

# Create Incentives for Students to Pursue the Core Curriculum in an Interest-based Context

THIS ARTICLE IS THE FIFTH IN A YEARLONG SERIES THAT WILL MORE CLOSELY EXAMINE THE RECOMMENDATIONS MADE IN ACTE'S HIGH SCHOOL REFORM POSITION STATEMENT AND HIGHLIGHT BEST PRACTICES FOR IMPLEMENTING EACH OF THE RECOMMENDATIONS.



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## THE FIFTH RECOMMENDATION IN ACTE'S

high school reform position statement is to create incentives for students to pursue the core curriculum in an interest-based context. Many students are bored and disengaged with today's schools—they don't see the relevance of the school curriculum to their current or future lives.

Many of the nation's leading high school reform models highlight the value of using an interest-based context or real-world application, including High Schools That Work, American Diploma Project, Talent Development High Schools, and organizations such as the Bill and Melinda Gates Foundation, High School Alliance, and National Governors' Association.

From across the school reform spectrum, there is ample evidence that connecting rigorous academic expectations with the relevance of an interest-based curriculum can help connect students to learning in powerful ways. Career and technical education (CTE) has long been a leader in ensuring relevant, integrated curricular opportunities for students. Career Clusters, career academies, magnet schools, tech prep and other CTE models provide interest-based programs that increase motivation and learning for all students, regardless of their unique goals for the future.

### Increasing Opportunities for Students

Four years ago, the course offerings at Lake Travis Independent School District (ISD) were extremely limited. The high school was operating on an accelerated block schedule due to funding constraints, with only three courses in the spring and three in the fall. This left almost no room for the inclusion of interest-based courses, including CTE. While a few introductory courses were offered in areas like agriculture or business, students were

missing the opportunity to explore relevant, interest-based areas in depth.

In discussing changes, the school's leadership team talked about things that were important to the community. Lake Travis ISD wanted a comprehensive academic program that fit the needs of all students. Reform efforts were aided by a change in the Texas school funding system that freed up more resources for the school district and allowed them to finance an alternating block schedule that provided students with eight class periods each year.

Jill Siler, director of secondary academic services, says, "In essence, we wanted to create a comprehensive program that not only provided a rigorous academic program in the core area but also provided students with an opportunity to pursue an area of study in depth." The high school created six "Institutes of Study" in the areas of advanced sciences and medicine; business, finance and marketing; veterinary and agricultural science; humanities, technology and communications; math, engineering and architecture; and fine arts.

Each Institute consists of a foundational course of study in which all students take rigorous academics, a career exploration emphasis, postsecondary preparation, including everything from site visits to job shadowing, internships, articulated credit, work-based learning, and certifications, and a selective course of study that encourages students to enroll in advanced placement and dual credit programs. While students are encouraged to choose an Institute and pursue an area of study in depth, the coursework is open enrollment.

The reform efforts at Lake Travis ISD received incredibly positive reaction from students and parents. Siler adds, "The curricu-

lum became very relevant and useful, and stakeholders could see that we were preparing students for real-life experiences.” About one-third of the 1,700 students in the school now take three or more credits in a coherent, articulated sequence.

### Partnering with Business and Industry

In 2006, Siemens Building Technologies was looking for a school district to model best practices in high school engineering programs. With highly recognized post-secondary engineering programs at Austin Community College and the University of Texas, Lake Travis ISD was in a prime location to participate.

In the spring of 2006, Lake Travis ISD was awarded a four-year, \$66,000 grant through Siemens Building Technologies and the Association for Career and Technical Education to foster the Engineering Institute into an integrated, cohort-based academy that not only provided a comprehensive academic program but also partnered each student with the professional community and prepared them for postsecondary success.

While Siler admits that many of the educators involved in the grant didn't really know what they were getting into originally, she stresses the value that has been provided by partnering with the business community and bringing in the opportunity to really integrate curriculum through the cohort-based model.

The first cohort will begin in the engineering program during the 2007–2008 school year. While other students will still be able to participate in the school's engineering courses, Siler expects about 75 students to be included in the first-year cohort.

These 10th-graders will all be enrolled in principles of engineering (one of the Project Lead the Way pre-engineering courses), as well as special engineering-focused English and social studies courses. As juniors, the cohort courses will include math and science instead of English and

social studies, providing students with a balanced and varied curriculum.

The Engineering Development Team, consisting of English, science, social studies, math, computer science and engineering teachers, as well as the counselor, high school associate principal and district administrators, began meeting in August 2006 and continues meeting once a month to plan what the enhanced engineering program will look like and how to make improvements in current offerings.

### Keys to Success

Professional development is one of the most critical parts of the integrated, interest-based approach to academics. Lake Travis ISD chose core academic teachers to introduce to the engineering world and be a part of the new cohort. These teachers did not have previous familiarity with the engineering profession and needed training to make their classes more relevant to engineering students.

In February, these academic teachers will travel to Chicago to visit the headquarters of Siemens and learn more about how their curriculum impacts engineering. After this trip, the team will spend time working on integrated projects and curriculum, whether it is a special focus on the role that engineering played in the industrial revolution, or a technical writing assignment. Siler emphasized that even without the grant-funded trip to Chicago, local externships would be a key part of any integrated approach.

The Siemens grant also will allow the school district to bring this team of teachers in during the summer to spend focused time working on the curriculum for the cohort, and for all cohort teachers to have a common planning time next school year to

continue to enhance coordination.

Bringing in experts in scheduling was also critical to the strong foundation for the new cohort approach to the Institutes at Lake Travis ISD. Even the challenges of appropriate scheduling for just one group of students and teachers can be more than many small schools or districts can handle when trying to balance diverse student levels and needs. By spending adequate preparation time and consulting experts in scheduling related to academy or cohort models, the school has been able to work out many of these issues in preparation for the first full year of implementation.

### A Focus on Relevancy

While practical considerations have taken a large amount of the planning team's time during the first year of this project, the underlying goal has not been forgotten. Contextual learning and application to the real world remain key to the efforts at Lake Travis ISD.

Scott Berry, the engineering teacher at the high school, is beginning to see the results of these efforts in his classroom. “We were in the midst of analyzing truss bridges and determining the force (either tension or compression) in truss members. I could sense that one group was particularly excited about their work, and as I came in on their conversation, they were realizing for the first time that the trigonometric functions they were learning in pre-calculus had serious real-life applications.”

By allowing students to pursue the core curriculum in an interest-based context, Lake Travis ISD has been able to increase the relevancy of the high school experience to students' futures, without sacrificing the rigor necessary for student success in postsecondary education and careers. ■

ACTE is very interested to learn about other CTE programs and initiatives that strive to allow students to pursue the core curriculum in an interest-based context. In addition, we are looking for information about CTE programs that work toward achieving the remainder of ACTE's high school reform recommendations. If you teach or administer such a CTE program, please send information to Alisha Hyslop at [ahyslop@acteonline.org](mailto:ahyslop@acteonline.org).