

In Pursuit of a Healthy Balance



Wellness
Needham Public Schools

*Movement is a medicine for creating change in a
person's physical, emotional, and mental states.*

~Carol Welch

K-12 Program Review
November 2013



Executive Summary

This report represents the culmination on a yearlong review of Needham Public Schools' K-12 Wellness Program. This work was done in accordance with procedures outlined in the district's comprehensive curriculum review process. The intent of the study is to assess the current program against local, state, and national standards in light of scholarly research, and community needs and expectations. This report represents a snapshot of the program and reflects its status at a particular point in time. The results of this review will help to establish areas of focus for continuous program improvement over the next three to five years.

Committee Charge

To review the K-12 Wellness Program and to make recommendations regarding:

- The viability of the curriculum, instruction, assessment and administrative practices in the current program and directions the program should take in the future;
- The professional development, resources, and personnel requirements with respect to current and future core curriculum and instructional needs;
- Viable options for both the short and long term programmatic improvements and associated funding.

Assumptions

The K-12 Wellness program in the Needham Public Schools consists of both health education and physical education. This program review encompasses both areas but does not include the sexuality education portion of the program since a thorough review of this program was recently completed. The following assumptions on which we based this program review are grounded in current research on physical and health education practices and standards:

- The acquisition of health skills and motor skills requires frequent practice;
- Physical activity contributes positively to student learning;
- The mission of the K-12 wellness program in Needham is to help students to develop positive decision-making strategies and physical skills that will enable them to lead healthy lifestyles as adults;
- Curriculum and instructional practices within the K-12 wellness program should be based in current research and aligned to state standards;
- Professional development and instructional support are critical components to ensure classroom practices that promote proficient skill development for students;
- Valid assessments should be used to determine student growth and to inform instructional practice.

Committee Organization

In response to our request for broad-based representation on the committee, we had twenty-four people volunteer. As with previous program reviews, the expertise of our volunteers—the Wellness Program Director from a surrounding district, an elementary principal, a former Needham Wellness teacher, parents, a school committee member, along with our health and physical education teachers, proved invaluable. The Director of Wellness, Kathy Pinkham, and the Director of Program Development, Terry Duggan, coordinated the process. The program review committee divided itself into several small task groups. Each task group examined the program through the eyes of a particular constituency (administrators, parents, students, teachers, and other districts) and then shared their work during full committee meetings throughout the 2012-2013 school year.

Membership

We want to thank everyone who participated in this review. The multiple perspectives and data sources gave us a more complete picture of the K-12 Wellness Program. The time, honest reflections, and extensive feedback that constituencies throughout the district provided enabled us to conduct this comprehensive review. Our hope is that this report recognizes the strengths and best practices within our schools and provides direction for areas of future growth. Members of the K-12 Wellness Program Review Team included:

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| Director of K-12 Wellness: | Kathy M. Pinkham |
| Director of Program Development: | Terry Duggan |
| HS Wellness Teachers: | Peter Arsenault James Nix Samantha Martyn Tim Walsh |
| Middle School Wellness Teachers: | Suzanne Eaton Jon Grant Dave Lambertson Kindra Lansburg |
| Elementary Wellness Teacher: | Rob Tatro |
| Principals: | Michael Kascak - Hillside School Armand Pires - Medway Middle School/Medway |
| School Committee Member: | Susan Neckes |
| Parents/Community Members: | Karen Hood Karen Mullen Ann Keegan, Director of Wellness Norwood Public Schools Dr. Alan Stern, School Physician |

Key Conclusions

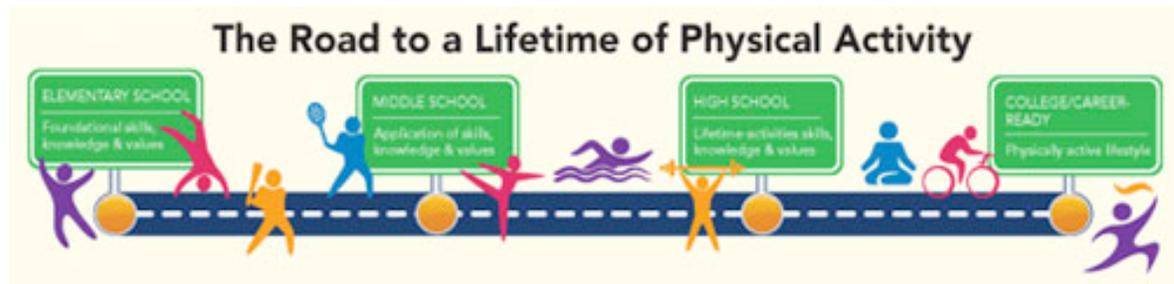
Emerging from the data are some key strengths and recommendations:

- There are numerous strengths in the Wellness Program. Overall satisfaction among both students and parents is strong.
- Parents highly value physical activity and the program's approach to wellness. There is general parental support for an increase in physical activity for students during the school day.
- Opportunities for physical activity during the school day, particularly at the secondary level was highly valued by students and provided a welcome respite from more classroom-centered instruction.
- Students highly value what they are learning in the program, demonstrate an understanding of the concept of wellness, and clearly see the instruction as having long-term impact on their ability to develop a healthy lifestyle beyond the classroom.
- Student risky behaviors are showing a marked decline over the past six years. To maintain this positive trend will require continued work in this area
- There is a need for further K-12 vertical articulation, professional community development across the levels, and clarity with respect to the vertical articulation of the curriculum.
- Suggestions for improvement point toward expanding current best practices so that they are more consistent across grade levels and classes.
- How we assess student progress and use that information to inform practice, provide feedback, and report achievement must be more consistent and clearly articulated.
- Teachers are committed to student learning and their own professional growth. Time and resources are needed to address ongoing teacher professional development and to ensure program modifications are responsive to changing student needs and social contexts.
- Space constraints due to increased enrollment at the secondary level require gym facilities to be shared by multiple classes. Limited space has led to modifications in programming and reduced opportunity for students to engage in physical activity during a class period.
- Although available time for programming is on par with most districts at the secondary level, our time at the elementary level falls short of comparable communities. In making this comparison, it is important to note that many districts have reduced wellness programming in recent years.
- Teachers, principals, and the Director must partner to turn this review into an action plan with measurable, achievable goals and outcomes.

We see this review as an opportunity for the Needham Public Schools to update its Wellness program in light of these findings and recommendations. The intent is to ensure that our program responds to the life skills needs of our students in the 21st century and prepares them for the demands of college, the workforce, and lifelong healthy living.

The recommendations in this report will take time to implement in a thoughtful, coherent way. Further research and data collection may be necessary in some areas. Time and support for teacher professional development and additional funding for instructional resources, staff, and technology are critical to the successful implementation of these recommendations.

Physical Education in the U. S.



Since 1987, the National Association for Sport and Physical Education (NASPE) has compiled the *Shape of the Nation Report* on a periodic basis to track our success, as a nation, in providing quality physical education in our schools. *The 2012 Shape of the Nation Report: Status of Physical Education in the USA*¹, issued in partnership with the American Heart Association (AHA) is their most recent publication. Both NASPE and AHA believe that the importance of physical education programs, as a regular physical activity, not only improves one's overall well-being, but is also one of the best preventers of significant health problems that are linked to many chronic diseases. The report looks at each state and the guidelines it sets forth toward this goal. The ongoing challenge of such a report is that there is no standard benchmark against which to measure. Mandates differ widely from state to state. Many state policies are broad and leave details open to interpretation by local schools, while others are quite prescriptive. Several things to note are:

- No federal law requires physical education to be provided to students in American schools.
- There are no incentives to states or schools to offer physical education programs.
- States define guidelines and set requirements, but individual school districts are responsible for implementation.
- School districts may choose to meet the minimum standards or might (and often do) go above and beyond basic recommendations.

Fifty states have their own state standards for physical education. Only Iowa has not adopted state standards. All but four states have updated their standards within the last ten to twelve years. The last update for Massachusetts' standards occurred in 1999. There is a current revision process underway at this time that has not yet been made public. Appendix A contains a more detailed summary of the current state of physical education programming in the U. S.

Health Education in the U. S.

The health of young people is strongly linked to their academic success, and the academic success of youth is strongly linked with their health. Thus, helping students stay healthy is a fundamental part of the mission of schools. After all, schools cannot achieve their primary mission of education if students and staff are not healthy.
--Center for Disease Control (CDC)

Health education follows a similar pattern as outlined for physical education. Although some "health issues" have been mandated by some state legislatures (e.g., bullying), decisions about whether to offer health education, at what grades, and for how long have been primarily left up to local municipalities. As a result, school districts are free to develop health education programs that meet the needs of their communities.

In Needham, our health curriculum is informed by both state and national guidelines. Massachusetts' guidelines are based on the National Health Education Standards (NHES) that were developed jointly by several organizations who all share an interest in the health and well-being of America's youth².

¹ National Association for Sport and Physical Education (NASPE) and American Heart Association (AHA). (2012). *Shape of the Nation Report: Status of Physical Education in the USA* (<http://www.aahperd.org/naspe/publications/Shapeofthenation.cfm?cid=00007>)

² The American Cancer Society; American Association for Health Education; American Public Health Association; American School Health Association; The Society of State Leaders of Health and Physical Education



Coordinated School Health

The CDC recognizes that there are many school programs (health education, physical education, school health services, food and nutrition services, guidance, and school safety) responsible for the health and safety of students and staff. They encourage schools to coordinate these programs and to adopt a coordinated school health program with a focus on: eliminating gaps and redundancies across the many initiatives and funding streams; building collaboration and enhancing communication among public health, school health, and other education and health professionals in the community; and focusing efforts on helping students engage in protective, health-enhancing behaviors and avoiding risky behaviors.

Coordinated School Health (CSH) is a partnership between Massachusetts Department of Elementary and Secondary Education (DESE) and the Massachusetts Department of Public Health (DPH). The vision of Coordinated School Health is that all Massachusetts children and adolescents will develop into physically, socially, and emotionally healthy adults, educationally prepared to become contributing members of society. The overall goal of Coordinated School Health is to help schools deliver evidence-based comprehensive health education, develop and implement health-related policies, and provide health-promoting school environments. As part of this initiative, all Massachusetts school districts are required to have an officially-appointed School Wellness Advisory Committee (SWAC) to review local health data, monitor the status of school health programs, and implement an annual action plan to improve student health. These regulations are in effect as of August 2012.³ The Director of the K-12 Wellness Department co-chairs SWAC along with the directors from School Health Services, School Nutritional Services, and Guidance.

