efforts have had a demonstrable and positive impact on the school culture as well as the climate for learning at home, as verified by parents, teachers and students in the morning focus groups.

B. How did the school plan their improvement initiatives and put them into practice?

The implementation of both district and school-based improvement initiatives has taken place over the last five years. The decision to adopt the Everyday Math program was made at the district level and was collaborative, involving district members of the textbook committee, math and special education teachers, parents and teachers from across the district. The committee considered a variety of programs, piloted several in selected classrooms, and followed up with frequent visits. Upon deciding to adopt the Everyday Math program, the district embarked on what was described as a comprehensive needs assessment and implementation process.

When the program selection was finalized at the end of the 1998-1999 school year, grades K-3 were the first to implement the program. At this time, all K-3 teachers district wide participated in a two-day in-depth orientation session over the summer. In the fall of 1999, the first year of implementation for K-3, monthly professional development was established during which district coaches and program trainers were brought to the school. During the 1999-2000 school year, the district provided monthly professional development for the program and offered parent orientation and information sessions. The following year, in 2000, the district adopted the math program across the district, and at the Indian Head School all grade 4-5 teachers received training to prepare for implementation in the fall of 2001. A survey instrument was developed to capture issues and concerns that enabled the district to monitor the effectiveness of the program for the school's student population.

The decision to include all staff in the training sessions, according to teachers, provided a comprehensive resource that enabled teachers and support staff to support each other in learning to use the program. Parents were also included in the orientation process through what parents described as "lots of information nights." As implementation went forward, budget constraints dictated that most professional development be provided by teachers more familiar with the program and able to share their knowledge with colleagues.

The embedded nature of professional development further supports the team's judgment that the math initiative could successfully be replicated in other schools. Despite the fact that common planning time is in general a scarce resource at the school, teachers consistently reported that they are able to share ideas, including small-scale demonstration/workshops, that emphasize best practices. Teachers and leadership at the school report that professional development and training for the math program were acquired by a small core group of teachers who shared their knowledge at monthly faculty meetings or informally during individual class demonstrations. It appeared that school-based professional development is informally arranged, and that a regular schedule is currently not in place.

After two years of using the math program in grade 3, analysis of assessments and communication with teachers and parents revealed that a small group of students consistently needed additional support to keep up with the program's brisk pacing schedule. The school then embarked on a comprehensive series of efforts designed to support the needs of at-risk students and to put in place a school-wide support network to insure that resources are available to students who needed them the most. As the Principal confirmed in an interview, "The struggling learner is the driving force of all that we have done."

Although parent and teacher resistance to the new math program was high, the administration facilitated acceptance through a combination of resources for teachers, information for parents, and academic support programs for students. As the Principal reported to the visiting team, “consistency is critical” for successful implementation, and coordination appears to have been achieved by several mechanisms that were developed by the school or provided by the district for this purpose. Monthly professional development to support teachers in the delivery of the program was established that further supported successful program implementation. Beginning in 1999, the district provided professional development and assigned district coaches as well as Everyday Math program trainers to the school. In 2000, when implementation in grades 4-5 occurred, the district provided more extensive professional development, which included a two-day session at the end of the school year as well as the hiring of an on-site training consultant.

The parent outreach efforts at the school have been developed over the last four years, but only during the last year have added resources resulted in the substantial increases in the number of parents who actively participate in the school. In 2001, the Principal saw a need to more closely involve parents during the school day and in the education of their children. She put out a call, among a small number of existing parent volunteers, for a coordinator who could commit to a regular schedule to work with administration, teachers and other parents to staff some of the administrative and human resource needs of the school. The Principal and coordinator reported that approximately 275 of over 400 families responded to a letter that was sent home to every child requesting volunteers who could commit to at least two hours per month to work in the building. From this group, approximately 80 parents were identified to form part of a core group of volunteers who agreed to make themselves available on a weekly basis to help meet teachers’ needs in all 21 classrooms.

In both formal and informal communications with teaching staff, the coordinator identifies faculty needs on a weekly basis and assigns tasks to the core of volunteers to meet those needs. Examples include making photocopies, providing assistance in the cafeteria, and serving as tutors to help students study, organize homework and build foundation skills in math and literacy. Additionally, some classrooms have regular parent tutors who are available after school. All teachers have the opportunity to use the volunteer resources, and at any time approximately one-third of the teachers take advantage of their services.

