

MIDDLE SCHOOL TASK FORCE REPORT

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Middle School Task Force Report

“Good large middle schools are an oxymoron.”

- Ted Sizer

Introduction

In response to the significant problems with overcrowding at the Pollard Middle School, Stephen Theall, Superintendent of Schools, formed a task force to address the issues. In December, 2000, this Task Force made a series of recommendations for short-term answers; however, we were also charged with finding a more permanent solution to the problem. The specific charge to the task force was:

- 1) To review the literature/research concerning the relationship of middle school size, enrollment, and program efficacy;
- 2) To consult, visit, and document program effectiveness in varying size middle schools in reasonable proximity to Needham;
- 3) To review and interpret various existing studies and documents developed on behalf of the Needham Public Schools;
- 4) To survey, conduct open forums, and gather qualitative data concerning the expectations and interests for middle school education among existing preschool, elementary, middle, and high school parents, and greater community by September 1, 2001;
- 5) To develop a set of recommendations and options for the School Committee to consider regarding program and facility needs for the next five to fifteen years.

Background

In 1960, Needham had two junior high schools--Highland Avenue Junior High with an enrollment of 417 and Pollard Junior High with 861 students, for a total enrollment of 1278. The Newman Junior High School was opened in 1962 with 577 students, and Pollard was downsized through redistricting to 688; therefore, the total junior high population was 1265 students. Enrollments continued to increase until 1969 when the Newman had 1013 students; and Pollard, 838; for a total of 1851. In 1981, the two junior high schools were converted to middle schools that housed grades six through eight instead of seven through nine. Enrollments soon began to decline, and the Newman Middle School was closed in 1986. The Pollard Middle School then housed all of the 834 grade 6-8 students. Student numbers hit a low of 798 students in 1989. During the 90's enrollments steadily increased.

In 1990, the Needham Public Schools engaged Anthony Tappe and Associates, Inc. to review and document the physical conditions of the various public school buildings as well as to determine the space needs for the projected expansion of the student and teacher populations. The Tappe report predicted a student of population of approximately 1050 middle school students by the end of the decade. This figure was very similar to the projections of the Future School Needs

Committee. In order to provide adequate space for this size population, the Tappe report said, "Without consideration of the size of instructional rooms needed to meet Regulations for the Massachusetts Board of Education, there is a need for at least 12 instructional rooms by the late 1990's." It should be noted that the space needs were based on 25 students per class in grade 6 and 22 in grades 7 and 8.

In order to meet this need for more space as well as to upgrade many of the systems in the 1958 structure, Pollard was renovated in the mid-nineties. The 1995 renovation added five classrooms and a new media center. Initial plans for the construction called for 20 classrooms, but that number was scaled back to 10 and then to 5 due to financial considerations.

The student capacity for the renovated structure was projected to be 982; however, a study by Kaestle Boos Associates, Inc. for the 1999 Needham Townwide Comprehensive Facilities Study found that the building had an existing space deficit of 8,168 sq. ft. Thus, the actual building capacity is 922. The current enrollment at Pollard is 1,051, and the 2001-02 projected enrollment is 1083. The enrollment is then projected to fluctuate slightly between a high of 1,073 in 2002-03 and a low of 998 in 2005-06 before beginning to rise again to 1,050.

The Problem

The Pollard Middle School is significantly overcrowded. The Building Capacity Utilization is currently 107%. Next year it will be 110%. Recommended utilization is 90%. In order to meet guidelines from the *Regulations Governing the School Building Assistance Act*, the Middle School currently needs 21,803 sq. ft. of additional space; and the 1999 Kaestle Boos study called for another 5,050 sq. ft. for an optimal program. For a full discussion of the impact of overcrowding, please see the December 2000 Middle School Task Force Report; however, a brief summary follows:

- Many teachers do not have their own classrooms; and, even with sharing spaces, there are times when there are no available rooms.
- Space restrictions often impact on the ability of teachers to use innovative teaching approaches (e.g., use of technology, flexible grouping, project-based learning, wet labs.)
- There is a severe shortage of meeting spaces, offices, and teacher work rooms.
- Special education classes have inadequate spaces. There are also no individual testing areas. It is likely that these deficiencies will be cited in the next program audit.
- The auditorium and cafeteria cannot meet the needs of the school.
- There is insufficient storage space. Book and storage rooms have been converted to offices and instructional areas.
- Hallways and common areas are overcrowded and pose potential safety issues.

