Career resources Science

Activity collection – years 7–8

Introduction

These resources are suitable for students in years 7–8.

They are aligned to the Australian Curriculum and relate to the Australian Curriculum learning area of Science

This selection will provide you, as an Australian educator, with tools to help build your own and your students’ career development awareness.

If you are an Australian teacher or preservice teacher you can access these resources via Scootle, the national digital learning resources portal that contains more than 20,000 digital teaching and learning resources.

Log in to Scootle

Using your school or teacher training institution email account, [log in to Scootle](https://www.scootle.edu.au/ec/login.action).

Not registered? Accessing resources on Scootle

These resources can only be accessed by teachers working in Australian schools (using their school email accounts), and by preservice teachers in Australian education institutions (using their institution email accounts). [Register now](http://www.scootle.edu.au/ec/preregister.action).

Not sure if you are eligible? View [Frequently asked questions](https://www.scootle.edu.au/ec/p/faq).

# Careers with STEM: Science and health teacher notes

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| **Resource ID** | M021754 | | | | | |
| **Link to resource** | <http://resolver.thelearningfederation.edu.au/?rft_id=10257/5870667> | | | | | |
| **Resource description** | The Careers with STEM Teacher Notes are for teachers, careers counsellors, parents, STEM-based institutions, or mentors that could use the guides to expose and inspire students towards STEM careers. These notes focus on careers with science or careers with health. | | | | | |
| **Relevance of resource to careers education** | The Careers with STEM series includes four quarterly magazines, along with website articles, teacher resources and videos across four STEM areas: science, technology, engineering and maths.  The focus is on independent inquiry and constructivist learning through the application of a range of general capabilities that can ‘bridge the academic and vocational divide, providing young people with the resources to navigate the future.’\* Each magazine issue provides inspiring stories, career role models, job statistics and first step action points towards the careers of the future, and is based on the premise of discovering new areas of innovation through *STEM + X –* where X is another field of study, a personal passion, or a world-changing goal.  \*Kate Torii and Megan O’Connell, March 2017. Preparing young people for the future of work. *Mitchell Report* 01/2017. | | | | | |
| **Australian Curriculum Work Studies category/ies** | Career development and management | 🗹 | Entrepreneurial behaviours | 🞎 | Gaining and keeping work | 🞎 |
| Learning to learn | 🗹 | The nature of work | 🗹 | Work skills | 🗹 |

# Bringing engineering to life: STEM careers

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| **Resource ID** | M019742 | | | | | |
| **Link to resource** | <http://resolver.thelearningfederation.edu.au/?rft_id=10257/5871187> | | | | | |
| **Resource description** | This is a unit of work on engineering, the range of possible occupations in engineering and the future and ethics of engineering. The resource includes: An introduction with teacher notes, student tasks, embedded videos and links to additional resources. The resource aims that students learn broadly about engineering and that there are many types; and that students consider and appreciate the important role of engineering today, throughout history and into the future. Topics covered include defining engineering; meeting engineers; engineering wonders and who made them; and ethics in engineering. The resource is a career resource written for both classroom teachers and career counsellors. | | | | | |
| **Relevance of resource to careers education** | This is a highly useful resource for the year 7, 8 and 9 Science curriculum. It is particularly useful for the content descriptions referring to the way people use understanding and skills from across the disciplines of science in their occupations (year 7 and 8) and how advances in science and technology affect people's lives creating new career opportunities (year 9). Task 2: Getting to know some engineers is particularly relevant here as it includes three videos of interviews with engineers discussing their work, with associated student tasks. Task 6: If I were an engineer is also relevant, which asks students to reflect on their own career aspirations on completion of the unit. | | | | | |
| **Australian Curriculum Work Studies category/ies** | Career development and management | 🗹 | Entrepreneurial behaviours | 🞎 | Gaining and keeping work | 🞎 |
| Learning to learn | 🗹 | The nature of work | 🗹 | Work skills | 🗹 |

# Unconscious bias: You can be a scientist: STEM careers

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| **Resource ID** | M019899 | | | | | |
| **Link to resource** | <http://resolver.thelearningfederation.edu.au/?rft_id=10257/5871192> | | | | | |
| **Resource description** | This is a unit of work about the work of scientists and science careers; particularly what common stereotypes, prejudices and perceptions exist regarding who can or should become scientists. The resource includes: an introduction with teacher notes, student tasks, embedded videos and links to additional resources. Specific topics explored include stereotypes; scientists at work; and participation of girls and women in STEM. The resource is a career resource written for both classroom teachers and career counsellors. | | | | | |
| **Relevance of resource to careers education** | This is a highly useful resource for the year 7 and 8 Science curriculum. It is particularly useful for the content descriptions referring to the way people use understanding and skills from across the disciplines of science in their occupations. Task 1 is particularly relevant to this as it includes four videos of interviews with scientists discussing their work, and includes associated student tasks. | | | | | |
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| Learning to learn | 🗹 | The nature of work | 🗹 | Work skills | 🗹 |

# Meet a scientist

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| **Resource ID** | R10706 | | | | | |
| **Link to resource** | <http://resolver.thelearningfederation.edu.au/?rft_id=10257/5830011> | | | | | |
| **Resource description** | This collection of 20 digital curriculum resources investigates the life and work of scientists from a range of scientific endeavours. It is organised into five categories - environmental scientists, life scientists, physical scientists, earth scientists and the qualities of a research scientist. Interactive learning objects can be used to explore and collect biographical data from which scientific profiles can be developed. Several audio and video resources discuss the nature of the work of particular scientists. | | | | | |
| **Relevance of resource to careers education** | This resource:   * explores the nature of work within science * illustrates how scientists live and work * provides biographical information about scientists at work, their professional activities and personal interests * demonstrates real-world applications of science. | | | | | |
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| Learning to learn | 🞎 | The nature of work | 🗹 | Work skills | 🞎 |

# A career as a geologist

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| **Resource ID** | M015756 | | | | | |
| **Link to resource** | <http://resolver.thelearningfederation.edu.au/?rft_id=10257/5858221> | | | | | |
| **Resource description** | Do all scientists wear white lab coats and work with chemicals? Watch this clip and discover how a career in science can take you soaring to dizzying heights. Find out what an exploration geologist does and why helicopters are used in the job. This clip will inspire you to consider a career in one of the many varied fields of science, including geology. | | | | | |
| **Relevance of resource to careers education** | Teachers can use this video to ask students a set of questions related to opportunity awareness.  **Questions to ask before viewing:**  There are many different jobs in science. How many science jobs or types of scientists can you think of? Can you name some less well-known science jobs and describe what work is involved? Do you know a scientist? What does he or she do?  **Questions to ask while viewing:**  Why did the South Australian government set up the website *There's more to it than you think*? Listen as Emma explains why she took part in the program. What does Greg say geology is the study of? Why do geologists take to the skies? What are they looking for and what clues help them find these?  Find out more about geology and related earth science careers at the [Earth Science Australia](http://www.earthsci.org/) website. | | | | | |
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| Learning to learn | 🗹 | The nature of work | 🗹 | Work skills | 🗹 |