Effectiveness of the initiatives is monitored through a combination of administrative walk-throughs, formal assessment and informal discussion. The school’s Assistant Principal, who oversees the guided reading program, frequently visits classrooms to support teachers in all content areas. However, outside of contractual teacher evaluations, there does not appear to be a formal process in place to monitor the quality of classroom instruction. Although some teachers report using the end of unit assessments in math to identify students for extra academic help, it appeared to the Panel that teachers rely to a considerably greater degree on informal conversations (during lunch or before and after school) to monitor student progress. Teachers indicated that the informal methods have been effective because there is a shared knowledge among all staff of academic support resources (math labs and the before and after school tutoring program) and the students who use those resources. Teachers also monitor student improvement by examining student work, including whiteboards, written assignments, math journals and class portfolios for all content areas. The Panel concluded that these efforts, while requiring a highly

flexible schedule on the part of teachers, provide accurate indications of student learning and program effectiveness.

C. Does the school think these initiatives can be successfully used in similar schools? Why?

The Indian Head School leadership and teachers stated in interviews and focus groups that they believe the Everyday Math program, academic support programs and parent outreach efforts could all be replicated in similarly profiled schools. School leadership stated that successful implementation of the initiatives owes to several factors that could easily be replicated: (1) an extended day schedule, which allows for extra time before and after school for targeted assistance, (2) direct referral to and collaboration with support providers, (3) collaborative organizational structure which allows teachers to make key decisions affecting students, and (4) carefully defined expectations for student learning, facilitated by the use of rubrics at all grade levels.

Although the staff reported, on both the DOE survey as well as in interviews and focus groups, that they have ample time for planning and coordination of efforts, the Panel remained concerned that the school's informal meeting arrangements may not be easily replicable in other schools. Approximately 81 percent of teachers indicate that they meet one or more times per week to discuss student work; 87 percent reported that they meet equally as often to plan and coordinate instruction; and 92 percent meet weekly or more often to discuss strategies and services for individual students. Teacher focus groups and interviews confirmed the survey results, and teachers reported that "We can meet at any time," referring to informal teacher and grade level team meetings. In the majority of the interviews, teachers indicated satisfaction with the freedom of meeting on their own and being able to make decisions affecting instruction. However, the Principal acknowledged that "there is a problem" with lack of common planning time and that as a result "some teachers are taking on enormous extra responsibilities."

It is the Panel's opinion that the ongoing collaboration, dedication and spirit of volunteerism among the staff have clearly supported the school's improvement efforts. While recognizing the effectiveness of these efforts, the Panel also believes that the scheduling arrangement supporting those efforts may be unique to the culture of the school and therefore may not be easily replicable in similarly profiled schools.

KEY QUESTION 2: Are the conditions in place for this school to serve as a model of effective practices and successful improvement initiatives?

The Panel believes that the Indian Head School has the conditions in place to serve as a model of effective practice and showcase the initiatives that have led to sustained student improvement in mathematics. There is a common understanding of the impact of the math program and its associated support programs across the school. Faculty have responded positively to the Principal's leadership style. The Principal has the benefit of a very resourceful .5 FTE Assistant Principal who works closely with teachers on a daily basis and appears to serve as the school's instructional leader. Further, the school staff displayed a high degree of professionalism, and the Panel concluded that the initiatives are strongly supported by an extended community that

participates in the school and is willing to carry out what leadership determine is necessary to meet the learning needs of all students.

A. Do leadership and staff have a shared understanding and use a common language to describe the changes/initiatives that have led to improvements in teaching and learning?

Panel members encountered consistent language describing the components and features of the initiatives highlighted here. Through teacher interviews, focus groups and the two DOE administered teacher surveys, a common vocabulary emerged describing the use of standards-based learning methods as well as the new math program to enhance student learning. Panelists discovered broad application of the improvement strategies across the school, as verified by visits in classrooms where a majority of teachers were observed implementing the key initiatives.

One of the most visible forms that common understanding takes is the staff's familiarity and use, across the curriculum, of the principles on which the math initiative is based. In all forms of evidence collected by the Panel (surveys, classroom observations, interviews), there was an understanding that regular education students are taking advantage of the additional supports that were originally targeted to special education and at risk students. Teachers who were interviewed also spoke of the importance of goals, rubrics, clear expectations and benchmarking to improvement efforts, citing them collectively as tools that have boosted student achievement and enabled the initiatives to work successfully. One teacher in a focus group indicated that "We use rubrics for everything," a statement to which others in the group assented. Panelists' visits to classrooms confirmed the accuracy of this statement and noted the prominent display of rubrics on most classroom walls and the use of graphic organizers on overheads and handouts in class. The implementation of writing across the curriculum, the use of math journals and the importance of clear expectations for students were also cited as helping improve student performance. Teachers supported these claims with references to students' improved writing abilities in all disciplines. Referring to the effect of the school-wide use of rubrics and benchmarks, one teacher in the literacy group said, "everyone is on the same page."

