Introduction

1.1 Introduction to this resource

The Ready for Work Plan: School to Work Program

The NSW Government’s Ready For Work Plan details a commitment to improving the preparation of school leavers moving into the workforce and/or further education and training by providing them with:

- relevant vocational skills
- up to date workplace knowledge
- advice on a broad range of training options.

The School to Work Program focuses on:

- introducing individual school to work plans where students record their employment related skills, develop action plans and track their career planning progress using the Employment Related Skills Logbook over a period of up to four years
- expanding student access to work education programs
- improving workplace learning opportunities
- developing and disseminating industry-specific information on vocational pathways
- providing training and development for careers advisers and other teachers.

This resource provides teachers with information and teaching strategies to support the implementation and use of the School to Work Planning Employment Related Skills Logbook.

The School to Work Planning Employment Related Skills Logbook

This logbook enables students to record their transition planning over a period of up to four years and to articulate how their vocational learning experiences at school and beyond have prepared them for life long learning.
Why use the logbook?

Research from major employment agencies, multi-national companies and professional employer groups has found that employers are specifically seeking indicators from the key competencies and other employment related skills.

The changing nature of work has resulted in a changing work environment. The main features emerging are moves from:

• continuous employment to continued employability
• vertical careers to lateral careers
• a single career to multiple careers within a working lifetime
• employer managed careers to employee managed careers.

Students are already learning and developing these employment related skills daily in the classroom but have not been able to track and articulate them to their full potential. Pages from the logbook’s classroom section can be used to brainstorm, summarise and reflect all the knowledge and skills gained during any lesson, topic, activity or unit of work. Teachers can use the classroom section of the logbook to demonstrate how their subject or course offers students valuable knowledge plus the employment related skills students will need for future life, education, training and employment.

The logbook is also a useful tool for schools to use when writing school leaver references.

1.2 Science curriculum: Vocational links

Pedagogy

Effective teaching and learning will be achieved by Science teachers who use pedagogy which promotes intellectual quality and provides access to learning environments to link the work of students to personal, social and work contexts outside of the classroom. Effective delivery of vocational learning will incorporate relevant Science syllabus outcomes, embed the Work, Employment and Enterprise and Key Competencies cross-curriculum content statements and be based on a range of pedagogical approaches which connect students to the ‘real world’.
Board of Studies K-10 curriculum framework review

The School to Work Planning Employment Related Skills Logbook reflects the key directions of the Board of Studies in its review of the K-10 curriculum framework. In this framework the Board of Studies has incorporated Work, Employment and Enterprise and the Key Competencies into its cross-curriculum content statements. The logbook is a tool that supports the implementation of this content into any Science program.

Key Competencies

The importance of integrating Key Competencies into the teaching and learning of Science is highlighted in the science syllabuses. The following statement, from the Science Stages 4-5 Syllabus, can also be found in the Stage 6 Science syllabuses.

Science provides a powerful context within which to develop general competencies essential for the acquisition of effective, higher-order thinking skills necessary for further education, work and everyday life.

Key competencies are embedded in the Science Stages 4-5 Syllabus to enhance student learning and are explicit in the objectives and outcomes of the syllabus. The key competencies of collecting, analysing and organising information and communicating ideas and information reflect core processes of scientific inquiry and the skills identified in the syllabus assist students to continue to develop their expertise in these areas.

Students work as individuals and as members of groups to conduct investigations and, through this, the key competencies planning and organising activities and working with others and in teams are developed. During investigations, students use appropriate information technologies and so develop the key competency of using technology. The exploration of issues and investigation of problems contributes towards students’ development of the key competency solving problems. Finally when students analyse statistical evidence, apply mathematical concepts to assist analysis of data and information and construct tables and graphs, they are developing the key competency using mathematical ideas and techniques.

Stage 6 syllabus links to vocational learning

Use of the logbook supports content statements within the following Board of Studies Stage 6 syllabuses:

- Biology
- Chemistry
- Earth and Environmental Science
- Physics
- Senior Science

(Marine Studies and Agriculture are located in the TAS booklet).

Under the heading ‘Post-school opportunities’ it states the study of each course: “provides students with knowledge, understanding and skills that form a valuable foundation for a range of courses at university and other tertiary institutions.”

In addition it states that the study of each course “assists students to prepare for employment and full and active participation as citizens. In particular, there are opportunities for students to gain recognition in vocational education and training. Teachers and students should be aware of these opportunities”.

Vocational Learning in Science
## Stage 5 syllabus links to vocational learning

Use of the logbook supports the following Stage 5 objectives and outcomes from the NSW Board of Studies syllabuses: Science Years 9-10, 1988.

### Objective: A student will gain knowledge and understanding of the nature and practice of science

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Core content statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.2 describes the processes that are applied to test and validate models, theories and laws</td>
<td>a) evaluate the importance of using creativity, curiosity, objectivity and logical reasoning in describing phenomena in their surroundings, stimulating investigations about phenomena and devising and testing hypotheses&lt;br&gt;b) apply scientific processes to test the validity of ideas and theories&lt;br&gt;c) use examples which show that scientists isolate a set of observations, identify trends and patterns and construct hypotheses or models to explain these&lt;br&gt;d) give examples that demonstrate the benefits and limitations of using models&lt;br&gt;e) identify that the nature of observations made depends upon the understanding that the observer brings to the situation</td>
</tr>
</tbody>
</table>

### Objective: A student will gain knowledge and understanding of the implications of science for society and the environment

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Core content statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.4 discusses evidence supporting different viewpoints</td>
<td>a) give examples to show that different societal groups may use or weight criteria differently to make a decision about an issue involving a major scientific component&lt;br&gt;b) discuss the place of ethical considerations in scientific practice and in applications of Science</td>
</tr>
</tbody>
</table>

