



2009–2010

# HIGHLIGHTS

An Annual Report of the CTE Resource Center,  
Serving Career and Technical Education in Virginia

For 28 years, the CTE Resource Center has been serving Career and Technical Education (CTE) teachers and administrators across the Commonwealth. While our special projects have changed throughout the years, our primary focus of developing and distributing CTE curriculum materials to educators has always been—and continues to be—our mainstay.

We continue to adhere strictly to the Virginia CTE curriculum development process, in place for almost 20 years and revised in May, 2010. This process requires input from business and industry representatives to ensure that Virginia programs are addressing current workforce trends and requirements and are preparing our students with entry-level occupational skills.

We also rely heavily on the expertise of CTE teachers around the state. While we have the content guidance from business and industry, teachers are the experts in converting that occupational information into actual classroom curriculum.

The Center's long-time expertise comes in facilitating the work of these groups, extracting from the experts the best information possible, and converting that data into user-friendly, clear, and concise instructional resources.

We continue to explore and implement new and improved ways to deliver these resources to teachers and administrators. Verso, Virginia's Educational Resource System Online, is the primary vehicle for distributing our task lists, instructional frameworks, and student competency records, as well as other resources, including posters and other print items, electronic slide presentations, PDF files, and CDs.

## New/Revised Frameworks in Verso

During 2009–2010, the Center created or revised the following course frameworks for use in 2010–2011: *Agricultural Business Fundamentals*, *Agricultural Business Management*, *Agricultural Business Operations*, *Introduction to Natural Resources*, *Land Use and Conservation Management*, *Computer Information Systems*, *Advanced Computer Information Systems*, *Advanced Programming*, *Database Design and Management with PL/SQL*, *Life Planning*, *Medical Laboratory Technology I and II*, *Nurse Aide I and II*, *Radiologic Technology II*, *Military Science I, II, III, and IV*, *Internet Marketing*, *Geospatial Technology II*, *Air Traffic Controller*, *Aviation Maintenance Technology I and II*, and *Drafting I and III*.

## Special Assignments

### Virginia's Workplace Readiness Skills

In 2008, the Virginia Department of Education (VDOE) decided to re-evaluate Virginia's Workplace Readiness Skills. Employing the expertise of the University of Virginia's Weldon Cooper Center and CTECS (formerly V-TECS), the VDOE and the CTE Resource Center began the two-year process of researching and creating a new list, having that list critiqued and revised by employers across the state, and developing supporting instructional materials. This work was completed and offered to Virginia's CTE teachers in June 2010 for implementation in the 2010–2011 school year. The Workplace Readiness Skills for the Commonwealth are divided into three major areas as shown below.

#### Personal Qualities & People Skills

- ◆ Positive Work Ethic
- ◆ Self-Representation
- ◆ Creativity & Resourcefulness
- ◆ Integrity
- ◆ Diversity Awareness
- ◆ Teamwork
- ◆ Conflict Resolution

#### Professional Knowledge & Skills

- ◆ Speaking & Listening
- ◆ Health & Safety
- ◆ Job Acquisition & Advancement
- ◆ Customer Service
- ◆ Reading & Writing
- ◆ Organizations, Systems, & Climates
- ◆ Time, Task, & Resource Management
- ◆ Critical Thinking & Problem Solving
- ◆ Lifelong Learning
- ◆ Mathematics

#### Technology Knowledge & Skills

- ◆ Job-Specific Technologies
- ◆ Telecommunications
- ◆ Information Technology
- ◆ Internet Use & Security

We have converted the skills list into the appropriate format for Virginia's CTE curriculum: Skills are now expressed as tasks/competencies with definitions to amplify and describe the skills. We have incorporated instructional activities and blended our Workplace Readiness Skills Featured Resources into the new tasks. Rather than one umbrella task for Workplace Readiness Skills as before, each course task list now begins with the 21 new skills, each expressed as a separate task.

