

What do I need to know as an educator?

CURRICULUM LINKS

NSW

- Years 7 to 10: NS 5.1.5, 5.2.2
- Year 11 General: FM1, FM2, FM3

National

- Year 7, Percentages ACMNA158
- Year 8, Percentages ACMNA187
- Year 8, Rates ACMNA188
- Year 9, Simple interest ACMNA211
- Year 10, Compound interest ACMNA229

NOTES TO TEACHERS

It can be very challenging for students living in economically disadvantaged areas to aspire to a different life style. The aim of this 3-part activity is to show students how it is possible for them to obtain qualifications, attend a TAFE or university, obtain a degree, pursue a professional career and achieve a different lifestyle. It is also intended to show them the likely costs of further/tertiary education and living costs while studying.

The unit concludes with an investigation requiring students to go to the 'My Future' site. On the site they look at career options and they are challenged to suggest strategies they could use to achieve the career of their choice.

'Daniel's in the Navy' concludes with an investigation into the opportunities available in the Navy or other parts of the defence forces. It provides an illustration of types of trades, traineeships and professional careers. (Students are also directed to pay and benefits of a career in the services.)

If students have completed module 'Life Goals', these investigation activities may not be required.

Teacher as a learner inquiry

- What were the limits of my career aspirations at school?
- How did I find out about careers outside of family and community norms?
- How much did I know about the costs of career options?
- How did I fund my career goals?

Learning objectives

This module is designed to show students how it is possible for them to obtain qualifications, attend a university, obtain a degree, pursue a professional career and achieve a different lifestyle.



Description of student activities

This activity has three parts:

➔ **SAMANTHA'S PLANS – TO GO TO UNIVERSITY AND BECOME A NURSE**



CLASS DISCUSSION



Warm up the class by asking how much they think it might cost to go to university.



PAIR WORK SAMANTHA'S GOALS



Work in pairs to calculate how Samantha can achieve her goals. *Worksheet A*

➔ **JOHA'S PLANS – TO GO TO TAFE TO OBTAIN HEALTH INDUSTRY CERTIFICATE III**



PAIR WORK JOHA'S GOALS



Join pairs into groups of four to calculate how Joha can achieve his goal. *Worksheet B*

Optional investigation/homework: Discuss with the class how Samantha and Joha are able to achieve their goals through different pathways.



Encourage students to log onto the site:  www.myfuture.edu.au/mycareerprofile and investigate some career possibilities.

- What careers interest them?
- What training will they need?
- Where can they get the training?
- How could they pay for the course and support themselves while doing the training?

➔ DANIEL'S IN THE NAVY



PAIR WORK DANIEL'S GOALS



Daniel wants to join the Navy through an apprenticeship in marine science.

Form the class into different pairs to calculate how Daniel could get an apprenticeship in the Navy. *Worksheet C*

Optional investigation/homework:

Discuss the benefits of an apprenticeship in the military. 

Encourage students to log onto the site:  www.defencejobs.gov.au and explore possible jobs and apprenticeships in the Army, Navy, or Air Force. *Worksheet D*

Resources and tips

My Future site:
<http://www.myfuture.edu.au/mycareerprofile>

Jobs in the Defence Forces:
<http://www.defencejobs.gov.au>

Pay and benefits:
<http://www.defencejobs.gov.au/Navy/PayAndBenefits/payDetails.aspx>

ANSWERS: Samantha's plans *Worksheet A*

- 1a \$157.75, 1b \$126.20, 1c \$362.10,
1d Earned \$8353.50, saved \$6682.80
- 2a $5.16 \div 12 = 0.43$,
2b $0.43 \div 100 = 0.0043$, 2c \$7,130
- 3a \$417, 3b \$25,020, 3c \$25,895
- 4a \$11,130, 4b \$895, 4c \$11,088, 4d \$24,958

ANSWERS: Joha's plans *Worksheet B*

- 1a 62, 1b \$41.90, 1c \$1187
- 2a 18, 2b 25, 2c \$434.15, 2d \$369.15
- 3a \$284.15, 3b \$170.49, 3c \$3,068.82
- 4a \$688, 4b \$474, 4c \$11,281.20
- 5 \$15,537.02

ANSWERS: Daniel's in the Navy *Worksheet C*

- 1 \$51,346,
- 2 \$8,234.45,
- 3 \$1,921.10,
- 4 \$41,190.45,
- 5 \$1,584.25
- 6a \$8,837.06, 6b \$7,36.42
- 7a \$233,384, 7b \$285,266, 7c \$468,834
- 7d Teacher to discuss

Further reading

My Future site <http://www.myfuture.edu.au/>

MyUniversity allows potential students to search and compare Australian universities and higher education courses by provider <http://www.myuniversity.gov.au/>

Study assistance alternatives
<http://studyassist.gov.au/sites/StudyAssist/>

Online survey

We encourage you to run these online surveys, designed to capture how students' attitudes to money changed as a result of implementing the units into the school curriculum. The overall survey results can be requested from gail.yap@unitedway.com.au.