### Objective: A student will gain knowledge and understanding of current issues, research and developments

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Core content statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.5 analyses how current research might affect people’s lives</td>
<td>a) describe some recent scientific contributions made by male and female scientists, including Australians, and discuss the effect of their contributions&lt;br&gt;b) identify scientific skills that can be useful in a broad range of careers&lt;br&gt;c) identify possible career paths in Science</td>
</tr>
<tr>
<td>OBJECTIVES</td>
<td>OUTCOMES</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Values and attitudes</td>
<td></td>
</tr>
<tr>
<td>A student will gain skills in planning investigations</td>
<td>5.13 identifies a problem and independently produces an appropriate investigation plan</td>
</tr>
<tr>
<td>A student will gain skills in conducting investigations</td>
<td>5.14 undertakes first-hand investigations independently with safety and competence</td>
</tr>
<tr>
<td></td>
<td>5.16 accesses information from a wide variety of sources</td>
</tr>
<tr>
<td>A student will gain skills in communicating information and understanding</td>
<td>5.18 selects and uses appropriate forms of communication to present information to an audience</td>
</tr>
<tr>
<td>A student will gain skills in developing scientific thinking and problem-solving techniques</td>
<td>5.19 uses critical thinking skills in evaluating information and drawing conclusions</td>
</tr>
<tr>
<td></td>
<td>5.20 selects and uses appropriate strategies to solve problems</td>
</tr>
<tr>
<td>A student will gain skills in working individually and in teams</td>
<td>5.22 independently plans, implements and evaluates the effectiveness of a variety of tasks as an individual and as a team member</td>
</tr>
<tr>
<td>A student will develop positive attitudes towards, and values about, themselves, others, learning as a lifelong process, Science and the environment</td>
<td>5.23 demonstrates confidence and a willingness to make decisions and to take responsible actions</td>
</tr>
<tr>
<td></td>
<td>5.24 respects different viewpoints and is honest and fair in dealing with others</td>
</tr>
</tbody>
</table>
1.3 Questionnaire for teachers

Are you already teaching employment related skills in the classroom to Stage 5 students?

Students gain a variety of employment related skills in every subject. Complete this questionnaire to determine the extent to which you are already teaching employment related skills to your students.

<table>
<thead>
<tr>
<th>Do Year 9 and 10 students develop any of these skills in your classroom?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communication skills</strong></td>
<td><strong>Social skills</strong></td>
</tr>
<tr>
<td>(Tick) Are you teaching students to</td>
<td>(Tick) Are you teaching students to</td>
</tr>
<tr>
<td>... speak to a group confidently</td>
<td>... listen when others speak</td>
</tr>
<tr>
<td>... debate in front of a large audience</td>
<td>... respect the point of view of others</td>
</tr>
<tr>
<td>... speak and write another language</td>
<td>...</td>
</tr>
<tr>
<td>... work with other people to sort out a problem</td>
<td>...</td>
</tr>
<tr>
<td>... follow verbal instruction</td>
<td>...</td>
</tr>
<tr>
<td>... convey ideas confidently</td>
<td>...</td>
</tr>
<tr>
<td></td>
<td>...</td>
</tr>
<tr>
<td><strong>Numerical skills</strong></td>
<td><strong>Physical skills</strong></td>
</tr>
<tr>
<td>(Tick) Are you teaching students to</td>
<td>(Tick) Are you teaching students to</td>
</tr>
<tr>
<td>... record information using charts and graphs</td>
<td>... swim .......... metres</td>
</tr>
<tr>
<td>... calculate percentages</td>
<td>... referee a game of ........</td>
</tr>
<tr>
<td>... work out and manage a budget</td>
<td>... understand rules to the following sports:</td>
</tr>
<tr>
<td>... handle money and give the right change</td>
<td>...</td>
</tr>
<tr>
<td></td>
<td>...</td>
</tr>
<tr>
<td><strong>ICT skills</strong></td>
<td><strong>Creative skills</strong></td>
</tr>
<tr>
<td>(Tick) Are you teaching students to</td>
<td>(Tick) Are you teaching students to</td>
</tr>
<tr>
<td>... use a word processor</td>
<td>... design and construct several small pieces of furniture</td>
</tr>
<tr>
<td>... send an email</td>
<td>... write and perform a short play</td>
</tr>
<tr>
<td>... use a fax machine</td>
<td>... design and produce several artworks using pastels and oils</td>
</tr>
<tr>
<td>... use the following software programs:</td>
<td>...</td>
</tr>
<tr>
<td></td>
<td>...</td>
</tr>
<tr>
<td><strong>Leadership skills</strong></td>
<td><strong>Practical skills</strong></td>
</tr>
<tr>
<td>(Tick) Are you teaching students to</td>
<td>(Tick) Are you teaching students to</td>
</tr>
<tr>
<td>... captain a sporting team</td>
<td>... investigate a problem</td>
</tr>
<tr>
<td>... participate in the SRC</td>
<td>... follow occupational health and safety rules</td>
</tr>
<tr>
<td></td>
<td>... work well in a team</td>
</tr>
<tr>
<td></td>
<td>... meet deadlines</td>
</tr>
<tr>
<td></td>
<td>...</td>
</tr>
</tbody>
</table>
Are you already teaching employment related skills in the classroom to Stage 6 students?

Students gain a variety of employment related skills in every senior course they study. Complete this questionnaire to determine whether you are already teaching these employment related skills to your students.

<table>
<thead>
<tr>
<th>Do Year 11 and 12 students develop any of these skills in your classroom?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tick and/or add to the list below.</td>
</tr>
</tbody>
</table>

As a result of my lessons a student may develop the ability to ...

(Tick)

... Communicate ideas and information
... Collect, organise and analyse information
... Generate, identify and assess opportunities
... Identify, assess and manage risks
... Generate and use creative ideas and processes
... Solve problems
... Recruit and manage resources
... Match personal goals and capacities to undertakings
... Work with others and in teams
... Be flexible and deal with change
... Use initiative and drive
... Negotiate and influence
... Plan and organise

The logbook provides you with a tool to summarise a topic and to explain to students how and when they develop these employment related skills.
Employment related skills in the classroom

The *classroom* section of the *Employment Related Skills Logbook* has been designed to enhance the value and relevance of all subjects and courses that students study at school. Sheets in this section provide teachers with a topic summary tool.