### New Career Planning Guide Launched

The Career Planning Guide (CPG), for use by students, teachers, parents, and counselors, as well as administrators, was completely revised during 2009–2010 and launched on June 1, 2010. Its purpose is to help guide students to CTE courses through identifying their areas of interest and linking those interests to courses. The newly revised site is <http://www.cteresource.org/cpg>.

### Transportation Careers National Curriculum Project

In 2009–2010, the Center completed the development of 50 lessons for a U.S. Department of Transportation multi-state project. The Virginia-developed lesson plans are now in a national field test and may be found at <http://www.transportationcareers.org/>.

### CanDo Online Competency Tracking System

The Center has been coordinating the state's efforts to offer and support CanDo, the online student competency tracking system developed by Arlington Public Schools. Phase II of the pilot project, involving five school divisions, was completed in 2009–2010. CanDo was also accessible to any school division that wanted to use it, and several non-pilot localities successfully set up the system and trained their teachers in its use.

During 2009–2010, the Center looked at new ways to facilitate the implementation of CanDo across the Commonwealth. Fall 2009 survey results indicated that more than 27 school divisions were considering CanDo, and by May of 2010, more than 60 school divisions had expressed interest. The Center focused on providing accessible CanDo information and easy, reliable training. We created new pages on the Center's Web site to address the CanDo hardware and software requirements (<http://cando.cteresource.org/index.html>).

### Exciting Projects for 2010–2011

#### CanDo Continues

The Center's work on CanDo continues in 2010–2011. In August, the Center hosted two informational sessions for administrators and IT staff. When 60+ school divisions expressed interest in the system, the Center staff looked at alternative ways of providing training and recently developed a series of video training modules. While we still offer on-site training, school divisions will receive great benefits from these modules, which can be used whenever training is needed with current or new faculty.

#### New Workplace Readiness Skills Test Planned

A new assessment for the revised Workplace Readiness Skills (WRS) is being developed. It will stand alone for a verified credit. The current NOCTI test, which must be coupled with an IC<sup>3</sup> exam to earn a verified credit, may be used through the end of this school year. The new test should be presented to the Virginia Board of Education in January 2011 and will be available for use upon the Board's approval.

#### Going Green

This year, the Center is addressing sustainability and green technologies in a variety of ways. First, we are working on a new course, Sustainability and Renewable Technologies, to introduce students to renewable resources; social, economic, and environmental issues; and sustainable practices in agriculture, construction, energy production, and transportation.

We are also incorporating green technologies into the activities associated with the new Workplace Readiness Skills and developing a new group of tasks for selected courses that will address green technologies, particularly LEED standards, in construction-related courses.

## Curriculum Development

During 2009–2010, the Center completed 145 products and submitted them to the Department of Education and localities for review and approval:

### DEPARTMENT OF EDUCATION

#### Academics (29)

Economics and Personal Finance Curriculum Framework  
 Economics and Personal Finance 6120  
 Economics and Personal Finance Framework Revision  
 Economics and Personal Finance Standards of Learning Finance Framework Revision  
 History and Social Science (H&SS) 2001–2008 Standards of Learning (SOL) Crosswalk  
 H&SS Enhanced Scope & Sequence 2010 (9)  
 H&SS Curriculum Framework, Virginia and U.S. History  
 Music SOL Instructional Strategies (7)  
 SOL Correlation Work  
 Stepping Stones I Update  
 Stepping Stones II Update  
 Visual Arts SOL Instructional Strategies (2)  
 Visual Arts Strategies History SOL Correlations Update

