ATSE
STELR
PROJECT

ENTREPRENEUR WORKBOOK

CONTENTS

Download the Women in Stem Careers and Entrepreneurship poster at:

STELR Website   http://www.stelr.org.au/women-in-stem/

INTRODUCTION

This resource encourages students to use STELR's Women in STEM resources to come to a better understanding of entrepreneurship through:

- Entrepreneurial skills and behaviours
    - o Creating valuable goods/services
    - o Selling the vision
    - o Creative problem-solving
    - o Organisational skills
    - o Taking risks and managing risks
    - o Taking action and getting things done
    - o Working collaboratively
    - o Working independently
- Types of entrepreneurs
- Challenges and opportunities that can be addressed by entrepreneurs.

Students can use the case studies provided to identify successful young entrepreneurs and look at the challenges they addressed and the benefits to the individual, community or environmental sustainability.

Videos and written career profiles of the following entrepreneurs can be found on the STELR website. Written profiles are also published in Section 6 of this booklet.

Catherine Ball	A drone specialist and founder of five start-up companies.
Emily de la Pena	An engineer who started coding clubs for kids and teachers.
Sarah Last	An inventor with a passion for animal welfare and chicken farming.
Liz Williams and Kate Lomas	Scientists and inventors whose invention is helping the profoundly deaf.
Pia Winberg	A marine ecologist with a start-up business in seaweed farming.

STELR Website   http://www.stelr.org.au/women-in-stem/

1. IDEAS ABOUT ENTREPRENEURSHIP

1.1 MY IDEAS

Before beginning these activities, write down what you think 'entrepreneurship' means to you.

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1.2 WHO ARE ENTREPRENEURS?

Start a list of people that you think are entrepreneurs and add to it as you go through these activities.

Name of entrepreneur	What they did	Who benefits?

1.3 ENTREPRENEUR MIND MAP

What do you think it means to be an entrepreneur? What do you think are some of the characteristics of an entrepreneur? Make a mind map of your ideas.

Entrepreneur

2. WHAT IS AN ENTREPRENEUR?

2.1 DEFINING ENTREPRENEURS

There are many different definitions of an Entrepreneur.

Entrepreneurship is the process of designing, launching, and running a new business which is often initially a small business. The people who create these businesses are called entrepreneurs.

Wikipedia

One who organises and manages any enterprise, esp one involving considerable risk.

Macquarie Dictionary

A person who sets up a business or businesses, taking on financial risks in the hope of profit.

Oxford Dictionary

Someone who undertakes a significant project or activity finding new or better ways of doing things; they are opportunity-aware, take risks and utilise a range of behaviours, such as initiative and innovation, that create value and contribute to their success.

Australian Curriculum, ACARA

Question 1. What do these definitions have in common?

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_____

_____

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2.2 ENTREPRENEUR WORD CLOUD

Collect some more definitions of 'Entrepreneur'.

Ask your friends, family and class mates what they think the definition is.

Record (write down) the definitions.

_____

_____

_____

_____

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_____

Pick out the important words in all the definitions (leave out the words such as 'and', 'the', 'is').

Your task will be to create an Entrepreneur word cloud. You can use Wordle or Word It Out, by using one of the programs below. Paste your word cloud in the space below.

www.wordle.net
www.worditout.com

3. LOOKING AT ENTREPRENEURS

3.1 HOW DO ENTREPRENEURS MAKE YOU FEEL?

 Entrepreneurship Video

www.stelr.org.au/women-in-stem

Watch the Entrepreneurs video. Take a few moments to write down your thoughts below

Question 1. Overall, how did this video make you **feel** about entrepreneurs?

Question 2. What did you **think** about the people in this video?

Question 3. What behaviours did you **see** in this video?

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Question 4. What did you **learn** about entrepreneurs from this video?

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Question 5. Was there anything **surprising** in this video?

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Question 6. Did the video make you want to **find out** more? If so, what?

_____

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_____

3.2 ENTREPRENEURIAL SKILLS AND BEHAVIOURS

There are six videos in the Women In STEM series that are based on entrepreneurs:

- Catherine Ball
- Emily de la Pena
- Sarah Last
- Vanessa Rauland
- Kate Lomas and Liz Williams
- Pia Winberg

Choose two of these to watch. Also read their written career profiles.

Question 1. Make a list of as many characteristics and skills that they mention as ones being important for entrepreneurs to have.

If the characteristic or skill is mentioned more than once, note down the number of times it is mentioned.

Characteristic	Number of times mentioned

Add any new words and their meanings to the glossary on page 53 as you go along.

Question 2. Rank the characteristics in order of how many times they are mentioned. Write down the top five characteristics and skills. Compare your list with two other groups in the class.

My top five characteristics	Other group's top five	Class' top five

Optional activity: Create a word cloud for these characteristics to illustrate the most mentioned characteristics. Here is an example of a word cloud made using Worditout.

www.wordle.net/

www.worditout.com

3.3 CASE STUDY OF AN ENTREPRENEUR

Chose one of the entrepreneur videos to watch. Read the accompanying career profile

Research the entrepreneur further on the internet.

Name of Entrepreneur: _____

Question 1. What was the issue or problem that the entrepreneur identified?

_____

_____

_____

_____

_____

Question 2. What was the creative solution to the problem?

_____

_____

_____

_____

_____

Question 3. Who benefits from the solution to the problem? Individuals, communities, the environment?

_____

_____

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_____

Question 4. Write a short paragraph about how they started their business.

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_____

Question 5. Where are they located?

_____

_____

Question 6. What characteristics does your chosen entrepreneur have?

_____

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_____

Question 7. Give examples of how the entrepreneur demonstrated characteristics such as

Confidence   **Initiative**   **Creativity and innovation**

Willingness to take a risk   **Resilience**

_____

_____

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_____

Question 8. What makes them different from other people in their industry?

_____

_____

_____

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_____

Question 9. Write down any ideas they mentioned about managing work-life balance.

_____

_____

_____

_____

_____

4. PATENTS, INTELLECTUAL PROPERTY AND RIGHTS

4.1 PROTECTING YOUR IDEAS

Watch the Sara Last Video and read her career profile.

https://youtu.be/SCqYbPPVq4M

When some people watch this video, they are a bit confused because Sarah's actual invention is never shown.

Question 1. Why do you think she does not show her invention?

In small groups, brainstorm your ideas and write down some reasons why you think this is.

In Australia, there is a government department called IP Australia that helps inventors and innovators protect their ideas. Go to their website to answer the next questions:

IP Australia   https://www.ipaustralia.gov.au/understanding-ip/getting-started-ip/ip-explained

Question 2. What does 'I P' stand for?

