CAREER AND TECHNICAL EDUCATION: PREPARING STUDENTS FOR POSTSECONDARY EDUCATION AND THE WORKFORCE

THE BASICS

The purpose of Career and Technical Education is to help students attain skills needed to move successfully to postsecondary education, work or the military by developing students’ academic achievement, career exploration, career preparation, and leadership development. These goals are part of Kentucky’s Unbridled Learning: College/Career Ready for All assessment and accountability system. See Chapter on Assessment and Accountability.

Students not interested in or suited to a four-year college degree need high level skills in order to meet future workplace needs. Those skills can be developed in community and technical colleges but also while students are enrolled in high school through authentic work-based learning experiences such as internships, cooperative education, pre-apprenticeship, mentoring, shadowing, and community service.

An Individual Learning Plan (ILP) is required of all students beginning in middle school indicating a career goal and a planned course of study necessary for a successful transition to postsecondary education or a career. Students may change career goals at any time. A web-enabled ILP is available to all students to help them better focus on postsecondary studies and careers.

Kentucky’s Career and Technical programs are available at almost every school district offering services to students in grades 7 to 12. In 2009-10, 75 percent of high school students were involved in Career and Technical education. Of those 20 percent had taken three career sequence courses and of those students, 93 percent transitioned into college, career or the military.

Fourteen (14) career clusters have been identified as a way for schools to organize instruction and student experiences in areas of student interest. These clusters encompass almost any occupation from entry through professional levels of skills and include:

- Agriculture
- Arts & Humanities
- Business & Marketing
- Communications
- Construction
- Education
- Health Science
- Human Services
- Information Technology
- Manufacturing
- Public Services
- Science & Mathematics (Pre-Engineering)
- Social Sciences
- Transportation
Kentucky has developed a **Skill Standards, Assessments, and Certification System**, based on standards identified by employers across the state. The two following components will be used to determine career readiness in Kentucky’s Unbridled Learning: College/Career Readiness for All system. (See chapter on Assessment and Accountability for more details). Included are:

- **Industry Certificates for College/Career Readiness**, certificates indicating a student is ready to be successful in a particular industry; determined by industries and reviewed and updated on an annual basis to assure skills meet changing industry needs.

- **The Kentucky Occupational Skill Standards and Assessment System (KOSSA)** developed by the Department of Education with the help of business and industry. Career and technical education students participated in eighteen assessment areas (horticulture, administrative support services, retail services, hospitality services, child development, family services, consumer services, manufacturing, production livestock, production crop, financial services, marketing, allied health, technology education/pre-engineering, communications, construction, and transportation) in measures of academic, employability, and occupational skills of students.

**General Program Standards for Secondary Career and Technical Education Programs** for secondary education and technology centers have been established as required by law.

**WHAT’S NEW?**

- Kentucky’s two career and technical education systems have been combined to create a more efficient system of job training and learning opportunities for students. The Office of Career and Technical Education, formerly part of the Education and Workforce Development Cabinet, will be moved into the Kentucky Department of Education. This effort works to support Kentucky’s new focus on college and career readiness. A Career and Technical Education Advisory Committee will provide guidance in the design and implementation of these programs. 2013’s House Bill 207 confirmed these changes, which were initially made by a 2012 executive order.

- In 2011-12, more than 150,000 students (about 75 percent of Kentucky high school students) were enrolled in career and technical education programs such as agriscience, machine tool technology, health sciences, electrical technology and business administration in middle and high schools, area technology centers, and career and technical centers across the state.

- Senate Bill 38, enacted in 2012, calls for the Department of Education to develop core content standards and new courses for career and technical education and a way to assess student progress.

- **Common Career Technical Core**: Common standards for career and technical education were developed by the Common Career Technical Core (CCTC) as a state-led initiative to establish rigorous, high-quality standards. Forty-two states participated. Adoption by states is voluntarily. The initiative was coordinated by the National Association of State Directors of Career Technical Education Consortium (NASDCTEC).
PROGRAMS

The following initiatives are being implemented across the state. They focus on keeping students in school, improving student academic and technical skill achievement, improving student preparation for the workforce, and increasing successful transition rates.