2.1 Sample pages from the logbook

Sample pages from the *classroom* section of the *Employment Related Skills Logbook* are attached to the following two pages. These sheets can be used to brainstorm and reflect all the knowledge and skills gained or developed at the end of a topic. Teachers are provided with an opportunity to demonstrate to students how their subject allows students to develop the skills they will need for future life, education, training and employment.

2.2 Models for recording employment related skills

Below are three different models for teachers to consider when developing their own system of recording employment related skills in the classroom.

<table>
<thead>
<tr>
<th>Model 1: Student managed</th>
<th>Model 2: Teacher managed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. End of topic — students bring logbook.</td>
<td>1. Teacher keeps blank logbook sheets in classroom.</td>
</tr>
<tr>
<td>2. Class brainstorms topic.</td>
<td>2. End of topic — class brainstorms topic.</td>
</tr>
<tr>
<td>3. Students identify and summarise knowledge gained and skills developed.</td>
<td>3. Students identify and summarise knowledge gained and skills developed.</td>
</tr>
<tr>
<td>4. Students record employment related skills on sheets.</td>
<td>4. Teacher distributes blank logbook sheets.</td>
</tr>
<tr>
<td>5. Teacher initials sheets.</td>
<td>5. Students record employment related skills on sheets.</td>
</tr>
<tr>
<td>6. Students file sheets into logbook and take home.</td>
<td>6. Teacher collects sheets.</td>
</tr>
<tr>
<td>7. Teacher initials sheets.</td>
<td>7. Teacher initials sheets.</td>
</tr>
<tr>
<td>8. Teacher gives sheets to clerical aide or nominated students to file.</td>
<td>8. Teacher gives sheets to clerical aide or nominated students to file.</td>
</tr>
</tbody>
</table>

Model 3: School managed - School reports

1. School adds heading ‘Employment related skills’ to half yearly and yearly reports.
2. Faculties decide which employment related skills are most relevant to list on reports.
3. Teachers tick students’ level of achievement/development observed in classroom (twice a year).
4. Teachers encourage students to log employment related skills in their logbooks.
5. Students log employment related skills gained in all subjects/courses.

Alternatively teachers may develop their own model for implementing the CLASSROOM section of the logbook.
SUBJECT:

YEAR 9 and YEAR 10 SKILLS IN THE CLASSROOM

You gain a range of important skills in this subject. Research some of the careers and/or TAFE and university courses related to these skills.

What employment related skills have you acquired in this subject?

<table>
<thead>
<tr>
<th>Activity/Topic</th>
<th>Employment Related Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Teacher initial</td>
</tr>
</tbody>
</table>

Date

Teacher initial

Date

Teacher initial
COURSE:

PRELIMINARY AND HSC COURSES - SKILLS IN THE CLASSROOM

You gain a range of important skills in this course. Research some of the careers and/or TAFE and university courses related to these skills.

What employment related skills have you acquired in this course?

<table>
<thead>
<tr>
<th>Topic</th>
<th>Employment Related Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Teacher initial

Date

Teacher initial

Date
2.3 **Examples of employment related skills developed in Science Stage 5**

Students gain a variety of employment related skills in every subject they study. Here are some examples of employment related skills developed by students studying Stage 5 Science.

**Communication skills**
- Collate relevant, reliable information/data from a number of sources and present it in a written report or as an oral presentation
- Select appropriate medium to present information on
- Clearly and confidently convey ideas in a written or oral form

**Practical skills**
- Design, construct and draw circuits containing a number of components
- Perform practical activities with safety and competence
- Identify potential risks in the work environment and develop strategies to minimise the risk
- Use time and resources effectively

**ICT skills**
- Organise data using spreadsheets and data bases
- Use a data logger to collect and analyse information
- Use the Internet to locate and access information

**Social skills**
- Work with other people to solve an identified problem
- Respect the rights and property of others
- Be honest and open in their dealings with others
- Work cooperatively in groups

**Creative skills**
- Use creative ideas to present information or concepts
- Use imagination to identify alternative solutions to solving an identified problem
- Demonstrate understanding of concepts or ideas through writing a short story
Leadership skills

- Accept personal responsibility for maintenance of a safe working environment for a team
- Monitor the progress of a team towards completing a task
- Set and work to realistic timelines and goals

Numerical skills

- Analyse data using mathematical techniques
- Select and draw appropriate type of graph or diagram
- Extract information from graphs, flow diagrams and other resources
2.4 Examples of employment related skills developed in Science Stage 6

Students gain a variety of employment related skills in every course they study. Here are some examples of employment related skills developed in students studying Science Stage 6.

Communicating ideas and information
- Appropriately communicate information and understanding in a written report
- Use a range of strategies to enhance an oral presentation
- Use a variety of pictorial representations and graphs to show relationships and present information clearly and succinctly

Collect, organise and analyse information
- Summarise and collate information from a range of resources
- Measure, observe and record results in accessible and recognisable forms
- Evaluate the relevance of first-hand and secondary information and data in relation to the area of investigation
- Assess the reliability of first-hand and secondary information and data by considering information from various sources
- Analyse information to make and justify generalisations

Generate, identify and assess opportunities
- Use ideas and concepts developed in Science to generate solutions for identified problems
- Identify current areas of scientific research and development that have the potential to revolutionise current practices

Identify, assess and manage risks
- Carry out a risk assessment of intended experimental procedures and identify and address potential hazards
- Efficiently undertake the planned procedure to minimise hazards and wastage of resources
- Dispose carefully and safely of any waste materials produced during the investigations
- Identify and use safe work practices during investigations

Generate and use creative ideas and processes
- Design and produce creative solutions to problems
- Apply creativity in responding to set tasks

Solve problems
- Solve problems by identifying and explaining the nature of a problem
- Describe and select from different strategies those which could be used to solve a problem
- Evaluate the appropriateness of different strategies for solving an identified problem
Recruit and manage resources
• Identify and set up the most appropriate equipment or combination of equipment needed to undertake an investigation
• Choose appropriate technology that could be used during investigations and determine its suitability and effectiveness for its potential role in the procedure or investigations