Throughout the program review process, we discovered that the wellness program in Needham reflected a number of the trends mentioned in the Shape of the Nation Report. The methodology for our review of the K-12 Wellness program is summarized in Appendix A. We recognize the limitations of various data sources used in this review. Therefore, we focused our attention on areas with common findings across data sources or areas where similar data differed across different constituencies in order to form our recommendations.

Curriculum

In this section of the report we examined the extent to which there is an organized, articulated, up to date curriculum in place that meets the needs of all our students. We looked for the existence of curriculum maps that are aligned to the Massachusetts frameworks, a curriculum that is articulated vertically and horizontally, as well as documents that are accessible, up to date, and used by all teachers.

Program Description

The K-12 Wellness Program includes three different disciplines: physical education, health education, and experiential education (grades 7 and 8). The mission is to teach health, physical education, and experiential education for wellness outcomes. By teaching lessons that focus on wellness outcomes, students gain an understanding of the complex nature of human health, while at the same time, learn how to develop skills and knowledge to enhance each individual dimension (physical, social, emotional, spiritual, intellectual, occupational/leisure).

³ See Appendix B for Needham Public School Wellness policy.

Physical Education teaches motor skills, movement patterns, games, sports, and lifelong wellness activities to children in grades K-12 in an attempt to influence positive participation in physical activity, increase physical fitness levels, and enhance overall health and well-being.

Health Education teaches children in grades 5-12 health and wellness concepts along with social and emotional skills in an attempt to influence healthy choices and sound decision-making. Health education begins in grade 5 with one unit covering issues of puberty. There was a time when health education was taught in both grades 4 and 5 but this was eliminated when MCAS was first introduced to make more time available in the school day for language arts. Students have health classes in middle schools (grades 6-8) and in high school. Once again, the duration of classes and frequency of meeting time varies from one grade to another.

Experiential Education is a course that is part of the wellness program in both grade 7 and 8. In this class, students deepen their understanding and have opportunities to practice social and emotional skills. The course engages students in individual and group activities and focused reflection in order to increase knowledge, develop social skills, clarify values, and develop their capacity to contribute to their respective communities.

In many instances, curriculum documents are in place and are recorded in the ATLAS curriculum database. The perception of having a documented curriculum in place varied across program areas and levels. Sixty percent (60%) of the elementary, 100% of the middle school, and 71% of the high school health education teachers agreed with this statement. Among the physical education teachers, only the high school teachers (43%) feel that the curriculum is lacking documentation. Although much has been accomplished with respect to having a documented curriculum in place, the understanding of the work and how it should be used is uneven across the levels.

All elementary and middle school teachers report that they use the existing curriculum documents to guide what they teach. While 71% of high school teachers reported using curriculum documents to teach, it was unclear as to whether they were using the agreed upon documents. Aside from having and using an agreed upon curriculum, the dilemma many teachers (53%) face is not having enough time to teach the required curriculum. There was a clear difference of opinion among the different levels. Eighty-six percent (86%) of the high school wellness teachers feel that there is enough time available to complete the documented curriculum. Only 42% of middle school teachers and none of the elementary wellness teachers felt this way. It appears that the matter of sufficient time for teaching the curriculum is more of an issue at the middle and elementary levels.

The sentiments of the elementary teaching staff may reflect the fact that time for the elementary physical education program was reduced by 15 minutes at each grade level due to the fiscal constraints that resulted from a failed override a number of years ago. Students in grades 3, 4 and 5 now have physical education only once a week for 45 minutes and health education has been eliminated from the elementary schools with the exception of one unit -- a puberty unit taught in fifth grade.

It is also quite likely that similar reasons exist regarding the sentiments of middle school staff. Physical education programming at both High Rock and Pollard experienced a reduction within recent years. When the High Rock School opened, the small size of the gymnasium prevented the scheduling of more than one class into that space simultaneously (a practice that was previously done when the 6th grade was at Pollard). As a result, half the students are assigned to a health class while the other half are assigned to a physical education class. Students alternate between health and physical education throughout the school year.

The reduction at Pollard occurred more recently when the school adopted a new schedule that reduced the amount of meeting times that students have physical education in grades 7 and 8 by one-third. Eighth grade health was also reduced from 30 lessons to 20 lessons although the reductions were offset by the addition of experiential education at the 8th grade for one trimester.

Given recent changes in the amount of time allocated to physical education at the elementary and middle school levels, it is not surprising that teachers cited the schedule (63%) and class size (53%) as impacting their ability to teach the required curriculum. Again, this varied across level with class size being more of a factor at middle school (57%) and high school (86%) and schedule being more of a factor at elementary (80%) as well as at the middle school (71%). This points to the fact that student/teacher ratios for physical education classes at the elementary level are based on the number of students assigned to the classroom teachers. Students attend their physical education classes by classroom. At the secondary level, the numbers of sections that have been budgeted determine class sizes. In health or physical education, class sizes often exceed those in the other subject areas. This is a complex problem because a viable solution is rooted not only in having additional staff but also in having the physical space available for them to teach the increased number of smaller sized classes. Currently, teaching space is tight and in some places teachers are teaching classes in the same instructional space simultaneously. Moreover, the noise levels in these shared facilities are extremely distracting to both teachers and students and impact both teaching and learning.

Clearly, the instructional space that is available is not appropriate for teaching the established curriculum in some locations. In fact many teachers (74%) are concerned that students are not able to receive an appropriate amount of physical activity within the time allotted because of this space sharing arrangement. This problem is exacerbated by a significant increase in the student population in recent years and it creates a tremendous strain on the existing activity space in all three secondary schools. Appendix D contains a more detailed description of the impact of space limitations on program delivery.

Course Content

Content addressed in the wellness curriculum continually evolves and changes to address the needs of our students and families. The MetroWest Adolescent Health Survey (MWAHS) tracks student behavioral data in six key areas:

1. Substance Use (tobacco, alcohol, illegal substance use and prescription drug misuse)
2. Violence (weapon-carrying, physical fighting, bullying, and cyber bullying)
3. Behaviors related to unintentional injuries (seatbelt use, helmet use, and drinking and driving)
4. Sexual Behaviors related to unintended pregnancy and sexually transmitted infections
5. Mental health (stress, depressive symptoms, and suicidality)
6. Dietary behaviors and physical activity
7. School attachment and adult support

These behaviors have been determined by the CDC to result in morbidity and death in teens and young adults. Prevention strategies include strong health education programs. Data tracking these behaviors has been gathered over the past twenty-plus years, so we are able to look at trends across time. Peaks in these trends guide changes and adjustments in curriculum. Other reasons for change include teen issues prevalent in the popular media and outcomes from content specific study groups. Most recently, the sexuality education curriculum was revised and launched in grades 5, 6, 9, and 11 in response to the trend data and the recommendations of the sexuality education subgroup of the School Health Wellness Advisory Committee (SWAC).

To remain responsive to student needs, positive changes in the curriculum have evolved over time. Building principals noted that they have seen a positive shift from a “traditional physical education model” to a “skills-based program with wellness outcomes.” They feel that the goals of the program are clearly articulated by teachers, the director, and in written department documents. However, principals did wonder about how much time is provided for students to reflect on how the many activity-based lessons they experience are related to the larger context of social issues.

The curriculum appears to address the needs and interests of students. Seventy-seven percent of high school students and middle school students agree that there is enough variety in the topics and activities to engage their interest. Moreover, they also feel that the physical activities are geared towards both the

athlete and non-athlete. Students commented that overall the activities are fun, informative, helped relieve stress, and enabled them to better understand how to work in teams. Students consistently suggested that there was a need to go into greater depth in some topics particularly drugs, sexuality, nutrition, and alcohol. A number of high school students would like to be able to choose the activities in which they participate.

"I wish we could sign up for class PE electives that were broken up into quarters. For example, for the first quarter of the semester I could sign up for out door pursuits and for the second quarter of the semester I could choose high ropes or cardio. I feel like we could get a chance to have more time to go into depth or pursue our interests."

"Find out what programs must be mandatory for students. Before the program begins, the students should be asked what programs they want to do in addition to the mandatory ones. Offer programs that are optional that may interest students. That way, people are interested and don't have to sit through something they don't want to do."

However, others report that they are glad that they were exposed to activities that they typically would not have tried.

"The high ropes were awesome. I learned a lot about myself with the high ropes and did things I didn't think I could do. It makes you put a lot of faith into your classmates."

"I liked the high ropes because it was a good experience and pulled me out of my comfort zone."

Although students varied slightly in the order of preference for certain activities, they were fairly consistent in naming their favorite activities. Among middle school students, basketball, creative games, handball, survivor (a form of adventure education), and volleyball were those most preferred. Among high school students, fall sports, group dynamics, high ropes, net games, self-defense, and yoga were those most chosen.

Changes and adjustments to curriculum are often informed by student input. When middle school students were asked what three health topics they felt were important to learn about they all listed alcohol as number one and drug prevention as number two. The third topic varied by gender. Females identified body image and eating disorders as being important while males identified tobacco use. Students who identified themselves as receiving special education services identified self-esteem as their third topic. At the high school, for females, self-defense and nutrition were topics most frequently mentioned. Males responded similarly but added the topics of sexuality and drugs/alcohol.

Ninety-seven percent (97%) of the parents feel that it is important to include physical education and health education as part of their son's/daughter's overall academic experience. However, they report a lack of knowledge about the curriculum at all levels. For those that indicated awareness of the program, approximately 30% said that their son/daughter provided them the most information. Elementary parents reported that they valued the opportunity to visit their child's physical education classes to observe their participation in dance, gymnastics, the bike rodeo, and field days; however they, like parents at all other levels, wanted more information.

Strengths

- Curriculum is responsive to student needs
- Curriculum takes into accounts the needs of the whole student (physical, social, emotional, spiritual, intellectual, occupational/leisure)
- Students can articulate and appear to understand all the dimensions of wellness

Recommendations

- Regularly update/maintain documentation of curriculum in ATLAS as curriculum is modified to meet changing student needs
- Modify curriculum, as needed, so that it can be taught within the time available for instruction
- Continue to monitor data from Metro West survey and student needs and adapt/modify curriculum accordingly
- Insure that all teachers are familiar with and regularly use the ATLAS curriculum maps to guide instruction

Instruction

As part of this program review, we examined the extent to which research-based, best instructional practices are part of the instructional experiences we are providing for our students.