- The parking area cannot meet the needs of the middle school community.

The Process

The eleven members of the Middle School Task Force have been meeting since the beginning of the school year, and we reported to the School Committee in December about our analysis of the problem and short-term recommendations. Since January, we have been meeting to consider long-term solutions. We focused on four options:

- * Maintaining Status Quo
- * Portable Classrooms
- * An Addition to the Pollard Building
- * A Second Middle School

To analyze these options, we focused on three tasks:

- 1) We surveyed Pollard faculty members to obtain more detailed information about the impact of overcrowding at the Middle School.
- 2) We conducted research about school size and its relationship to educational efficacy.
- 3) We surveyed neighboring towns to determine if they were experiencing similar difficulties and how they were addressing the problem.

The results of each of these activities are described below:

Staff Survey

The Task Force surveyed the Middle School staff to gather their impressions about the impact of overcrowding. The questionnaire elicited a range of responses, but there was widespread agreement that the lack of space is beginning to impact education as well as morale. The staff offered a number of examples:

- Taking space away from the media center for two classrooms (inner space and the newly created classroom) will be very problematic. It will be impossible to keep the classes from disrupting the quiet, focused atmosphere of the media center; and the comings and goings in the media center will obviously be a distraction to students in the classes. In addition, it will be much more difficult for multiple classes to use the media center at the same time because of reduced space.
- The loss of a computer lab has significantly impacted the use of technology. In the 2000-01 school year, one of the two labs had to be converted to other uses.
- Sharing rooms with other teachers is difficult. When teachers must leave their rooms, there are no good work spaces in the Pollard building. For the traveling teacher, carrying materials from room to room affects planning as well as the use of the classroom for display of student work

or visual cueing. It is very hard to anticipate the resources and materials which will be needed for every class. It severely limits the flexibility of the teacher to use the “teachable moment” or to respond to particular situations.

- Loss of the media center and constant use of the Science Lecture Hall limit possibilities for integrated learning experiences or multiple class activities.
- Teaching science in a non-laboratory setting is extremely burdensome. For example, buckets of water are being used instead of sinks.
- There are no specialty rooms available for small group instruction, meetings, guidance groups, etc,
- Space limitations impact the type of instruction which is possible. Classroom teaching is becoming more teacher directed; and there are fewer occasions for discovery learning, group activities, differentiated instruction, and project based learning.
- Crowded halls, cafeterias, and classrooms mean that students are constantly overstimulated. The day feels hectic and stressful.
- There are not enough staff bathroom facilities available.
- The Pollard Health and Safety Committee has issued a statement that the health and safety of faculty and students are compromised by the overcrowded conditions.

Research Concerning School Size

Research clearly indicates the benefits of smaller schools. In an article by Kathleen Cotton, she states that she has found 103 documents identifying a relationship between school size and some aspect of schooling. Traditionally, people have believed that smaller elementary schools were better; but larger middle and high schools were more acceptable. However, school size research suggests that positive impacts of small school size increase as students get older. (Galletti, 1998). Deborah Meier, Senior Fellow of the Annenberg Institute at Brown University, says, “Small schools come as close to being a panacea for American’s educational ills as we’re likely to get.” These benefits generally fall into seven areas:

- *Governance.* When a school is small enough for an entire faculty to meet and work together, people are more likely to participate in problem solving, communication is enhanced, and morale is improved. There are research studies in group efficacy which demonstrate that smaller faculty groups are significantly more effective. (Meier, 1996) A study by Valerie Lee and Julie Smith indicates that large schools are actually more expensive because they require more administrative support. In larger schools, faculty is much more likely to have negative perceptions of administration. (Galletti, 1999)
- *Safety.* With the mounting concern about violence in our schools, there is clear evidence that small schools have fewer incidents of violence. (Stockard and Mayberry, 1992) Several of the

examples of violence around the country tell stories of students who feel alienated and isolated. In a smaller school, it is much easier to facilitate relationships and guard against anonymity. Strangers are also more easily identified, and people tend to take greater ownership for the well being of the group. Studies also indicate that vandalism and rudeness and negative social behaviors decrease in smaller schools. (Kershaw and Blank, 1993) Students feel more connected to their peers as well as to adults and are much less likely to engage in anti-social behavior. The sense of belonging increases for the students.

