In 2018-2019, the CTE Resource Center logged another year of serving career and technical education teachers and administrators across the commonwealth thanks to the continued support of the Virginia Department of Education, which funds and oversees our project, and from Henrico County Public Schools, which administers our grant. The Center is proud to provide its services and products free of charge to Virginia's educators.

**Ongoing Curriculum Emphases**

**Work-Based Learning Guide:** This guide focuses on the 11 types of work-based learning experiences, includes Virginia regulations and guidelines for administration of work-based learning, and provides training materials for coordinators.

**Workplace Readiness Skills for the Commonwealth:** Revised with input from businesses and industries in Virginia, the skills have been updated and expanded to meet the demands of the 21st century workplace. All courses for 2019-2020 include the revised workplace readiness skills.

**CanDo:** The CanDo online competency tracking system continues to gain users in the commonwealth's school divisions. During the 2018-2019 school year, about 45 school divisions used CanDo.

**For the Record**

CTE Resource Center records show that in the past 37 years, since 1982-1983, the Center has

- distributed more than five million curriculum documents
- conducted more than 2,300 searches for patron-requested information
- developed more than 3,200 curriculum products
- facilitated or presented to more than 2,225 groups, addressing more than 48,400 educators and business/industry representatives.

**Thank You**

We appreciate the continued support from the commonwealth and all localities in enabling us to provide necessary resources to CTE administrators, teachers, and school counselors. We are grateful for the opportunity to serve CTE in Virginia. As always, we welcome your comments and suggestions. Many of our best ideas and improvements have come from your requests!
ANNUAL ACTIVITY REPORT

Curriculum Development
From July 1, 2018, to June 30, 2019, the Center completed 134 products in collaboration with the Virginia Department of Education (VDOE).

Academics (2)
Mathematics Co-Teaching Lesson Plans (editing)
Science Standards of Learning 2018 (editing)

Across the Board (1)
Workplace Readiness Skills Framework Revision

Agricultural Education (12)
Agriscience and Technology Framework Revision
Cybersecurity in Food and Agriculture, Advanced, Framework
Floral Design I/II Framework Revision
Floriculture Framework Revision
Foundations of Agriculture, Food, and Natural Resources Framework Revision
Greenhouse Plant Production and Management Framework Revision
Horticulture Sciences Framework Revision
Landscaping I/II Framework Revision
Turf Grass Applications, Advanced, Framework Revision
Turf Grass Establishment and Maintenance Framework Revision

Business & Information Technology (8)
Business Management Framework Revision
Database Design and Management (Oracle) Framework Revision
Database Design and Management (Oracle), Advanced, Framework Revision
Database Design and Management with PL/SQL (Oracle) Framework Revision
Digital Input Technologies Framework Revision
Information Technology Fundamentals Framework Revision
Make it Your Business Framework Revision
Principles of Business and Marketing Framework Revision

Family and Consumer Sciences (11)
Culinary Arts I/II Framework Revision
Culinary Arts Specialization Framework Revision
Cybersecurity in Family and Consumer Sciences, Advanced, Framework
Hospitality, Tourism, and Recreation I/II Framework Revision
Interior Design I/II Framework Revision
Introduction to Culinary Arts Framework Revision
Introduction to Hospitality, Tourism, and Recreation Framework Revision
Introduction to Interior Design Framework Revision

Health & Medical Sciences (14)
Emergency Medical Responder Framework Revision
Emergency Medical Technician I/II/III Framework Revision
Healthcare Information Security Framework
Introduction to Health and Medical Sciences Framework Revision
Physical/Occupational Therapy I/II Framework Revision
Radiologic Technology I/II Framework Revision
Sports Medicine I/II (140 hours) Framework Revision
Surgical Technologist I/II Framework Revision

Marketing Education (6)
Cybersecurity in Marketing, Advanced, Framework
Entrepreneurship Education Framework Revision
Entrepreneurship Education, Advanced, Framework Revision
Entrepreneurship Infusion Unit Framework Revision
Introduction to Leadership Framework Revision
Leadership Development Framework Revision

Technology Education (10)
Aerospace Technology I/II Framework Revision
Biomedical Engineering Framework Revision
Biotechnology Foundations in Technology Education Framework Revision
Cybersecurity in Manufacturing, Advanced, Framework
Geospatial Technology I/II Framework Revision
Imaging Technology Framework Revision
Materials and Processes Technology Framework Revision
Renewable Energy Framework Revision