According to elementary (100%), middle (57%) and high school teachers (72%), the department's overarching philosophy regarding wellness guides their instructional practices. Secondary students confirmed this with 82% of middle school students and 84% of high school students reporting that their teacher helps them to better understand the connection between physical health and the other areas of health (social, emotional, spiritual, intellectual, and occupational-leisure).



*“Teachers do a good job of including all students in physical education regardless if they are athletes or not.”
—High School Student*

The Needham Public Schools wellness department has designed lessons that challenge all students regardless of their interest or ability in the subject. Students seem to recognize this. At every level, students indicated that their teacher makes it comfortable for them to participate in all activities (86%); and makes it possible for all students, regardless of their physical abilities or interests, to participate in class (90%). Special education students felt similarly. Administrators seemed to concur, noting that teachers are proficient at differentiating to meet the needs of all children; that all students are involved in class activities; and that the classroom environment appears to be a safe place for everyone.

“Our teacher makes the skills fun and interesting to learn. There are a wide variety of skills to learn and even the skills I don't want to learn turn out fun.” – Elementary School Student

Beyond the fact that teachers in the wellness department have lessons that challenge and interest their students, students told us that they enjoyed the activities because they were fun; that classes enabled them to be active during the school day; provided useful information; and helped them to understand the dynamics of being part of a group. They reported that their teachers are knowledgeable about the subjects they teach (91%); make learning goals clear (86%); respect them as learners (90%); and that they know what is expected of them (91%). Sixty-three percent (63%) of the high school students felt that engaging in physical activity during the day helps reduce stress. Seventy percent (70%) of middle school students reported that their increased energy levels enabled them to better participate in their other classes. Students generally feel that they try to do their best in whatever they are asked to do (83%), but slightly fewer feel that the teacher understands their areas of strengths or weaknesses (78%). However, 39% of high school students and 26% of middle school students feel that they are not getting as much physical activity in class as they would like. This may be due in part to the time and space issues discussed earlier in this report.

With respect to their experiences in health education, secondary students echoed many of the same feelings expressed with regard to their physical education classes. Additionally, they felt that the lessons

“The strength of wellness is the focus on fitness and healthy living. These have really built a strong foundation for leading a healthy lifestyle, moving on to college, and the start of my life...it was a great experience filled with many great memories.”—High School Student

and activities in health education classes helped them to make more responsible decisions (81%) and to understand what influences the decisions they make. They also indicated that the skills they learned helped them avoid risky behaviors (77%) and felt that the information and skills they acquired would help them later in life (77%).

Experiential Education is offered at the middle school in grades 7 and 8. Students, particularly special education students, found that the instruction in this course helped them to better navigate the world of middle school relationships. They told us that teachers in this class helped them to be able to work better in groups (76%; 81% special education); develop leadership skills (74%; 80% special education); learn how to make friendships (62%; 83% special education); become more aware of their own feelings and those of others (72%; 72% special education); and develop a greater awareness of their own social skills (76%; 78% special education). It seems that further examination of the aspects of experiential education instruction that are particularly responsive to special education students' needs may yield information that would be helpful in other areas of the Wellness Program.

"It provides a chance to examine issues in all our lives that aren't discussed in other classes. It's about us."—Middle School Student

Beyond the classroom, students are actively engaged in physical activities. Eighty-one percent (81%) of high school students and 90% of middle school students report that they regularly participate in some type of sport. Participation by special education students at both levels was 10% less. Regardless of whether students are taking a physical education class or not, nearly three quarters of secondary students reported getting more than sixty minutes of physical activity per week. However, their experiences in physical education class does not appear to influence their choice of which physical activity they participate in outside of school (HS 23%; MS 37%).

"I have much respect for the wellness staff. I can't think of any one (teacher) that I have had a problem with. They are all respectful, stand-up individuals who make wellness/PE enjoyable. They will be hard to forget."—High School Senior

"The teachers seem pretty organized, with all the units set up for specific times. I like that we always know what we're doing and where we are headed. Also, a lot of very enthusiastic and energetic and helpful teachers are in this department."—High School Junior

It is not surprising that: with lessons that challenge all regardless of their interest or ability; activities that are fun and engaging; opportunities to learn useful information and skills that help later in life; opportunities to develop and enhance social and emotional skills; and teachers who respect them as learners that 89% of the students across all levels and areas of the wellness program reported that they like and respect their wellness teachers.

Although teachers struggle to find objective data to identify measurable outcomes for the wellness program, student survey data shows that students are having positive experiences as a result of their interactions with

their teachers and participation in wellness classes. The challenge continues to be to try to find ways to measure, record, store, manipulate, and report objective data about student outcomes that will inform our instruction in a timely manner and help us to make curriculum decisions that meet the immediate needs of our students.

Strengths

- The majority of students find their lessons engaging and relevant to their life beyond the classroom
- Lessons are designed to challenge all students regardless of their interest or ability in the subject.
- Many students appreciate the variety of classroom activities and the opportunity to learn skills that interest and challenge them.
- Students have positive relationships with their teachers and feel respected as learners.

Recommendations

- Examine the ways in which students are provided with opportunities to debrief on activities and make explicit connections to concepts being taught
- Examine the aspects of experiential education instruction that are particularly responsive to special education students' needs in order to inform programming in other areas of the Wellness Program.

Assessment of Student Learning

At the heart of good teaching is assessment of student knowledge. Interesting and creative student activities are only valuable to the extent that students learn what they need to know. It is critical for the teacher to set clear learning goals and continually assess how the students are doing and whether they have reached the goals set for them. Informal and formal assessments also inform the teacher's instruction. Assessment provides evidence that students are acquiring the knowledge and skills that contribute to healthy behavioral outcomes and that the delivery of instruction and learning strategies are contributing to students' achievement of physical and health education standards. In today's approach to wellness education assessment, educators set academic standards, or learning or benchmark targets, indicating what students should know (content) and be able to do (skills) as a result of the instruction. With this approach, the student's goal is not to compete with and "beat" other students, but rather, to reach proficiency in meeting the target standards and expectations. The teacher's goal is not to sort and rank, but to assess student work over time and provide descriptive feedback so students have the opportunity to improve and succeed.

It is the ongoing assessment of student learning, related to meeting the standards that provides the teacher, student, and parent with the necessary information to move the student toward proficiency. An effective classroom assessment process occurs over time, includes a variety of methods, offers a personalized record of student achievement, and provides timely and descriptive feedback to the student. It is essential that students know the learning targets (standards), the assessment criteria (e.g., a rubric or performance checklist), and has continuous access to evidence of progress. The student can then partner with the teacher to work toward proficiency. Students will have the information they need to take responsibility for their learning and teachers will have the information necessary to improve their instruction.⁴

In both physical education and health education, students are assessed on a regular basis. Students feel that the tests reflect the learning goals for the units that they are studying and that teachers provide them with multiple opportunities to demonstrate what they know through the various types of assessments that they are given (80%). This sentiment is slightly lower for seniors (77%) and for females at both the middle and high school (MS 76%; HS 74%). The notion of testing in both physical education and health education seemed to be less important to students. Overall, at the high school only 20% of the students felt that having tests in physical education is important while 46% felt assessment in health education is important. This may be due to a prevalent attitude among high school students that what is done in the gymnasium should be fun and playful and not academic. Although we strive to develop lessons that are both fun and playful, there is academic content that must be delivered and state and national standards that must be met. Perhaps we should take a stronger role in helping our students understand these expectations and the importance of their inclusion in their academic experience.

Grading

On average, students generally believe the grades they receive in their wellness classes accurately reflect their achievement (82%). This feeling is most prevalent among eighth grade students (84%) and to a lesser degree among high school seniors (76%) high school females (79%) and special education students at both levels (HS 74%; MS 77%). Students, for the most part, say that their teachers explain the criteria for how grades are determined (HS 75%; MS 82%) and that they understand the criteria that the teacher presents (HS 78%; MS 84%).

⁴ The Joint Committee on National Health Education Standards. *National Health Education Standards: Achieving Excellence* (2nd Edition). Atlanta: American Cancer Society; 2007.

The subject of grading in the areas of physical and health education continues to generate various opinions. There was more consensus among students about grading in health education than in physical education. This may reflect confusion about the purpose and outcomes for the program. Many people (students and parents alike) see physical education and athletics as one-in-the-same. Therefore, they are not clear about the expectations for a school-based physical education program and are surprised when students are graded. This calls for more communication with students and parents about the vision and purpose of our program and the criteria for assigning grades.

Table 1: Importance of Grading in Physical Education

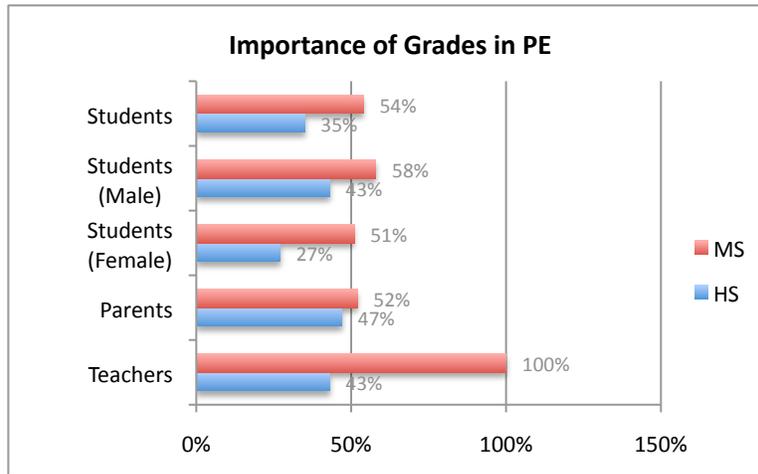
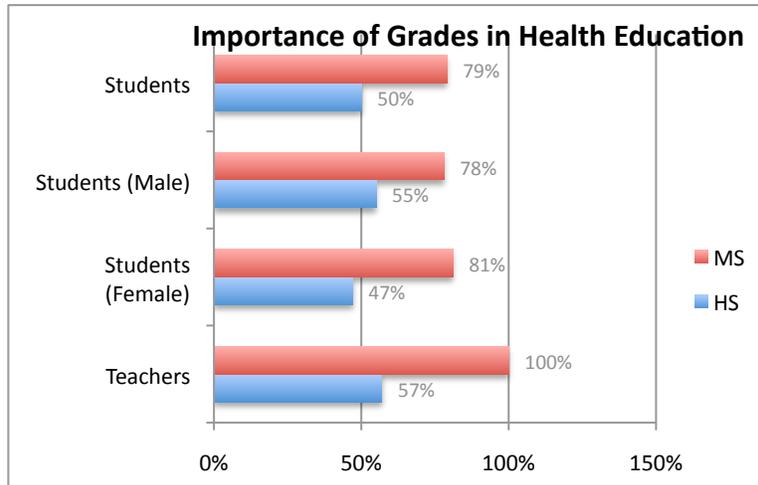


Table 2: Importance of Grading in Health Education



At the middle school, although all teachers feel that grading in physical education is important, only about half of the parents (52%) and students (54%) feel that way. At the high school level, less than half of the teachers, parents, and students indicated that grading in physical education is important. Middle school and high school health teachers differ with respect to the importance of grading in that area of the wellness program (MS 100%; HS 57%).