The staff also displayed a common understanding of the math program's teaching strategies and the principles of learning on which it is based. In focus groups and in the teacher surveys, teachers referred to the use of a spiraling curriculum, flexible grouping, ongoing assessments, and a variety of differentiated instruction techniques as new practices that have been employed which are raising student achievement in math and other subjects. As one teacher explained in an interview, changes at the school have been successful because they are sharable among all staff and not confined to instruction in a single grade level or content area. Teachers in general seemed comfortable with the fact that, with a spiraling curriculum, students may not immediately master all skills. Teachers' confidence that students will have other opportunities to meet the learning standards is a testament to the fact, as another teacher explained, that "the entire school has bought into the math program."

In all observed math classes, students were required to verbalize their thinking, prompted with open ended questions, required to explain how they arrived at their particular problem-solving strategies and were assisted in learning by experiencing math as related to daily life. Students in other classes were observed using manipulatives such as white boards, graphic organizers,

bricks, rubrics, calculators, plastic plates and drawing skills to facilitate learning. In one class, students sketched the outline of their hand and then determined the total area of their own skin surface based on a formula, in another class students were asked to develop and then share strategies for solving a lengthy division problem without the use of the calculator's division key, students in another observed class were asked to complete a drawing to illustrate the qualities of horizontal and vertical lines while a student in an upper grade class used a feather and a brick to understand the concept of balance. The Panel believes that these activities, carried out by students fully engaged in the learning process and behaving politely toward peers and teachers, illustrate a shared understanding of the technical and practical components of the improvement initiatives.

Additional support for teachers' shared understanding of the improvement initiatives comes through an informal arrangement whereby expert teachers teach difficult concepts for less experienced staff. For example, one teacher described exchanging classes with her neighbor for one hour so her students could benefit from her neighbor's success in teaching a particular portion of a math lesson. Although all teachers have been trained in the math program, teachers openly acknowledge differing levels of expertise and use the "teaching neighbor" arrangement to provide students with targeted, high quality instruction when it is appropriate and will benefit students.

While teacher interviews and focus groups revealed that overall faculty support for the effectiveness of the improvement efforts is high, the results of the DOE administered Instructional Staff Survey were somewhat mixed on this point. Twenty-five percent of faculty were either "unsure" or "disagree" that the Principal provides effective leadership to improve student performance, and 42 percent of the faculty are either unsure or disagree that the school council is actively involved in the school's improvement efforts. While over 90 percent believe that the curriculum is "effective and appropriate" for students, the survey also disclosed that 47 percent believe that the availability and adequacy of curriculum guidance/implementation as well as professional development are "available but not adequate." This opinion differs markedly from information collected and disclosed to Panelists during the on-site visit, during which faculty uniformly cited district leadership and curriculum support as strongly influencing high student achievement.

B. How effectively do leadership and staff articulate the connections between the specific changes and improvement initiatives they have implemented, and the gains made in student achievement?

Leadership and interviewed staff, as well as the staff who responded to the narrative survey, associate the implementation of improvement initiatives with improvements in teaching and student achievement. The Principal and teachers characterize the source of student improvement in broad terms as due to the new math curriculum, which is closely aligned to the frameworks, improvements in teaching methods, more opportunities for students to obtain academic support, and greater participation on the part of parents in the education of their children. Teachers and leadership also confirmed that the improvements in student achievement correspond to the timeframe for implementation of improvement initiatives.