Trade & Industrial Education (19)
Aircraft Pilot Training I/II Framework Revision
ASE Education Foundation Revision—Auto Body
Auto Body Technology I/II/III Framework Revision
Automotive Technology I (MLR 3-year program)
Building Trades I/II Framework Revision
Criminal Justice I/II Framework Revision
Firefighting I/II Framework Revision
Graphic Imaging I/II Framework Revision
Public Safety I/II Framework Revision
Utility/Heavy Construction I/II Framework Revision

Editorial and Production Services (42)
2019 Experience Works Program (editing)
Board of Education Annual Report 2016-2017 and 2017-2018 (production)
Career Success Stars Parents Brochure (editing/production)
Creating Excellence 2019 Program (editing)
Creating Excellence 2019 Script (editing)
CTE Month PowerPoint (production)
CTERS Manual Review 2018-2019 (editing)
Development of an Interactive Academic and Career Plan: Report of the VDOE and Workforce Development (editing)
FBLA Handbook 2018-2019 (production)
HB1530 Workgroup Meeting Summary
History of VTEEA 1978-2018 (editing/production)
VACTEA Conference Program 2018 (editing/production)
VACTEA Conference Survey (production)
VAME Conference Program (editing)
VAME Spring Newsletter (editing)
VAME Winter Newsletter (editing)
VATIE Conference Program (editing)
Virginia ACTE Fact Sheet
Virginia ACTE Issues and Solutions 2019 (editing/production)
Virginia ACTE Professional Development Seminar Program (editing/production)
VCEC Convention Program 2019 (editing)
VDOE Safety Guide for Career and Technical Education (editing/production)
VDOE Work-based Learning Guide (editing/production)
VDOE English Language Learners Credentials Survey 2019
VDOE Office of Career, Technical, and Adult Education Professional Development Video (recording, editing, transcribing) (17)
Workplace Readiness Skills Poster 2019 (editing/production)

Instructional Resources (11)
STEM Brief (11)

Meeting/Facilitation Services (34)
Creating Excellence Awards Judging Panel
CTE Advisory Committee (4)
CTECS Workplace Readiness Skills Summit
VACTEA Board of Directors (3)
Reach
The Center connects with teachers, administrators, and others through social media and quarterly emails that describe ongoing activity. Through Facebook, the Center has approximately 541 followers; on Twitter, the Center averages about 300 impressions each day, or about 10,000 impressions per month. Our current subscribers to quarterly emails totals about 900.

Distribution
In 2018-2019, the Center continued distributing printed, web-based, and electronic documents to Virginia educators. Figure A breaks down the distribution. VERSO is the primary method of distributing CTE task lists, student competency records, and instructional frameworks. The statistics for VERSO distribution are identified separately and then included in the Center’s total figures for distribution, in Figure B.

Inservice Programs
In 2018-2019, the Center presented or facilitated 43 inservice programs and workshops to approximately 1,180 people. Thirty-five meetings were held at the Center to revise curriculum; the Center hosted meetings of business/industry experts to review the existing curricula and hosted teachers at curriculum development meetings to create rigorous, relevant curriculum frameworks.

The Center also conducted six curriculum development meetings “virtually” through live video conferencing with writer/editors at the Center and business/industry experts and teachers at remote locations. Other Center presentations were held for school divisions and the Virginia Department of Education professional development and training sessions, while others highlighted the Center’s services and products. The Center also exhibited at eight conferences.

Meeting Facilities Use
During 2018-2019, the Center hosted 49 meetings, primarily for the VDOE’s Office of Career and Technical Education and for Henrico County Public Schools. Approximately 1,074 business representatives, state CTE Advisory Committee members, administrators, school counselors, teachers, and students attended meetings at the Center.

CTECS
The Center managed Virginia’s 2018-2019 program initiatives with the Career and Technical Education Office of Virginia. The Center facilitated 43 inservice programs and training sessions designed for specific audiences, delivered at the Center or in a locality. Requests have included occupational research and analysis, facilitation of curriculum development teams, and suggestions for resources.

Search: Patrons request resources on a specific education-related topic or subject area. Staff members select appropriate print or electronic items from the Center’s holdings, or they conduct an Internet search for relevant materials.

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

In-service programs: 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, information sessions on Center resources for teachers, presentations about Workplace Readiness Skills for the Commonwealth, training sessions for curriculum development teams, training sessions on CanDo, the online competency tracking system, facilitation of business/industry panels to develop/validate task lists.

Ordering: Virginia educators may visit www.cteresource.org/verso to place orders for printed materials or request information directly.

CTE Resource Center Products
The VDOE contracts with the Center each year to develop curriculum-related products. Development consists of any combination of research, writing, editing, design, and production. The Center’s products and services are provided to educators at no cost.