“Stop testing. It does not matter anyway and puts kids against each other in a non-specific arena.” ---Parent

This difference is also reflected among the students at each level; with 79% of the middle school and 50% of the high school juniors and seniors feeling that grading in health education is important. The range of perspectives among health teachers towards grading may be

due to the fact that they are working towards influencing student behaviors that occur outside of class and away from their purview. This dynamic makes it extremely difficult to know or measure the impact of instruction on student behavior.

The survey results on the question of grading generated a healthy conversation on this topic among the high school teachers participating on the program review team. They perceived that our high school students may be so focused on getting an “A” that they can lose perspective on the value of the experiences they are getting in their wellness classes. Teachers wondered if grades were taken out of the equation, whether students would focus more on the outcomes of their wellness experiences (improved fitness, better decision making, proper nutrition, positive group interactions, etc.).

At the elementary level, all teachers felt that grading student progress is important. The progress report at that level is based on standards related only to physical education; although students are taught to develop good habits of mind, have an understanding of physical exercise, know how to make educated choices about their bodies, know how to be a good team member and to develop resiliency. Principals recognize the difficulty in measuring resiliency and other social-emotional traits and understand why they are not addressed in the progress report.

There is a moderate degree of confidence among students as to whether they would earn the same grade if they had a different teacher for the same course. Eighty-two percent (82%) of grade 8 students and 73% of high school juniors and seniors believe they would earn the same grade with a different teacher.

Common Assessments

“One of the most powerful, high leverage strategies for improving student learning available to schools is the creation of frequent, common, high quality formative assessment by teachers who are working collaboratively to help a group of students develop agreed-upon knowledge and skills.”
--(Fullan, 2005)

The need for continued work on common assessments might be seen as another reason for these various discrepancies in opinions and practices regarding assessment and grading. Only a modest number of teachers at all levels indicated that they have a collection of shared assessments that measure what students know and are able to do (K-5 60%; MS 29%; HS 43%). Among the common assessments that exist, those at the elementary (60%) and at the high school (57%) serve as a

basis for evaluating student performance. At the middle school only 29% of the teachers indicated that this was the case.

Along with the need for more use of common assessments is the associated need for common rubrics that guide the assessment of student academic and performance tasks. The introduction of the standards-based progress report at the elementary schools may be why 100% of the elementary wellness teachers report using common rubrics to guide assessments. Only 14% of middle school teachers and 43% of high school teachers report the use of common rubrics. Teachers at these grade levels might benefit from having agreed upon benchmarks that enable a common grading practice.

A third reason for the range of opinions regarding grading may be the fact that not all teachers use formative assessments to determine the knowledge and skills students have prior to the teaching of a curriculum unit. Formative assessments are most prevalent at the elementary level (60%) and at the high school (71%). They are used least at the middle school (43%). The more consistent use of formative assessments would enable teachers to better understand students’ strengths and to differentiate instruction accordingly.

A final, and perhaps the most significant reason may be an issue of time. Teachers feel that even if they had common assessments and rubrics in place, they do not have enough time to effectively assess or to track individual students’ progress. This feeling was most prevalent at the elementary level (100%), a bit less at

the middle level (85%) and somewhat less at the high school level (assessment 57%; tracking progress 71%). With large class sizes and multiple classes sharing one facility, the task of administering common assessments and tracking student progress takes a back seat to insuring all students are safe and physically active during the lesson for the duration of a class.

Strengths

- Variety of assessments used at most grade levels
- Curriculum maps, assessments and associated rubrics are in place and used regularly at the elementary level
- Teachers have clear commitment to student learning

Areas of Concern

- Lack of common rubrics that are used consistently at the secondary level results in inconsistent grading practices
- Inconsistent grading practices results in different perceptions regarding the value of grades

Recommendations

- Continue to develop and implement common assessments where they are not currently in place
- Develop and use common rubrics for existing assessment at the secondary level
- Include assessments, rubrics, and assessment strategies in ATLAS maps to ensure access and consistency of assessments among teachers who are teaching the same course
- Continue to examine ways to measure outcomes for the effects of the wellness program on student behaviors
- Examine how grading practices at the secondary level could be more standards-based
- Increase communication with students and parents about the vision and purpose of the wellness program and about criteria for assigning grades

Program Satisfaction



Generally, parents are feeling positive about the Wellness Program offered in the Needham Public Schools and value the role schools play in helping them to educate and foster the physical and social-emotional growth and development of their children. They particularly appreciated the fact that risky behaviors, peer relationships, bullying, and body image are addressed in the curriculum. While most parents acknowledge that they are also educating their children in these areas at home, they believe that the school wellness program provides good reinforcement of their efforts. Some parents find it difficult to have conversations about these issues with their children and are grateful for the schools' role. Most secondary parents (72% HS; 72% MS) reported that they appreciate the homework activities that require their children to interview them as an opportunity to engage in meaningful conversations and would value the continuation of this practice. In addition to the social emotional aspect of the program, parents of students at all three levels (97%) told us that it was important to include physical education as an integral aspect of their son's /daughter's overall academic experience. This may be due in part to the fact that they see physical activity as important in their own lives (97% K12).

Most parents indicated that their son/daughter derived multiple benefits from their participation in the wellness program (e.g., better behavior, overall physical development, social and emotional development, academic success, and stress management). Numbers were highest at the elementary level and decrease in middle school and high school.

Table 3: Positive impact of physical education

| | Elem | MS | HS |
|----------------------------------|------|-----|-----|
| Behavior | 85% | 70% | 57% |
| Physical development | 94% | 84% | 56% |
| Social and emotional development | 86% | 72% | 57% |
| Overall academic success | 77% | 71% | 39% |
| Ability to manage stress | | 67% | 37% |

It may be that because the growth of children is much more evident when they are younger, it is easier for parents to see the impact of the program. As students develop over the secondary grade levels their growth may be subtler and the impact of the program may be less evident until much later in life.

Overall satisfaction with the Wellness Program has been fairly consistent over the years. For every other year since 2001, the Needham Public Schools Parent Survey asks about satisfaction with respect to each of the major subject areas (Health Education was not included). When looking back over the years, consistently, on average, 87% of parents indicated that they were satisfied with the Needham Public Schools physical education program.

Several of our parents' comments seemed to best summarize the sentiments expressed by many parents about the program:

"Encouraging all forms of physical movement, not just organized sports, is important so that all feel included and so that a life-long, positive attitude about physical exercise is developed and nurtured. Learning about nutrition, exploring fun and healthy ways to move their bodies (for mental and physical health) and making safe and healthy choices for their bodies is crucial."—Elementary Parent

"The program is well thought out and well-rounded."—Middle School Parent

"I think that the discussions about issues that many of the kids at her age level are facing are fantastic. Anorexia, alcohol, etc. are all things that need to be addressed often and in various settings with kids."—Middle School Parent

"All of my kids have really loved the relationships that they had with the teachers. The more informal setting of PE class allows for great opportunities to get to know the adults, and even better opportunities for the adults to build strong bonds with the kids. In addition, since so much of the school day is intensely focused on achievement, the kids get a needed break through the physical activities and the comfortable settings these PE teachers have created. Hats off to all of them!"—High School Parent

Organizational Systems

This area of the program review report focuses on the current support systems that enable wellness instruction to take place in a coordinated, cohesive, and equitable manner between all the schools in the district. It includes: Leadership, Professional Development and Professional Community.

Leadership

The Director of the Wellness Department oversees curriculum, instruction, and special programming for K-12 Physical Education, Health Education, and Middle School Experiential Education. The director provides instructional leadership, supervision and evaluation of teachers, and program support for the K-12 health and physical education program. In addition, the director works to support district goals and initiatives and also works with school and community leaders in a variety of different ways. Examples include curriculum development, supervision and evaluation of teachers, prevention strategies, parent and community education, and the advancement of health promotion initiatives.

We examined the extent to which there is leadership in place to ensure that the program is managed and that resources are used in ways that promote an effective teaching and learning environment. Leadership for the wellness program lies primarily with the K-12 Director of Wellness, with support from the Director of Program Development. We are fortunate to have a leadership structure in place for this program in the district.

Leadership plays a critical role in supporting teaching and learning in the wellness program. The supervisor's role is similar to that of other program directors throughout the district. Specifically, she works with members of the department to:

"Sustainability depends on many leaders—thus, the qualities of leadership must be attainable by many, not just a few.

---Michael Fullan (2002)

- provide leadership in program design (curriculum, instruction & assessment) and implementation that develops capacity in all students along the six dimensions of wellness (physical, social, emotional, intellectual, spiritual, and occupational/leisure);
- hire quality professionals and provide professional development and assistance to individual teachers based on current research, trends in wellness teaching along with other areas of standards-based instructional practice;
- analyze needs, research options and oversee the selection of instructional materials and equipment;
- provide leadership in developing and implementing a coherent district-wide wellness program for students;
- act as liaison among wellness teachers, administrators and the community to articulate the program's goals.

When K-12 principals and assistant principals were asked about how leadership provides coordination and coherence for the program in their respective schools, they were very supportive of the leadership that the Director provided. They told us that she:

- Hires high quality teachers, supervises very well, and holds teachers accountable to rigorous standards;
- Is skillful at communicating objectives about the sex education program in the district and in addressing parent concerns;
- Together with the teachers has done a very good job defining a strong curriculum that staff understands and are able to articulate to parents and to each other. The clarity of this work makes it possible for the administration to feel comfortable in supporting and communicating the program to their respective communities;

- Works together with members of the department to ensure consistent instructional practices;
- Is knowledgeable, provides resources and insights, and exemplifies the values of the department;
- Understands the big picture and provides vision for the program;
- Is an advocate for the needs of students;
- Has “too many irons in the fire” for one person and would benefit from clerical help;
- Sometimes does not follow through on small details at the building level because her K-12 role pulls her in multiple directions;
- Is not always present in the schools because of her assigned teaching responsibilities at one level;
- Has so many ideas for enhancing the program. She should focus on what realistically can be done.