The Panel consistently heard in interviews and read on the staff survey that a focus on standards based teaching and learning practices have “raised the bar” on instruction, teacher expectations and student performance. According to building staff, the focus of the efforts is on developing curriculum, instruction and support resources to meet the needs of students performing at low achievement levels. As one teacher remarked in the staff narrative survey, “Through the efforts and programs offered here to support the staff, I am able to reassess my approach and implement new/individual techniques to help each individual student.” Others remarked that because rubrics and benchmarks have been established, “I am able to be much more direct in my teaching” and “children know what is expected of them and strive to do their best to meet the stated objective.” When asked by Panel members what teachers are doing differently in classes to improve student performance, teachers consistently answered that they are using the learning standards, developed from the frameworks, to identify gaps in the curriculum. The Panel believes that teachers understand the connections between improvement initiatives and student performance because they are actively involved in the full cycle of learning, from developing lesson plans based on learning standards, setting expectations through standards-based instructional methods, developing rubrics, delivering effective instruction and using both formal and informal (teacher-developed) assessments to monitor learning.

When Panelists asked teachers for evidence that improvement initiatives have led to higher student achievement, many replies came in the form of barriers that have been overcome. One teacher explained that “a big chunk of kids just don’t get the help they need” from an inflexible curriculum and from MCAS test preparation support. Other teachers identified barriers to learning such as student services “stretched beyond comfort” and the inability of teachers to teach “the same skills” across grade levels and build on prior student knowledge. One teacher commented that after the “difficult transition process” of getting parents and teachers to support the new math curriculum, “everyone is on board and student achievement is improving.”

Teachers spoke uniformly of the importance and use of assessments to monitor student progress and to inform instruction. The assessments to which teachers most frequently referred are informal or ongoing assessments. Many of the ongoing assessments are anecdotal in nature and include a variety of student monitoring strategies that include instruction, independent activities, file cards, checklists and mini interviews with students. Panelists less frequently heard mention of the use of formal and summative assessments such as school-wide and district-administered tests or the MCAS. Other informal assessment methods indicating improved student learning include looking at student work (which includes homework, workbooks and journals), informal discussion with math lab staff, informal meetings with special needs teachers, and teacher monitoring of student progress in small in-class groups. Although mid-year and end-of-year assessments are in place, and MCAS data is used by administration, the majority of teachers did not reference these measures when citing gains in student achievement.

Additional anecdotal information was provided to the Panel as evidence that improvement initiatives are having a positive impact on student performance. Teachers report that, with the new math program, students understand that “math is a process, and their understanding of concepts is greater.” Others indicated that their students now enjoy math because “math is fun” and because the program provides “a more leveled playground for all students” since “everyone is strong in something.” A cross-section of over 20 students in the morning focus group

confirmed the fact that they enjoy learning, and students provided numerous examples as to why. Students' responses indicate that the line normally separating learning from entertainment has been made less distinct, as students talked with the same degree of excitement in describing a Jeopardy-like game to study for tests as they recounted field trips and activities for "sports day" and "Hawaiian day." Other entertaining aides to student learning include frequent breaks to play learning games, such as "math bingo"; teacher stories to help students connect learning to real life experiences; a "marble jar" for good behavior; and tickets to a "treasure box" as a reward for good work. Students also directly credited their teachers as being "cheerful," as "acting out lessons" that make them laugh, and as being aware "if you don't get it."

Teachers and building administrators also see a direct connection between the institution of the math labs and higher achievement in math. Panelists learned that the math labs provide support for teachers as well as students, since special needs students no longer need to be separated from struggling regular education students and can receive remediation in the same setting. The relationship between strategies to meet the needs of under-achieving students and school-wide improvement is clear in teachers' minds and reinforces the theme (in question 1B above) that the school's improvement efforts were driven by the needs of special needs and at-risk students. The Panel concluded that because the school's improvement efforts have been developed from a shared concern for at-risk students, an atmosphere of proactive concern has emerged to insure that every student is placed in a supportive atmosphere before being asked to learn.

C. Is there a school-wide focus on, and sufficient staff investment in, continued improvement of student performance?

The visiting Panel believes that there is sufficient investment in the existing initiatives, and evidence suggesting those efforts will be continued, to support the likelihood of continued improvement of student performance. There is a highly collegial culture in place at the school. The combination of strong leadership, a collaborative faculty who work across grade levels, extensive communication between faculty, academic support personnel, and a highly involved parent population all indicate that the school has the resources necessary to sustain and build upon the success it has achieved.

The Panel believes that the school is well positioned to sustain improvement because the strategies and initiatives under consideration are fully implemented and widely practiced across the school. Everyday Math has been fully implemented in all grades 3-5 since the beginning of the 2001-2002 school year; math labs were piloted in grade 3 in 2001 and later that year were expanded to grades 4-5; the before and after school support initiative is fully implemented at all grade levels. Existing math resource were increased by the addition, through Title I funds, of a full-time certified elementary teacher to serve on the team and to complement the math programs in all three grades.