CTE Resource Center Services
The Center provides services to the VDOE and local school divisions to aid in the design and implementation of career and technical education programs.

Distribution: Virginia’s Educational Resource System Online (Verso) is the Center’s primary method of distributing CTE curriculum. This web-based system allows educators, using the 16 Career Clusters, to search for CTE task lists, student competency records, and instructional frameworks, and provides them the ability to print basic course elements.

The few documents that are still printed are distributed according to VDOE specifications and are free for Virginia career and technical educators.

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

- Occupational research and analysis
- Facilitation of curriculum development teams
- Suggestions for resources

Figure A: Distribution, 2018-2019

<table>
<thead>
<tr>
<th>CTE (Non-VERSO) Materials Distribution</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Print</td>
<td>5,840</td>
</tr>
<tr>
<td>Electronic (PDF, Word, PPT, HTML)</td>
<td>5,524</td>
</tr>
<tr>
<td>Totals</td>
<td>11,364</td>
</tr>
</tbody>
</table>

Figure B: Web Activity, 2018-2019

<table>
<thead>
<tr>
<th>Main Categories</th>
<th>Page Views</th>
</tr>
</thead>
<tbody>
<tr>
<td>About/Home</td>
<td>58,946</td>
</tr>
<tr>
<td>Services</td>
<td>12,727</td>
</tr>
<tr>
<td>Links</td>
<td>10,741</td>
</tr>
<tr>
<td>Career Planning Guide</td>
<td>40,343</td>
</tr>
<tr>
<td>Administrative Planning Guide</td>
<td>111,383</td>
</tr>
<tr>
<td>VERSO</td>
<td>2,830</td>
</tr>
<tr>
<td>CanDo</td>
<td>2,081,216</td>
</tr>
<tr>
<td>Total</td>
<td>2,329,720</td>
</tr>
</tbody>
</table>
Center Assignments 2019-2020

The following projects are in process for revision or development in the coming year:

Across the Board
» Career Exploration–Elementary Grades (New)

Agriculture, Food, and Natural Resources
» Agricultural Education–Development
» Agricultural Education–Preparation
» Biological Applications in Agriculture
» Biotechnology Applications in Agriculture
» Forestry Management
» Forestry Management, Advanced
» Operating the Farm Business
» Outdoor Recreation, Parks, and Tourism
» Systems Management

Architecture and Construction
» Carpentry I/II/III
» Heating, Ventilation, Air Conditioning and Refrigeration I/II
» Masonry I/II/III
» Plumbing I/II

Arts, Audio/Video Technology & Communications
» Commercial Photography I/II
» Fashion Careers I/II
» Introduction to Fashion Careers

Business Management and Administration
» Accounting
» Accounting, Advanced
» Business Law
» Legal Systems Administration
» Medical Systems Administration

Health Science
» Emergency Medical Telecommunications
» Health and Medical Sciences Exploratory

» Home Health Aide
» Medication Aide (New)
» Medical Terminology
» Nurse Aide I/II
» Patient Care Technician
» Pharmacy Technician I/II

Human Services
» Family and Consumer Sciences Exploratory I/II/III
» Family Relations

Information Technology
» Computer Solutions
» Computer Information Systems
» Computer Information Systems, Advanced
» Programming
» Programming, Advanced

Manufacturing
» Electronics/Industrial Robotics Technology
» Electronics Technology
» Industrial Robotics Technology
» Manufacturing Systems I/II
» Technology Assessment
» Technology Foundations
» Technology Transfer

Marketing
» Hotel Management and Operations
» Opportunities in Hospitality and Tourism
» Travel and Tourism Marketing and Sales

Science, Technology, Engineering, and Mathematics
» Energy Course 1 (to be determined, New)
» Energy Course 2 (to be determined, New)
» Power and Transportation

All frameworks will be published in June 2020 so that teachers and administrators may plan their 2020-2021 classroom instruction.

About the CTE Resource Center

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

The Center welcomes visitors Monday through Friday, 8 a.m. to 4:30 p.m. We invite you to visit the Center and use our meeting rooms.

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Technical Education Consortium of States (CTECS). The year’s work continued to focus on the 21st Century Workplace Readiness Skills for the Commonwealth and the completion of instructional resources for each of the competencies. The Center also facilitated meetings to review and revise the workplace readiness skills in anticipation of a rollout of the revised skills in 2019-2020.

Web Statistics
The Center’s website has become a 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 featured resources lists and links to education-related websites.