#### Across the Board (22)

2009 CTE Professional Institute Program  
 2009 CTE Summer Institute Planning  
 2009 CTERS Manual  
 Cooperative Education Handbook update of Web Addresses  
 Cooperative Education Brochure, Revised  
 Cooperative Education: A Career Connection for Students Program  
 Creating Excellence Awards 2009  
 Creating Excellence Forms 2010  
 Creating Excellence Program 2010  
 CTE Five-Year Vision and Strategy  
 CTE Vision Comparison  
 CTE Vision Web Site Development  
 Department of Transportation/VDOE/Illinois Grant  
 Differentiating Instruction in CTE Courses (Featured Resources)  
 Local Performance Plan Rubric/Checklist  
 Perkins IV Accountability Data Guide  
*r u ready?* Magazine 2010  
 Sample Plans of Study Information Sheet Update  
 Student Learning Styles  
 Task Lists/SCRs 2010–2011  
 Workplace Readiness Skills (WRS) Revision  
 WRS Poster

#### Agricultural Education (8)

Agricultural Business Fundamentals Framework  
 Agricultural Business Management Framework  
 Agricultural Business Operations Framework  
 Foundations of Agriculture, Food, and Natural Resources Task List  
 Introduction to Agriscience, Grade 6 Revision  
 Introduction to Natural Resources Framework  
 Land Use and Conservation Management Framework  
 Supervised Agricultural Experience Record Book 2009

#### Business and Information Technology (9)

Advanced Computer Information Systems (CIS) Framework Revision  
 Advanced Programming Framework Revision  
 CIS Framework Revision  
 Database Design and Management with PL/SQL Framework  
 FBLA Annual Report Judging 2010  
 FBLA New Adviser Guide 2009–2010  
 FBLA State Handbook 2009–2010  
 IB Business Management Task List  
 IB Information Technology in a Global Society Task List

#### Career Connections (2)

Parents Brochure: *r u ready?* 2010  
 Ready or Not 2010

#### Family and Consumer Sciences (1)

Life Planning Framework

#### Health and Medical Sciences (5)

HOSA Competitive Events Guide Revision 2009–2010

Medical Laboratory Technology I Framework  
 Medical Laboratory Technology II Framework  
 Nurse Aide I, II Framework  
 Radiologic Technology II Framework

#### JROTC (4)

Military Science I Framework  
 Military Science II Framework  
 Military Science III Framework  
 Military Science IV Framework

#### Marketing Education (1)

Internet Marketing Framework Revision

#### Miscellaneous (1)

Byrd/Meade Scholarships

#### Technology Education (10)

Geospatial Technology II  
 Nanotechnology Featured Resources  
 PLTW Aerospace Engineering  
 PLTW Biotechnical Engineering  
 PLTW Civil Engineering and Architecture  
 PLTW Computer Integrated Manufacturing  
 PLTW Digital Electronics  
 PLTW Engineering Design and Development  
 PLTW Introduction to Engineering Design  
 PLTW Principles of Engineering

#### Trade and Industrial Education (10)

AGCV "Building Your Career in Construction" Video Review  
 Air Traffic Controller Framework  
 Aviation Maintenance Technology I Framework  
 Aviation Maintenance Technology II Framework  
 Drafting I Framework 2010  
 Drafting III framework 2010  
 IES School Codes for the Exchange of Data (SCED) for T&I  
 Newport News Aviation Courses Evaluation  
 SkillsUSA Virginia Advisors' Manual 2009–2010  
 SkillsUSA Virginia Championships Technical Standards 2010

#### TECH PREP (1)

CAPER High Tech Express Academy flyer 2010

#### LOCALITIES (31)

"What They Make" Data from Career Clusters posters  
 Alexandria Program of Studies (2)  
 Alexandria Summer School Program (2)  
 Alpha Delta Kappa 2009–2010  
 Bio-Diesel Production Grant Proposal  
 HCPS CTE Highlights Report  
 Henrico 21 Lesson Plans  
 Issues and Solutions 2010  
 Marketing Task List/Definitions for Chesapeake NAWI (2)  
 NAVIC (7)  
 VACTE (3)  
 VACTEA (8)

#### CENTER PRODUCTS (11)

AIM Nominations 2009  
 Center Promotional Printed Materials (2)  
 CTE Resource Center Promotional Video 2009  
 Grant Writing Course Online  
 Highlights 2008–2009  
 Internal Research Projects (2)  
 Verso Video  
 Workplace Readiness Skills PowerPoint for Students  
 Workplace Readiness Skills Presentation PowerPoint

#### SUMMARY

Total DOE Products:	102
Total Tech Prep Products:	1
Total Local Products:	31
Total Center Products:	11
<b>Total Products:</b>	<b>145</b>

### CTE Resource Center Products

The Virginia Department of Education contracts with the Center each year for development of a specified number of curriculum-related products. Development consists of any combination of writing, editing, design, and production.

