



Hospitality & Tourism



Health Science



IT & Coding

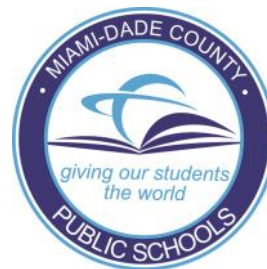


CTE Student Organizations

February 2021

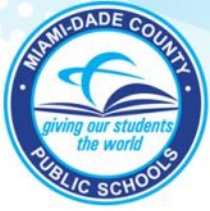


**CELEBRATE TODAY,
OWN TOMORROW!**



@CTEmiami

#MiamiCTEMonth



CTE Month®

February 2021

Celebrate TODAY, Own TOMORROW



CTE Month is a great opportunity to promote your school's Career & Technical Education (CTE) programs and to advocate for CTE.

Goals of CTE Month

- Increase parent and student awareness that CTE programs and academies are aligned to high-skill, high-wage and high-growth careers
- Increase awareness that CTE is a major part of STEM/STEAM school designations, as well as STEM career preparation
- Promote career academies, industry certification, internship participation, dual enrollment and other opportunities for college and career readiness
- Increase student participation in Career & Technical Education Student Organizations

M-DCPS CTE Highlights

- 104,073 students are enrolled in CTE courses in Miami-Dade K-8, middle and high schools
- 2,072 completed the 2020 Summer Youth Internship Program with 57 senior high schools and 594 internship providers participating
- Highest number of Distinguished NAF Academies outperforming all U.S. school districts
- Increased participation of team-based video gaming "E-SPORTS" at 17 high schools, 2 middle schools

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Theme for each week of CTE Month:

- ◆ **Week 1 (Feb. 1-5): College and Career Readiness**
- ◆ **Week 2 (Feb. 8-12): CTE Programs, Academies and STEAM**
- ◆ **Week 3 (Feb. 15-19): Internships, Industry Certification, Digital Literacy, Coding, Robotics**
- ◆ **Week 4 (Feb. 22-26): Career & Technical Education Student Organizations**



SUGGESTED ACTIVITIES FOR CTE MONTH®



Share the facts about CTE each day! During school announcements use informational flyers in this resource guide for sample “Facts about CTE,” trivia questions and/or information on following pages.

Week 1 - College and Career Readiness

- Post “February is CTE Month” on school’s electronic sign, post Announcement in TEAMS, hang posters at school. (Download CTE Month® logo at dcte.dadeschools.net)
- Share the video “CTE is Cool - Miami-Dade” on Zoom, school website, dcte.dadeschools.net
- **Announce**
- or the [Previous Award-Winning ACTE and NASA HUNCH Videos](#).
- Invite guest classroom speakers from industry, colleges, or academy advisory boards.
- Explore college and career information through “[MyCareerShines](#)” application (login through M-DCPS student portal).
- Explore *Careers in a Year* on M-DCPS Technical Colleges website: <https://www.careerinayear.com/>.

Week 2 - CTE Programs and Academies—STEM and STEAM Designation

- Invite industry or community partners to take a virtual tour of your CTE program in action.
- CTE Teacher Appreciation: send thank-you emails from students, recognize them during faculty meeting.
- Highlight CTE students from each CTE program at your school during school announcements.
- Interview and videotape successful alumni, how they trained for their career, tips for success, etc.
- Use social media to promote your school’s STEM or STEAM designation, and how CTE is an integral part of STEM/STEAM at your school. <http://steam.dadeschools.net/>

Week 3 - Internships / Industry Certification / Digital Literacy Skills / Coding / Robotics

- Invite 12th graders to share their internship presentations with juniors and school staff on zoom or post videos.
- Highlight student achievement of industry certification, digital literacy skills, coding skills and/or robotics through social media and during faculty meetings.
- Host guest speakers from industry, or have industry partners judge contests, hold practice/mock job interviews online.
- Advertise and begin to prepare eligible students for 2021 Summer Youth Internship Program. (dcte.dadeschools.net)

Week 4 - Career & Technical Education Student Organizations (CTSOs)

- Leadership Through Service Day: donate toys, clothes or other items to a local shelter or children’s floor at a hospital.
- Club Advisor Appreciation Day: send a thank-you email, or give them a special shout-out during morning announcements.
- Hold a shared meeting with another club at your school or another school on zoom.



