



Kentucky's Corbin High School is one of the high schools that works as a 21st century school.

The “Good News” about academic and CTE integration in Kentucky, says ACTE in its position paper *Reinventing the American High School for the 21st Century*, is that the state has developed 10 interdisciplinary courses that allow students to meet requirements for academic courses by taking classes that carefully merge academic standards with career-oriented content. One of the “good news” high schools in Kentucky is Corbin High School.

Located in Kentucky's Southeastern portion of the Appalachia Mountains, lies the town of Corbin, population nearing 9,000. Although many of the families in and around Corbin live in poverty, the town has found great wealth in its academic and CTE integration at Corbin

High School (CHS) and Area Technology Center (ATC).

CHS has become the shining star and center of its community. The school has fostered relationships with parents, teachers, students, neighbors and local businesses through the rising academic achievement of the students that has been documented by data from the Kentucky Department of Education (KDE) and Southern Regional Education Board (SREB). Its media center has also become a place to gather and discuss education, policy, and to just socialize.

Job opportunities are scarce in this area of Kentucky, and that is one of the reasons principal Joyce Phillips instituted the High Schools That Work model of reform. The goal was to increase students' readiness for college and bet-

ter prepare those who would be seeking immediate employment. For Corbin, reformation at the high school level was paramount in giving these students the chance they deserve to succeed in the real world.

In the PBS documentary, “Making Schools Work,” that aired in October 2005, Phillips says, “Twenty percent of the students will learn no matter what. Eighty percent need a hook—something that makes them want to come to school and want to learn.”

Corbin's “hook” was in connecting with each individual student through an Individual Graduation Plan (IGP), and making time spent with students “focused, intentional and designed to provide multiple supports.”

The documentary also credits the en-

ing at Works

By Hope J. Gibbs

personal interests. Each student has an assigned personal counselor who guides this yearly process.

Support to Succeed

According to the first issue of the e-newsletter, *High School Redesign Monthly*, KDE officials realize that, when encounters between a caring school adult and a student—particularly one who is in need of multiple supports—are too infrequent, it does not engender the personalized support that researchers and practitioners suggest helps students to succeed in and beyond high school.

“Students typically begin their IGP in the eighth grade,” says Corbin ATC’s principal, Ronnie Partin, “so we needed a means of connecting with students at an earlier age. What developed was a unique program we call Eighth Grade Explorers. While it does not exactly involve integration, it sets the stage for integrating academics with CTE at the high school level as students begin plan-



Science Olympiad student Erin Watts prepares for competition in Health Science.

“This program is supplemented by visits to CMS to inform all the students about programs and opportunities available at the tech school, as well as a tour of our tech facility for all the eighth-grade students. Since beginning this program four years ago, we have seen an increase in enrollment in our programs, as well as seeing students more focused on a career path.

the high schools that work model increases students readiness for college and better prepares them for employment

rollment of half the students in the ATC, where they work on real-world projects as a key element in this school’s success.

The integration of academics and CTE at Corbin begins with the IGP. Kentucky’s Department of Education describes the IGP folder as a tool that “is designed to help students focus on the connection between coursework and goals after high school. Folders provide space to record information pertaining to academic and career assessment, career goals, four-year high school plan, interests/hobbies, school and community activities, and work experience.”

The IGP gauges students’ progress and aids parents, teachers and advisers in an annual review that is always focused on the individual student’s academic performance, career goals and

ning their careers.”