Match personal goals and capacities to undertakings
• Identify relative strengths of themselves and of team members when determining roles and responsibilities
• Set achievable goals that can be completed within the identified constraints

Work with others and in teams
• Implement strategies to work effectively as a member of a team
• Explain why an investigation or task is best undertaken individually or as a part of a team
• Respect the different ideas or points of view that others may have

Be flexible and deal with change
• Recognise where and when modifications are needed and analyse the effect of these adjustments
• Respond quickly and safely with accident situations that occur or may occur
• Adapt to changes as they arise

Use initiative and drive
• Complete tasks within a set timeframe
• Work independently to complete open-ended investigations
• Initiate further discussion or investigations that extend beyond what is required

Negotiate and influence
• Negotiate task structure and parameters
• Negotiate the allocation of roles and responsibilities within the team
• Justify an idea or opinion to a critical audience

Plan and organise
• Design investigations that allow valid and reliable data and information to be collected
• Design and trial procedures to undertake investigations
• Explain why a procedure, a sequence of procedures or repetition of procedures is appropriate
• Predict possible issues that may arise during the course of an investigation and identify strategies to address these issues if necessary
2.5 **Teacher Activity: Employment related skills in the classroom**

**Science Stage 5**

The following examples show some of the employment related skills developed by students as a result of their participation in activities or topics in Science. Using the examples as a guide, develop your own list of employment related skills students may gain by undertaking activities or curriculum topics in your classroom.

**Examples**

<table>
<thead>
<tr>
<th>Activity/Topic</th>
<th>Employment Related Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy in the home</td>
<td>• work in a team&lt;br&gt;• conduct a survey on energy usage of household appliances&lt;br&gt;• present a survey as a spreadsheet&lt;br&gt;• interpret a household electricity and power bill&lt;br&gt;• follow a series of instructions to perform an investigation&lt;br&gt;• identify, assess and manage risks of using electricity and household electrical appliances&lt;br&gt;• understand the environmental issues of power and electrical sources</td>
</tr>
<tr>
<td>Genetics</td>
<td>• use the Internet to locate information&lt;br&gt;• prepare and use PowerPoint presentations&lt;br&gt;• confidently present an oral argument to a group of peers&lt;br&gt;• accept and respect differing points of view&lt;br&gt;• work towards completing a goal within a given timeframe&lt;br&gt;• use computer simulations to solve problems&lt;br&gt;• develop a positive view of one's capabilities&lt;br&gt;• identify and understand the ethical and moral implications of the use of technology</td>
</tr>
</tbody>
</table>

Date: T eacher initial:

Teacher initial:
### Vocational Learning in Science

#### Your examples

<table>
<thead>
<tr>
<th>Activity/Topic</th>
<th>Employment Related Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Students can ...</em> / <em>Students are able to...</em> / <em>Students know how to ...</em></td>
</tr>
</tbody>
</table>

Date:  
Teacher initial:  

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Date:  
Teacher initial:  

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Date:  
Teacher initial:  

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Date:  
Teacher initial:  

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Biology Stage 6

The following example shows some employment related skills developed by students as a result of their participation in activities or topics in Biology. Using the example as a guide, develop your own list of employment related skills students may gain by undertaking activities or curriculum topics in your classroom.

Example

<table>
<thead>
<tr>
<th>Activity/Topic</th>
<th>Employment Related Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Students can .../Students are able to.../Students know how to ...</td>
</tr>
<tr>
<td>Option - Biochemistry</td>
<td>• use the Internet to locate and access information</td>
</tr>
<tr>
<td></td>
<td>• summarise and collate information from a range of sources</td>
</tr>
<tr>
<td></td>
<td>• use appropriate terminology</td>
</tr>
<tr>
<td></td>
<td>• use a word processor</td>
</tr>
<tr>
<td></td>
<td>• set achievable goals that can be completed within identified constraints</td>
</tr>
<tr>
<td></td>
<td>• complete tasks within a set time frame</td>
</tr>
<tr>
<td></td>
<td>• work independently to complete open-ended investigation</td>
</tr>
<tr>
<td></td>
<td>• design investigations that allow valid and reliable data and information to be collected</td>
</tr>
<tr>
<td></td>
<td>• adapt to changes as they arise</td>
</tr>
<tr>
<td></td>
<td>• use pictorial representations to present information</td>
</tr>
<tr>
<td></td>
<td>• construct models</td>
</tr>
</tbody>
</table>

Date: [ ] Teacher initial: [ ]

Your example

<table>
<thead>
<tr>
<th>Activity/Topic</th>
<th>Employment Related Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Students can .../Students are able to.../Students know how to ...</td>
</tr>
</tbody>
</table>

Date: [ ] Teacher initial: [ ]
Chemistry Stage 6

The following example shows some employment related skills developed by students as a result of their participation in activities or topics in Chemistry. Using the example as a guide, develop your own list of employment related skills students may gain by undertaking activities or curriculum topics in your classroom.

Example

<table>
<thead>
<tr>
<th>Activity/Topic</th>
<th>Employment Related Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>The chemical earth</td>
<td>• gather information from first-hand and secondary sources</td>
</tr>
<tr>
<td></td>
<td>• plan an investigation</td>
</tr>
<tr>
<td></td>
<td>• work out percentages</td>
</tr>
<tr>
<td></td>
<td>• classify materials</td>
</tr>
<tr>
<td></td>
<td>• analyse gathered information</td>
</tr>
<tr>
<td></td>
<td>• apply creativity in responding to set tasks</td>
</tr>
<tr>
<td></td>
<td>• use the Internet to locate information</td>
</tr>
<tr>
<td></td>
<td>• use pictorial representations</td>
</tr>
<tr>
<td></td>
<td>• construct models</td>
</tr>
<tr>
<td></td>
<td>• identify and set up the most appropriate equipment for a given task</td>
</tr>
<tr>
<td></td>
<td>• use appropriate terminology</td>
</tr>
<tr>
<td></td>
<td>• identify and use safe work practices during investigations</td>
</tr>
</tbody>
</table>

Date: Teacher initial:

Your example

<table>
<thead>
<tr>
<th>Activity/Topic</th>
<th>Employment Related Skills</th>
</tr>
</thead>
</table>

Date: Teacher initial:
Earth and Environmental Science Stage 6

The following example shows some employment related skills developed by students as a result of their participation in activities or topics in Earth and Environmental Science. Using the example as a guide, develop your own list of employment related skills students may gain by undertaking activities or curriculum topics in your classroom.