Over the course of the last decade, program reductions at the elementary and middle school levels due to budgetary constraints and scheduling may have led to feelings among slightly more than half of the teachers that leadership at the school, and department levels is not providing the support they need to do their job effectively and that administration at the building and district level are not supportive of the goals of the program. Situational factors that also may be contributing to this sentiment are the limits on time and space that the program has experienced. The gym space may be used for voting or other events and not be available for classes. With one gym and one day per week of class, inadequate contact time with students is reduced even further. Time is also lost in the setting up and taking down of equipment. In many schools the facilities are too small, and as enrollment grows, the space situation continues to worsen [see more on space constraints in Appendix D]. It is important to note that, the teachers’ perception of lack of administrative support runs counter to the perspective offered by the administrators. Administrators indicated that they fully understand and support the goals of the program. Just like the teachers, they would like students to have more time for wellness instruction and physical movement activities. There is a strong feeling among administrators that the department does a ‘fantastic job’ and the goals of the program are “powerful and clearly articulated.” They readily acknowledge that the staff has “done an excellent job of making do in an environment (schedule, facilities, large class sizes) that is not ideal” and “makes the most of the facilities that they have.” In describing the teaching staff, administrators used words such as: flexible, experienced, professional, gracious and empathetic.

Also evident was the fact that administrators hold the wellness staff in high esteem not only for the instructional program that they provide but also for the roles they play within their respective schools. They feel that the wellness teachers are an integral part of the school and the larger school community. The teachers know all the students and are a great resource in helping everyone to understand student needs. Administrators appreciate the fact that since wellness teachers see the whole child, they are able to provide a useful perspective in schoolwide discussions and a deep understanding of team building and school culture.

It is evident that having a K-12 leadership structure in place has contributed to the overall strength of the wellness program. While there was an acknowledgement of strong leadership, there was some concern about the director’s time to lead the department given her teaching and district wide responsibilities. In addition, the Director needs to acknowledge that teachers at different levels vary in their opinions around the degree of support they are feeling. This will require a better understanding of what teachers perceive as support and then a plan for developing “presence” in all eight schools. A number of other leadership challenges lie ahead.

Strengths

- A strong curriculum that staff understands and is able to articulate to parents and to each other
- Teachers are valuable contributing members to their respective school communities
- Consistent instructional practices
- Ability to communicate program objectives to the larger school and parent community

Recommendations

- Focus on regular support and feedback for teachers that encourages personal reflection and growth.
- Provide on-going leadership and follow through on details that support teaching staff through increased presence in the schools
- Provide regular opportunities for communication among teachers both within and between levels
- Ensure that available meeting time is dedicated to the professional growth of teachers
- Ensure that the program continues to meet the ever-changing needs of students
- Continue to advocate for additional program time for students
- Continue to advocate for appropriate space (particularly with school renovation projects) to deliver program
- Help teachers to understand the “big picture” regarding programmatic and facilities decisions. Engage them in the discussion/decision-making process when possible
- Help teachers to understand/recognize the added value that they provide to their school communities
- Continue to refine and enhance communication about program goals to parents and the larger school community

Professional Development

Our teachers are actively engaged in learning about wellness instruction and participate in professional development in a variety of settings and structures. Over the last three years:

"We are finally able to focus department time to sharing best practices in our settings. Given the demands of teaching to standards in order to have students demonstrate skills at grade level expectation, places a higher demand on effective lesson structure and activities. The work we have done on rubrics has been very enjoyable because it is tangible and useable. But this work is not done and we can reflect on potential changes. Common assessment practices should be shared or how we maximize assessing such a large number of students."

--Wellness Teacher

- 30% have attended at least one conference.
- 26% have taken at least one graduate course.
- 33% have attended at least one out of district workshop on wellness specific content areas.
- 42% have observed a colleague's class at least once to see new practices.

Overall, 84% of the teachers have participated in two or more professional development opportunities outside of the district. Teacher participation in the various professional development opportunities outlined above was comparable across all levels. About three-quarters of the teachers felt that the director made them aware of and encouraged them to participate in these professional growth opportunities.

Other venues for professional growth include those that are job-embedded and that occur within regularly structured routines and processes. Such venues include the use of department meeting time and early release days.

Similar to teachers in other specialized areas, wellness teachers feel that the school-based professional development is not applicable to their specific area. All K-8 teachers as well as about half of the high school teachers expressed this sentiment. It is interesting to note that principals see wellness teachers as valuable contributors to the building-based professional development because of their understanding of school culture and team building strategies. It seems that each of these two groups may have differing perceptions of the goals of the professional development that is being provided. Teachers are feeling the need for it to be subject matter relevant, while principals see their participation as contributing to the overall health of the school community. It may be worthwhile for the principals and director to review the plans/goals for the available building based professional development time and to determine when participation by wellness teachers is necessary and when it can be used to further their own content knowledge development.

Within the department, more than half the teachers (63%) indicated that they were active in helping shape the department-based professional development so that it would meet their individual needs and those of their colleagues. Engagement was most prevalent at the elementary level (100%) and somewhat less at the high school (57%) and middle school levels (43%). When asked whether the department-based professional development opportunities were useful for advancing instruction and student learning, 47% of the teachers feel that the majority of meeting time is focused on teaching and learning. Middle and high school teachers' experiences with respect to the use of department meeting time differed, with 25% of middle school teachers and 54% of the high school teachers feeling that department time was used for working on teaching and learning. It is interesting to note that at the levels where teacher engagement in planning the professional development was the greatest, the level of satisfaction was the least. Exploration of this dynamic is needed to inform planning for future professional development.

Although there is significant participation in externally offered professional development opportunities and participation is encouraged and promoted by department leadership, the serendipitous nature of the offerings has both a positive and negative impact. Teachers have the ability to choose the type of growth experience that best nurtures their individual personal development. However, there does not appear to be

a coherent plan for professional development within the department that insures that all teachers have a common understanding of current effective practices that promote wellness learning.

When teachers comment on areas they would like to increase their knowledge, many of their comments were very similar to teachers in other disciplines and reflected a number of the components of standards-based practice. These included: curriculum development; lesson development & execution; increasing repertoire of instructional strategies--particularly for working with special needs students (84%); assessment strategies and development; rubrics development; monitoring student growth; and technology integration. Administrators suggested that it would be helpful if wellness teachers learned more about resilience in order to help students to better develop their capacity to deal with stress.

Strengths

- Teachers' understanding of their discipline specific content knowledge and ability to help students develop a balanced perspective on wellness
- Significant teacher participation in wellness related professional development opportunities.
- Significant teacher interest in their own professional growth
- Leadership support/encouragement for teacher participation in out-of-district professional development activities

Areas of Concern

- Common and coherent understanding within the department of effective standards-based instructional strategies within the area of wellness
- Need for more ongoing, consistent professional development that ensures a common understanding and implementation of effective instructional practices
- Time spent in school based professional development that is not seen as relevant to professional growth in the discipline

Recommendations

- Structure existing meeting time to ensure it is used to further teachers' understanding of effective standards-based practices within the area of wellness
- Prioritize professional development on areas of expressed need, particularly in the area of strategies for working with students with special needs
- Explore the possibility of using existing time for job-embedded professional development more effectively
- Engage in collaborative planning for professional development, ensuring that teachers have more opportunities to help each other to further develop skills and knowledge in the area of wellness
- Provide teachers with opportunities for on-going assessment and reflection of professional development experiences with an eye towards using the information to shape subsequent experiences.
- Continue to support outside opportunities for further teacher growth in the area of wellness
- Explore the possibility of providing alternative professional development opportunities for wellness teachers when building-based programs are tangential to their learning needs

Community/Culture of Continuous Improvement

The Needham School District understands that the key to improved learning for all students is continuous, job-embedded learning for teachers. Thus, the district is committed to promoting educators working collaboratively in ongoing processes of collective learning and research to achieve better results for their students. In a professional learning community (PLC), educators regularly meet to discuss what they want students to know and be able to do, how they will assess it, and how they will support all students in their learning. There is a commitment to continuous improvement in instruction and student growth. We explored the extent to which PLC practices were happening among wellness teachers.

“Educators who are building a professional learning community recognize that they must work together to achieve their collective purpose of learning for all. Therefore, they create structures to promote a collaborative culture.” – Richard DuFour

There are few structures in place to ensure that wellness teachers have common planning time. When teachers were asked to respond to a question about common planning time 0% of elementary teachers, 71% of middle school teachers, and 43% of high school teachers agreed that they had opportunities to observe colleagues in order to see new practices. The response from elementary teachers is not surprising. Elementary wellness teachers tend to be the most isolated from their subject area colleagues. Typically there is one wellness teacher per school. On those occasions when a second teacher is scheduled to come into a building to help balance the schedule – both teachers are too busy to devote much time to collegial conversation.

The Pollard Middle School has adopted a schedule that provides time for all teachers to meet during the school day. It is the only school that has successfully provided common planning time for all teachers (including specialists). This opportunity does not exist at the other levels. In spite of not having time built into their schedules to meet with colleagues, 79% agreed that teachers share best instructional practices with each other. Teachers who do get together to work with colleagues typically do it on their own time or during a shared preparation period. On occasion, some teachers have been awarded an “in-house” professional day to allow them time to work together on a particular project. Other teacher meeting time, department meetings and early release days have most recently been devoted to system-wide and/or school based initiatives (e.g., developing standards-benchmarks, curriculum mapping, development of assessments, etc.).

Typically, formal department meetings have been organized around level. Each team (elementary team, middle school team, high school team) has met regularly to address issues specific to that level (e.g., agree upon outcomes, develop curriculum maps, create common assessments, develop rubrics for assessment, and share best practices for instruction). Although this remains a work in progress, this process has created a strong culture of collaboration, respect and trust among teachers at each level. We have not yet extended this work on a K-12 level. The decision was made to meet by level to allow teachers to focus more directly on the curriculum and instruction that they are responsible for teaching. Although this has made department work more relevant to individual teachers, it has been at the expense of a more comprehensive K-12 focus.

Strengths

- Strong collegial relationships have developed among teachers at the same grade level

Areas of Concern

- Development of a strong collegial relationship among teachers K-12 does not exist.

Recommendations

- Provide time for teachers to meet as a K-12 team to share best practices and build community.
- Collaborate with school administrators to find common planning time for wellness staff.