- *Student Growth and Learning.* Research is beginning to indicate that there is a direct relationship between smaller schools and higher achievement. This is particularly so with minority students and at risk populations. (Raywid, 1996; Rotherham, 1999) Part of the reason seems to be that teachers in small schools are more likely to use good teaching practices (e.g., forming teaching teams, integrating disciplines, using differentiated instruction, making learning meaningful, using authentic assessment). In addition, larger schools mean less flexibility and risk-taking. Studies also indicate that attendance is better at smaller schools. (Fowler, 1995) Students in smaller schools are more likely to participate in clubs, sports, and other extracurricular activities. (Stockard and Mayberry, 1992)
- *Parental Involvement.* Smaller schools are less intimidating. Parents are more likely to participate in events, activities, and volunteer opportunities. (Cotton, 1999) They are also more likely to develop relationships with other parents. There have been many studies over the years which indicate that there is a positive relationship between parental involvement and student achievement. Several studies also demonstrate that parents often choose private or charter schools for their children because of school size. (Rotherham, 1999)
- *Accountability.* In the community focus groups which were conducted last fall, we learned that people find their own personal experiences much more meaningful than test scores or other types of data concerning our schools. In a smaller school, parents can walk around, listen to students and teachers, and form their own perceptions about the school. They are less dependent upon statistics and charts. Moreover, a smaller school makes it possible for a principal to be much more involved in classes and to have a better sense of teachers and their work. Difficulties can be identified earlier, and teachers can receive more support.
- *Culture.* Small schools feel friendlier and help students and parents to be more comfortable. As Ted Sizer states, "Bigness all too readily signals a need for order--crowd control, some call it--and order all too usually implies standardized routines and a rule-driven, impersonal school culture." Small schools help engender responsiveness and mutual support.
- *Collegiality.* Teachers get to know and trust their colleagues in a smaller school. They are much more likely to engage in peer support. There is research that teacher morale is higher, more teachers engage in collaborative problem solving and integrated curricular efforts, and there is more peer accountability. (Meier, 1966)

There has also been much discussion about what is a "small" school versus a "large" school. In other words, when does size begin to make a difference? A study conducted by the National Association of Secondary School Principals in 1992 (Valentine, et.al., 1993) concluded that the

optimal middle school size was 400 to 600 students. With fewer than 400 students, it is hard to offer a comprehensive program and a range of academic and social options for students. After 600 students, principals reported that impact of a small school was lost and that they were no longer instructional leaders but rather had become program managers.

The Task Force also spoke to educational leaders in Newton where middle schools range greatly in number of students to determine when size begins to make a difference. These administrators said that overcrowding in any school was the greatest obstacle to good education. Newton's smallest middle school also has the least space; consequently, they have the largest class sizes, teacher caseloads of greater than 100, and many constraints on programming. Newton officials also reported more difficulty making changes, creating a welcoming environment, and supporting education in its larger middle schools. To deal with these problems, Newton is planning a middle school redistricting next year.

Survey Information from Neighboring Town

The Task Force sent a questionnaire to those nearby towns which had a middle school structure asking for information about their enrollments, problems with overcrowding, and plans to deal with the problem. The chart below gives information about enrollments in these school systems.