Example

<table>
<thead>
<tr>
<th>Activity/Topic</th>
<th>Employment Related Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environments through time</td>
<td>• plan and organise an independent research task</td>
</tr>
<tr>
<td></td>
<td>• research using the Internet</td>
</tr>
<tr>
<td></td>
<td>• assess the reliability of data collected from the Internet by identifying the host/developer of the site</td>
</tr>
<tr>
<td></td>
<td>• analyse information from secondary sources to identify key points</td>
</tr>
<tr>
<td></td>
<td>• demonstrate an understanding of geological time by preparing a timeline</td>
</tr>
<tr>
<td></td>
<td>• work independently to complete a research task</td>
</tr>
</tbody>
</table>

Date: ___________________________ Teacher initial: ___________________________

Your example

<table>
<thead>
<tr>
<th>Activity/Topic</th>
<th>Employment Related Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Students can .../Students are able to.../Students know how to ...</td>
</tr>
</tbody>
</table>

Date: ___________________________ Teacher initial: ___________________________
Physics Stage 6

The following example shows some employment related skills developed by students as a result of their participation in activities or topics in Physics. Using the example as a guide, develop your own list of employment related skills students may gain by undertaking activities or curriculum topics in your classroom.

Example

<table>
<thead>
<tr>
<th>Activity/Topic</th>
<th>Employment Related Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical energy in the home</td>
<td>• solve problems by using mathematical formula</td>
</tr>
<tr>
<td></td>
<td>• identify potential risks and work safely with electrical circuits</td>
</tr>
<tr>
<td></td>
<td>• identify the importance of safety devices used in household circuits</td>
</tr>
<tr>
<td></td>
<td>• select appropriate equipment and/or resources to model household circuits</td>
</tr>
<tr>
<td></td>
<td>• plan and perform an investigation</td>
</tr>
<tr>
<td></td>
<td>• use secondary information to discuss whether different views contributed to an increased understanding of electricity</td>
</tr>
</tbody>
</table>

Date: Teacher initial:

Your example

<table>
<thead>
<tr>
<th>Activity/Topic</th>
<th>Employment Related Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Students can .../Students are able to.../Students know how to ...</td>
</tr>
</tbody>
</table>

Date: Teacher initial:
Senior Science Stage 6

The following example shows some employment related skills developed by students as a result of their participation in activities or topics in Senior Science. Using the example as a guide, develop your own list of employment related skills students may gain by undertaking activities or curriculum topics in your classroom.

Example

<table>
<thead>
<tr>
<th>Activity/Topic</th>
<th>Employment Related Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water for living</td>
<td>• follow instructions/directions in design investigations that allow valid and reliable information to be collected</td>
</tr>
<tr>
<td></td>
<td>• identify and set up the most appropriate equipment or combination of, needed to undertake an investigation</td>
</tr>
<tr>
<td></td>
<td>• measure, observe and record results in accessible and recognisable forms</td>
</tr>
<tr>
<td></td>
<td>• use appropriate units of measurement</td>
</tr>
<tr>
<td></td>
<td>• use mapping skills</td>
</tr>
<tr>
<td></td>
<td>• analyse information to make and justify generalisations</td>
</tr>
<tr>
<td></td>
<td>• analyse and interpret results</td>
</tr>
</tbody>
</table>

Date: ___________________________  Teacher initial: ___________________________

Your example

<table>
<thead>
<tr>
<th>Activity/Topic</th>
<th>Employment Related Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Students can .../Students are able to.../Students know how to ...</td>
</tr>
</tbody>
</table>

Date: ___________________________  Teacher initial: ___________________________
Science and vocational learning

This section contains vocational information and activities for teachers and students of Science.

3.1 Enterprise education

Enterprise education is action learning. It involves students, usually in teams with creating and sustaining a project which may be voluntary or profit making. It develops students’ personal and employment related attributes including the ability to be innovative and to successfully manage change. It provides opportunities for young people to develop these attributes in workplace and community settings.

Examples of enterprise education in Science could include students:

- volunteering to participate in community projects for environmental benefit such as streamwatch or landcare projects
- planning and implementing an environmental project such as regenerating local fish or frog populations, in cooperation with Taronga Zoo or the National Parks and Wildlife Service
- undertaking the Young Achievement Australia, Business Enterprise program which involves student teams forming companies to market goods - choosing products at the cutting edge of scientific research
- operating a school based service business based on scientific equipment e.g. testing radiation from microwave cookers
- Participating in scientific projects such as Questacon, National Science Competitions, University Science Weeks
- setting up and operating a school based business eg producing horticultural/agricultural products
- setting up a practice firm within the Australian Network of Practice firms, mentored by a Science industry company, to sell virtual scientific products, planning and operating scientific research projects of benefit to the local community.

What examples of enterprise education are taking place in Science in your school?

- 
- 

3.2 *Teachers in Business* program

The *Teachers in Business (TIB)* program is designed to improve teaching practice and enhance teacher awareness of business and industry. Students benefit from enhanced vocational perspectives in their learning.

All teachers K-12 are eligible to apply for this program. No portion of the placement has to involve non-teaching time. Teachers are supported with relief and other expenses to work in businesses and other organisations for up to three weeks.

Priority is given to teachers updating their industry currency for VET courses and for teachers who have clearly outlined how the placement will enhance their teaching. Applications are processed by the school’s District Office. Contact your District Vocational Education Consultant for details.

3.3 Community and business partnerships

Partnerships between schools and industry, commerce and the local community are encouraged as a means of increasing vocational learning opportunities and enhancing school to work transition planning for students.