Further support for continued improvement in math is indicated by the creation, in 2002, of a "math team," a group of three individuals from the school who are under the supervision of the Assistant Superintendent of Curriculum to support all aspects of math instruction in classrooms. Some of the team's responsibilities include: providing resources for struggling teachers, putting on workshops in standards-based math instruction, analyzing MCAS results to insure alignment

between the math curriculum and the frameworks, administering surveys to identify staff needs, adapting assessments so that they are more student-friendly for special needs and struggling students, and recruiting teachers to model best practices.

The Indian Head School Improvement Plan for 2002-2003 contains goals that, if implemented, further support continued improvement of student performance. The six goals are:

1. Increase community involvement and support
2. Enhance students' individual development
3. Maintain high expectations for student performance on the MCAS test
4. Meet the requirements of the Department of Education District Curriculum Accommodation Plan (DCAP)
5. Safety and security
6. Increase staffing to provide more services and safety

Action plans within each of the above six goals indicate that new strategies will be introduced, and existing strategies that have been proven successful in supporting continued improvement will be maintained. Selected strategies include: provide training in standards-based learning and lesson planning strategies, provide continued training in the math program and rubric use, extend teachers' development and use of learning standards in each subject area; require all teachers to post a daily agenda, lesson objectives, summarize lessons for students; and use graphic organizers during instruction. And even though the school has shown increases in ELA scores that parallel gains in math, the Principal stated that the school is "behind on literacy" and that weaknesses in this area will inform professional development. The effort to improve literacy appears already to be underway, as the team learned that literacy labs and a literacy team are being developed based on the models in place in math.

Despite the fact that the school has shown impressive increases in its math MCAS scores, the Principal sees room for additional improvement. When asked what are the next steps for continuing the development and implementation of the math initiatives, the Principal provided a list of tasks that includes: identifying "holes" in the curriculum; gaining more input from teachers for decision-making; reducing class size; and obtaining common planning time in the schedule for teachers.

In focus groups, teachers took an open and self-reflexive view of their own practice, stating that they are not afraid to ask for help and that the culture at the school allows teachers to be "honest about having needs and about needing help." Another focus group, speaking of the likelihood of continued improvement, agreed that the administration proactively identifies weaknesses and then addresses them. There is also a district-level content institute in place to support new teachers, and any others who need help, with implementation of the math program.

Multiple forms and channels of communication are in place insure that all stakeholders remain informed about the initiatives and are alerted to any special needs as they arise. Communication is also a key feature in place that, in the Panel's view, increases the likelihood of continued parent investment in the education of children. The volunteer coordinator who oversees the parent outreach effort indicated that "continuous communication" is key to sustaining high parent involvement. Parents further confirmed the importance the school places on

communication in the morning focus group. They recounted numerous examples of extended efforts on the part of the parent coordinator, administration and teachers to keep them informed of the progress of their children and the activities of the school. Successful practices that will be continued in this effort include flexibility, described as the ability to find work that fits parents' limited schedules; monthly meetings with parents; monthly updates in the school newsletter regarding faculty and student support needs; and personal telephone calls to solicit volunteers. While the parent outreach effort did require a period of full-time effort on the coordinator's part to establish, it currently requires the coordinator to work at the school approximately two days (16 hours) per week.

D. Does the school appear to have the capacity to host site visits and to participate in various activities to share effective strategies and practices with other schools in the state?

The Panel believes that the school is well positioned to share its successful improvement initiatives with other schools in the state. The combination of the staff's familiarity with the math program, teachers' widespread participation in the school day and extended day academic support services, school leadership and collegial school culture suggest to the Panel that if selected, the school could effectively showcase its improvement efforts.

According to teachers and administrators, the school frequently opens its doors to visitors. Visitors have included teachers and administrators from other schools, both from within and outside the district. Parents report being frequently invited by teachers to visit the school and observe their children's classrooms. Teachers also participate in professional development activities in which teachers share what they have learned at off-site during in-house workshops and teaching demonstrations.

The building staff demonstrated professionalism, pride in what they have accomplished, enthusiasm for what they do, and a willingness to share what they have learned with others. Teachers whose classes were visited by the Panel appeared relaxed and at ease with the presence of an observer. The facility is clean, well lighted and in excellent repair. There appears to be sufficient space within the building for teaching observations, workshops or other presentation activities.