IP Australia manages four different types of protection for inventors and innovators:

- Patents
- Trade Marks
- Designs
- Plant Breeders Rights

Question 3. Briefly explain what each of these are:

Patents

_____

_____

_____

_____

Trade Marks ™

_____

_____

_____

_____

Registered Designs

_____

_____

_____

_____

Plant Breeders Rights

_____

_____

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_____

Question 4. IP Australia does not manage Copyright ©. Which Australian government department manages copyright?

_____

_____

Question 5. Briefly explain what copyright is.

_____

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_____

Look at the **IP in everyday life** page at the link below:

IP Australia

IP in Everyday Life

https://www.ipaustralia.gov.au/understanding-ip/getting-started-ip/educational-materials-and-resources/ip-everyday-life

Question 6. Explain how the following Australian innovations are protected?

Qantas:

_____

_____

Baby safety capsule:

_____

_____

Polymer banknotes:

_____

_____

5. DEVELOPING YOUR ENTREPRENEURIAL SKILLS

5.1 COMMUNICATION SKILLS AND WORK EXPERIENCE

Many entrepreneurs talk about the importance of networking with people and having good communication skills. Just like sporting skills, you can practice your communication skills to get better at them.

Successful entrepreneurs are confident, self-motivated and are able to persuade other people to their point of view.

In this activity you can practice your communication skills by calling companies to find out if they provide work experience placement for secondary students.

Calling up someone you don't know is sometimes called cold-calling. This can be challenging for some people, but if you plan your call, then it makes the job easier.

Step 1. Think about the type of industry with which you would like to do work experience.

_____

_____

Step 2. Use the internet to find the names and telephone numbers of two or three nearby companies in that industry.

_____

_____

_____

Step 3. Plan your call

Think about what you are going to say. Then write down a script for the phone call.

What to consider:

- How are you going to introduce yourself?
- Who are you going to ask to be put though to?
- What questions are you going to ask?
- If you get a positive response, what will you do next?
- If you get a negative response, what questions can you ask? (for example, if the company does not take work experience students could they recommend another company? Or if the person is not available could they suggest another person or another time to call back?)
- How are you going to complete the call?

Step 4. Set up a one-page document that you can use to record your phone conversation. Include on it the following:

- Name of company and phone number

- Date of call

- Name of person to whom you are speaking

- All the questions you want to ask with room to write in the answers

- A space at the bottom to write down any actions (such as when you agreed to call back) or thoughts that you had during the call (such other questions you might ask the next time you call).

Step 5. Once you have called all the companies, write down your reflections.

Include things like:

- What you thought before you started

- How the process made you feel

- What you learnt during the process

- What you would do differently the next time.

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5.2 PITCH AN IDEA FOR AN APP

These days there is an app for just about everything. Despite this, new apps are being created everyday.

For example, you can use apps to:

- Order a food delivery
- Translate into another language
- Find out if the train is on time
- Online banking
- Listen to music
- Find directions

In this activity, you will think up an idea for an app.

You don't have to make the app, but you have to think about 'selling' your idea to someone or a group of people who is going to buy it or provide you with funds to develop it.

Thinking of the idea

Ideas to help you think up an app:

- Work in small groups to think of an app that would help you at home or at school.
- Interview an older person (such as grandparents or parents) to find out something they have difficulty with. Could an app help them?

Question 1. What is the issue that your app is going to address?

Question 2. How is it going to address the issue?

Question 3. Who is it going to help? (What is the target market?)

_____

_____

_____

_____

Name and logo

Before you sell your app it would be a good idea to give it a name and think about the logo or icon that will be used to make a button for the screen when it is downloaded.

A good name will help people to remember your product and will help you to 'sell' the product to your market.

The name should be easy to remember, as short as possible and easy to spell.

Think of the names of products that you use to help you with your idea.

Product ideas can:

- include the name of the inventor – Levi™ jeans, Hills Hoist™
- be rhyming names – tutti frutti
- describe what it is – spray on skin
- describe what it does – Super Soaker™, black-box flight recorder
- be made up of initials – DVD, SCUBA

Question 4. Make a list of 5 possible names for your app

_____

_____

_____

_____

_____

To help to choose a name, companies often undertake market research to find out which name is the most popular.

Market research can be carried out in different ways, such as by interviewing people or by written questionnaires.

Question 5. Carry out a quick survey to find out which of the names is most popular. Do this by asking at least 10 people to rank your ideas from 1 to 5 – with 1 being most popular and 5 being least popular. You could use a paper voting form or send an email with voting buttons.

Write down how many people gave each score for each name.

Add up the scores for each name. The one with the lowest score (the most number 1s) will be the most popular name.

Name	1 Most popular	2	3	4	5 Least popular	TOTAL SCORE

Question 6. Sketch an idea for a button icon for your app.

Pitching your idea

Question 7. Develop a presentation to sell your app.

This could be a slide show, a short video or a poster.

Keep it simple and to the point.

In your presentation you might include things like:

- How you thought up the idea

- The problem that is being solved

- What research you have done to check that the app doesn't already exist

- Why your idea is different from or better than other similar ideas

- Market research you did on the name

- Who the app is aimed at

- What other people think about your idea (you could include a testimony).

Elevator pitch

Imagine that you are in an elevator and someone asks you what your idea is. You only have 1 minute to explain it before they get out of the elevator. In that time you have to get your idea across to them and leave them thinking that they want to find out more.

Question 8. Develop an elevator pitch to sell your app. Write it here.

Practice saying it in a natural way (without notes).

Present your pitch to the class.

5.3 ASSESSING RISKS

Many definitions of an entrepreneur use the term 'risk taking'.

Risk is sometimes defined as the potential of gaining or losing something of value. The valuable thing could be your health, money or even social standing.

Many entrepreneurs take financial risks by investing their money to develop and idea or product which may or may not become popular and make the money back. Taking a risk can be quite stressful. One way of easing the stress is to use a risk assessment template to help you think about all the aspects of the risk before you take it.

Question 1. Do you think taking a risk is a good or a bad thing? Write down some of your thoughts.

_____

_____

_____

_____

Work out the risks involved in making your breakfast.

This risk assessment activity is based on assessing the risk to health rather than financial risk. The first thing you need to do is think carefully about the hazards that might be present when you make breakfast.

A hazard is something or activity that could cause you injury. Once you have identified the hazards, then you need to decide on the **likelihood** of the hazard to occur and the **consequences** if it does. This helps you to use the risk matrix to determine the risk level.