CELEBRATE TODAY,
OWN TOMORROW!

When posting on Social Media sites: Twitter, Facebook, Instagram, Pinterest, LinkedIn, etc., please use: [@ctemiami](#) [@mdcps](#) [#MiamiCTEMonth](#)



CELEBRATE TODAY,
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2020-2021 Student Video Challenge Sponsored by CTE MONTH® And NASA HUNCH



The [Association for Career & Technical Education \(ACTE\)](#) and NASA HUNCH are hosting, for the third year, the student video challenge, celebrating Career and Technical Education (CTE) and project-based learning programs.

Video Challenge Theme: *"Advancing Space Exploration through Manufacturing"*

Feature a manufacturing project or possible future scenario in one or more of the following areas that could advance our understanding of living and working in space.

- Precision manufacturing
- Additive manufacturing, including 3D printing
- Biofabrication, involving tissue cell production
- Soft goods and sewn products, such as clothing, cargo transfer backs and space suit manufacturing
- Food production, including plant science
- Clean water production and recycling
- Robotics in manufacturing
- Habitat production
- Energy production, including solar power
- Transportation and rocket production
- Satellite production for communications, weather, space exploration and more
- Video production to document space exploration for research and verification
- Pharmaceutical and medical equipment production

Deadline to submit your video to ACTE is Thursday, April 1, 2021 at 11:59 p.m. EST

The contest is open to **middle school (6th-8th grades), high school and postsecondary students** in any CTE or project-based (hands-on) class or program, or NASA HUNCH school. Students may enter as individuals or as a team.

[GUIDELINES FOR VIDEO, INSTRUCTIONS FOR SUBMISSION - CLICK HERE!](#)

Or VISIT <http://ctemonth.org/>

About CTE Month® and NASA HUNCH

ACTE, empowering educators to deliver high-quality CTE programs that ensure students are positioned for career success, is host to the annual CTE Month awareness campaign held each February.

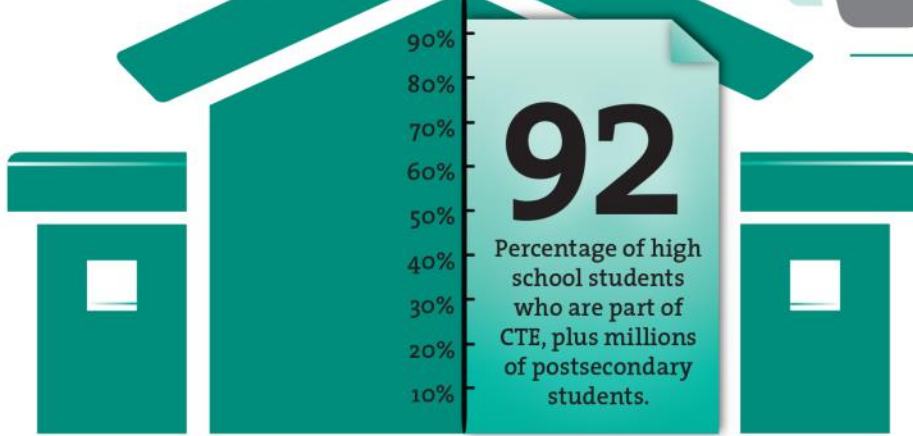
HUNCH stands for *High School Students United with NASA to Create Hardware* and is looking to extend its message of inspiring students through project-based learning to CTE students across the nation. NASA HUNCH high schools offer students the opportunity to launch their careers through the participation in the design and fabrication of real world valued products for NASA.

