

Technology in Action Guide

CTE Open Educational Resources



Career Ready Practices

Students starting out in a CTE course should also work on building competency in the Career Ready Practices. In Illinois these are very closely linked to our Social Emotional Learning Standards and Math Practice Standards.

Act as a responsible and contributing citizen and employee	Consider the environmental, social and economic impacts of decisions	Model integrity, ethical leadership and effective management
Apply appropriate academic and technical skills	Demonstrate creativity and innovation	Plan education and career path aligned to personal goals
Attend to personal health and financial well-being	Employ valid and reliable research strategies	Use technology to enhance productivity
Communicate clearly, effectively and with reason	Utilize critical thinking to make sense of problems and persevere in solving them	Work productively in teams while using cultural/global competence



Career Exploration



CareerOneStop is a website that students can reflect on their strengths and skills that will allow them to look at how those factors can be connected to careers and colleges. Selecting resources for Students and Career Advisers takes users to a page that offers two exploration links: "Identify Your Interests" and "Explore Careers". On both of these pages is where students can use their list of strengths and skills to identify careers that would match with what most interest them. Take this a "tech step" further and have them create a presentation or infographic about one of the careers that match their strengths/skills. <http://www.careeronestop.org/>



Course Specific Classroom Resources



CTE Online is the California resource devoted to connecting educators and leaders within the unique field of Career and Technical Education to quality curriculum models, shared communities of practice, and professional development tools that emphasize the role rigorous academic skills play in supporting students' pursuit of industry- and career-related coursework.

Almost 60 Model CTE Online STEM Integrated Projects.

Over 3,000 Lesson Plans aligned to CTE Standards, Common Core and Next Generation Science Standards

Over 50 CTE Model Course Outlines

Professional Curriculum Development Tools

Over 20,000 Instructional Resources

<https://www.cteonline.org/>

Complete Course Outlines with lessons, units, project based learning activities and assessments for the following CTE Industries:

- Agriculture & Natural Resources
- Arts, Media, and Entertainment
- Building and construction trades
- Education, Child Development, and Family Services
- Energy, Environment, and Utilities
- Engineering & Architecture
- Fashion and Interior Design
- Health Science and Medical Technology
- Hospitality, Tourism, and Recreation
- Information and communications Technologies
- Manufacturing and Produce Development
- Marketing, Sales, and Services
- Public Services
- Transportation



Tools for Career Prep Skills



Resume Now is an online platform to create a resume. There are many templates to choose from, even some dedicated to the "first job" resume or high school student. Simple steps to building a complete resume. Resume creation is a free part of this platform. Job search is available for a fee.

<https://www.resume-now.com>



Recap is a platform that allows students to practice interview skills. Educators can create a class account for all students. Educators can then "send" interview questions to the student either via video or text. The student can then record themselves answering the questions. Students can then review and reflect on how they answered the question, including visual clues that they may not be aware of at the time. <https://letsrecap.com>

IOER—Illinois Open Educational Resource Career Libraries



Health Sciences library contains career information, health sciences curriculum, labor market information and a professional library. The curriculum can be downloaded in its entirety or just specific modules. There are 15 modules plus a capstone project. All activities and resources are aligned to the standards including IL-PDH, NHES and NGSS.

<http://bit.ly/2rHslji>



Curriculum Revitalization has sub-libraries with many CTE resources. Their libraries include: All Career & Technical Education, Business, Marketing & Computer Education, Family & Consumer Sciences, School Counseling Resources and Technology & Engineering Education. The libraries contain interactive resources, lesson ideas, articles to assist in college and career readiness for students. <http://bit.ly/2ryWVLT>



Resources to Support CTE Courses



Canva is a platform where students can create infographics, collages, letterhead, flyers and other publishing needs. The resource is available on the website, which is ChromeBook compatible, an iOS and Android app. <http://www.canva.com>

iOS app—<https://apple.co/2KbppCa>

Android app— <http://bit.ly/2wAtqy6>

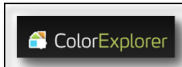


Lucidpress makes it easy for all students to create stunning content that brings their big ideas to life. Built in templates are available and the platform includes connection to images that are copyright free. There is an educational account just for teachers and their students. Scroll to the bottom of the linked page to get started. If you do not automatically get enrolled in the educational platform, please don't hesitate to follow the instructions to request it. (Email accounts with .edu or k12.us.il should automatically populate. If you use another type of address, request access.) The platform integrates with Google Classroom.

<https://www.lucidpress.com/pages/usecase/education>



LucidCharts is a connected website to LucidPress that has an abundance of charting, drafting and flowchart style documents. When educators create a LucidPress account they will also get a LucidCharts educator account...or vis - versa. This platform can also just be used as an online tool to create and download (many formats)/print a chart. <https://www.lucidchart.com/>



Color Explorer has a "color match" page that allows users to adjust color bases (RGB) and Hue, Saturation/Lightness to them show what the RGB numbers are or industry standard number for a specific color. This will allow students in a painting, graphic arts, interior design and many others to make sure their color schemes are exactly the same color choice. This will work on a ChromeBook.

<http://www.colorexplorer.com/colormatch.aspx>



SketchUp allows users to create 3D modeling for many CTE programs. (Architecture, Construction, Engineering, Interior design, 3D printing, Landscape

Architecture, Game design and Film & Stage) The site offers many video tutorials on how to use the platform. It will work on a ChromeBook. They also have a community help desk that is very responsive to requests. <http://sketchup.com>



Blender offers many programs that focus on animation, 3D printing and game design. This is an open source program that needs to be downloaded and used on a laptop or desktop station. This also means that internet connectivity will not be an issue. There are many examples and resources available for teacher and students to get inspiration. (This is a python controlled interface.) <https://www.blender.org>



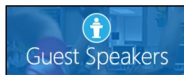
Tinkercad is an easy, browser-based 3D design and modeling tool for all. Tinkercad is also the perfect 3d printing companion – it allows students to imagine anything, and then design it in minutes! Tinkercad is part of the123D family of free apps. Students and teachers can sign up for free accounts and start creating projects quickly and easily. The platform offers wonderful tutorials for teachers to incorporate the lessons into the classroom activities. <https://www.tinkercad.com/>



PhET Simulations from University of Colorado provides fun, free, interactive, research-based science and mathematics simulations. The simulations are written in Java, Flash or HTML5, and can be run online or downloaded to your computer. (More are being updated to HTML5 everyday, those will work on a ChromeBook.) Simulations are all subjects -physics, biology, chemistry, earth science and math. Users can play with the simulations without an account. Educators can use an account to keep track of students and simulations. A great tool for electricians, construction and any other engineering pathway. <https://phet.colorado.edu/>



Need an Expert???



Microsoft Skype in the classroom has many Guest Speakers on the platform. Educators can search for a specific speaker by topic or location. Try a few different terms when searching...i.e. "Electrician" can also be under "Engineer". This link will take you to the "find an expert" page where you can search. If you do not find an expert in the topic you are searching for submit it to Microsoft. They may be able to find you an expert. Also look for field trips to companies or organizations that fit your CTE need. <https://education.microsoft.com/skype-in-the-classroom/find-guest-speakers>



Even MORE Resources

To find more resources and the latest up-to-date technology to support technology integration, please visit www.ilclassroomtech.weebly.com.

- ◆ Assessment tools
- ◆ Audio/video tools
- ◆ Content area support
- ◆ Digital portfolios
- ◆ Computer science
- ◆ Learning management systems
- ◆ Mobile apps
- ◆ Research tools
- ◆ Social Emotional Learning
- ◆ Technology terms

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