For example:

One of the hazards may be the possibility of burning your hand when boiling water for a cup of tea. What is the likelihood of this happening? How serious could it be?

The consequence could be a bad burn needing medical treatment. The likelihood would depend on how practiced you are at using the kettle and making tea.

Using the matrix below, we can score:

Consequence as moderate - **level 3**

Likelihood as possible – **level 3**

The grid then tells us that the risk level is **medium.**

Risk Level

Likelihood	Consequence				
	1	2	3	4	5
5	Medium	High	Extreme	Extreme	Extreme
4	Medium	Medium	High	Extreme	Extreme
3	Low	Medium	Medium	High	Extreme
2	Low	Low	Medium	Medium	High
1	Low	Low	Low	Medium	Medium

Here is an example of a risk matrix.

Likelihood

Likelihood	Level	Definition
Rare	1	May occur rarely (once in 100 years)
Unlikely	2	Unlikely to occur (one every 10 years)
Possible	3	Possible (once a year)
Likely	4	Likely to occur (once a week)
Almost certain	5	Prone to occur regularly (once a week)

Consequence

Consequence	Level	Definition
Insignificant	1	No injury / minimal financial loss
Minor	2	Injury requiring first aid / medium financial loss
Moderate	3	Injury requiring medical attention / high financial loss
Major	4	Injury requiring hospital admission / very large financial loss
Severe	5	Death / massive financial loss

Risk Level

Likelihood	Consequence				
	1	2	3	4	5
5	Medium	High	Extreme	Extreme	Extreme
4	Medium	Medium	High	Extreme	Extreme
3	Low	Medium	Medium	High	Extreme
2	Low	Low	Medium	Medium	High
1	Low	Low	Low	Medium	Medium

The next step is to think about how to reduce the risk. This could be either by reducing the likelihood or the consequences or both.

The risk level for burning yourself making tea could be reduced if you are properly trained in how to use the kettle. This does not reduce the consequences (because if you do drop boiling water on your hand, the consequences would be the same), but it does reduce the likelihood.

Another way of reducing the risk could be to be trained in first-aid for burns and apply an ice pack to the burn straight away. This could reduce the consequences because the burn will not be a serious if the ice is applied straight away. Training in the proper use of appliances is also a way of reducing risk. If you know how to use a kettle and you have practiced many times, risk can be reduced. Another way to reduce the consequences would be to wear protective gloves.

Question 2. Use the Risk management template on the next page to complete the activity for preparing your breakfast.

Be careful to think about all of the risks not just boiling some water that was used for this example:

Name	Activity							Date	
Risk	**Likelihood**	**Consequence**	**Risk level**	**How the risk could be reduced**	**New likelihood**	**New consequence**	**Risk level**	**Is this acceptable?**
Burning hand with boiling water	3	3	Medium	Make sure you know how to use a kettle properly. Have an ice pack available.	2	2	Low	Yes

Risks might include:

- Cutting yourself on a sharp knife

- Burning yourself on a hot drink

- Burning yourself on a stove or toaster

- Slipping on milk or water spilt on the floor

- A fat fire if you are frying eggs.

Question 3. Were there any risks that were still not acceptable? What were they?

_____

_____

_____

Question 4. Discuss how any unacceptable risks could be managed. Write your ideas here:

_____

_____

_____

_____

_____

Risk management template

Name				Activity			Date	
Risk	Likelihood	Consequence	Risk level	How the risk could be reduced	New likelihood	New consequence	Risk level	Is this acceptable?

5.4 INNOVATE USING AN EXISTING PRODUCT

Entrepreneurs can either invent a completely new product or they can improve on an already existing one. Improving an existing product is called innovation.

Question 1. Go to the website below that lists 20 Australian inventions.

Australian Geographic

20 Australian Inventions that changed the world

http://www.australiangeographic.com.au/topics/history-culture/2010/06/australian-inventions-that-changed-the-world/

Look at the following examples and decide if you think they are inventions or innovations. Briefly explain your answer:

Polymer (plastic) banknotes:

Cochlear implant:

Black box flight recorder:

Spray-on skin:

Question 2. Think about these products that were created through innovation. Fill in the answers below:

	What was it like before this innovation?
	What problem did the innovation solve?
Reusable tea bags	Who benefits from the innovation?
	Are there any negative aspects to the innovation?

	What was it like before this innovation?
	What problem did the innovation solve?
Travel umbrella	Who benefits from the innovation?
	Are there any negative aspects to the innovation?

Bendy straw	**What was it like before this innovation?**
	What problem did the innovation solve?
	Who benefits from the innovation?
	Are there any negative aspects to the innovation?

Edible take-away spoons	**What was it like before this innovation?**
	What problem did the innovation solve?
	Who benefits from the innovation?
	Are there any negative aspects to the innovation?

Question 3. Think about some existing products that have not been changed for a while or that could be changed for the better. To get inspiration, go to a supermarket, ask friends and family or talk with your class-mates. Come up with an innovation that will make the product better

Your innovation could include:

- Combining two existing ideas (a pencil with an eraser on the end)
- Changing the shape or design of something (cooking utensils with big thick handles for people with arthritis)
- Changing what it is made from (polymer banknotes).

Sketch your product:	What was it like before this innovation?
	What problem did the innovation solve?
	Who benefits from the innovation?
Name of product:	Are there any negative aspects to the innovation?

6. ENTREPRENEUR CAREER PROFILES

Following are the written career profiles that accompany the career videos that have been produced of Women in STEM and entrepreneurial careers. Ideally, students should access this information and the videos at the same time.

STELR Website   http://www.stelr.org.au/women-in-stem/

6.1 CATHERINE BALL

Dr Catherine Ball trained as an environmental scientist and as a statistician. She is currently Chief Executive Officer (CEO) and founder of several companies mainly based on drones, coding and robotics.

AT SCHOOL

Catherine was an enthusiastic learner, even at primary school. She always loved science subjects and languages.

In secondary school, her favourite subject was geography and she had a dream that she would travel to a new country every year.

She was not keen on maths at school even though she eventually studied statistics at university!

In her final year of school in England, she studied Biology, Chemistry, Physics and French. She was also in the debating team, the orchestra and the choir.

I really threw myself into all the opportunities I had at school and this has followed me throughout my career.

When she was at school Catherine also did baby-sitting jobs and worked in a pharmacy and a pizza shop.

After she finished school, Catherine took a gap year working in Zambia.