Before: www.surveygizmo.com/s3/2124450/Financial-Literacy-Career-Plans-Before

After: www.surveygizmo.com/s3/2126365/Financial-Literacy-Career-Plans-After



When Samantha was in Year 10 she decided that after she completed Year 12 she was going to attend the University of Wollongong to complete a degree in Nursing. She knew it would be expensive and that her family couldn't afford to help her with any of the course or accommodation costs but she was determined to go.

Complete the questions in this activity to learn how she did it!

In March of Year 11 Samantha applied for a job in a fast food restaurant. She obtained casual employment at \$13.50 per hour during the week and \$15.35 per hour on the weekends.

During term time Samantha decided that she could work 6 hours during the week and 5 hours on the weekend and still have sufficient time to do her homework, assignments and study.

1a How much did Samantha earn each week for 11 hours work?

1b Every week Samantha saved 80% of the money she earned. How much did she save each week?

1c During holidays Samantha was able to work 20 hours during the week and 6 hours on the weekend. How much did Samantha earn per week during school holidays?

1d During the remainder of the year Samantha worked for 30 weeks during school term and 10 weeks during holidays. Calculate the total amount Samantha earned and saved during this time, assuming she continued saving 80% of what she earned.

At the end of the year Samantha took \$6,600 out of her savings account and invested it in a term deposit at 5.16% pa monthly compounding interest for 18 months.

2a Use a calculation to show that 5.16% pa is equivalent to 0.43% per month.

2b Use a calculation to show that $0.43\% = 0.0043$ as a decimal.

2c Use the compound interest formula

$A = P(1 + r)^n$, where

A = the final value of the investment

P = the principal or amount invested

r = the monthly rate of interest as a decimal, and n

= the number of months

to calculate the value of Samantha's term deposit at the end of 18 months. Answer to the nearest dollar.

In January of Year 12 Samantha was able use her work experience record to get a job as a waitress in an up-market restaurant. She worked in the restaurant for 6 hours each of Friday, Saturday and Sunday night earning \$19 per hour. As a bonus, she received an average of \$25 per night in tips.

3a Calculate the amount Samantha earned per week, including tips.

3b Samantha worked in the restaurant for 60 weeks until it was time to move to Wollongong to start university. How much did she earn during the 60 weeks?

3c When she moved to Wollongong Samantha had the money in her term deposit and 75% of the money she earned as a waitress. How much did she have?

Attending University is an expensive exercise. There are accommodation costs, course fees, and living expenses to pay. Samantha's application to defer her course fees was successful, so she was able to leave paying for the course until she completed it. But there were other expenses!

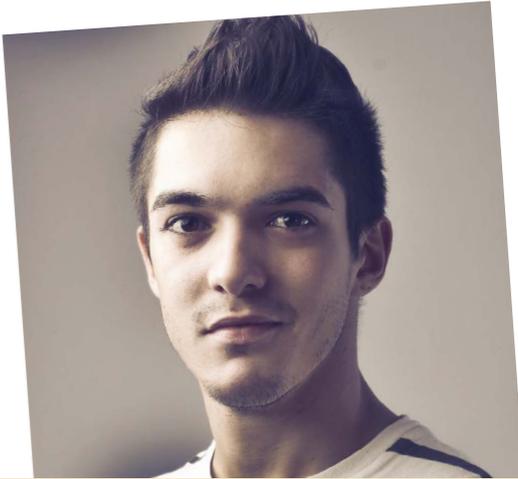
4a Samantha found accommodation for the academic year in University housing. Her room with en-suite bathroom cost \$265 per week and her meals were included. Calculate the cost of Samantha's room for the 42 weeks of the academic year. While the room was expensive it was close to everything and she could walk where she needed to go. Samantha also went home to stay with her family for the remaining 10 weeks of the year.

4b Samantha bought her textbooks from the second hand book shop for \$480, pens and papers cost \$45, incidentals cost \$250, and during the year she bought most of the clothes she needed in a charity shop. The clothes cost her \$120. Calculate the total cost of Samantha's textbooks, stationery, incidentals and clothes.

4c Fortunately there were quite a few restaurants close to the University and Samantha was able to get a part-time job during the academic year. She worked 12 hours at \$22/hour for the 42 weeks. How much did she earn?

4d How much of the money Samantha had saved (from her jobs while she was at school and university) remained at the end of Samantha's first year at University? *Ignore any interest the account earned.*

Samantha returned to the same accommodation and part-time job each year. The determination and plans she made during her final years at school enabled her to achieve her career goal.



Joha works with Samantha in the fast food restaurant and through working on shift with her, realized he has similar aspirations to Samantha, he wants to be a mental health nurse. But during Year 12, he realized that he hadn't done sufficient study and he had spent all the money he'd earned from the job. When he heard about Samantha's calculations, he knows that he won't be able to get into or afford Uni, but her planning motivated him to look at other options.