### CTE Resource Center Services

The Center provides services to the Virginia Department of Education and local school divisions to aid in the design and implementation of career and technical education programs.

**Local development assistance:** Career and technical educators benefit from many services provided by Center staff:

- ◆ Occupational research and analysis
- ◆ Guidance of curriculum writing teams
- ◆ Suggestions for and use of resources

**Search:** Patrons request resources on a specific education-related topic or subject area. Staff members select appropriate print or electronic items from the distribution inventory and lending library. In addition to the review of local resources, the Center librarian conducts an Internet search for relevant materials.

**Library:** The Center library contains more than 7,000 titles. Using the online library catalog, educators may review and request library titles through the Center's Web site.

**Printing:** The Center coordinates printing and CD duplication of new and previously developed Virginia publications. The Center also provides this service on a cost-recovery basis to local school divisions.

**Distribution:** Verso, Virginia's Educational Resource System Online, is the Center's primary method of distributing CTE curriculum. This Web-based system allows educators online access to CTE task lists, student competency records, and instructional frameworks and provides them the ability to print the basic elements for a course as well.

Those documents that are still printed are distributed according to Department of Education specifications and are available free of charge to Virginia career and technical educators. Selected products are available on CD and/or in PDF.

**In-service programs:** Local educators may request curriculum-related in-service programs and training sessions designed for specific audiences, delivered at the Center or in a locality. Requests have included

- ◆ introductory sessions on Verso, the Web-based curriculum system for CTE
- ◆ information sessions on CTE Resource Center resources for teachers
- ◆ presentations about Workplace Readiness Skills and All Aspects of Industry
- ◆ training sessions for writing teams
- ◆ workshops on using the Web as a teaching resource
- ◆ facilitation of business/industry panels to develop/validate task lists.

**Ordering:** To use Verso, Virginia educators may visit <http://www.cteresource.org/verso2/>. Teachers and administrators may also place orders for printed materials or request information directly through Verso, which now incorporates all Center products, regardless of medium.

## Printing

In 2009–2010, the Center coordinated the printing or CD duplication of 8,675 copies of 18 items.

## Search

The Center's search service focuses on filling non-routine information requests by providing library, Web, and other resources. During 2009–2010, the Center addressed 59 research requests:

◆ Department of Education .....	5	◆ Other .....	9
◆ Field Requests (localities) .....	43	◆ Tech Prep .....	2

## Lending Library

The Center library service loaned 333 resources to Virginia teachers and administrators and acquired 108 new titles for the lending library.

## Distribution

In 2009–2010, the Center continued distributing printed, Web-based, and electronic documents to Virginia educators. Figure A breaks down the distribution figures. "Administration" identifies Center promotional materials.

For the past seven years, Verso has been the major method of distributing CTE task lists, student competency records, and instructional frameworks. The statistics for Verso distribution have been blended into the Center's overall distribution figures.