Concord	680
Framingham	998 (Fuller); 846 (Walsh)
Lexington	737 (Diamond); 776 (Clarke)
Medfield	720 (grades 6-8)
Natick	704 (Kennedy); 663 (Wilson)
Needham	1083
Newton	463 (Bigelow); 757 (Brown); 844 (Day); 621 (Oak Hill)
Walpole	450 (Johnson); 450 (Bird)
Wayland	682
Wellesley	869
Weston	558
Westwood	529 (99/00); 601 (00/01); 630 (01/02)

The survey also yielded some interesting data about overcrowding problems. Every town indicated an expanding population, but school systems were at different places in their responses to the problem:

- Newton has recently opened a new middle school. It is also redistricting to alleviate crowding in some of its buildings.
- Framingham opened a new sixth grade school last year. It will be adding seventh and eighth grade classes over the next two years, thus reducing the populations in its two current middle schools.

- Concord is building an additional 800-student middle school.
- Weston has already completed an addition to its middle school. Westwood added 8 classrooms in 1998 but still anticipates the need for portable classrooms beginning next year.
- Lexington, Wayland, and Wellesley are in the process of making additions and renovations to handle the increased enrollment. The Wellesley Middle School \$34 million renovation is to reclaim space used by central administration and the preschool program.
- Medfield has a \$49.6 million renovation project which involves moving the middle school to the current high school.
- Walpole has already moved one grade from its middle schools back to the elementary level where they are expanding two schools. Despite this action, they are still experiencing problems and are converting existing spaces.

The survey results indicate to us that overcrowding problems are very common in other suburban communities. All of the towns have or are in the process of adding schools or renovating existing buildings.

With an enrollment of 1054, Pollard is one of the largest middle schools in the area. This information led the Task Force to look at the enrollments for every middle school in the state. We found only 12 middle schools with an enrollment higher than 1000. According to the 2000 figures available from the Department of Education, the schools and their populations are:

Belmont (5-8)	- 1144
Dartmouth	- 1053
East Bridgewater	- 1033
Marlborough	- 1184
North Andover	- 1023
North Attleborough	- 1118
Peabody	- 1518
Salem	- 1095
Shrewsbury	- 1036
Stoughton	- 1050
Wakefield	- 1108

The Task Force also surveyed these communities to determine what, if anything, they were doing about their large student populations. Eight of the eleven superintendents responded. Three of these systems (Peabody, North Andover, and Belmont) said that their middle school buildings had sufficient space to handle their student populations. Salem had just constructed an additional K-8 school which has helped to reduce the pressure on its middle school. In Dartmouth, they are building a new high school and converting the current high school into a larger middle school. Shrewsbury already has 10 portable classrooms at its middle school and is adding more for this

school year. The town recently committed \$100 million to add a new elementary school, to build a new high school, and to convert the current high school into a new middle school. Both Wakefield and Stoughton have significant problems with overcrowding, and both have formed study committees to make recommendations for addressing the issue.

Recommendations

The Task Force recognizes that there are many projects competing for limited financial resources; nonetheless, based on our research and analysis, the Task Force strongly and unanimously recommends the creation of a second middle school. We believe the reasons are clear:

- 1) The need for more space is impacting the quality of education for our students and the morale of our staff.
- 2) Research suggests that there could be many significant enhancements to the educational experiences of our children with two smaller schools.
- 3) A second middle school will provide more flexibility for future changes in enrollment, afterschool programs, educational initiatives, and community use.

Although a building addition or use of portable classrooms could help alleviate some of the space problems, these solutions are seen as less desirable for the following reasons:

- Increasing the capacity of the present building addresses some of the space needs; however, it would not produce the benefits associated with two smaller schools. The research described above clearly indicates the desirability of smaller schools.
- An addition to the Pollard School will not alleviate overcrowding problems associated with certain areas of the building (e.g., cafeteria, halls, auditorium, parking lots). Furthermore, the Kaestle Boos architectural study raised significant issues about the desirability of adding on to the Pollard building.
- Adding on to the present Pollard building raises many questions about logistics (e.g., where to house students during the renovation) as well as about the possibility of revisiting past environmental issues caused by the last renovation to the building.

We understand that many obstacles must be overcome to create a second middle school. These include convincing the community of the need, obtaining funding, finding a site, and handling the numerous logistical and programmatic issues. However, as a Task Force, we believe that the community and staff of Needham deserve the type of facilities necessary to provide a quality educational program; and we are available to assist in this process in any way that can be useful.

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