Embedding career education in the Victorian Curriculum F–10

Mathematics, Level 8

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 level:** Mathematics, Level 8

**Relevant content description:** Solve problems involving profit and loss, with and without digital technologies [(VCMNA278)](https://victoriancurriculum.vcaa.vic.edu.au/Curriculum/ContentDescription/VCMNA278)

**Existing activity:** Expressing profit and loss as a percentage of cost or selling price, comparing the difference.

**Summary of adaptation, change, addition:** Running a school market day ‘micro-business’ to develop real-world understanding of profit and loss.

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 |
| Teacher provides students with simplified and/or simulated financial statements showing costs and revenues based on selling price per item.  Teacher demonstrates calculation of total unit cost and total cost by multiplying unit cost by items sold in a business. Teacher demonstrates calculation of profit as total cost minus total revenue at a particular volume of sales, and then profit as a percentage or proportion of total revenue; per unit profit as a percentage of per unit cost; and per unit profit as a percentage of per unit revenue (price).  Students review sample data and discuss example calculations with teacher and peers in class. | Teacher introduces concept of self-employment and business entrepreneurship to class. Teacher and students review information and data on small business start-ups in Australia, including reasons for small business failure.  Teacher places students in small groups and has teams plan a ‘micro-business’ stall to sell to fellow students on a designated market day lunchtime. Ideas could include cakes, craft products, photography stands and sausage sizzles.  Students work in teams to plan their market day stall and estimate how many product ‘units’ they are likely to sell. Teacher guides student teams by advising numbers in the school and other logistical details. |
| Teacher provides students with set or sets of simulated financial data including per unit cost, per unit revenue (price) and sales volume data.  Students use simulated financial data to calculate total cost and total revenue, and then total profit (or loss). Students calculate profit or loss as percentages of unit cost and of price per unit. | Teacher provides students with a simplified printed table, allowing them to record financial data and to calculate profit and loss. A spreadsheet tool may also be used.  Students use profit and loss record sheets and/or spreadsheeting tools to first calculate estimated total cost, total revenue and total profit when planning for their ‘business’, as well as estimated profit or loss as percentages of unit cost and of price per unit.  Teacher discusses with students the importance of financial planning such as this for small or start-up businesses. |
| Teacher provides problem-solving scenarios for which students need to calculate percentage profit or loss and then make a decision regarding adjusting price or cutting costs of production.  Students work in small groups with modelled or simulated financial data to solve calculations and make decisions regarding simulated business situations as presented. Students record financial information in tables and line graphs. | Teacher supervises and coordinates students’ market day preparations in readiness for the date (such as permission notes, food and dietary guidelines, cash handling procedures).  Students hold their market day. Student teams ensure careful recording of sales volumes and cash takings during the activity.  Following completion of market day activity, student teams record actual costs, revenues and profit calculations. |
| Teacher reviews students’ responses and decisions with whole class; students discuss responses in class.  Teacher marks individual students’ financial tables and graphs as a record of work completed in class groups. | Student teams peer review one another’s financial records to ensure accuracy and provide an independent ‘audit’.  Class discussion takes place, focussing on estimated versus actual costs, revenues and profit/loss percentages for their market day business. Students discuss reasons for differences in planned versus actual profits. |
| **Extension:** Teacher organises a small business owner from the community to the class either before or after this activity to discuss financial record keeping, revenue, costs and profits in the context of a real business. |  |

Considerations when adapting the learning activity

* As an enrichment, a representative from a charity could discuss financial elements of the charity with the class. Real money raised by the activity to be donated to a charity of students’ choice.
* Teachers will need to ensure that school policies are adhered to, including cash handling, change floats, till reconciliation and the appropriate disposal of recycling and garbage.

Additional resources to help when adapting the learning activity

* Australian Small Business and Family Enterprise Ombudsman, ‘[Small Business Counts](https://www.asbfeo.gov.au/sites/default/files/documents/ASBFEO-small-business-counts2019.pdf)’

Benefits for students

Know yourself – self-development:

* By planning and operating a small real-life market day micro-business together, students develop leadership and learn how to work well in teams, developing the capacity to work with others.
* By engaging in the experience of planning a business to sell goods or services to fellow student ‘customers’, students learn to present themselves well.

Know your world – career exploration:

* When using spreadsheeting tools to record and calculate financial data, students learn to use technology and information effectively for the purpose of planning for and running a small business.
* By investigating various aspects of creating and operating a small business, students learn to understand work through the relationship between self-employment and generating an income.
* By planning a micro-business in a realistic context, including financial planning of costs and revenues, students use initiative and enterprise skills to engage in activities that allow them to experience work.

Manage your future – be proactive:

* By experiencing some of the practical aspects of self-employment, students use organisational and self-management skills so develop skills in building and managing their career.