Embedding career education in the Victorian Curriculum F–10

Digital Technologies, Levels 9 and 10

An existing learning activity linked to a particular learning area or capability in the Victorian Curriculum F–10 can be easily adapted to incorporate career education, enriching students’ career-related learning and skill development.

1. Identify an existing learning activity

**Curriculum area and levels:** Digital Technologies, Levels 9 and 10

**Relevant content description:** Analyse simple compression of data and how content data are separated from presentation ([VCDTDI046](https://victoriancurriculum.vcaa.vic.edu.au/Curriculum/ContentDescription/VCDTDI046))

**Existing activity:** Editing aspects of website content and altering display features in a separate website.

**Summary of adaptation, change, addition:** Rebranding a website with a name change and new logo.

2. Adapt the learning activity to include a career education focus

|  |  |
| --- | --- |
| Existing learning activity | Adaptations, changes or extensions that can be made |
| Teacher models the distinctions between the content of a website (such as text, links to pages in the same website or external websites) and the presentation elements (such as colour, size of text, placement of images and font styles). | Teacher leads a discussion about the many roles involved in website design. These roles vary in their technical involvement and include graphic artists, programmers working with HTML (hyper-text mark-up language), CSS (cascading style sheets) and/or JavaScript, and UX (user experience) designers. |
| Teacher demonstrates how students can develop tools in a browser, and students navigate to a defined website (this could be the school website or the website for a pre-arranged local business). Teacher identifies elements of an HTML document, such as <p>, which denotes a paragraph, and <li>, which denotes a list item. Students adjust text in the website’s About page to add themselves as the company’s founder and state their vision for the direction of the company. Students can add the names of movie characters or musicians as the company’s other founding members or board of directors. Teacher should remind students that they are modifying a local copy of the website rather than the live web version. | As a class, students discuss the types of businesses that have websites and how business size might influence the nature of that website. Teacher highlights businesses that update their website regularly (such as commercial sites offering weekly specials, news outlets promoting daily news content or critics reviewing new film or music releases) by editing their web content to convey more recent information without changing the presentation elements of the webpage. How would all these factors determine who works on the website? For example, small businesses might be DIY, while big businesses need professionals. What roles are available for people looking for a career in website design and maintenance, and what are the education and career pathways to these roles? |
| Teacher models the impact of style sheets and how each element on the page is rendered according to the display rules in the style sheet. Teacher guides students to make changes and note the effects on individual page elements and the whole page. Students develop a rebranding strategy for a webpage involving changing the colour scheme and the font. They use a text editor to replicate the HTML code for the page, and define their own CSS style sheet to add their own presentation elements to the same content. | Teacher makes connections with page design and online advertising techniques, including banner ads and pop-up notifications. Students consider how advertising interacts with website design. Has advertising changed since internet access became common and widespread? How? Do advertisers use online advertising differently to print, radio or TV advertising? |
| Students reflect on the separation between content and presentation and how it can affect web design. | Students nominate a preference for roles involved in developing content for websites or adjusting presentation elements for web content. They reflect on the skills and strengths that make them suitable for these roles and identify areas for improvement. How can they work towards improving those skills to increase their chances of working in this area? Teacher should facilitate a structured discussion to encourage answers beyond ‘get a university degree’ or similar.  Students add any insight gained to their e-portfolio or other career-planning tool. |

Considerations when adapting the learning activity

* Teachers will need to ensure that the devices students use have access to developer tools in the web browser. Teachers will also benefit from developing their own skills; Dash (see Additional resources) is a free short course in coding that outlines the basics of HTML, CSS and JavaScript, which may help in developing or refreshing skills. Preparing some screenshot or screencast guides to altering content and presentation elements using the developer tools can also help the activity run smoothly.
* Teachers may wish to invite community members involved in web design to speak to students about their career experience. These community members should reflect a range of genders and cultures to challenge preconceived notions and stereotypes about computer and website programmers.

Additional resources to help when adapting the learning activity

* General Assembly, [Dash](https://dash.generalassemb.ly/)
* Tutorialspoint, [HTML – Quick Guide](https://www.tutorialspoint.com/html/html_quick_guide.htm)

Benefits for students

Know yourself – self-development:

* Students identify the area (HTML, CSS or JavaScript) that they prefer to use, and experience how a website relies on a combination of content and presentation.
* Students build awareness of their skills and strengths and identify how to improve themselves to reach career goals.

Know your world – career exploration:

* Students understand the work behind the design process involved in publishing internet content.
* Students develop web-based digital and design skills.
* Students understand that web design and content interacts with different businesses and industries.

Manage your future – be proactive:

* Students reflect on their skills and preferences for working with either the content of a website or the presentation elements, and incorporate these into a digital portfolio.