Note: Contest is not sponsored by M-DCPS Dept. of Career & Technical Education

What is Career and Technical Education?



Fulfills employer needs that are **High** skill wage demand



Includes high schools, career centers, community and technical colleges, four-year universities and more.



Integrates with academics in a rigorous and relevant curriculum.



Features high school and postsecondary partnerships, enabling clear pathways to certifications and degrees.



Prepares students to be college- and career-ready by providing core academic skills, employability skills and technical, job-specific skills.



Educates students for a range of career options through 16 Career Clusters® and 79+ pathways.

Association for Career and Technical Education
1410 King Street
Alexandria, VA 22314
Toll-free: 800-826-9972
www.acteonline.org
Connecting Education and Careers

Revised February 2019



VIDEOS & ANNOUNCEMENTS



Suggestion: During school announcements, read sample announcements or trivia questions each morning (*give answers to trivia questions during the afternoon or next day announcements.*) If school has televised announcements, share the video “CTE is Cool - Miami-Dade” dcte.dadeschools.net

- Career and Technical Education (CTE) is at the forefront of preparing students to be “College and Career Ready.” CTE equips students with core academic skills, employability skills and job-specific, technical skills related to a specific career pathway.
- 92% of all high school students in the U.S. are enrolled in CTE.
- CTE graduates are twice as likely to be engaged at work, if they had a meaningful internship or job while in college.
- 2 million students participate nationwide in Career and Technical Student Organizations (CTSOs), such as DECA, FBLA, HOSA, FCCLA, FFA, TSA, etc.
- More than 300,000 U.S. jobs needing cybersecurity skills are unfilled, companies are needing to hire workers for these jobs. CTE Information Technology high school and technical college programs are helping fill the need for skilled workers.
- Half of all STEM jobs call for workers with less than a bachelor’s degree.
- Almost half of the Power and Energy workforce may need to be replaced by 2024, and demand for solar and wind energy technicians will double.
- Middle-skill level jobs that require education and training beyond high school but less than a bachelor’s degree, are a significant part of the economy. Of the 55 million job openings created by 2020, 30 percent will require some college or a two-year associate degree.
- By 2027, 1.1 to 1.6 million new restaurant jobs are projected, and hotels have experienced six consecutive years of job creation.
- The top three skills and experiences that students report gaining in their CTE classes are: 1) technical, specific job skills; 2) real-world examples to help them understand academic classes and 3) the chance to work as part of a team.
- Almost 1/3 of CTE students have the opportunity to earn college credit and/or an industry certification through CTE nationwide. Miami-Dade students have a much higher percentage.
- 70% of CTE students say entering a CTE program of study helped them achieve better grades.
- 11 of the 20 fastest-growing jobs nation-wide are in the health care field.
- HOSA-Future Health Professionals, the career and technical student organization for health science, has more than 200,000 members.
- From 2016 to 2026, employment in transportation and logistics will add 634,400 new jobs.



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TRIVIA QUESTIONS & ANSWERS

Q. Who was the founder of “Career Guidance” in 1908?

*Answer: In 1908, Frank Parsons established the first vocational guidance clinic and outlined the basic principles of vocational guidance, cementing him as the founding father of vocational psychology.
(www.celebratecareers.com)*

Q. The 16 Career Clusters were validated through a national effort managed by the National Association of State Directors of CTE Consortium. What is a career cluster? Give at least 4 examples.

Answer: A Career Cluster is a grouping of occupations and industries based on common traits. Health Science; IT; Engineering; Agriculture, Food, & Natural Resources; Architecture & Construction; Arts, A/V Technology & Communication; Business Management; Education; Finance; Government & Public Administration; Hospitality & Tourism; Human Services; Law, Public Safety & Security; Manufacturing; Marketing, Sales & Service; Transportation, Distribution & Logistics

Q. Name the Career and Technical Ed. Student Organization (club) that represents Agriscience students. (Customize this question to your school’s CTSO clubs: DECA, FCCLA, FFA, SkillsUSA, etc.)

