

Crucial Phases in School Modernizations

By Nikkia Martin

In 2007, the Office of Public Education Facilities Modernization, which later evolved into the Department of General Services (DGS), was created to provide a 21st century learning environment for all students who would traverse the District of Columbia Public School (DCPS) system. A capital improvement plan was developed to determine which schools, over a 10-year span, would receive renovations during a specified fiscal year. While this plan was effective, it soon became apparent that following the traditional method of modernizing schools under the constraints of tighter budgets meant that some students would sit in the same classroom their parents once occupied and that classroom would not have been updated. The majority of classrooms in the district were crippled by poor lighting, windows that did not open or were broken, window-mounted A/C units and old furniture passed down from school to school. Studies have shown that students learn better in environments with a higher foot-candle and rooms that allow fresh-air intake, so the targeted repair program was extended and a phased modernization program was created. Phase I focused on student learning spaces, Phase II on support spaces and Phase III on support systems. This would put the schools on a rotation until every school was completed. The intent of the program was to provide as many students as possible with the opportunity to learn in state-of-the-art classrooms. It would also provide the flexibility for more schools to be worked on simultaneously versus building all new schools one by one. To date, DGS has completed approximately 34, Phase I modernizations since the program's inception in 2009.

Phase I Modernization

Phase I is the first component of the three-step modernization process and it targets the entry lobbies, classrooms, corridors, restrooms and stairwells in elementary and middle schools. Since elementary and middle school students spend the majority of their time in one or two classrooms, modernizing those classrooms at a minimum would improve the quality of their learning environment. The parameters set for these projects include, but are not limited to, improving the lighting, air quality, technology, acoustics, interior finishes and furnishings. Typically, this work would take place over the course of nine months, but in a Phase I modernization, it is condensed to 2.5 months — commonly referred to as “a summer miracle.”

The Process

Each school undergoing a Phase I modernization during a specific fiscal year is given a project budget based on a combination of square footage cost and a facility condition assessment. Within a few months, an architectural/engineer-

ing (A/E) firm is selected for each project based on its qualifications and prior experience. This A/E team is then tasked to develop a master plan for the school that targets the areas selected for Phase I improvement. Throughout the various design stages, the A/E team is responsible for providing a comprehensive scheme and strategy while remaining within budget parameters. The School Improvement Team (SIT), a small body of decision makers consisting of the principal, staff, students, parents and community members, provides guidance for the design, finishes and furniture selected. The general contractor then provides a guaranteed maximum price (GMP) contract that aligns itself as closely as possible with the project's budget and design. More often than not there is a need for a few value engineering sessions. Once the GMP is finalized, the general contractor will assume the A/E contract, thereby forming one design-build team.

Once students are dismissed from their last day of classes, the Phase I project team moves in and takes over the school, thus beginning the condensed construction process. Demolition starts with walls being torn down to right-size the classrooms, re-arrange layouts for more efficient circulation and make room for new ductwork for the upgraded HVAC systems. New lighting and flooring are installed while walls are furred out and painted. All work is substantially complete by the time teachers and staff arrive back to school to prepare their classrooms.



A typical Phase I classroom modernization designed by Washington, D.C.-based Sorg Architects has proven effective in school design.

This is not an ordinary process, nor is it without uncertainty. The biggest element working against the project is its extremely tight schedule. Most projects will start with double shifts in 14- to 16-hour rotations for six, sometimes seven, days a week. Weekly progress meetings along with daily walkthroughs are required to keep up with the demanding timetable and to accommodate potential unforeseen conditions (e.g. hazardous materials, unidentified piping and material delays).

Benefits of Phase I

In a time when almost all school districts across the country are facing budget deficits, phased modernizations offer a step in the right direction, ensuring all students are afforded the same opportuni-

ties to learn in updated classrooms. With work expected to be completed over the course of summer break, there is less worry about swing space or providing modular classrooms. In addition, this approach creates a more efficient capital improvement planning process and can be applied to virtually any school district. The most important benefit of the Phase I method is that it provides students with brighter possibilities one step at a time, as opposed to the traditional method of expecting our youth to somehow blossom in the classrooms of yesterday.

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