Examples of partnerships include: Links to Learning Program, Jobs Pathways Program, E-Teams, guest speaker programs, organisations regularly hosting excursions, work experience and work placement, practice firms and other enterprise programs. Your school will also have its own examples of existing partnerships.

3.4 Traineeships and apprenticeships

---

Traineeships and apprenticeships are jobs that combine work with training.

**Apprenticeships** generally last four years and cover traditional trade areas including aircraft, automotive, boat building, bricklaying, cookery, drafting, electrical, electronic, floor covering, greengrocery, hairdressing, plumbing, saddlery, sign writing, stone masonry and woodworking.

More than 600 traineeship vocations have been introduced to provide employment and training opportunities in a broader range of industry areas. Some examples are:

- **Utilities and Electrotechnology** - Gas, Water and Electricity.
- **Automotive** - Vehicle Servicing Sales, Replacement Parts and Accessories. *(This can be part of the T3 program for HSC students).*
- **Process Manufacturing** - Manufacturing (including cement, clay, plastics, rubber), Cablemaking and Laboratory Skills and Techniques.
- **Primary Industries** - Horticulture, Meat Processing, Racing (including greyhound/harness/thoroughbred/stablehand). Rural Skills (including agriculture, beef cattle production, veterinary nursing).
- **Mining** - Coal Operations, Drilling, Extractive Industries.
- **Manufacturing Engineering** - Aeroskills (aircraft maintenance). Engineering Production, Engineering Technician.
- **Food Industry** - Food Processing, Meat Processing, Seafood (fishing, processing, sales).
### 3.5 Part-time traineeships in NSW schools

School based traineeships provide students with increased opportunities to gain experience and qualifications in a particular industry while still at school. Students are able to include a recognised VET qualification within their HSC and combine this with paid work.

Students successfully completing a school based traineeship receive:

- a nationally recognised VET qualification under the Australian Qualifications Training Framework
- a Certificate of Proficiency
- credit toward the Higher School Certificate.

Generally, over the two years of their school based part-time traineeship, students spend the equivalent of three and a half days a week on their HSC program at school, one day a week in paid employment with their employer and a half day a week undertaking structured training either at school, TAFE or another registered training organisation.

For more information about current NSW traineeships and apprenticeships and school based part-time traineeships in NSW schools: [http://apprenticeship.det.nsw.edu.au](http://apprenticeship.det.nsw.edu.au)

The Commonwealth Government refers to all traineeships and apprenticeships as new apprenticeships. For more information about new apprenticeships: [www.newapprenticeships.gov.au](http://www.newapprenticeships.gov.au)

### 3.6 Credit transfer arrangements: HSC to TAFE NSW

Credit transfer is a form of recognition based on formal arrangements between educational institutions.

Credit transfer arrangements negotiated between the NSW Board of Studies and TAFE NSW allow students credit for study completed as part of the HSC.

To be eligible for credit transfer in a TAFE NSW course, students will need to provide appropriate evidence of previous study or experiences at the time of enrolment. Credit is awarded depending on whether study and experience are relevant to a student’s chosen TAFE NSW course.

Successful students will receive advanced standing into their chosen TAFE NSW course and complete fewer modules making it possible to achieve a TAFE NSW qualification faster.
Example 1: Students who successfully complete PHYSICS and meet the conditions for credit, will be eligible to receive credit for specified modules in these TAFE NSW courses:

- Civil Engineering
- Construction Management
- Electrical Engineering
- Electrical Technology
- Engineering
- HVAC - Refrigeration Engineering
- Manufacturing Systems
- Manufacturing Technology
- Materials Technology
- Mechanical Engineering
- Mechanical Technology
- Mechatronics
- Naval Architecture
- Quality Systems
- Structural Engineering

Example 2: Students who successfully complete BIOLOGY and meet the conditions for credit, will be eligible to receive credit for specified modules in these TAFE NSW courses:

- Aboriginal Cultural Site Conservation
- Agriculture
- Environmental Practice
- Natural Resource Management

Example 3: Students who successfully complete EARTH AND ENVIRONMENTAL SCIENCE and meet the conditions for credit, will be eligible to receive credit for specified modules in these TAFE NSW courses:

- Aboriginal Cultural Site Conservation
- Agriculture
- Australian Land Conservation and Restoration Environmental Practice
- Natural Resource Management
- Horse Industry Management
- Hydrology
- International Hotel Management
- Viticulture

Further information about credit transfer for HSC courses can be found at: http://www.det.nsw.edu.au/hstafe

Note: VET ICFs are based on units of competency not modules. Credit transfer for students who study VET ICFs need to speak with TAFE NSW enrolling officers for information about the amount of module credit available.
HSC/TAFE Credit Transfer website http://www.det.nsw.edu.au/hsctafe

On this website, HSC credit transfer information is arranged into two key areas. They are:

- New HSC which applies to HSC studies commenced in Year 11, 2000 and examined from Year 12, 2001 onwards
- Former HSC which applies to HSC studies and examinations up to and including Year 12, 2000.

1. Click on either the New HSC Transfer button or the Former HSC Transfer button.
2. This will display either: Former HSC subjects with credit transfer arrangements to TAFE NSW or New HSC subjects with credit transfer arrangements to TAFE NSW.
3. Click on the relevant HSC subject.
4. Click on the relevant course option, where available, within the HSC subject.
5. This will display the TAFE NSW courses which provide credit transfer for the relevant HSC subject.
6. Click on a particular TAFE NSW course.
7. This will display course and module information. Only the modules which give credit transfer will be shown.
8. Click on the module number - this will take you to a description of the module purpose.

This section provides information about credit transfer, the national training system, the Higher School Certificate, VET courses and enrolling at TAFE NSW.

Many HSC submitted works can be designed to gain maximum credit transfer into a TAFE NSW course. A range of Statement of Achievement forms are included in this section.

Sample case studies of the amount of credit transfer gained in specific TAFE NSW courses based on individual patterns of study are provided.

References for further information about HSC/TAFE credit transfer and related issues are included.
3.7 Credit transfer arrangements: TAFE NSW to university

On completion of any TAFE NSW diploma or advanced diploma students are eligible to apply to any university in Australia. A student may be entitled to receive credit for subjects in a university degree course.