Answer: FFA

Q. What is an industry certification? (Name at least three examples.)

Answer: An industry certification is a verification of an individual’s competence in an industry skill issued by a third party with the relevant authority to issue the credential or certificate. (Examples: ServSafe, Microsoft Office Specialist, Cisco, Pharmacy Technician, Adobe Certified Associate, etc.)

Q. What does STEAM stand for? What is the difference between STEM and STEAM? (Do you know the STEM/STEAM designation for our school?)

Answer: STEAM stands for Science, Technology, Engineering, Art and Mathematics. STEM focuses only on Science, Technology, Engineering and Mathematics (not integrating the Arts.)

Q. Which city is home to the first career academy in the United States? Bonus: What is the name of the school?

*Answer: Philadelphia is the city which is home to the first career academy.
Bonus: Edison High School in Philadelphia*

Q. Why was U.S. Rep. Carl D. Perkins important to Career and Technical Education?

Answer: Carl Dewey Perkins was a Member of the U.S. House of Representatives, from Kentucky. He was the chairman of the Committee on Education and Labor (1967–1984). While a part of the committee, his work helped produce the Economic Opportunity Act of 1964 and Head Start. He was also a supporter of the Civil Rights Act.

*Perkins's legacy of support to education and the under-privileged is shown by the federal student loan called the Perkins Loan, named for him, as is the **Carl D. Perkins Career and Technical Education Improvement Act of 2006**, which provides federal funds for career and technical education.*

Career and Technical Education (CTE) Student Organizations

With more than 2 million student members combined nationwide, Career and Technical Student Organizations (CTSO) integrate into CTE programs and courses across the country. CTOS extend teaching and learning through innovative programs, business and community partnerships and leadership experiences at the school, state and national levels.

CTOS are a powerful avenue for helping our nation address key challenges such as workforce development, student achievement, economic vitality and global competitiveness. CTOS are authorized by the U.S. Congress in the Carl D. Perkins Career and Technical Education Improvement Act.



DECA prepares emerging leaders and entrepreneurs in marketing, finance, hospitality and management in high schools and colleges around the globe.

■ www.deca.org



To promote personal growth and leadership development through Family and Consumer Sciences education. Focusing on the multiple roles of family member, wage earner and community leader, members develop skills for life through: character development, creative and critical thinking, interpersonal communication, practical knowledge, and career preparation.

■ www.fcclainc.org

NATIONAL RECOGNITION DATES in February

- National FBLA-PBL Week - February 14-20, 2021
- National FCCLA Week - February 11-15, 2021
- National FFA Week - February 20-27, 2021
- SkillsUSA Week—February 7-13, 2021



Bringing business and education together in a positive working relationship through innovative leadership and career development programs.

■ www.fbla.org



The Florida Public Service Association provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, problem-solving skills, employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Law, Public Safety and Security career cluster. FPSA will continue to accelerate students in "mastery and command of subject matter" to promote STEM related skills in the classroom and at state conference/competitions.

■ www.myfpsa.us



SkillsUSA is a partnership of students, teachers and industry working together to ensure America has a skilled workforce. SkillsUSA helps each student excel.

■ www.skillsusa.org



Making a positive difference in the lives of students by developing their potential for premier leadership, personal growth and career success through agriculture education.

■ www.ffa.org



The mission of HOSA is to enhance the delivery of compassionate, quality health care by providing opportunities for knowledge, skill and leadership development of all health science education students, therefore, helping the student meet the needs of the health care community.

■ www.hosa.org



The Technology Student Association fosters personal growth, leadership, and opportunities in technology, innovation, design, and engineering. Members apply and integrate science, technology, engineering and mathematics concepts through co-curricular activities, competitive events and related programs.