INSPIRATIONS

*My **mum** is a big hero for me. She always said to me "go out and do it and be yourself". I could always rely on her if things went wrong.*

*As a child, I fell in love with planet Earth from a very young age and **David Attenborough** was my 'third parent', I was just transfixed by wildlife.*

*I'm also very grateful for my education and my wonderful **teachers**.*

CATHERINE BALL

ENVIRONMENTAL SCIENTIST & ENTREPRENEUR

UNIVERSITY AND FIRST JOB

I originally thought I should study medicine, but then after my Gap Year in Zambia I decided to go with environmental science. We have enough medical staff really, and you can't vaccinate against famine.

Catherine's first degree was in BSc with Honours (Environmental Protection). She then had another gap year working in Thailand, finding and recording new species of bananas. After that, she completed a PhD in Spatial Ecology and Predictive Statistics.

My PhD gave me the wings to choose where I might work in the world, it was my passport to go where I wanted to go or be what I wanted to be.

CATHERINE'S ADVICE TO STUDENTS

Catherine says that the key personal attributes and skills that have contributed to her success are:

Communication is key when you're self-employed. Your network is your net worth. Relationships are very important.

Ability to identify new ways of doing things and creating business opportunities with them. If you can't see new ways, then creating them is just as good if not better.

I never give up. Tenacity.

She says that no person is an island, your networks and the strength and diversity of those directly relate to how successful you'll be.

People don't often talk about it but not having people in your network can also be powerful. Don't be afraid to say no to things, sometimes people want to connect with you for their benefit, not yours.

STEM skills are going to be required by most jobs and in most businesses. Global challenges such as climate change, population growth and aging will only improve if we use STEM.

Having a broad spectrum of experiences has been a huge factor in how I have been able to become independent.

If there is one piece of advice I could give young people today, regardless of what career path they think they might want is "travel, you have to travel, you have to get out there and see the world".

BECOMING AN ENTREPRENEUR

When she came to Australia, Catherine first worked as a consultant, advising companies on environmental issues.

Catherine's first project using drones was looking at turtle rookeries (where they dig nest and lay their eggs) on islands off the coast of Western Australia which are difficult to get to. The project identified endangered animals that had not been seen in years. She was inspired by the enormous potential of drone technology.

Since then she has started up five STEM-based businesses, that she heads:

Remote Research Ranges is company that sends drone technology to remote communities to work with indigenous ranger groups.

SheFlies, co-founded with Dr Karen Joyce to encourage girls and women into STEM careers, to build confidence by getting them to try their hand at something new - learning to fly drones.

Co-Creator and Technical Convenor of the **World of Drones Congress**, which aims to support the growing drone economy across the Asia Pacific region.

Oneplanetwoman is a business she started to provide mentoring and sustainability guidance as well as start-up advice to women in business.

Gumption Trigger is a book that Catherine put together. It highlights 14 stories of Australian business women and how they have found their determination and resilience after things have gone wrong in their life.

CATHERINE'S CURRENT JOB

I am in charge of major strategic decisions across all my businesses. I am the technical convenor of the World of Drones Congress, so am in charge of the technical content.

Catherine has built a successful career as an entrepreneur. She aims to grow her businesses and keep learning and watching for new opportunities.

She chose to work in this sector because she like to have fun and enjoy work life.

I chose a place I could see a lot of opportunity. I used my personal brand to have conversations and raise issues around where there can be improvements, especially with regard to gender diversity in STEM subjects.

STEM AT WORK

STEM is a major factor behind my successes. My companies mainly involve the use of drones and coding and robotics, as well as business and start-ups.

Science skills really set you up for life. How to challenge things and learn about the world. If we don't know where we are, how can we know where we are going?

SheFlies	https://sheflies.com.au/
World of Drones Congress	https://www.worldofdrones.com.au/
Remote Research Ranges	http://www.remoteresearchranges.com/
Gumption Trigger	www.gumptiontrigger.com

6.2 EMILY DE LA PENA

Emily de la Pena is an entrepreneur and the founder of Coding Kids, a company that provides coding workshops for schoolchildren and professional development for teachers.

AT SCHOOL

Emily went to secondary school in Brisbane where she studied Maths B, Chemistry, Physics, Legal Studies, Accounting, English and Study of Religion.

I have always enjoyed and was curious about Maths and Science and found these subjects a lot easier than English and History.

She did legal studies and accounting as well as maths and science so that she could cover all her bases.

I didn't know what to study at uni, I just knew that I really loved maths, science, and problem solving. So I thought engineering would be a great opportunity to use those skills and contribute positively to the community.

WHY CODING IS IMPORTANT

What's so beautiful about learning how to code is that it's not just learning the language and how to write up a program but it's about turning a person who is a consumer of technology into a creator of technology so that they can build their own products and their own digital solutions to solve community problems.

EMILY DE LA PENA

CIVIL ENGINEER & ENTREPRENEUR
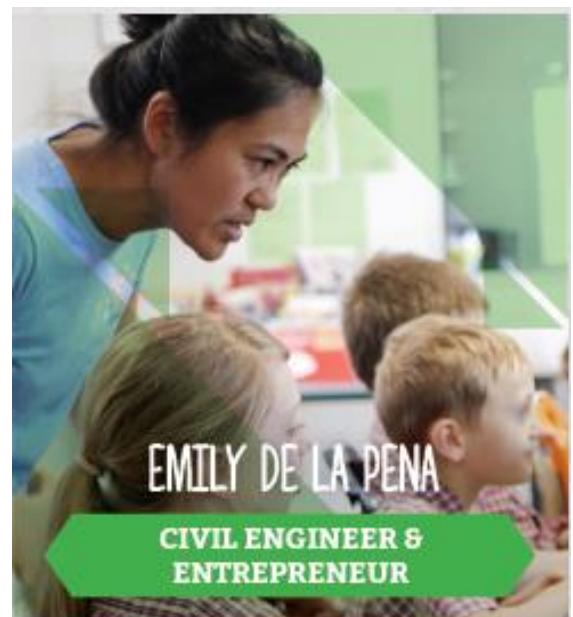
UNIVERSITY AND FIRST JOB

Emily completed a Bachelor of Science and Civil Engineering at university and a Certificate IV in Small Business Management at TAFE.

Her first job was waiting tables at a restaurant, which she did whilst at university.

After she graduated from university, Emily worked as a graduate civil engineer at an Australian engineering consulting firm. Her area was traffic and transport planning.

EMILY'S ADVICE TO STUDENTS

Emily stresses the importance of understanding yourself, knowing who you are and understanding your own values. She advises not to just follow things that are encouraged by parents or teachers or media, but understand who you are and follow your values, your interests and your passion.

My values are lifelong learning, giving back to the community and independence.

Follow your passion, when you do that, you will succeed because you already love it.