E. Does the Panel recommend that this school be designated to serve as a Commonwealth Compass School?

The Panel recommends that the Indian Head Elementary School be designated to serve as a Commonwealth Compass School.

CONCLUSION

The examination of evidence cited above led the Panel to conclude that effective improvement initiatives in mathematics are being employed that could be replicated in similarly profiled schools. Highly challenging improvement initiatives in mathematics are well supported by school day and after school programs as well as a thriving parent volunteer program. As a result, not only are the needs of struggling learners being met, but students at all achievement levels have shown improvement. The Panel believes that the initiatives have been and should continue

to be successful because all stakeholders in the community are kept informed and have multiple opportunities to collaborate in supporting the needs of students.

APPENDIX A
TEAM MEMBERS

Scott Kelley, Ph.D., Coordinator, MA Department of Education, Malden, MA

Michelle Nessralla, Grade 6 Teacher, Administrative Intern, Brockton Public Schools,
Brockton, MA

Nancy Sprague, Director of Instructional Services, Franklin Public Schools, Franklin, MA

Megan Tupa, Consultant, Somerville, MA

APPENDIX B

COMPASS SCHOOL PANEL REVIEW VISIT SCHEDULE

All activities take place at the school.

- 7:30—8:00 *a.m.* Panelists meet with the Principal
- 8:00—8:30 *a.m.* Panelists meet with the School Council
- 8:30—9:00 *a.m.* Panelists meet with parents and students

Panelist A	Panelist B	Panelist C	Panelist D
Student Focus Group	Student Focus Group	Student Focus Group	Parent Focus Group

- 9:00—11:00 *a.m.* Classroom observations and teacher interviews*

	Panelist A	Panelist B	Panelist C	Panelist D
9-10 <i>a.m.</i>	Observe teacher 1 and teacher 2	Observe teacher 3 and teacher 4	Observe teacher 5 and teacher 6	Observe teacher 7 and teacher 8
10-11 <i>a.m.</i>	Interview teacher 1 and teacher 2 individually	Interview teacher 3 and teacher 4 individually	Interview teacher 5 and teacher 6 individually	Interview teacher 7 and teacher 8 individually

- 11 *a.m.*—12:30 *p.m.* Panelists meet to discuss findings so far and to plan the remainder of the day (working lunch)
- 12:30—1:00 *p.m.* Panelists use time as needed to analyze findings and to gather more information; Panelists are encouraged to roam the entire school and visit classrooms not yet seen.
- 1:00—2:00 *p.m.* Panelists meet with teachers in groups*

	Panelist A	Panelist B	Panelist C	Panelist D
1:00-1:30	Teacher	Focus Group 1	Teacher	Focus Group 3
1:30-2:00	Teacher	Focus Group 2	Teacher	Focus Group 4

- 2:00—2:30 *p.m.* Closing meeting with the Principal to discuss next steps (all Panelists are present)
- 2:30—5:00 *p.m.* Panelists deliberate and form conclusions

*Instructions for teacher observations, individual interviews, and focus groups

1. Classroom Observations Each Panelist will observe at least two class lessons in order to obtain a representative sample of the school’s classrooms. The purpose of the classroom observations in

candidate Compass Schools is to find evidence of the extent to which the improvement initiatives the school has described as having the most positive impact on student achievement are in practice in the classroom. Observers will also gather additional information on those programs and practices.

2. Individual Teacher Interviews The purpose of the teacher interview that follows the Panelist's observation of that teacher's classroom is to:
 - Clarify the evaluator's impressions of the classroom dynamic and learning environment
 - Determine each teachers' understanding of the initiatives cited in the application as having had the most positive impact on student achievement; and the extent to which the improvement initiatives are guiding their classroom practice (for instance, curriculum, instruction and assessment).
 - Determine what has changed at the school over the past three years.
 - Determine each teacher's role in implementing the improvements made to student performance at the school.

3. Teacher Focus Groups The purpose of the teacher focus groups is to:
 - Determine each teachers' understanding of the initiatives cited in the application as having had the most positive impact on student achievement; and the extent to which the improvement initiatives are guiding their classroom practice (for instance, curriculum, instruction and assessment).
 - Determine what has changed at the school over the past three years.
 - Determine each teacher's role in implementing the improvements made to student performance at the school.

Taken together, the observations, individual teacher interviews, and teacher focus groups will provide a comprehensive view of the staff's understanding of, and participation and investment in, the programs and strategies to improve student performance.