**Figure A: Materials Distributed, 2009–2010**

<b>Across the Board</b> (print)	2,916	Task List	10,093
CD	1,691	SCR	3,757
Download	6,083	<b>Totals</b>	<b>59,972</b>
Framework	16,275	<b>JROTC</b> (print)	0
Task List	9,076	Framework	1,589
SCR	1,638	Task List	1,884
<b>Totals</b>	<b>37,679</b>	SCR	790
<b>Agricultural Education</b> (print)	0	<b>Totals</b>	<b>4,263</b>
Download	538	<b>Marketing</b> (print)	0
Framework	48,304	Download	422
Task List	17,536	Framework	39,797
SCR	4,519	Task List	13,867
<b>Totals</b>	<b>70,897</b>	SCR	4,168
<b>Business and Information Technology</b> (print)	24	<b>Totals</b>	<b>58,254</b>
CD	761	<b>Tech Prep</b> (print)	0
Download	1,088	Download	485
Framework	108,621	<b>Totals</b>	<b>485</b>
Task List	42,383	<b>Technology Education</b> (print)	8
SCR	12,778	CD	567
<b>Totals</b>	<b>165,655</b>	Download	1,307
<b>Career Connections</b> (print)	35,713	Framework	65,820
Download	1,832	Task List	26,527
Framework	17,517	SCR	7,380
Task List	5,509	<b>Totals</b>	<b>101,609</b>
SCR	1,537	<b>Trade and Industrial Education</b> (print)	0
<b>Totals</b>	<b>62,108</b>	Download	779
<b>Family and Consumer Sciences</b> (print)	454	Framework	111,510
Download	807	Task List	29,047
Framework	73,225	SCR	9,159
Task List	27,357	<b>Totals</b>	<b>150,495</b>
SCR	7,790	<b>Administration</b> (print)	637
<b>Totals</b>	<b>109,633</b>	<b>Totals</b>	<b>637</b>
<b>Health and Medical Sciences</b> (print)	286	<b>Total All Program Areas</b>	<b>821,560</b>
Download	369		
Framework	45,467		

## In-Service Programs

In 2009–2010, the Center presented or facilitated 82 in-service programs and workshops to approximately 1,550 people. Center presentations for school divisions and the Virginia Department of Education addressed curriculum issues, while others highlighted the Center's services and products. The Center also exhibited at 12 conferences.

## Meeting Facilities Use

During 2009–2010, the Center hosted 48 curriculum groups and other meetings, primarily for the Office of Career and Technical Education, Virginia Department of Education, and Henrico County Public Schools. Approximately 670 business representatives, advisory council members, administrators, counselors, teachers, and students from across the state attended meetings at the Center.

## CTECS (formerly VTECS)

The Center managed Virginia's 2009–2010 commitment to the CTECS consortium. This past year's work focused on research and development of the new Workplace Readiness Skills.

## Web Statistics

The Center's Web site has become the primary vehicle for news articles, online resources, and major announcements about CTE curriculum activities across the Commonwealth. Through the site, educators have access to all Virginia CTE task lists, student competency records, and instructional frameworks, as well as library holdings, featured resources lists, and links to valuable education-related Web sites. Figure B provides the annual figures on the Center's Web site activity.

**Figure B  
Web Activity, 2009–2010**

Main Categories	Page Views
About/Home	63,566
Services	6,986
Library	7,706
Links	7,330
CPG	6,495
APG	30,404
Verso*	778,638
<b>TOTAL</b>	<b>901,125</b>

## Just for the Record

CTE Resource Center records show that in the past 28 years, since 1982–1983, the Center has

- ◆ distributed approximately 3.2 million curriculum documents
- ◆ conducted 2,149 searches for information
- ◆ developed 2,287 curriculum products
- ◆ loaned more than 20,210 library items and acquired more than 11,359 library titles
- ◆ facilitated or presented to 1,658 groups, addressing approximately 37,700 educators and business/industry representatives.

The CTE Resource Center welcomes visitors Monday–Friday, 8:00 a.m.–4:30 p.m. We invite you to visit the Center, browse our library holdings, and use our meeting rooms.

## Thank You

The CTE Resource Center appreciates the support of the VDOE and local school divisions and is grateful for the opportunity to serve CTE in Virginia. We look forward to providing new resources for educators across the Commonwealth this year.

The CTE Resource Center is a Virginia Department of Education grant project, administered by Henrico County Public Schools.

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