■ www.tsaweb.org

CTE: READINESS FOR ALL CAREERS

CTE students gain pathway-specific **TECHNICAL** and **ACADEMIC** skills as well as cross-cutting **EMPLOYABILITY** skills for success in any workplace, in further education and in career awareness and planning. In fact, CTE inspires and motivates students to develop many of the skills that employers most need across jobs and industries.



1. The Conference Board, Corporate Voices for Working Families, the Partnership for 21st Century Skills and the Society for Human Resource Management, *Are They Really Ready to Work?*, 2006 (employer responses for skill needs of new workforce entrants with two-year degrees).

2. Alfeld et al., *Work-Based Learning Opportunities for High School Students*, National Research Center for CTE, 2013.

3. Advance CTE, *CTE is Your STEM Strategy*, 2013.

4. Lekes et al., *CTE Pathway Programs, Academic Performance and the Transition to College and Career*, National Research Center for CTE, 2007.

5. My College Options®/ACTE research study, 2017.

6. Hughes & Karp, *School-based Career Development: A Synthesis of the Literature*, Community College Research Center, Teachers College, Columbia University, 2004.

7. ACTE, Issue Brief: *CTE's Role in Adolescent Literacy*, 2009.

8. Alfeld et al., *Looking Inside the Black Box: The Value Added by Career and Technical Student Organizations to Students' High School Experience*, National Research Center for CTE, 2007.