Other Districts

As part of our review of the Wellness Program in Needham, we surveyed program directors in other districts to examine the scope of the Wellness Programs offered in comparable communities. Eleven of twenty districts responded. We asked them to rate themselves as Exemplary (E); Proficient (P); Developing (D); or Not at All (N/A) with respect to the elements of their program that were similar to those being examined in this program review. The table below represents the percentage of districts responding Exemplary or Proficient to the extent to which these practices were in place.

Table 4: Program Status in Other Districts

| Program Area | % Districts | Program Area | % Districts |
|--|-------------|---|--|
| Curriculum | | Instruction | |
| Health curriculum documented | 82% | Instruction reflects standards-based practice | 54% |
| PE curriculum documented | 82% | Technology used to support student learning & growth | 54% |
| Teachers use documented curriculum | 82% | Balance between content & activity | 55% |
| Wellness program aligned to MA standards | 91% | Coherence of curriculum and instruction among teachers of same course | 63% |
| Community agencies contribute to programming | 45% | Addresses need of students w/different abilities | 64% |
| | | Program incorporates interdisciplinary collaboration | 9% |
| Assessment | | Other | |
| Effective measurement of student learning & growth | 45% | Professional development meets teacher needs | 36% |
| Effective reporting of student learning and growth | 45% | Available collaboration time meets teacher needs | 45% |
| Existing assessment effective for gauging student learning | 54% | Facilities meets programmatic needs | 82% |
| Assessment effectively used to inform instruction | 45% | Reporting System (SB=Standards-based; PF=Pass/Fail; LG=Letter Grade; O=Other) | |
| | | | O LG PF SB |
| Grading practices accurately reflect student learning | 36% | Elementary | 9% X 27% 64% |
| | | Middle | 9% 64% 18% 9% |
| | | High | 9% 91% X X |

It seems that many districts are making progress with documenting their health and physical education curriculums as they grapple with aspects of instruction and assessment, including various reporting systems. Teachers are generally feeling a need for content based professional development and collaboration time. Most districts (82%) feel that their respective communities are supportive and value their wellness programs. However, about a third to a half of them, like Needham, have experienced some form of change in time allotted to health or physical education in recent years with a number of districts falling short of the AAHPERD (American Alliance for Health, Physical Education, Recreation and Dance) guidelines.

Time

We examined how the time allotted to the physical education program at each level in Needham compared to the time allotted to comparable programs in surrounding districts. Since schedules differed across schools, time reported was re-calculated as minutes per week for comparison purposes. Tables 5-7 below summarize the minutes per week allocated to physical education in elementary, middle and high schools in surrounding towns. The specific way time is scheduled in these districts appears in Appendix C.

At the elementary level, among the responding districts, students receive, on average, about 58 minutes of physical education per week in grades 1-5 and about 45 minutes per week in kindergarten.

Needham’s program is on par with other districts at grades 1 and 2, but falls short of the median by 15 minutes per week at the other grade levels.

Table 5: Elementary Physical Education Instructional Time Comparison—Minutes/Week

| | K | 1 | 2 | 3 | 4 | 5 |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Belmont | 60 | 60 | 60 | 60 | 60 | 60 |
| Dedham | 40 | 40 | 40 | 40 | 40 | 40 |
| Dover | 45 | 90 | 90 | 90 | 90 | 90 |
| Holliston | 50 | 50 | 50 | 50 | 50 | 50 |
| Lexington | 60 | 60 | 60 | 60 | 60 | 60 |
| Natick | 40 | 80 | 80 | 80 | 80 | 80 |
| Needham | 30 | 60 | 60 | 45 | 45 | 45 |
| Norwood | 30 | 30 | 30 | 45 | 45 | 67 |
| Sherborn | 40 | 40 | 40 | 40 | 40 | 40 |
| Walpole | 60 | 60 | 60 | 60 | 60 | 60 |
| Wayland | 30 | 45 | 45 | 45 | 45 | 45 |
| Weston | 60 | 60 | 60 | 60 | 90 | 90 |
| Range | 30-60 min/wk | 30-90 min/wk | 30-90 min/wk | 40-90 min/wk | 40-90 min/wk | 40-90 min/wk |
| Average | 45 min/wk | 56 min/wk | 56 min/wk | 60 min/wk | 59 min/wk | 61 min/wk |
| Median | 43 min/wk | 60 min/wk |
| AAPEHRD Recommendation | 60 min/wk |

At the middle school level, among the responding districts, students receive, on average about 97 minutes of physical education per week in grades 6, 7, and 8. Time allocated to physical education in grade 6 in Needham exceeds the average and is 5 minutes short of the average at grades 7 and 8. Time allocated to physical education at all middle school grades in Needham exceeds the median time of 88 minutes for this program at all middle school grade levels in comparable districts.

Table 6: Middle School Physical Education Instructional Time Comparison—Minutes/Week**

| | Grade 6 | Grade 7 | Grade 8 |
|------------------------|----------------|----------------|----------------|
| Belmont | 75 | 75 | 75 |
| Dedham | 75 | 75 | 75 |
| Dover-Sherborn | 113 | 113 | 113 |
| Holliston | 88 | 88 | 88 |
| Lexington | 100 | 100 | 100 |
| Natick | 100 | 83 | 83 |
| Needham | 113* | 90 | 90 |
| Norwood | 66 | 66 | 87 |
| Walpole | 165 | 165 | 165 |
| Wayland | 100 | 100 | 100 |
| Weston | 88 | 88 | 88 |
| Range | 66-165 min/wk | 66-165 min/wk | 75-165 min/wk |
| Average | 98 min/wk | 95 min/wk | 97 min/wk |
| Median | 100 min/wk | 88 min/wk | 88 min/wk |
| AAPEHRD Recommendation | 225 min/wk | 225 min/wk | 225 min/wk |

*Includes health education;

** schedules prorated to min/wk for comparison purposes.

At the high school level, among the responding districts, students receive, on average about 89 minutes of physical education per week in grades 9-12. Time allocated to physical education in grades 9-12 in Needham exceeds the average by 30 minutes per week and falls nearly at the top of the range of time allocated to this area of wellness for these districts.

Table 7: High School Physical Education Instructional Time Comparison—Minutes/Week**

| | Grade 9 | Grade 10 | Grade 11 | Grade 12 |
|------------------------|---------------|---------------|--------------|--------------|
| Belmont | 50 | 50 | 50 | 50 |
| Dedham | 100 | 100 | 65 | 87 |
| Dover-Sherborn | 109 | 109 | 109 | 109 |
| Holliston | 47 | 47 | 47 | 47 |
| Lexington | 100 | 100 | 100 | 100 |
| Natick | 98 | 98 | 98 | 98 |
| Needham | 119 | 119 | 119 | 119 |
| Norwood | 87 | 87 | 0 | 0 |
| Walpole | 126 | 126 | 126 | 126 |
| Wayland | 100 | 100 | 68* | 68* |
| Weston | 76 | 76 | 76 | 76 |
| | | | | |
| Range | 47-126 min/wk | 47-126 min/wk | 0-126 min/wk | 0-126 min/wk |
| Average | 88 min/wk | 92 min/wk | 86 *** | 88*** |
| Median | 100 min/wk | 100 min/wk | 94 min/wk | 98 min/wk |
| AAPEHRD Recommendation | 225 min/wk | 225 min/wk | 225 min/wk | 225 min/wk |

*includes health education; **schedules prorated to min/wk for comparison purposes. ***includes only districts offering PE

Overall programming time for physical education is a bit less than our comparable communities at the elementary level in grades K, 3, 4, and 5. It is relatively on par with these districts at the middle school level, and exceeds all but one of the districts at the high school. While the time allocated to the physical education program is fairly comparable to our neighboring districts, only about half of our parents feel that our programming provides the appropriate amount of time for students at each of the grade levels (41% K5; 58% MS; 66% HS). One parent of an elementary student summarized the sentiments of many others as to why they feel programming at that level is insufficient, noting that:

“Regular physical activity at school is important, although 45 minutes once a week is inadequate for having any positive impact on physical development. My daughter learned quite a lot from the 5th grade puberty unit. It gave a great opportunity for further discussion at home, though I was surprised to hear that the last three weeks were combined into one week. I am not sure of the impact.”—Elementary Parent

Summary

In examining other districts, we found many similarities with respect to the current state of wellness programming in Needham. The scope of the program, use of new technologies, increasing focus on the many dimensions of wellness are all issues that we and other districts are in the process of addressing. Since all districts have programs that live within the confines of their respective contexts, some are further along than others in addressing these issues and there are lessons to be learned from those who have gone before us. We are most interested in those communities who feel that they are exemplary, particularly in areas where we are still developing. Using the responses that districts provided, we will be contacting them to learn more about what they are doing so that it can help inform our work as we move forward.

Recommendations

- Explore some of the more innovative solutions within some selected districts to help inform our own decision-making.
- Explore possibility of expanding programming time at the elementary level to ensure at least compatibility to surrounding communities.

Student Learning



To examine the impact of the program on student learning and behavior, we looked to the MetroWest Adolescent Health Survey (MWHAS). This survey is an important initiative of the MetroWest Health Foundation (MHF) that supports community efforts to improve the health of youth in the region. Since 2006, the MWAHS has been administered every other year to students in grades 7-12 to monitor trends in health and risk behaviors and to identify emerging health issues at the local and regional levels. It has proven to be a valuable barometer of how effective our programming is with respect to addressing the instances of risky behaviors of secondary students in the areas of substance abuse, violence, bullying victimization, mental health, and physical activity/body weight. Table 8 provides a summary of our performance.