Universities have different entry requirements for each course. Entry requirements can vary between universities and between courses. They consider applications for credit on a case by case basis.

Listed below are some examples of credit arrangements. They are a guide only to help teachers and students understand pathway planning options.

<table>
<thead>
<tr>
<th>TAFE NSW - Sydney Institute course</th>
<th>University</th>
<th>Degree course</th>
<th>Credit agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>4293 Advanced Diploma of Mechanical Technology</td>
<td>Wollongong</td>
<td>Bachelor of Engineering</td>
<td>Up to one year credit for students with a good average grade; credit may be given for subjects in any year</td>
</tr>
<tr>
<td></td>
<td>Newcastle</td>
<td>Bachelor of Engineering (Mechatronics)</td>
<td>Up to 65 credit points (80 credit points are equivalent to a full year)</td>
</tr>
<tr>
<td>6788 Advanced Diploma of Electrical Technology</td>
<td>Newcastle</td>
<td>Bachelor of Engineering (Electrical)</td>
<td>Up to 125 credit points including some in year one and some in year two of the degree (80 credit points are equivalent to a full year)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bachelor of Engineering (Mechatronics)</td>
<td>Up to 90 credit points (80 credit points are equivalent to a full year)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bachelor of Engineering (Telecommunications)</td>
<td>Up to 100 credit points including some in year one and some in year two of the degree (80 credit points are equivalent to a full year)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bachelor of Engineering (Computer)</td>
<td>Up to 100 units including some in year one and some in year two of the degree (80 units are equivalent to a full year)</td>
</tr>
<tr>
<td>TAFE NSW - Sydney Institute course</td>
<td>University</td>
<td>Degree course</td>
<td>Credit agreement</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>------------------</td>
<td>----------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>6790 Advanced Diploma of Electrical Technology (Computer Technology)</td>
<td>Newcastle</td>
<td>Bachelor of Engineering (Mechatronics)</td>
<td>Up to 70 credit points (80 credit points are equivalent to a full year)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bachelor of Engineering (Electrical)</td>
<td>Up to 125 credit points including some in year one and some in year two of the degree (80 credit points are equivalent to a full year)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bachelor of Engineering (Computer)</td>
<td>Up to 100 credit points including some in year one and some in year two of the degree (80 credit points are equivalent to a full year)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bachelor of Engineering (Telecommunications)</td>
<td>Up to 100 credit points including some in year one and some in year two of the degree (80 credit points are equivalent to a full year)</td>
</tr>
</tbody>
</table>

This information comes from *Degree Express* - produced by TAFE NSW Sydney Institute, 2002. For more information on credit transfer arrangements students should contact the relevant TAFE NSW institution and also check the university faculty/school handbooks and websites. Students can also contact the university faculty that offers the course a student wishes to enter.
### 3.8 Science at university: Areas of study

Some areas of study at university that may be of interest to students who study Science related subjects and courses at school are listed below:

| Archaeology | Geography |
| Biological Sciences | Health Sciences (Aboriginal Studies, Acupuncture, Biomedical Engineering, Biomedical Science, Chinese Medicines, Chiropractic, Clinical Studies, Community Health, Complementary Therapies, Counselling, Diversional Therapy, Environmental Health, Forensic Mental Health, Health Education Promotion, Health Science (Psychology, Sociology), Laboratory Science, Medical Imaging, Medical Physics/Chemistry, Medical Radiation Technology, Naturopathy, Nuclear Medicine, Occupational Therapy, Orthoptics, Osteopathy, Pathology, Physiotherapy, Play Therapy, Podiatry, Pre Hospital Care(Ambulance Studies), Public Health Radiation Therapy, Rehabilitation Counselling, Respiratory Science, Speech and Hearing Studies, Speech Pathology) |
| Chemistry | Physics |
| Engineering | Environmental Science and Management (Coastal Management, Earth and Environmental Science, Ecological Studies, Environmental Biology/Chemistry/Microbiology/Technology, Fisheries and Aquaculture/Parks and Heritage/Recreation, Pollution Control, Resource and Environment, Soil Science, Vegetation and Wildlife) |
| Teaching (including Early Childhood; Primary/Infants; Secondary: Agriculture, Science, Personal Development, Health and Physical Education, Health Education, Human Movement/Physical Education, Special Education) |

For more information, consult the index of the most recent version of the NSW UAC Guide
http://www.uac.edu.au

Note: It is important to check the prerequisites of any course for which a student is interested in applying.
3.9 Student vocational learning activities

STUDENT HANDOUT: TAFE NSW credit transfer

Visit the website at http://www.det.nsw.edu.au/hsctafe to find out about the credit transfer arrangements between HSC courses and specific NSW TAFE courses. Follow these instructions:

1. Click in the header at the top of the page on either NEW HSC TRANSFER or NEW.
2. Scroll down the list of New HSC subjects and click on either Agriculture or Biology or Chemistry or Physics or Earth and Environmental Science or Marine Studies CEC or Senior Science.
3. Click on a TAFE NSW course that interests you from the list displayed.
4. Read and summarise this information, completing the table below.

<table>
<thead>
<tr>
<th>TAFE NSW course name:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification:</td>
<td></td>
</tr>
<tr>
<td>Training package:</td>
<td></td>
</tr>
<tr>
<td>TAFE NSW course number:</td>
<td></td>
</tr>
<tr>
<td>Vocational area:</td>
<td></td>
</tr>
</tbody>
</table>

**Typical attendance:**

**Entry requirements:**

**Career opportunities:**

**Articulation:** When you finish this course you can...

**HSC Credit Transfer arrangements with this course**

To be eligible for an exemption, students must:

- have studied Stage 6 ...
- provide evidence of ...

<table>
<thead>
<tr>
<th>TAFE NSW module number</th>
<th>Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Vocational learning in Science

Stage 6 Science courses that can be studied in Years 11 and 12 are:

- Biology
- Chemistry
- Physics
- Senior Science
- Earth and Environmental Science

Did you know?