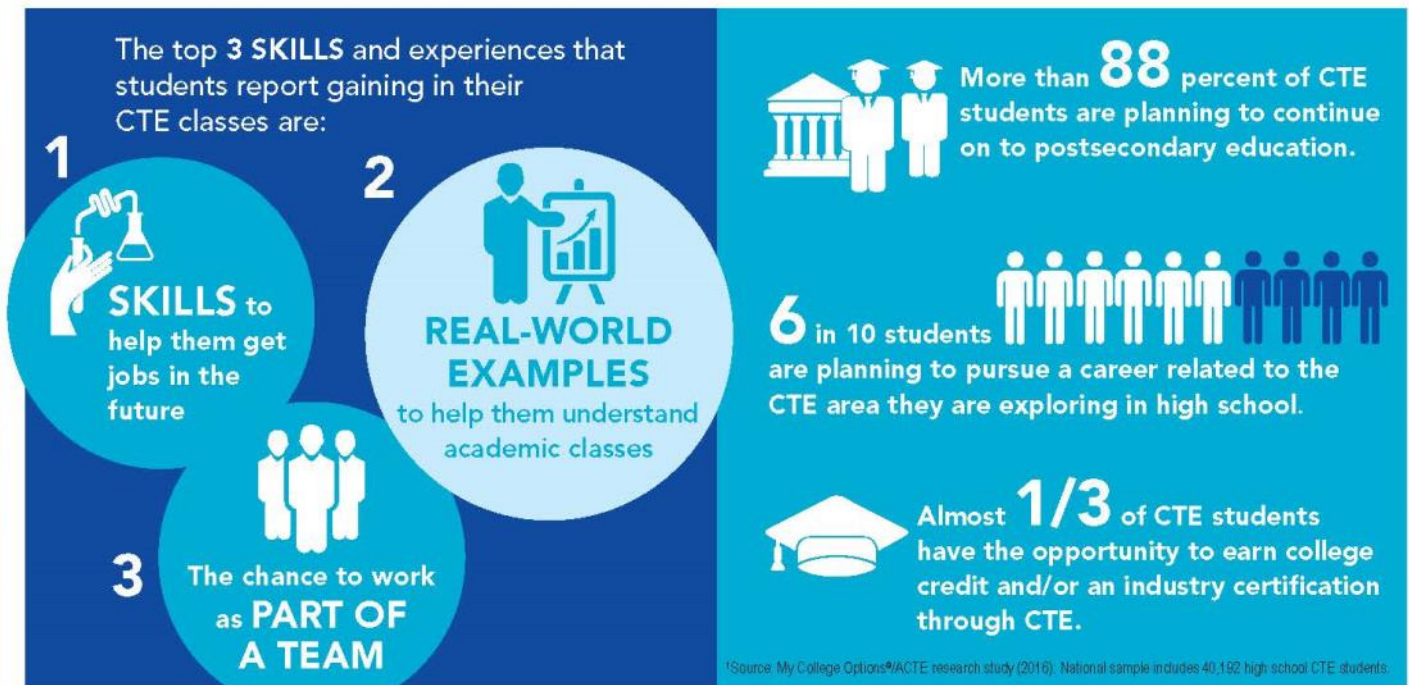
College and Career Ready through CTE



When **APPLIED TECHNICAL LEARNING** is integrated with **RIGOROUS ACADEMICS**, students develop the **SKILLS NEEDED FOR SUCCESS.**

The technical, academic and employability skills that students gain in CTE programs, through CTE courses, work-based learning, career and technical student organizations and dual/concurrent enrollment, are essential for college and career success.

CTE programs prepare students for college and careers:¹



CTE students demonstrate the academic, technical and employability skills needed for postsecondary and workplace success:



80 percent of students taking a college prep academic curriculum with rigorous CTE meet college and career readiness goals, compared to only 63 percent of students taking the same academic core who did not experience rigorous CTE.²



Students attending CTE high schools demonstrate higher rates of on-time graduation and credit accumulation and a greater likelihood of successfully finishing a college prep math sequence.³



CTE students are significantly more likely to report developing problem-solving, project completion, research, work-related, communication, time management and critical-thinking skills during high school.⁴



Postsecondary CTE concentrators earn significantly more than those who majored in academic fields, particularly when employed in an industry related to their program of study.⁵

² Southern Regional Education Board, High Schools That Work 2012 Assessment

³ Neild et al., The Academic Impacts of Career and Technical Schools: A Case Study of a Large Urban School District, 2013

⁴ Leikes et al., CTE Pathway Programs, Academic Performance and the Transition to College and Career, National Research Center for CTE, 2007

⁵ Jacobson and Mokher, Florida Study of Career and Technical Education, 2014, as cited in the 2014 National Assessment of CTE Final Report

For more information about CTE, visit www.acteonline.org.

M-DCPS Career and Technical Education



Website <http://dcte.dadeschools.net>

Facebook www.facebook.com/CTEMiamiDade

Twitter www.twitter.com/ctemiami

Pinterest www.pinterest.com/ctemiami

Instagram www.instagram.com/ctemiami

CTE Websites

Association for Career and Technical Education

<http://www.acteonline.org>

Florida Association for Career and Technical Education (FACTE)

<http://www.facte.org>

Florida Department of Education - Career and Adult Education

<http://www.fldoe.org/academics/career-adult-edu>

U.S. Department of Education/Office of Career, Technical, and Adult Education (OCTAE)

<https://www.ed.gov/about/offices/list/ovae>

College Information

Florida Student Financial Aid

<http://www.floridastudentfinancialaid.org/FFELP/>

Miami-Dade Technical Colleges

<https://www.careerinyear.com/>

MyCareerShines

(login through M-DCPS student portal)

Career Information

CareerSource South Florida

<http://www.careersourcesfl.com/>

America's Career OneStop

<http://www.careeronestop.org/Toolkit/ACINet.aspx>

Careers.org

<http://www.careers.org>

Florida Dept. of Economic Opportunity

<http://www.floridajobs.org>

Florida NEXT Magazine

<http://www.floridanext.com>

Florida Ready to Work

<http://www.floridareadytowork.com/>

MyCareerShines

(login through M-DCPS student portal)

STEM / STEAM

M-DCPS District STEAM website

<http://STEAM.dadeschools.net/>

Girls in Engineering

<http://www.engineergirl.org/>

Hour of Code

<https://code.org/>



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