Emily says that the key personal attributes and skills that have contributed to her success are:

- Communication and critical thinking
- Leadership and team building
- Process optimisation
- Business development
- Good customer service.

Always keep learning because that will support you in your journey towards whatever you want to achieve for yourself.

Stop thinking about jobs and careers. These concepts are limiting. Focus on your lifelong learning, solving problems and creating positive social impact.

BECOMING AN ENTREPRENEUR

Emily spent 10 years as a civil engineer before starting her own business. During those 10 years she had gap years, firstly in Germany, teaching English as a second language for after school and school holiday programs.

In her second gap year, she explored different ideas and industries. She volunteered to run coding classes for students and she worked with a technology start-up company, where she saw how new businesses are formed and how technology is changing the world, changing the nature of jobs and how we do business.

I recognised an educational shortfall in Australia, between the developments in technology and the lack of training to introduce people to the world of technology and programming.

Emily completed business training and developed an adaptable education program for schools, child-care centres and community spaces. The program introduces children and adults to computer programming and coding. It also aims to encourage enjoyment and creative aspects of learning about technology.

EMILY'S CURRENT JOB

In 2016 Emily started Coding Kids which is a company that runs after-school code clubs and school-holiday code camps for students from Prep to year 9. It also runs professional development for teachers.

Coding Kids is based in Brisbane and their programs are delivered at over 30 schools around South East Queensland. Emily has developed online programs, which are accessed by customers around Australia and overseas. The programs have also been delivered in regional areas such as the Torres Strait, Mt Isa and Thargomindah.

Emily's day-to-day work involves managing her team of 35 tutors, supervisors, her social media team and customer service person. She sees her main role is to support her team so that they can do their work as best they can. She meets with school principals, heads of curriculum and teachers to discuss how Coding Kids could work in their school. She says that she also responds to anything else that might end up in her in-tray.

My aim is to see my business succeed and grow and create positive social impact globally.

STEM AT WORK

STEM outreach is my business. Coding Kids promotes digital literacy education. From a business side, we optimize our business back end operations by automating as many processes as possible.

Coding Kids   www.codingkids.com.au

6.3 SARAH LAST

Sarah Last is the co-founder and Chief Technical Officer (CTO) of a company called MimicTec.

AT SCHOOL

Sarah says that she was a fairly ordinary student in primary school and in lower secondary school.

About half way through year 9, I started really getting into science and I think it was because I realised that science was all about answering questions related to the natural world.

In Year 12, Sarah studied Maths Methods, Further Maths, Physics, Chemistry, Biology and English.

When she was at school, Sarah wanted to be a veterinary scientist.

INSPIRATIONS

*In year 10, one of my **teachers** pushed for me to study VCE biology a year early and I've never looked back.*

As a general rule however the people who have been the most supportive are the people who have never stopped listening to my questions.

SARAH LAST

BIOLOGIST, INVENTOR & ENTREPRENEUR

UNIVERSITY AND FIRST JOB

After high school, Sarah wanted to do something related to science, something with animals and something to do with agriculture. The natural choice at the time was veterinary medicine so after taking a gap year, she started her undergraduate degree in science.

She then began postgraduate study in Veterinary Medicine but realised that there were other options available. She stopped her vet degree and instead studied a Masters in Entrepreneurship and started a company called MimicTec.

Sarah's first job was working at racetrack stables in the morning as a groom.

SARAH'S ADVICE TO STUDENTS

Sarah says that agriculture is a great industry for a career path, there will always be a job for you and there is so much scope to move around in the sector.

It's important to spend time learning who you are and what drives you. Spend time learning what's on offer and what's out there and ask the people around you for their input and opinions.

Finally, don't be afraid to change the goal as you learn more about the world.

I think it is important to have a goal, to work hard but also be open to what you learn along the way.

Sarah says that the key personal attributes and skills that have contributed to her success are:

- Good communication skills
- Willingness to learn
- Curiosity, I'm curious and like learning about how things work which makes me good at asking questions and engaging people in this space
- Have a sense of humour
- Know who you are and what drives you
- Believe in yourself and sometimes ignore when someone says it won't work.

BECOMING AN ENTREPRENEUR

When Sarah started in veterinary medicine, she realised that she didn't just want to help sick animals, she wanted to make the lives of healthy animals even better.

Sarah had also had some experience working with exotic birds and she knew that animals do best when you put them in an environment that most closely mimics their natural setting. With this in mind, along with her experience with birds, she started a project where she invented a robotic device to artificially mimic the maternal care of poultry. Her aim was to see if young chicks would respond to her fake mother hen the way they would a real mother hen.

Sarah's theory was that baby chicks do better when they are reared by a mother hen, but real mother hens can't be used on chicken farms for important animal health reasons. She wanted to build a device to look after chicks when they were young so that they would get the best start to life.

To my surprise the device worked, the chicks treated my robot as they would a mother hen. Even more interestingly, the birds grew better and had better welfare outcomes.

From there she started talking to interested farmers and realised that she might be able to apply her idea to commercial farms. Sarah's cofounder, Ele Toulmin, joined the team and they started MimicTec.

SARAH'S CURRENT JOB

As part of developing her business, Sarah talks to lots of different people in the poultry industry to see how the product interacts with the systems they have and the jobs they have to do.

For example, she needs to make sure that their product doesn't stop the farmer from regularly checking on the chicks in the shed or potentially trip anyone up in the shed while they are working.

When Sarah gets their feedback, she can incorporate it into the product design. She takes what she has learnt from the farmers and explains it to the engineering team.

I build prototypes. We work with excellent engineers who make our product more durable and reliable but the first, second and third time a feature is developed I build it myself. This way I get a better understanding of exactly what is required and how it will need to be put together.

Sarah chose to work in this area because she loves the agriculture sector and the farmers are innovative and hardworking. They're willing to listen to new ideas and will offer honest and thoughtful feedback. Moreover, food is the backbone to human health and so contributing to a thriving agriculture sector means she can positively impact on the health of our country.

What gets me out of bed in the morning is being able to offer another perspective on how we can improve the welfare of our agricultural species.

STEM AT WORK

Our units are primarily mechanically driven, however the algorithm that drives them is all code that I wrote. An understanding of digital technologies therefore has been vital.

In saying that, prior to starting MimicTec, I had little to no experience coding (my background being much more in the biological sciences) but I learnt everything I needed for the job on Google. From a business perspective, our whole company is cloud based, this means we can keep the business paperless and work remotely if we need too which is very convenient.

