Embedding career education in the Victorian Curriculum F–10

Design and Technologies – Materials and technologies specialisations, Levels 3 and 4

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, sub-task and levels:** Design and Technologies – Materials and technologies specialisations, Levels 3 and 4

**Relevant content description:** Recognise the role of people in design and technologies occupations and explore factors, including sustainability, that impact on the design of solutions to meet community needs ([VCDSTS023](https://victoriancurriculum.vcaa.vic.edu.au/Curriculum/ContentDescription/VCDSTS023))

**Existing activity**: Exploring the factors behind the packaging of selected items in common use.

**Summary of adaptation, change, addition:** Extending the exploration to include the work roles occupied by people in stages of the packaging process, and the impact of change on those roles.

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

|  |  |
| --- | --- |
| Existing learning activity | Adaptations, changes or extensions that can be made |
| Teacher leads a brainstorming session for students to identify supermarket items that come in packages, such as pre-cut vegetables, boxes of muesli bars, drinks, etc. Teacher helps students identify what materials are used in the packaging of the different items identified, such as soft and hard plastic, cardboard, glass and Styrofoam. | Students extend their thinking by listing the jobs involved in the creation and disposal supermarket packaging. Thinking can be prompted using questions such as, where does the plastic or cardboard come from? Who designs it (engineers)? Where is it made, and by whom? Is it made somewhere different from where the product is made? Who puts it together? Who packs the products to deliver them to the store? Who unpacks the packaging at the store? What happens to it then? (See ‘Additional resources’ for information on this topic.)  For each or some of the jobs identified, students research what those jobs involve, including skills, tasks, and education needed to be successful. |
| Students each pick an item from the list to use as a case study. They explore how the item is packaged and consider why it is packaged that way (i.e. to protect it, to keep it fresh, for convenience). They consider the environmental impacts of the packaging – is it made from recycled materials? Where does the packaging go when it is discarded? Can it be recycled?  Students also research the evolution of the item’s packaging. For example, drinks used to come in six-pack rings of plastic, but now commonly come in cardboard boxes. Students explore why the change may have been made. | Students extend their thinking to consider who drives change in how products are packaged. They use the following questions as prompts:   * Who identifies issues with packaging? (i.e. environmental researchers, engineers, innovators, community members) * Who invents new ways of packaging items? * Who enforces these changes? Consider the movement to reusable bags – how did that become popular in the community, then a legal requirement? * What jobs may have changed, been created, or lost because of changes to how items are packaged?   Students consider the value of change and being adaptable. Do they personally enjoy change or is it something they struggle with? How can change and adaptation be useful for different careers? |
| Students present their findings in a poster format. They share their findings with the class and discuss any similarities in the evolution of packaging and reasons behind the changes. | Students discuss the different jobs they identified in their research. They share what the jobs had in common and where they differed. |

Considerations when adapting the learning activity

* When students are analysing why certain items are packaged, teacher should encourage them to consider who may need items prepared that way. For example, while some people may find the packaging on pre-cut vegetables to be wasteful, others in the community may not physically be able to cut vegetables themselves, therefore accessibility requirements justify the packaging choice.

Additional resources to help when adapting the learning activity

* [Australian Food History Timeline](https://australianfoodtimeline.com.au/)
* Article on sustainable cartons, [“Packaging has been tricky”](https://www.smartcompany.com.au/sustainability/brownes-milk-cartons/)
* Article on pre-cut vegetables and accessibility: [What some call ‘lazy’ others call a ‘lifesaver’](https://www.npr.org/sections/thesalt/2016/03/07/469521879/pre-peeled-oranges-what-some-call-lazy-others-call-a-lifesaver)

Benefits for students

Know yourself – self-development:

* Students recognise the value of being adaptable as they research how packaging has changed over time to suit different needs and policies.
* Students identify how being adaptable is necessary to everyday life and how it can be useful in different careers.

Know your world – career exploration:

* Students develop ICT skills by researching the history of packaging, jobs associated with packaging, and skills/tasks of those jobs.
* Students learn about the labour market while they conduct their research and analyse their results.

Manage your future – be proactive:

* Looking at how jobs can be linked to community needs and priorities equips students with the ability to embrace change, as they see how opportunities will change and grow in their lifetimes.
* Identifying the similarities and differences in the tasks, skills, and backgrounds of a range of jobs helps students plan and build their careers as they learn more about what is possible.