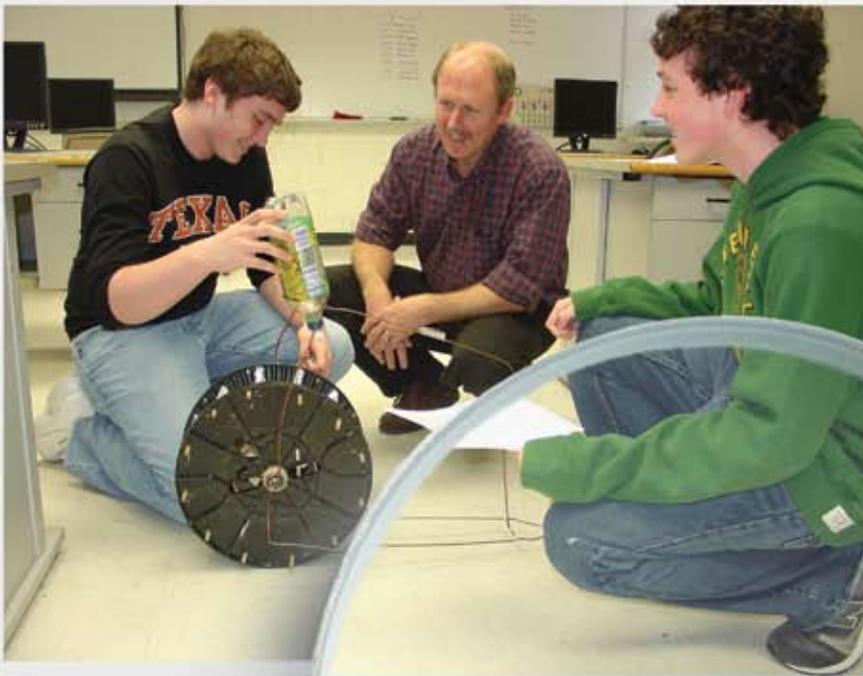
“In this program, approximately 54 eighth-grade students from Corbin Middle School spend 12 weeks at the tech school,” explains Partin. “Don Shupe, tech ed instructor at CHS, manages the program. After a couple of weeks in which he introduces many aspects of technology, safety, and use of tools, students are able to spend time in each of our six programs. Here they are exposed to some of the more common tasks and given an opportunity to explore various aspects of the occupation.”

Partin and his peers have been pleased with the outcome. “This has resulted in students being much more aware of career opportunities, especially non-traditional ones they might not have thought about otherwise,” says Partin.

David Cox, principal of CMS, says, “not only do the students love the program, but I have also received many positive comments from parents.”

Those positive comments and the increasing enthusiasm from parents, teachers, administrators and, more importantly, the students themselves, provide the energy that Corbin draws from as it continues to reinvent its high school for the 21st century. Its dedicated staff diligently works toward its goal for individual student success and to strengthen the ties between academics and CTE.

A recent advance in integration that has taken place at Corbin ATC has been in the CAD program. “Students earn academic math credit for two of our CAD classes,” adds Partin. “This has been the



CAD instructor Darrell Horn, center, looks on as Science Olympiad students Martin Palmer and Matthew Gibbs demonstrate their "Scrambler", a project in which they apply scientific principles to move a vehicle a set distance.

one credit in geometry. Although the classes are taught by Horn, the math teachers must monitor the instruction to ensure all content is covered.

Another technical course for which students receive academic credit is Corbin ATC's introduction to health sciences. Students who complete this course earn a half credit in health—a graduation requirement.

Continuing the Concept

The concept of academic credit for technical course completion has received enthusiastic support from Corbin schools superintendent, Ed McNeel, as well as members of the board of education.

"I would like to see this concept of academic credit for technical classes expanded into other programs," says McNeel. "The CAD/math activity has been an excellent first step for us in meeting the needs of students, and other areas are continuously being reviewed."

An important factor in making these programs work is identifying terminology and helping students understand how it converts to the verbiage used in testing. Partin and his team are working to accomplish this.

Partin notes, "One interesting component of discussion and planning

result of a yearlong effort on the part of CAD instructor Darrell Horn and CHS math instructors Nicole Brock and Heather Rice."

Together, the teachers have developed a plan just recently approved by the site-based council that permits students who complete CAD I and CAD II to receive one credit in CAD and

academic and tech teachers must work together to mutually support each other in delivering instruction that is most beneficial to students

among the teachers has been that of terminology and making sure the students understand. For example, the term in CAD might be 'pitch,' but in geometry it might refer to 'slope,' so students must be taught that when they encounter the term slope on CATS [Commonwealth Accountability Testing System] assessment, it means the same as pitch they studied in CAD. With SBDM [School Board Decision Making] and KDE approval, students can begin enrolling for these classes this fall."

There are also exciting activities taking place after hours that could be considered integration.