Mimictec   www.mimictec.com

6.4 VANESSA RAULAND

Dr Vanessa Rauland is an entrepreneur and the Founder and Managing Director of ClimateClever, a company that provides advice to schools to help them become more sustainable. She is also a research fellow at Curtin University.

AT SCHOOL

Vanessa attended a high school which was renowned for its music and sport. At school, she played a lot of sport.

In year 11 and 12 she studied Biology, Maths, Psychology, English and German.

I was pretty good at Maths but wasn't that excited about it at high school. So while I didn't initially follow down that track to begin with, I ended coming back to it.

I think I originally wanted to be a biologist because I loved nature. But not being very good at it sort of threw a spanner in the works. I wasn't really sure what I wanted to do, except I knew I wanted to work in something to do with the environment.

UNIVERSITY AND FIRST JOB

While she was studying, Vanessa's first job was working in a pizza restaurant answering the phones for take-away.

At university, Vanessa studied a Bachelor of Arts in Nature Tourism, which gave her a great grounding in sustainability. She loved the course because it was very hands-on.

After this course, she thought she might be an outdoor guide.

Vanessa then travelled to Amsterdam and studied a Masters of Science in Natural Resource Management. This gave her more technical skills and a better understanding of energy and economics.

INSPIRATIONS

I love the natural world and science – particularly geology, geography and biology. I remember not feeling like I was very technical or scientific or academic in high school.

*I had a great **biology teacher** who was very inspiring!*

*My **family** also instilled in me, from a young age, my love for the environment and nature, which has absolutely been the guiding compass in my career.*

VANESSA RAULAND

SUSTAINABILITY & RENEWABLES ADVOCATE

It was a great experience studying abroad!

I often reflect on how strange it is that I ended up doing a PhD and am now considered a scientist.

I would never have imagined I'd end up in this career if I asked my 17 year-old self.

VANESSA'S ADVICE TO STUDENTS

Vanessa suggests to do as many diverse subjects as you can. Study what you are passionate about. You can always go back and take extra subjects later if needed.

Don't ever let anyone tell you what you can't achieve. Ask for the opportunity to prove them wrong.

When I went to do my Masters, they told me I couldn't do the 'energy stream' because it was too technical and I probably didn't have the skills. I was pretty angry and upset that they had made that judgement of me. I challenged them and asked to do it anyway and they let me. I passed the degree just fine.

Vanessa says that the key personal attributes and skills that have contributed to her success are:

- Being open minded and willing and able to take advice from others

- Leadership and team building

- Building networks

- Knowing when to switch off

- Being resilient.

You have to constantly believe that you WILL succeed.

As an entrepreneur, you constantly experience massive highs and lows – great wins and big falls. You need to be able to ride those waves of emotions. I think I do that pretty well. I'm a pretty optimistic person There will always be doubts, but you need to squash them! Research has shown this is a key determinant of success!

Stop thinking about jobs and careers. These concepts are limiting. Focus on your lifelong learning, solving problems and creating positive social impact.

BECOMING AN ENTREPRENEUR

Vanessa, along with her colleague Samantha Hall, started SimplyCarbon in 2012 after they helped a local Perth high school to become the first carbon neutral school in Australia. After that achievement, many other organisations started to ask if they could help them to become carbon neutral. Seeing a budding business opportunity, they decided to 'bite the bullet' and start the company.

Their aim was to help more organisations achieve great climate and sustainability outcomes. The company has since changed its name to ClimateClever.

VANESSA'S CURRENT JOB

Vanessa has two jobs. She works as a researcher at a university where she supervises Master and PhD students, conducts research, analyses data, explores the latest technologies to reduce consumption of energy, water and waste and travels the world to present at conferences and network with colleagues.

As an entrepreneur, she work with schools, develops Apps, develops her business by networking and identifying potential business partners and she manages all aspects of business administration including marketing, sales, budgets and finance.

I love working in the start-up space! It's dynamic, fun, exciting and a challenge. I also love working with the university doing research – staying at the cutting edge and being on top of the latest developments. I love combining both, as I feel I can make the biggest impact by using the latest research and turning into something that can be implemented on the ground.

One of Vanessa's recent achievements was winning a $40,000 grant from AMP's Tomorrow Fund, which provides people with an opportunity to pursue their dreams. This grant has allowed her to work on and further develop the ClimateClever program, to ensure it is a success in the first year.

STEM AT WORK

There's a lot of maths and number crunching when it comes to calculating carbon emissions and the consumption of electricity, gas and water I used Excel for most of this, as well as for all the finances for running a business.

I am now super excited to be building an App to make the whole data process easier and more streamlined for everyone. I wish I learned to code in school – I am utterly impressed, inspired and amazed by people who can code.

ClimateClever   https://climateclever.org/

6.5 LIZ WILLIAMS AND KATE LOMAS

Dr Liz Williams and Dr Kate Lomas are entrepreneurs and co-founders of a company called Hemideina. The company is developing a hearing device for deaf people. Kate is the Chief Scientific Officer (CSO) and Liz is The Chief Executive Officer (CEO).

LIZ WILLIAMS
CHEMIST & ENTREPRENEUR

KATE LOMAS
BIOPHYSICIST, INVENTOR & ENTREPRENEUR

AT SCHOOL

LIZ

Liz grew up in the United Kingdom and she studied Chemistry, Physics, Maths and French at upper secondary school. She loved Chemistry and wanted to pursue it. She had a great Chemistry teacher when she was 15, so that inspired her to get excited about the subject.

I've always been fascinated by science, and how the world works. Chemistry to me is exciting; because we can make new molecules and products from smaller precursors…it's like building, but on the molecular scale!

Liz says that Chemistry gives you a broad skill-set so opens the door to different university courses or jobs.

KATE

Kate grew up in New Zealand. She studied Biology, Chemistry, Photography, Maths, Computer Studies and English.

When she was a child all she ever wanted to be was a wild-life photographer.

I always wanted to be a wildlife photographer, once I pursued this career I realised I wanted to know more about the animals not just photograph them. So I went back to university to do a degree in Biological Sciences.

UNIVERSITY AND FIRST JOB

LIZ

At university, Liz studied Chemistry. She also chose to do a year in industry, which gave her a chance to use her practical chemistry skills, while learning about the work place.

Liz always believed that she would work in industry and her first job after graduating was at a pharmaceuticals company.

After her PhD, Liz moved to Australia to join CSIRO as a postdoctoral fellow, studying sequence control in molecules called polymers.

I've since done more business development, and learned skills there, hence my move to Hemideina, where I use my knowledge of science, and my business skills to build the company financially.

