Embedding career education in the Victorian Curriculum F–10

Design and Technologies – Food and fibre production, Levels 5 and 6

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-strand and levels:** Design and Technologies – Food and fibre production, Levels 5 and 6

**Relevant content description:** Investigate how and why food and fibre are produced in managed environments [(VCDSTC035)](https://victoriancurriculum.vcaa.vic.edu.au/Curriculum/ContentDescription/VCDSTC035)

**Existing activity:** Identifying ways of applying, conserving and recycling nutrients in food and fibre production when designing a sustainable school vegetable garden, for example, composting.

**Summary of adaptation, change, addition:** Creating a business plan to sell finished compost to the community.

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

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| Existing learning activity | Adaptations, changes or extensions that can be made |
| This is an ongoing activity that may go for a semester or more. The tasks are suited for science, literacy and numeracy classes. It would suit an ongoing inquiry unit. | |
| Teacher introduces students to composting, including what it is and its benefits.  Teacher leads students in learning about the macro nutrients (nitrogen, phosphorus, potassium) that plants need to grow, and the importance of carbon in providing energy for microorganisms to break down organic matter during composting and explore the importance of the nitrogen:carbon ratio in this process. | Teacher uses statistics on food waste to engage students in the need to take action on food waste.  Teacher leads a discussion on how composting can help with food waste and provide macro nutrients to plants. |
| Teacher sets a task of researching and identifying what can and cannot be composted. Students could use the internet, and gardening books, magazines and TV shows to conduct research.  Students educate their whole school about composting, either through class presentations or making posters for all classrooms on what can and cannot be composted. | Teacher introduces students to careers that relate to composting on a small-business scale, such as market gardener; soil scientist; horticulturist; insect scientist (or insect farmer); agronomist; transport logistics; machinery operator; site manager; and waste management services.  Teacher leads a class discussion on how small businesses work. Students are encouraged to share information about small businesses family/friends work at or run. Students brainstorm what might be needed to run a small business that sells a product (finances, marketing, production, packaging). |
| Teacher designs an ongoing student-led project, in which students manage a school compost bin. This will involve students collecting and emptying classroom food scrap buckets and managing the compost bin. Instructions for maintaining a compost bin can be found in the ‘Additional resources’ section of this document.  Teacher will need to group students and make a roster for tasks to be completed weekly. | Teacher guides teams of students through developing a business plan to sell the compost produced. A step-by-step template in the ‘Additional resources’. Students create a business idea and work through marketing, finances, pricing and profit for their business. Each team can create their own branding and marketing and the class can pick one strategy, or the teams can sell under different marketing and compare sales results.  Students then sell their compost to the school community. This could be done via an honesty box system, student-run markets or order slips being sent out to community. |
| Students create and maintain a compost bin to produce compost.  Students also create a display that explains the importance of nutrients for plant growth, and how composting can support the conservation and recycling of these nutrients to educate their peers. | Students are assessed on their team business plans. At the end of the project, students reflect on the employability skills they developed through the production and selling of the compost. They consider which skills or tasks they enjoyed and how they could relate to future career planning.  As an extension, students could keep record of sales and work out profits of compost business. |

Considerations when adapting the learning activity

* Teacher will need to organise equipment such as buckets for scrap collection, compost bin, garden fork to turn compost, thermometer, pH kit, gloves, and carbon-rich ‘brown stuff’ such as straw/shredded paper/dried leaves to use to layer the compost.
* Teacher will need to supervise the management of funds as students sell their compost.

Additional resources to help when adapting the learning activity

* Composting/food waste resources: ABC’s ‘[War on Waste](https://www.abc.net.au/ourfocus/waronwaste/)’, [FoodWise](https://www.foodwise.com.au/), [Compost Revolution](https://compostrevolution.com.au/tutorial/composting/1/), [Gardening Australia YouTube channel](https://www.youtube.com/channel/UCzzsltdnAgTMSlPOvjko_Dw)
* Biz Kids ‘[Guide to writing a business plan](https://bizkids.com/wp/wp-content/uploads/Kids-Business-Plan.pdf)’

Benefits for students

Know yourself – self-development:

* Students will work with others in teams to create and follow their business plans.
* Student will need to adapt to changes and solve problems that may arise within making and selling the compost.

Know your world – career exploration:

* Students get an insight into the processes and requirements of producing and selling a product and understand the work it requires.
* Students will gain an insight to the skills and knowledge required to run a small business. They will reflect on which skills and tasks they enjoyed, and how they relate to the world of work.

Manage your future – be proactive:

* Students can experience work in a range of areas from manual labour to entrepreneurship.
* Students will learn skills to build and manage their careers by using organisational and self-management skills to maintain their compost, as well as prepare and sell it.