"Horn, our health sciences instructor, works with the Science Olympiad students," explains Partin. "As students research and prepare for competition in the science arena, Mr. Horn lends his expertise in engineering and technology to the science teacher. Together, they have guided students to not only blue ribbons, but also a wealth of knowledge of scientific and technological principles."

Partin believes strongly in the integration of academics and CTE. He has a deep sense of pride when he talks about Corbin and its accomplishments over the past few years. He is also an advocate for teamwork among core subject instructors and career and technical educators.

"All tech teachers integrate academics into their instruction," says Partin. "Many times, they may not recognize what they are doing as academic integration because it's such an integral part of the curriculum. For example, when welding teachers are teaching their students to read a ruler or lay out a project, they are teaching math. When auto instructors are teaching about cylinder wear and tolerances, they are teaching math.

"The next step to integration involves academic and tech teachers working together to mutually support each other in delivering instruction that is most beneficial to students," says Partin. "At Corbin ATC, we have had many short-term activities, such

as drafting and math teachers setting up surveying/trig problems for students to solve—real-life application scenarios that can help students better understand the academic concepts they have been learning."

According to Partin, "The best payoff is when students can take technical classes that have enough academic content and rigor to receive academic credit. This is where students benefit the most," he says. "Add to this the fact that they may receive college credit for these classes through our dual-credit agreement with the Kentucky Community and Technical College System, and you have a real win-win-win situation for students."

Partin adds, "Joyce Phillips and I have learned some important lessons from this particular project. We have discussed for a number of years the need for more true integration among our teachers, but not much happened. The key, we found, is to find teachers that are interested in working together, and then provide the support and resources to make it happen. This



CHS math teachers Heather Rice and Nicole Brock work with CAD instructor Darrell Horn to put finishing touches on their interdisciplinary CAD/Geometry courses.

includes hiring substitute teachers so they can spend time together in planning, providing stipends for work after regular hours, and finding similar programs in other schools that can be used as models. Recognizing their efforts and cheering them on is important as well."

Kentucky also has three specific

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statewide articulation agreements within its CTE programs that allow students to earn up to three credits in a specific career occupational area at colleges within the state. CHS and its technology center have embraced KDE's commitment to excellence in achieving success for each and every student and preparing them for the future.

Standards for Success

The *High School Redesign Monthly* also reports that CHS counselor Karen Collins attributes the success at Corbin to the block scheduling instituted nine years ago. Collins notes that block scheduling allows for greater flexibility of teacher time, opportunities for students to gain learning experiences beyond the school grounds and consistent advisory time. She also acknowledges the necessity of sufficient staff training as well as teacher leadership.

According to the 2003–2004 School



Eighth Grade Explorer Erika Paul (left) envisions her CO2 dragster in a research and design project. Don Shupe (right), CHS Tech Ed teacher, instructs 8th grade Explorer Shaala Bell in the use of the band saw.



Report Card, which can be found on the school's Web site (www.corbinschools.org/CHS), Corbin students scored above the state average on state assessments, nationally normed tests and the ACT/SAT. Corbin's diversified curriculum, along with the many co-curricular activities, has provided opportunities in helping students "prepare for a successful transition to postsecondary education, the workplace and life."

The interdisciplinary courses developed by Kentucky that merge academic standards with career-oriented content, along with a dedicated and committed staff, have led to the success that has been achieved at Corbin.

"I have heard a number of slogans recently, such as 'Kids First' and 'It's

All About Kids,'" says Partin. "When we as educators are aware of the big issues in education and focus on what's best for students, we can't help but get involved in these types of activities. When academic teachers realize that by taking advantage of the knowledge, expertise and resources of their technical education counterparts, it can not only make learning more meaningful for students through real-life application, it might also make their job easier and more rewarding as well! When technical teachers partner with academic counterparts, and together they develop an awareness of what students must know to be successful in the world of work, they may gain a greater appreciation for what their academic peers are doing, and students become the real winners. Most industries employ a team approach to their manufacturing processes; the same approach could very well work in education."

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Exploring What Works

To learn more about Corbin High School and Area Technology Center, visit www.corbinschools.org

To learn more about the Southern Regional Education Board's High Schools That Work initiative, visit www.sreb.org.