KATE

When Kate finished school, she went to Art School and majored in Photography. She travelled to England and Canada to photograph animals and build up her portfolio. For a while she lived in the Yukon, a very remote part of Canada. She learnt about the behaviour of bears in the area from the local indigenous people and became more interested in animal behaviour in general.

She decided to return to New Zealand to have her baby and then began studying Biological Sciences at university and eventually a PhD in Animal Behaviour.

During her study she was given the assignment to find out about the relationship between New Zealand's bats and the insects they eat.

BECOMING ENTREPRENEURS

Kate and Liz both moved to Australia. They were working as researchers in different departments at the CSIRO, with Kate in medical research and Liz in the polymers group.

They met when they both undertook a CSIRO course on aimed at taking ideas from the laboratory and making them into a practical project. They worked together on a project to create a sustainable agriculture business in an aboriginal community. Through this project they realised that the worked well together.

Kate had previously taken inspiration from the hearing system of a New Zealand insect called a Wetta. She had an idea to develop an improved hearing system for profoundly deaf people. She left CSIRO to try out her idea. Liz decided to join her and start up their company, Hemidiena.

The current treatment for deaf people consists of an external receiver placed on the side of the head and a device implanted into the cochlea. The external device restricts activities such as bathing, swimming, sleeping and playing sports with it in place because on the outside of the body.

Hemidiena is developing an internalised device about the size of a pill, that fits into the ear canal. This means that the profoundly deaf can do all the activities that a person with normal hearing can do.

LIZ'S AND KATE'S ADVICE TO STUDENTS

Talk to people who are in the career that you are interested in and try and to get some work experience. If you're going to do a PhD in STEM, you have to know it's for you – it's hard, but very rewarding. Also, get an idea of which STEM subject leads to which career.

Always do something you enjoy – that makes it a lot easier.

Science at school is different from science at work. Basic science skills can open doors for many different career paths.

Kate and Liz say that the key personal attributes and skills that have contributed to their success are:

- Not being afraid to take risks
- Believing in yourself and your ideas
- Good networking skills.

Get as many mentors as you can. My mentor inspired me to take risks, and not to worry about getting a permanent job. Other mentors have given me career advice and pushed me out of my comfort zone. Sometimes you need someone to point out your skills, you can't always see them yourself.

LIZ'S AND KATE'S CURRENT JOBS

Kate is responsible for managing the scientific, technological, and research operations at Hemideina. She sets strategy and performance goals and keeps abreast of regulatory protocols.

Liz oversees the financial, legal and general running of the company. She raises its profile in the business and scientific spheres through networking and fund-raising. She still works at CSIRO as her 'day job'.

They work with biophysicists, engineers and acoustic specialists to refine their ideas.

Together we solve the problems.

They say that one of the challenges is that there's no playbook, and there's no one telling you what to do – all the decisions are on them. They have to work everything out as they go but that, it is challenging but also incredibly fun and rewarding!

Kate and Liz chose to work in the biomedical sector because it is one that mixes business with helping people.

You're building devices that enable people to lead improved lives, or are even potentially life saving, whilst building a profitable and sustainable business. It's a very vibrant and supportive community, especially in Melbourne.

STEM AT WORK

STEM gives people such an important mix of skills, and that scientific understanding of how things work helps us to make informed decisions about the future.

It's so important, given how finite our resources are that we have informed and intelligent decision making.

Young people are our future, and we can only make advances and protect our planet for the next generation with their skills – and STEM is a key set of skills to have.

	Hemideina	https://hemideina.com/
	STELR *Future Health* Fact File	www.stelr.org.au/future-health-1/

6.6 PIA WINBERG

Marine Ecologist, Dr Pia Winberg, is an Entrepreneur who has started two companies called Venus Shell Systems and PhycoHealth. She is the Chief Executive Officer (CEO) and Chief Scientist of both companies.

AT SCHOOL

Pia came to Australia from Sweden when she was four. She grew up in Sydney spent a lot of time on the local beaches.

At school she liked biology. In year twelve she studied Maths, Biology, Physics, Chemistry and Music.

I didn't have plans exactly but followed my passion and opportunities, then it evolved.

At school, I just knew that I loved the oceans – I didn't think about becoming a scientist.

Pia loved other things as well as science. She took a break and studied at art school for a year, but then she felt that it was actually science she really wanted to do long term.

INSPIRATIONS

David Attenborough's Life on Earth series came out when I was 10 and I loved watching them. He was my big hero.

Using a snorkel and mask for the first time really opened my eyes to what was under the ocean.

PIA WINBERG

MARINE ECOLOGIST & ENTREPRENEUR

UNIVERSITY AND FIRST JOBS

When Pia was 18, she bought a one-way ticket and went back to Sweden. She completed a science degree, specialising in Marine Ecology.

Some of the jobs she did while studying were waitressing, working in a tap factory and as a train conductor.

After spending 15 years in Sweden, researching in marine ecology and learning about the waters of the Northern Hemisphere, Pia returned to Australia and worked with the Marine Parks Authority. Then she received a scholarship to complete a PhD at the University of Wollongong, where she continued to study marine ecology.

PIA'S ADVICE TO STUDENTS

Pia says it's fine to change and change back again. You don't have to be certain. Just know what interests you and have a go.

Know what interests you and try it.

That is the most important thing you can do, because if it interests you, you will really give it a go! Learn more about it, then it will really start to excite you.

It was a great privilege to be able to learn and teach within an academic setting, but it is another thing for these ideas to actually affect the real world.

Therefore, the only path forward for me was to start a company to progress the ideas of sustainable marine nutrition.

Pia says her most valuable personal attributes that have helped her to succeed are persistence and sharing stories. Communication is vital – and different people read things differently – you have to keep talking and listening to work out how people think.

There was too much damage from the early aquaculture systems of fish production. Overfishing was a problem and created unemployment locally. Keeping the coastline clean while developing new industries is a challenge. I felt that I had a small solution to contribute.

BECOMING AN ENTREPRENEUR

Pia worked for many years as a researcher studying the ecology of the sea. She found out about aquaculture, which is the farming of sea animals like fish, prawns and oysters for food. She saw that there were problems in the industry. Farmers put lots of nutrients into the water and the animals used up the oxygen, and produced carbon dioxide and lots of waste. The water used for aquaculture became polluted and the industry was in danger of not being sustainable.

At the same time, Pia was also studying the algae (seaweed) that is unique to Australian waters. She found that it is very nutritional, containing protein, minerals and dietary fibre. She thinks that if we all ate more seaweed products, the incidence of chronic nutrition problems and autoimmune diseases will be reduced.

