

# When Funding is Scarce: Making the Best Use of Existing Facilities

By Amy Yurko, AIA

*In this environment of economic uncertainty, school districts can be faced with tough decisions in their attempts to provide students and teachers with safe and functional facilities for teaching and learning. To accommodate program changes and enrollment fluctuations as well as aging facilities and limited capital budgets, it is increasingly important to find ways to get the most from existing facilities.*

Various strategies for evaluating and enhancing utilization of existing space can be quite successful when applied appropriately and thoughtfully. Parameters such as capacity, scheduling, operations, shared use, program offerings, and room assignments can be assessed and rebalanced to alleviate or even solve space challenges. The first step is to explore and understand the full range of needs: educational, operational, functional and perceptual. The next step is to assess the existing facilities to locate key areas of misalignment – spaces that are not being used so effectively – and to make note of areas of alignment – spaces that are being used effectively. An “overlay” or comparison of these first two steps will yield key insights into the actions required to enhance the overall use of the facilities.

While in-depth discussions of all of these parameters are important, this article simply scratches the surface by including a few case studies to illustrate various approaches to enhancing the effectiveness of existing school facilities.

## Facility Assessments

Measuring the effectiveness of a school facility includes assessments

of two key aspects: the adequacy of the space itself and the efficiency with which it is used. The first parameter measures physical characteristics such as size (square-footage) and proportions, structural integrity, air quality, lighting, power and data access and the like. Most of these characteristics require capital to correct or to otherwise modify, although shortcomings in a few of these can be mitigated with little or no money spent on the physical facility.

It is important to note that any action taken to enhance facility utilization should also support educational goals of the school. For example, a narrow hallway causes congestion and tension during passing time at a high school. One solution to alleviate congestion is to move student lockers out of the area or limit student access to their lockers during the most congested times. Another idea is to organize classroom assignments into grade-level clusters or interdisciplinary teams, which can reduce the travel distance for students or even the number of students in that area of hallway at any given time – a solution that is only viable if such clustering or teaming supports the curriculum.

## Room Assignments

Here’s another example: in schools where class sizes vary and classroom sizes vary, assigning larger classes to the larger rooms and smaller classes to the smaller rooms makes the best use of the available space. School leadership should keep a chart of classroom sizes handy when assigning students and teachers to each classroom, and teachers should be willing to switch rooms as needed.

The example elementary school illustrated in Case Study #1 (names and locations of case study schools are withheld by Owner requests) was built in the 1980s and has seen challenges of enrollment growth and increases in needs for special services. School leadership and staff have responded to these challenges with a series of modifications which have solved their immediate needs, but have also compromised the original clarity of the school’s floor plan as well as some of their key educational goals. The before-and-after plan diagrams show a re-balancing of room assignments that went a long way towards enhancing the functionality of the school given these current challenges. Additional goals achieved by the room reassignments include: organizing class-

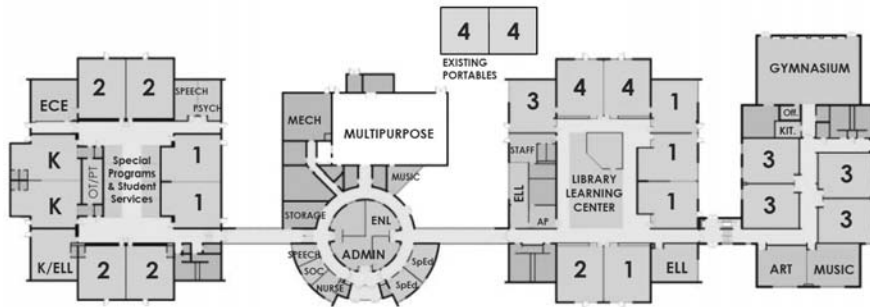
rooms into grade-level clusters, locating the early childhood in a classroom with a dedicated rest-room, assigning like grades to classrooms with operable partitions between and providing more appropriate spaces for staff and student services.

and after lunch. Several solutions were proposed, and resolution was achieved by soliciting parent volunteers to assist the custodian in more quickly transitioning the multi-purpose room from gymnasium to lunchroom and back. The time saved allowed the multi-purpose

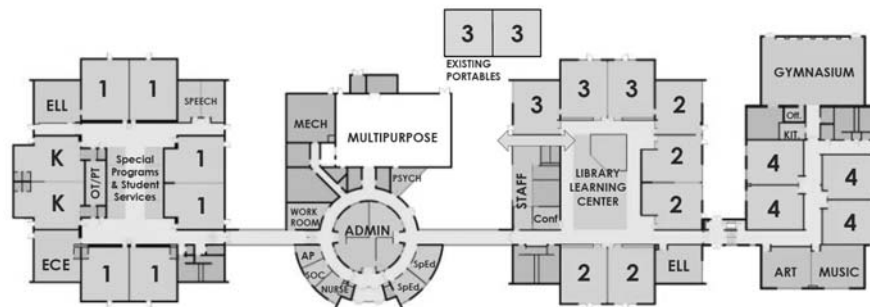
assignments in support of a school's educational goals as well as individual student needs. Adjusting school schedules can be another strategy for making more efficient use of available space. For example, a small elementary school district employed a single music teacher to offer music instruction at all its schools. By tweaking the teacher's schedule and route between sites, all schools achieved better use of their activity rooms and were able to offer music to a greater number of interested students.