Table 8: MWHAS Trends in Key Indicators

| | 2006 | | 2012 | |
|--|-------------|-------------|-------------|-------------|
| | MS | HS | MS | HS |
| | % | % | % | % |
| Substance Abuse | | | | |
| Current cigarette smoking (past 30 days) | 3.4 | 12.9 | 1.6 | 5.5 |
| Current alcohol use (past 30 days) | 8.1 | 45.2 | 6.2 | 34.9 |
| Current marijuana use (past 30 days) | 2.6 | 24.8 | 1.9 | 19.4 |
| Violence | | | | |
| Physical fighting (past 12 months) | 45.4 | 20.3 | 39.3 | 12.8 |
| Physical fighting on school property (past 12 months) | 20.3 | 6.9 | 9.5 | 4.1 |
| Bullying Victimization | | | | |
| Bullying victim (past 12 months) | 46.1 | 29.0 | 22.2 | 20.1 |
| Bullying victim on school property (past 12 months) | 41.0 | 25.1 | 16.5 | 15.7 |
| Cyberbullying victim (past 12 months) | 17.3 | 15.1 | 14.6 | 15.9 |
| Mental Health | | | | |
| Life "very stressful" (past 30 days) | 12.4 | 32.4 | 10.2 | 26.8 |
| Depressive symptoms (past 12 months) | 12.8 | 19.5 | 8.6 | 14.1 |
| Physical Activity & Body Weight | | | | |
| Exercised for >=20 min on 3 or more days/week | 81.3 | 33.8 | 83.7 | 57.5 |
| Overweight or obese | 16.3 | 16.8 | 16.8 | 15.7 |
| Sexual Behavior | | | | |
| Currently sexually active (past 3 months) | | 15.9 | | 15.0 |
| Condom use at last intercourse (among sexually active youth) | | 64.8 | | 66.5 |

The data indicates positive trends in nearly all categories at both the middle and high school levels. Only cyberbullying at the high school and body weight at the middle school have increased slightly over the six-year period. It appears that students are learning and have been exhibiting improved behaviors. Although it is hard to make causal inferences with respect to many behaviors that happen out of school, we do hope that the concepts, lessons, and activities that occur within the context of the wellness program are affecting students' behaviors beyond the classroom in positive ways.

Appendix A: Physical Education in the U. S.

Since the 2006 *Shape of the Nation Survey*, there have been areas of both improvement and decline in physical education programs in the U. S. Some notable areas of change are highlighted below:

In 2012, the majority of the states (74.5%) mandate physical education in elementary, middle, and high school, but most do not require a specific amount of instructional time and more than half allow exemptions waivers and/or substitutions.

Table 9: State Mandate Physical Education Instruction

| State Mandated PE Instruction | # States 2012 | % States 2012 | # States 2010 | % States 2010 | # States 2006 | % States 2006 |
|-------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Elementary Schools | 43 | 84.3% | 43 | 84.3% | 36 | 70% |
| Middle Schools | 41 | 80.4% | 40 | 75.5% | 33 | 65% |
| High Schools | 44 | 86.3% | 46 | 90.2% | 42 | 83% |

States mandating physical education in elementary schools (84.3%) has not changed since 2010. However, since 2006, there has been an increase in states requiring physical education at each of the levels. This may be, in part due to a surge of research that associates physical activity with a wide range of positive outcomes ranging from health (e.g., decrease in obesity, increase in bone mass, increase in heart health, etc.) to learning (e.g., better focus, facilitates the development of new neuro pathways in the brain, higher test scores, etc.). Massachusetts is one of five states that mandates physical education in every grade.

Only about one-third of the states specify a minimum number of minutes “per week” or “per day” that students must participate in physical activity. From among these states, the time for elementary students ranged from 30 to 150 minutes per week and 44 –225 minutes per week for middle school students. State mandates for physical education for high school tend to specify a number of credits rather than specific grade levels required to take physical education courses. Of the forty-five states requiring high school physical education, nearly 75% dictate a specific number of credits required for graduation. Massachusetts does not specify the number of physical education credits required for graduation but Massachusetts law does state that *“Physical education shall be taught as a required subject in all grades for all students in the public schools for the purpose of promoting the physical well-being of such students.”*

With no clear mandate from the state or federal government, the amount of time devoted to physical education in the public schools in Massachusetts is left up to each local municipality. This results in a wide variety of experiences for our Nation’s youth.

Although federal and state laws suggest that physical education should hold a place of importance in the public school system, many school districts undermine the goals of the program by allowing substitutions or waivers. More than half of all states (33) permit school districts or schools to allow students to substitute other activities for their required physical education credits. Common allowances include Junior Reserve Officer Training Corps (JROTC) (18); interscholastic sports (18); marching band (13), cheerleading (11); and community sports (4). The American Alliance for Health, Physical Education, Recreation and Dance (AHPERD) takes a strong stance against this practice, “Classes and activities that provide physical activity (e.g., marching band, ROTC, cheerleading, school and community sports) have important but distinctly different goals than physical education. Any opportunity for students to participate in sustained periods of meaningful physical activity can be valuable for their health and fitness, but these activities do not provide the content of a comprehensive, standards-based physical education program and thus should not be allowed to fulfill a physical education requirement.⁵” As mentioned above, the Needham Public Schools have developed a strong wellness program with unique goals for their physical education and health programs that promote optimal health and wellness. These goals cannot be met through substitutions.

⁵ American Alliance for Health, Physical Education, Recreation and Dance (AHPERD) <http://www.aahperd.org/whatwedo/advocacy/>

Half of the states require some form of state-wide assessment in physical education. Assessment requirements range from physical fitness (14); knowledge of physical education content (10); performance of motor/movement skills and personal and social responsibility (9); participation in physical activity outside of physical education class (8); and valuing physical activity (7).

Table 10: State Mandated Assessments

| | # States 2012 | %States 2012 | # States 2010 | %States 2010 | # States 2006 | %States 2006 |
|-------------|----------------------|---------------------|----------------------|---------------------|----------------------|---------------------|
| Assessments | 26 | 50.9% | 19 | 37.3% | 15 | 29% |

Over the last six years, state requirements for some form of assessment in physical education has nearly doubled. Currently, twenty-six states now require physical education grades to be included in a student's grade point average (GPA). This is up from fourteen states in 2010. Massachusetts is not among these states.

Appendix B: Needham’s Wellness Policy

| | | | |
|---|---------------------|------------------------|-------------------|
| SCHOOL COMMITTEE POLICY NEEDHAM PUBLIC SCHOOLS | | FILE | ADF |
| Policy for: | | SCHOOL WELLNESS | Revision 1 |
| Date Approved by School Committee: | Signature of Chair: | | Page 29 of 34 |
| December 4, 2012 | Heidi Black | | |

The Needham Public Schools (NPS) Wellness Policy is consistent with Federal and State laws and regulations that promote curriculum and programs for nutrition standards, promotion and education; physical activity and physical education; and other school based wellness activities.

School Wellness Advisory Committee (SWAC)

NPS maintains a standing School Wellness Advisory Committee (SWAC) in accordance with Federal and State regulations. The role of the SWAC is to recommend, review, and help promote school district policies addressing issues that affect students’ physical, social, and emotional health and wellbeing. Specific goals are addressed in an annual action plan that is monitored, implemented, assessed and shared with the School Committee.

The Superintendent appoints the NPS Directors of Nutrition Services, Health Services, Wellness, and Guidance to lead SWAC and to serve as liaisons between SWAC and the Superintendent. The Superintendent also appoints the annual SWAC membership which includes (but is not limited to) a school nurse, nutrition services personnel, wellness teacher, guidance counselor, school physician, administrator, School Committee member, parent, student, Needham Health Department personnel, a local health care provider, other community agency personnel and partners serving Needham’s youth. When possible, appointees to the SWAC represent the cultural, linguistic and ethnic composition of the community. SWAC works in conjunction with school-based wellness teams to foster wellness initiatives.

Annual goals and objectives for SWAC are established with input from the school community, student and public health data, and information about current school district programs and practices. SWAC meets at least four times a year, and evaluates the achievements of wellness goals, objectives, and action plan by assessing outcomes of education, wellness and other school-based initiatives promoting student health, social, emotional, nutrition, physical activity and physical education.

Nutrition Standards

NPS complies with DPH 105 CMR 225.000: the Nutrition Standards for Competitive Foods and Beverages in Public Schools, and national nutrition standards per the Healthy, Hunger- Free Kids Act (HHFKA) of 2010. The School Nutrition Standards apply to the primary sources of competitive foods and beverages, including all foods and beverages sold as a la carte items in cafeteria, vending machines, and school stores or snack bars. The time frame to which the nutrition standards apply is the school day itself and the 30-minute period directly prior to and following the school day. The Nutrition Standards for Competitive Foods in Schools do not apply to foods and beverages in curriculum related classroom-based activities, special school-sponsored events, and fundraising activities, including bake sales. The sales of competitive foods and beverages for fundraising purposes, including bake sales, are not permitted district wide during the school day, nor at the preschool-elementary schools during the 30-minute period directly prior to and following the school day. Non-curriculum related classroom-based celebrations and parties are food and beverage free. Foods or beverages are not used as a reward or incentive, except as documented in a child’s Individual Education Plan. It is encouraged that foods and beverages sold or provided during activities held beyond the school day offer options which meet the nutrition standards.

The Director of Nutrition Services provides the oversight, direction, and management of the National School Lunch Program in NPS that meets or exceeds the required guidelines and nutrition standards of the Richard B. Russell National School Lunch Act, The Child Nutrition and WIC Reauthorization Act of 2010, and the HHFKA of 2010.

Physical Activity

NPS embraces a comprehensive school physical activity program that encompasses physical activity programming before, during, and after the school day. In addition to their regularly scheduled physical education classes, the NPS encourages opportunities for all students to have activity breaks, daily recess periods at the elementary school level, and the integration of physical activity into the academic curriculum where appropriate. Administering or withholding physical activity as a form of punishment and/or behavior management is discouraged

Physical Education

The goals and implementation of a K-12 sequential physical education curriculum align with Massachusetts General Laws and the Massachusetts Curriculum Frameworks. The physical education program is offered to all students, including those with disabling conditions, chronic health conditions, and special needs. Participation in the School Committee approved physical education program is required and consistent with Massachusetts General Law.

Health Education

NPS provides a health education program designed to help students make good decisions and practice healthy behaviors. The health education program is aligned to the Massachusetts Comprehensive Health Education Frameworks.

Nutrition Promotion and Education

Nutrition education and promotion are designed to achieve standards of the Massachusetts Comprehensive Health Curriculum Framework. Where appropriate, nutrition concepts are integrated into the curriculum and also offered via nutrition promotion as part of the school lunch program.

Other School-Based Initiatives to Promote Wellness

Professional development and training are offered to address wellness topics including nutrition and diet, management and treatment of students at risk for childhood obesity, type 2 diabetes, and eating disorders. In addition, school-based wellness initiatives may address other health, safety, social, and emotional issues, including but not limited to risky behaviors, substance abuse, tobacco prevention, bullying prevention, sex education, and stress reduction. Collaboration with families and community is encouraged to support children's nutrition, lifelong physical activity, and healthy lifestyle.