Pia put these two ideas together. She saw that seaweed cleans out the excess nutrients and the carbon dioxide in fish farms. She also found a unique green alga that grows quickly absorbs all the nutrients and is high in protein, anti-oxidants, fibre and other nutrients.

The big step was to not stay in academia, but to start up my own company.

She and her team think that if we eat seaweed every day, then we will be much healthier.

Pia found out that one of the most common meals in Australia is spaghetti bolognaise, so she decided to add seaweed flour to pasta to make bright green spaghetti. She has also added it to corn chips and muesli.

PIA'S CURRENT JOB

As a start-up to scale-up company, Pia says she has to cover a lot of things from the development of applications and administration of the company, to making sure that the cultivation and scientific knowledge can be scaled as the company grows.

The company started small and as it grows, they need to work with engineers, food scientists and industrial chemists, building up a team of people with a lot of different skill sets.

She also has to find partner industries that can assist in the manufacture finished goods and with them, she develops a brand and communication strategy that works for the consumer. A lot of her time is used chasing funding from grants and investors – this is the boring but essential part at an early stage where there are still no profits yet.

STEM AT WORK

We are a data heavy company, collecting water quality and seaweed production data all the time, and working with engineers on our systems design and development. We use a lot of spreadsheets and business intelligence systems.

	Venus Shell Systems	https://www.venusshellsystems.com.au/
	PhycoHealth	https://www.phycohealth.com/
	STELR *Climate Change and Oceans*	http://www.stelr.org.au/climate-oceans/

GLOSSARY

Term	Meaning
Innovation	
Self-advocacy	
Transferable skills	
Lifelong learning	

APPENDIX ONE

INITALS AND ACRONYMS

Initials	What they stand for	What it is
BSc	**B**atchelor of **Sc**ience	This is an academic degree awarded to people studying any aspect of science, usually for three to five years. At the successful completion of any Batchelor degree, you become a graduate.
CEO	**C**hief **E**xecutive **O**fficer	This is the highest-ranking Executive in a company. The CEO oversees major corporate decisions and the overall operation of the company.
CFO	**C**hief **F**inancial **O**fficer	This person is responsible for managing a company's finances, including financial planning, risk management, keeping records and reporting to both the company and any other regulatory bodies.
CSIRO	**C**ommonwealth **S**cientific and **I**ndustrial **R**esearch **O**rganisation	This is an Australian independent federal government agency responsible for scientific research.
CSO	**C**hief **S**cientific **O**fficer	This person head all the scientific research that is happening in a company or organisation.
CTO	**C**hief **T**echnical **O**fficer	This person is responsible for overseeing all the technical and scientific operations within a company.
MBE	**M**ember of the Most Excellent Order of the **B**ritish **E**mpire	The Order of the British Empire rewards people in the British Empire for their contribution to the arts and sciences, work with charitable and welfare organisations and public service. There are five classes of awards and the MBE is one of these.
MSc	**M**aster of **Sc**ience	A Masters degree is a post-graduate degree that lasts about 2 years. Once someone has graduated from a Batchelor degree they can study their chosen subject more deeply and gain a Masters degree.
PhD	**D**octor of **Ph**ilosophy	The PhD is the highest academic qualification awarded by most universities. A PhD can be in any subject (not just sciences). People with a PhD can use the title 'Doctor' before their name. PhD comes from the Latin translation: *Philosophiae doctor.*

APPENDIX TWO

USEFUL WEBSITES

Name	Website	What it is
$20 Boss	https://www.fya.org.au/programs/20boss/	Foundation for Young Australians entrepreneurship program.
Meant to Invent	http://www.aas-world.org/YIP/PDFs/MeantToInventGuide.pdf	New Hampshire young inventors teachers' guide.
20 definitions of an Entrepreneur	https://www.businessnewsdaily.com/7275-entrepreneurship-defined.html	From Business News Daily.
IP Australia	https://www.ipaustralia.gov.au/	Explanation of Intellectual property including Trade marks, Design, Patents and Plant breeders rights.
Department of Communication and the Arts	https://www.communications.gov.au/what-we-do/copyright	Explanation of Copyright process.
Australian Geographic	http://www.australiangeographic.com.au/topics/history-culture/2010/06/australian-inventions-that-changed-the-world/	20 Australian Inventions that changed the world.
Game changers and change makers	http://asta.edu.au/article/National-Science-Week-resource-book-%27Game-Changers-and-Change-Makers%27-available-NOW%21%21-96	National Science Week teacher resource book (2018).
Design squad	http://pbskids.org/designsquad/parentseducators/guides/activity_guide.html	Activity guide of engineering challenges for 9 – 12 year olds.
Enterprise Academy at Mentone Girls Grammar School	https://ea.mentonegirls.vic.edu.au/ea-home/enterprising-culture	A school program that encourages entrepreneurship.

AUSTRALIAN CURRICULUM: WORK STUDIES

The following aspects of the Work Studies Curriculum are addressed by activities in this workbook.

Strand	Sub-strand	Year 9 Content
Skills for learning and work	Learning to learn	Outline how past learning experiences influence attitudes towards, and outcomes of, learning. ACWSCL001
	Work skills	Investigate a wide range of occupations, and the skills and personal qualities required in these fields. ACWSCL006
		Identify types of workplace communication and the effect of context on the choice of communication. ACWSCL007
	Entrepreneurial behaviours	Identify types of entrepreneurial behaviours and their opportunities for application to 21st century work and enterprise. ACWSCL010
		Explain how the application of entrepreneurial behaviours can address a range of and community challenges and provide benefits personally and to the community. ACWSCL011
		Practise the skills and attributes underpinning entrepreneurial behaviours. ACWSCL012
Career and life design	Career development and management	Recognise the importance of self-awareness in career and life design. ACWSCL013
		Source career information and resources. ACWSCL014
Strand	**Sub-strand**	**Year 10 Content**
Skills for learning and work	Learning to learn	Explain the relationship between lifelong learning and work in the 21st century and its importance for future work opportunities. ACWSCL023
	Work skills	Explain the range of skills and attributes necessary to work effectively in the 21 century. ACWSCL025
	Entrepreneurial behaviours	Assess the benefits of developing an 'entrepreneurial mindset' and its relevance to 21st century work and enterprise. ACWSCL029
		Complete an action project utilising entrepreneurial behaviours to address an identified challenge or opportunity. ACWSCL031

THANKS TO:

HEMIDEINA

MimicTec

PHYCO HEALTH
Seaweed Science

VENUSSHELL
SYSTEMS

climate clever

CODINGKIDS

WORLD OF DRONES CONGRESS

sheflies
Because she can.