Another example highlights a middle school whose student population had outgrown its facility. Portable classrooms were added, but persistent challenges included an excessive number of "travelling" teachers – those who picked up their instructional materials between classes and moved from classroom to available classroom. At this particular middle school, students were organized into three teams per grade, and the schedule allowed for each team to participate in electives or exploratory programs (art, music, health, PE, languages and the like) as a team. Even though the school was overcrowded, staff members were committed to maintaining this team structure and were doing their best to offer high quality instruction off of their carts.

The solution at this school was multi-faceted, including a combination of room reassignments and schedule adjustments, both of which enhanced the teaming approach while also reducing the extent of shared classrooms from nearly 60% to 15%. One strategy was to cluster each grade level into contiguous classrooms. Two classrooms per grade would be shared, but only within that grade level. The schedule for exploratory classes was rebalanced to assign a minimum of one team from each grade level to participate in exploratory programs, leaving their shared classrooms to be used by other two teams. This strategy ensured that shared classrooms



Case Study #1: School plan before room reassignments



Case Study #1: School plan after room reassignments - showing grade-level clustering and other functional improvements

### Operational Considerations

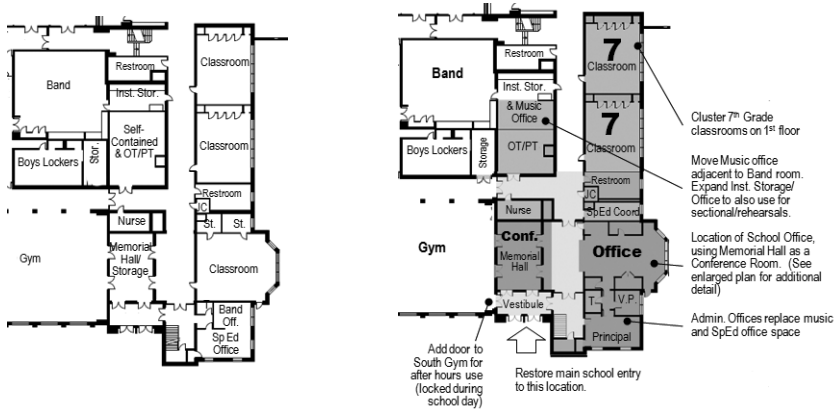
In addition to exploring the physical needs of a school facility, operational aspects such as staffing and scheduling should be considered. In a recent assessment of a K-8 elementary school, additional space for physical education was needed. Several PE classes were being conducted in the school lobby and hallways just to meet the minimum curriculum requirements for all the students. When various aspects of the situation were evaluated, it became clear that a key challenge was the time involved for the school custodian to set-up and clean up the multi-purpose space before

room to be used for PE activities for two additional classes per day and the school lobby and hallways were quiet again. What began as a physical space concern was actually alleviated through an operational strategy, in this case using volunteers, at no additional cost to the school.

### Time & Schedules

Time plays a critical role in the assessment of school utilization and efficiency, particularly at the middle and high school levels where students often move between classrooms for different academic subjects. Daily schedules coordinate student movement and room





Case Study #3: Partial Plans of main entry area BEFORE and AFTER Reorganization

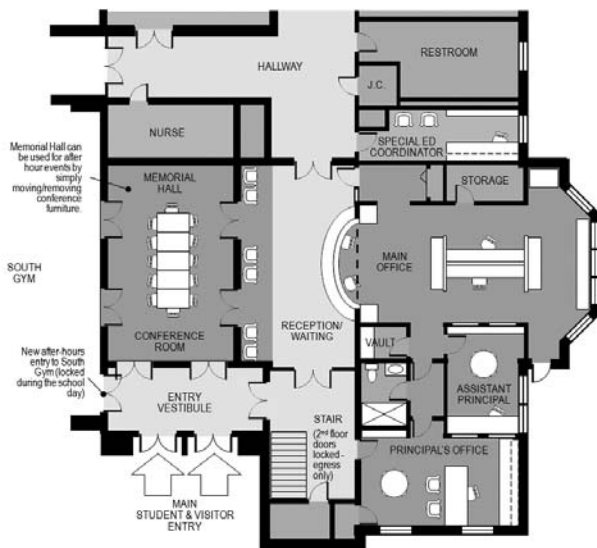
### In conclusion

In every school construction project, it is difficult to predict future enrollments, staffing and evolution of educational programs. Over time, occupants satisfy current needs by reconstructing, reconfiguring, reassigning, appending and otherwise modifying existing facilities. This is both normal and expected. But when all needs and parameters are considered collectively, these needs can often be addressed and challenges can often be alleviated without major capital expenditures. The goal is to maintain functional and educational relevance over time while also ensuring that resources are used wisely. ■



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Case Study #3: Reestablishing the school's front entry