

Members of Team

Chiming Cao

Elsa Glover

Charles Lyles

Staunetta Martin

Josh McCully

Kevin Robinson

Elijah Summers

Ronald Turcios

Jackie Vaughn



ACE Mentor Ivan Rodriguez teaches students how to utilize a scale to calculate distance.

Eclipse Cineplex Theater

Objective

To design an entertainment complex incorporating a 13-screen movie theater, food court and game arcade that could be built on a tight budget.

Solutions

A team of nine students from Northwest High School conceived and developed a highly efficient, circular floor plan for a 78,000-square-foot structure. Using AutoCAD and other sophisticated computer tools, they prepared detailed floor plans that enable the building to accommodate more than 2,600 theater patrons, diners and arcade players in style and comfort. Students also produced designs for parking, lighting utilities, landscaping and drainage. In addition, they prepared cost estimates and a schedule covering every aspect of the project.

Twelve professionals from architectural, construction and engineering firms helped plan the exercise and introduced students to state-of-the-art design, scheduling and other tools. To illustrate the practical issues involved in designing and building similar structures, the mentors arranged trips to the Indianapolis Colts training facility, a Kerasotes multiplex movie theater and the Lucas Oil Stadium construction site.

Skills Acquired

Through this experience, the students learned many of the practical considerations professionals face when designing, budgeting and building large-scale construction projects -- issues ranging from site and materials considerations to meeting local regulatory requirements to maximizing a project's commercial viability. They also acquired hands-on experience with the advanced technologies industry professionals use every day to speed the design and estimating processes. And they gained direct insight into the challenges and abundant rewards available to qualified professionals throughout the construction industry.

Team Mentor

Kay Townsend
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