All the students who are enrolled in Joha's course must be working in a health related job. Before he started the course Joha obtained a job in a local aged care facility. This table shows how Joha will spend his time.

| | |
|------------------|---|
| Monday | 6 hours TAFE + study |
| Tuesday | 6 hours TAFE + assignments |
| Wednesday | 6 hours TAFE + 4-hour shift at the Aged Care facility @ \$17.48/h |
| Thursday | 6-hour shift at the Aged Care facility @ \$16.35/h |
| Friday | 7-hour shift at the Aged Care facility @ \$16.35/h Study and assignments |
| Saturday | Sport and relaxation |
| Sunday | 8-hour shift at the Aged Care facility @ \$18.96/h |

2a How many hours per week will Joha attend TAFE?

2b How many hours will he work at the Aged Care facility?

2c How much will Joha earn per week in the Aged Care facility?

2d Joha will pay \$19 per week in tax and \$46 in transport costs to TAFE and work. How much will he have left after he pays his tax and transport?

Joha spoke with a TAFE counsellor who recommended that he complete an 18-week Health industry Certificate III course then start a TAFE degree course in nursing.

The Certificate III course will cost Joha \$838. There are 20 weeks from now until he has to pay the course fees.

1a How many hours at \$13.50 per hour, will Joha have to work to earn \$838?

1b How much will Joha have to save per week to have enough money to pay the course fees?

1c If during the next 20 weeks Joha can work 15 hours per week and save half the money he earns, how much is left after paying his course fees?



Daniel couldn't find an interesting apprenticeship near home. In fact, there weren't many job opportunities near home. He'd always wanted to see the world but he didn't have the money to do it. Then he discovered the Australian Navy. Now he has a well paid job, qualifications he can use anywhere and he's seeing the world!

Learn about Daniel's career as a Marine Technician as you answer the questions in this activity.

- 1 Daniel entered the Navy as a trainee. His base salary was \$38,422 pa and in addition he received a service allowance of \$12,924 pa. How much was Daniel paid per year when he entered the Navy?

 - 2 For annual taxable incomes from \$37,001 to \$80,000 income tax is \$3,572 plus 32.5c for each \$1 over \$37,000. Calculate Daniel's annual tax bill assuming he has no other income.

 - 3 Daniel is required to pay 5% of his base salary into superannuation. How much does he pay annually in superannuation?

 - 4 Calculate Daniel's net annual income after tax and superannuation.

 - 5 Daniel receives his pay fortnightly by direct deposit. How much goes into his account each fortnight?
- The Navy has good superannuation benefits. In addition to the 5% Daniel pays the Navy contributes 18% of his base salary to his superannuation account each year.
- 6a How much is deposited into Daniel's superannuation account each year?

 - 6b How much money goes into his superannuation account monthly?

- Use the compound interest calculator on the Moneysmart website to answer the next question.
www.moneysmart.gov.au/tools-and-resources/calculators-and-apps/compound-interest-calculator
- Daniel is planning to stay in the Navy for 15 years.
- 7a Estimate the value of his superannuation account in 15 years using these assumptions.
 - The monthly contribution will stay the same as in question 6b
 - The interest rate will be constantly 7% pa

 - 7b Daniel's monthly contribution won't stay the same. It will increase each year as his salary increases. Estimate the value of his superannuation account in 15 years using a monthly contribution of \$900.

 - 7c Now suppose that Daniel decides to stay in the Navy for 20 years. Calculate the value of his superannuation account after 20 years using \$900 per month deposits and 7% pa interest.

 - 7d What conclusions can you make about the growth in superannuation accounts?

You will need internet access to complete this activity.

Use the address:

www.defencejobs.gov.au/Navy/jobs/MarineTechnician

What does Daniel do in his job as a marine Technician?

Is this job exclusively for men?

Use these addresses to find out about jobs in the Navy, Army or Air Force.

Navy jobs: www.defencejobs.gov.au/Navy/jobsDirectory

Army jobs: www.defencejobs.gov.au/army

Air Force jobs: www.defencejobs.gov.au/airforce/Jobs

List three types of jobs that are available. What is involved in each job? Write a brief description. What training and qualifications will you achieve if you are employed in these jobs?

| Three types of jobs | What is involved? |
|---------------------|-------------------|
| | |
| | |
| | |

Use the address:

www.defencejobs.gov.au/Navy/PayAndBenefits/

Describe 4 pay benefits and describe the holidays available in Navy jobs.

Describe how the Navy helps their employees to get accommodation or buy their own home.

Is there a career in the Army, Air Force or Navy for you? List some of the jobs that could interest you and arguments for and against applying for the jobs.

| Possible jobs for me | Positives for the job | Negatives against the job |
|----------------------|-----------------------|---------------------------|
| | | |
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