- **Career Pathways** provide students with a program of studies for each career pathway with a sequence of academic and career/technical courses leading to a postsecondary degree, industry certificate and/or licensure. The courses are defined in a partnership among high schools, community/technical colleges and universities along with business leaders and include dual credit opportunities. They are available to all students including adult learners. The Carl D. Perkins Act requires this joint effort and is a component of Unbridled Learning: College/Career Ready for All.

- **Career and Technical Student Organizations** provide opportunities for students to develop leadership skills, teamwork, communications, and community service. The following organizations are available to high school students enrolled in career and technical education: FFA (agriculture), FBLA (business), FCCLA (family and consumer sciences), DECA (marketing), TSA (technology), SkillsUSA (industrial education), and HOSA (health science).

- **Unite to Read** is a statewide project designed by Kentucky’s Career and Technical Student Organizations (CTSO) in partnership with Kentucky Educational Television and PBS KIDS, Student Technology Leadership Program (STLP), and Future Educators Association (FEA). The overall goal is to have all of these groups within a school or district working together in promoting literacy and lifelong reading.

- **High Schools That Work** is designed to combine challenging academic courses and modern career/technical studies to raise the academic achievement of students. The focus is on school-wide revitalization that improves the academic and technical standards of the high school curriculum. Low-level academic and technical courses are eliminated; higher performance standards are set for students. Support services are included through such activities as a guidance and advisement program (a plan that assigns students to the same advisor throughout their high school years) and extra help is provided to help students achieve the higher standards.

- **Jobs for Kentucky Graduates Program**, an affiliate of Jobs for America's Graduates is being implemented in 24 Kentucky high schools to address learning goals for at-risk high school students focused on dropout prevention and school-to-work transition needs. A teacher (specialist) concentrates on providing students with extra help in job readiness skills and academic support. Students also receive intensive case management and support services. Upon graduation from high school, these students receive job search assistance. In Kentucky 1,800 students are being served.

- **Pathway To Careers**. Middle and high school courses and/or experiences that help students explore career interests and skills need to succeed in those skills.
Project Lead The Way (PLTW) is a high school curriculum designed to increase the number of students who seek to be engineers and technicians to fill thousands of engineering/engineering technology jobs available across the country. The curriculum helps students reach higher standards in the STEM areas (science, technology, engineering and mathematics).

RESULTS

- Listed below are the statewide transition results comparing 2003, 2005 and 2010 CTE graduates. These figures do not take into account the number of students who drop out of school.

<table>
<thead>
<tr>
<th>Transition Results for CTE Graduates in Selected years</th>
<th>2003</th>
<th>2005</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attended college</td>
<td>50.4%</td>
<td>58.1%</td>
<td>56.4%</td>
</tr>
<tr>
<td>Employed</td>
<td>24.4%</td>
<td>30.4%</td>
<td>22.2%</td>
</tr>
<tr>
<td>Entered military</td>
<td>2.2%</td>
<td>2.2%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Combined school and work</td>
<td>2.1%</td>
<td>3.5%</td>
<td>6.5%</td>
</tr>
<tr>
<td>Not employed or attending school</td>
<td>20.0%</td>
<td>5.5%</td>
<td>6.0%</td>
</tr>
</tbody>
</table>

WHAT YOU CAN DO TO HELP

- **Get involved** with your child’s Individual Learning Plan to help them think about and plan for their future career. Attend career days/fairs with them or be a guest speaker. **Serve** as a judge for student organizations’ career and technical competitive events.

- **Encourage** school-based decision making councils to support career and technical programs in high schools with funds necessary for hands-on activities.

- **Ask** teachers, students, and business leaders how these programs are working.

- **Write** to your elected state and local officials with specific examples of successes and problems you have noted.

- **Ask** local school board members in what ways do they support career and technical education.

- **Recognize** student achievement in career and technical education programs and the contributions of teachers and administrators.

FOR MORE INFORMATION, CONTACT

Kentucky Department of Education, (502) 502-564-3472 or visit the website at www.education.ky.gov/KDE/Default.htm (search for Career & Technical Education)

Prichard Committee for Academic Excellence, admin@prichardcommittee.org or www.prichardcommittee.org, (859) 233-9849 or 271 West Short Street, Suite 202, Lexington, KY 40507