Legal References:

Federal

Healthy, Hunger- Free Kids Act (HHFKA) of 2010

The Richard B. Russell National School Lunch Act, 42 U.S.C. §§ 1751 - 1769h

The Child Nutrition and WIC Reauthorization Act of 2010

State

MA Comprehensive Health Curriculum Framework, 1999

MGL School Nutrition Law, Chapter 111 Section 223;

MGL Public Schools- Physical Education, Chapter 71, Section 3

Massachusetts Department of Public Health, 105 CMR 215.000 Standards for School Wellness Advisory Committee 2011;

105 CMR 225.000 Nutrition Standards for Competitive Foods and Beverages in Public Schools. 2011;105 CMR 200.000 Physical Examination of School Children

Appendix C: Other Districts—Time

The following tables summarize how surrounding districts schedule time for physical education at each of the levels.

Table 11: Elementary Physical Education Instructional Time Comparison—Minutes/Week

| | K | 1 | 2 | 3 | 4 | 5 |
|-----------|--------------|--------------|--------------|--------------|--------------|------------------|
| Belmont | 2x30 | 2x30 | 2x30 | 2x30 | 2x30 | 2x30 |
| Dedham | 1x40 | 1x40 | 1x40 | 1x40 | 1x40 | 1x40 |
| Dover | 1x45 | 2x45 | 2x45 | 2x45 | 2x45 | 2x45 |
| Holliston | 1x50 | 1x50 | 1x50 | 1x50 | 1x50 | 1x50 |
| Lexington | 2x30 | 2x30 | 2x30 | 2x30 | 2x30 | 2x30 |
| Natick | 1x40 | 2x40 | 2x40 | 2x40 | 2x40 | 2x40 |
| Needham | 1x30 | 2x30 | 2x30 | 1x45* | 1x45* | 1x45* |
| Norwood | 1x30 | 1x30 | 1x30 | 1x45 | 1x45 | 2x40/6 day cycle |
| Sherborn | 1x40 | 1x40 | 1x40 | 2x40 | 1x40 | 1x40 |
| Walpole | 2x30 | 2x30 | 2x30 | 2x30 | 2x30 | 2x30 |
| Wayland | 1x30 | 1x45 | 1x45 | 1x45 | 1x45 | 1x45 |
| Weston | 2x30 | 2x30 | 2x30 | 2x30 | 2x45 | 2x45 |
| | | | | | | |
| Range | 30-60 min/wk | 30-90 min/wk | 30-90 min/wk | 40-90 min/wk | 40-90 min/wk | 40-90 min/wk |
| Average | 45 min/wk | 56 min/wk | 56 min/wk | 60 min/wk | 59 min/wk | 61 min/wk |
| Median | 43 min/wk | 60 min/wk |

*reduced from 60 minutes (2x30 minutes) to 45 minutes per week in FY'07 budget. Includes both health & physical education

Table 12: Middle School Physical Education Instructional Time Comparison—Minutes/Week**

| | Grade 6 | Grade 6 Min/Wk | Grade 7 | Grade 7 Min/Wk | Grade 8 | Grade 8 Min/Wk |
|--------------------|---------------------------|---------------------------|---|---------------------------|--------------------------|---------------------------|
| Belmont | 2x45/6 day cycle | 75 | 2x45/6 day cycle | 75 | 2x45/6 day cycle | 75 |
| Dedham | 2x45/6 day cycle | 75 | 2x45/6 day cycle | 75 | 2x45/6 day cycle | 75 |
| Dover- Sherborn | 3x52/7 day cycle | 113 | 3x52/7 day cycle | 113 | 3x52/7 day cycle | 113 |
| Holliston | 3x 35/6 day cycle | 88 | 3x 35/6 day cycle | 88 | 3x35/6 day cycle | 88 |
| Lexington | 2x50 | 100 | 2x50 | 100 | 2x50 | 100 |
| Natick | 2x50 | 100 | 1x50/3 day cycle | 83 | 1x50/3 day cycle | 83 |
| Needham | 1x45/alternate days*** | 113* | 1x54 /alternate days 2 trimesters**** | 90 | 2x54 /3 day cycle**** | 90 |
| Norwood | 2x40 /6 day cycle | 66 | 2x40 /6 day cycle | 66 | 2x60 /7 day cycle | 87 |
| Walpole | 3x55 | 165 | 3x55 | 165 | 3x55 | 165 |
| Wayland | 100 min/wk* | 100 | 100 min/wk* | 100 | 100min/wk* | 100 |
| Weston | 2x44 | 88 | 2x44 | 88 | 2x44 | 88 |
| | | | | | | |
| Range | 66-165 min/wk | | 66-165min/wk | | 75-165 min/wk | |
| Average | 98 min/wk | | 95 min/wk | | 97 min/wk | |
| Median | 100 min/wk | | 88 min/wk | | 88 min/wk | |

*includes health education;

** schedules prorated to min/wk for comparison purposes.

***reduced from every-other day when 6th grade moved to the High Rock School;

****reduced by one-third in 2012 with Pollard adopted a new schedule. Experiential Ed. added at grade 8.

Appendix C: Other Districts—Time (continued)

Table 13: High School Physical Education Instructional Time Comparison—Minutes/Week**

| | Grade 9 | Grade 9 Min/Wk | Grade 10 | Grade 10 Min/Wk | Grade 11 | Grade 11 Min/Wk | Grade 12 | Grade 12 Min/Wk |
|--------------------|--|-------------------|--|--------------------|--|--------------------|--|--------------------|
| Belmont | 2x50/semester | 50 | 2x50/semester | 50 | 2x50/semester | 50 | 2x50/semester | 50 |
| Dedham | 2x69/7day cycle | 100 | 2x69/7day cycle | 100 | 1x90/7day cycle | 65 | 1x120/7day cycle | 87 |
| Dover- Sherborn | 3x57/8 day cycle | 109 | 3x57/8 day cycle | 109 | 3x57/8 day cycle | 109 | 3x57/8 day cycle | 109 |
| Holliston | 1x77/day /half quarter | 47 | 1x77/day /half quarter | 47 | 1x77/day /half quarter | 47 | 1x77/day /half quarter | 47 |
| Lexington | 2x50/year | 100 | 2x50/year | 100 | 2x50/year | 100 | 2x50/year | 100 |
| Natick | 5x78/10 day cycle/semester | 98 | 5x78/10 day cycle/semester | 98 | 5x78/10 day cycle/semester | 98 | 5x78/10 day cycle/semester | 98 |
| Needham | 2x90/7 day cycle/semester 3x50/7 day cycle/semester | 119 | 2x90/7 day cycle/semester 3/50/7 day cycle/semester | 119 | 2x90/7 day cycle/semester 3x50/7 day cycle/semester | 119 | 2x90/7 day cycle/semester 3x50/7 day cycle/semester | 119 |
| Norwood | 2x60/7day cycle | 87 | 2x60/7day cycle | 87 | Not Offered | 0 | Not Offered | 0 |
| Walpole | 5x70/7day cycle/ semester | 126 | 5x70/7day cycle/ semester | 126 | 5x70/7day cycle/ semester | 126 | 5x70/7day cycle/ semester | 126 |
| Wayland | 100 min/wk* | 100 | 100 min/wk* | 100 | 68 min/wk* | 68 | 68 min/wk* | 68 |
| Weston | 1x76/year | 76 | 2x76/semester | 76 | 2x76/semester | 76 | 2x76/semester | 76 |
| | | | | | | | | |
| Range | 47-126 min/wk | | 47-126 min/wk | | 0-126 min/wk | | 0-126 min/wk | |
| Average | 88 min/wk | | 92 min/wk | | 86 *** | | 88*** | |
| Median | 100 min/wk | | 100 min/wk | | 94 min/wk | | 98 min/wk | |

*includes health education; **schedules prorated to min/wk for comparison purposes. ***includes only districts offering PE

Appendix D: Space Constraints

Space constraints coupled with increased student enrollment is impacting programming within the wellness program. A summary of the current situation at each of the levels is provided below:

Elementary Schools: Gymnasium space at the elementary level is exceedingly tight. Both the Hillside School and the Mitchell School have small gyms. Both are too small to allow for a regulation basketball court, which gives some perspective of their inadequate size. In addition, overcrowding at the Newman School is beginning to have a negative impact on the physical education program there. An increased number of classrooms, plus the need to share the gymnasium with the preschool program, has resulted in having to schedule more than one class in the gym at a time. When this happens, a curtain is pulled across the half court line and two separate classes are taught on either side. This cuts the available gym space in half, which limits students' practice opportunities. This practice is disruptive to both students and teachers as the noise level in a movement class is loud. Students get distracted and find it difficult to focus while teachers find it difficult to provide ongoing verbal feedback to individual learners.

High Rock: The gymnasium is very small (does not fit a regulation sized basketball court). Consequently, activities have to be modified and/or students have to wait their turn to participate in some games and activities.

Pollard: There are two full-sized gyms at this school. Current practice is to assign 3 sections of physical education to these two spaces during most periods. As a result, teachers must share gym space with other classes. The current schedule has no elective classes meeting during two periods in the middle of the day on both A and B days so all physical education classes are scheduled into the first two periods of the day and the last two periods of the day. Given that there are 3 sections of physical education classes meeting in the gyms at one time, there can be upwards of 75-85 students and three teachers in the two gyms simultaneously. The space limits the number of handball courts (4), basketball courts (4), volleyball courts (5), etc. that can be set up. As a result, team sizes are very large which means that fewer students have opportunities to practice skills. In addition, groups of students end up sitting out waiting for their turn to play for part of their class time. Out of necessity, managing students to ensure safety becomes a primary focus and teaching and learning become a secondary focus. This is especially true for eighth grade classes because the students are physically larger.

High School: Renovations were completed on Needham High School in 2009. This included new facilities and teaching spaces that allowed expansion of the wellness curriculum. Among the new high school facilities were a second gymnasium with a high ropes course, a wellness studio, a fitness center, and three classrooms (one of which was converted to a spinning room). In spite of these new state-of-the-art facilities, an increase in the student population is beginning to have a negative effect on the program. Teachers are starting to have to share space and it is becoming more and more difficult to schedule all students into the core curriculum units. This problem is expected to increase over the next several years as the student population continues to grow. The new design was built to accommodate 1450 students. The student population for 2018-2019 school year is projected to be 1770.

Appendix E: Methodology

Data collection included the following:

Materials Reviewed:

- State/National frameworks
- Needham curriculum maps
- Curriculum materials
- Assessment results
- Class assignments, rubrics, other assessments

Surveys:

- K-12 Wellness Teachers
- High School Junior and Senior Students
- Middle School Students (Grade 8)
- Elementary School Students (Grade 5)
- K-12 Parents
- Wellness Department Directors in other districts

Focus Groups

- K-12 Principals/Assistant Principals