The occupations listed below have been assessed as being in shortage in most states (source: http://jobsearch.gov.au/JobOutlook/Shortages.asp):

- Diagnostic Radiographer
- Occupational Therapist
- Pharmacist (Hospital/Retail)
- Physiotherapist
- Radiation Therapist
- General Science Teacher
- Physics/Chemistry Teacher
- Sonographer.

Example 1: A Science degree “provides......options, specialist training and the transferable skills essential for the professional work environment” and a “...degree in Physics...... has allowed me to travel the world and work in some very interesting places”. Read about the different paths that graduates with a Science degree have taken in their career at:


Example 2: “...flexible nature of the Science degree to obtain as wide a background as possible...... Science can lead anywhere”.

Career prospects in Biochemistry and Molecular Biology are available in a range of areas. Check out the list of career prospects at:

http://www.latrobe.edu.au/biochemistry/ProsStudents/careers.html

Example 3: BSc(Nutrition) leads to career opportunities with companies in the food and beverage industry, biotechnology companies, assistant dieticians and employment in health education.

More graduate profiles can be found at:

STUDENT HANDOUT: Exploring employment opportunities in Science

Take yourself on an Internet surfing adventure into the world of Science. Find out about some career opportunities that are available to young Australians and share your findings with the class. Students may work in pairs or teams.

ACTIVITY 1

Go to the CSIRO internet site: www.csiro.au

Answer the following questions and write a report for your class.

(You may need to ring up the CSIRO to answer some of these questions).

1. What do the letters CSIRO stand for?

2. What work does the CSIRO do?

3. What kinds of industries does this company support?

4. Who owns the CSIRO? (Is it private or government owned?)

5. What kind of jobs exist in this company?

Design a written report to give to your class that answers question 6 to 9 below.

Click on the INDUSTRY icon on the home page.

RESEARCH one INDUSTRY supported by the CSIRO.

6. What does this industry/sector focus on?

7. Give examples of what the CSIRO does to support this industry?

8. Discuss this industry’s capabilities and recent achievements?

9. Give one reason why it would be rewarding to work in this company?
ACTIVITY 2

Go to the ABC Science internet site: www.abc.net.au/science

Click on the Dr Karl page then go to Karl Who? then answer the following questions.

1. Who is Dr Karl? _______________________________________________________

2. List Dr Karl’s current occupations
   •
   •
   •
   •
   •
   •
   •

3. List Dr Karl’s previous occupations
   •
   •
   •
   •
   •
   •
   •

4. You will now act as a Professor of Science who will be making a three minute science lecture to your science class.

5. Select an interesting topic (search and select a topic from Dr Karl’s homework page or go back to the Science home page to news in science).

6. Confirm your topic with your Science teacher so that no two reports are the same.
**ACTIVITY 3**

How many occupations exist in science? There are possibly too many to ever find on any one list. However as a start go to http://jobguide.dest.gov.au

Select the TEXT VERSION, then select INTEREST, then select SCIENTIFIC.

From the list that appears, select two occupations, (the one you find most interesting and the one you find most unusual).

Write the definition of each occupation (that is, the first sentence) and list the personal requirements needed for each.

<table>
<thead>
<tr>
<th>Scientific occupations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The most interesting</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition</td>
<td>Definition</td>
</tr>
<tr>
<td>Personal requirements</td>
<td>Personal requirements</td>
</tr>
<tr>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>•</td>
<td>•</td>
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<tr>
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</tr>
</tbody>
</table>
ACTIVITY 4

Research some careers that are available for Science graduates using the following website:


Use this research to answer the following questions:

1. What is involved in the area of bioinformatics?

2. What education and training is needed in this career?

3. List some of the tasks undertaken by a bioinformatician.

4. List the skills that are necessary in this career.

5. What other types of jobs that a bioinformatician would be qualified for.

6. What do you consider to be some advantages of this type of career?

7. What does a geologist - sedimentology do?

8. What education and training is needed for this career?
**ACTIVITY 5**


- Click on the link *Browse Occupations by Category*.
- Click on the link *Science and Environment* under the category heading of Engineering, Science and the Environment. This site contains information on a variety of careers suitable for Science graduates. It also contains information on salary, employment prospects and much more. Use the information on this site to answer the following questions.

1. List some of the tasks Life Scientists would undertake.

   ____________________________
   ____________________________

2. List five occupations that are associated with Life Scientists.

   ____________________________
   ____________________________

3. What educational qualifications are necessary for this occupation?

   ____________________________
   ____________________________

4. What are the job prospects for this occupation?

   ____________________________
   ____________________________

5. What is the weekly wage for this occupation?

   ____________________________
6. List some of the tasks performed by geologists and geophysicists.

7. What is the weekly income of geologists and geophysicists?

8. What are the job prospects for this occupation?

9. What is the main employment industry for this occupation?

10. Would you expect to find employment in this area? What tells you this?

11. Which state employs the most geologists and geophysicists?

12. Click on the link Explore this job and list some of the skills, knowledge and ability needed in this career.

13. List some of the related occupations found on this page.
ACTIVITY 6

Access the following website and discover the skills you acquire each day at school:
http://www.tgmag.ca/byws/dash.htm

SKILLS YOU USE

DAILY DASH...
HOW TO DASH - Click on one of the 3 characters below to make the daily dash and to discover skills you acquire each day.

Focus on the skills gained in Science by clicking on one of the classroom doors to see inside. Check off the activities and skills you are learning. When you are finished, hit the submit button at the bottom of the list to see a summary of your skills. You can print the summary for your Employment Related Skills Logbook.
3.10 School to work pathways
3.11 Vocational learning resources for teachers and students

The following resources may be helpful to students who research careers and courses related to Science. Teachers and students may collect and add additional resources to this list.

**Handbooks**

- The most recent version of the *NSW UAC Guide* [www.uac.edu.au](http://www.uac.edu.au)
- The most recent version of the *TAFE NSW HANDBOOK* [www.tafensw.edu.au](http://www.tafensw.edu.au)
- The most recent version of the *HSC/TAFE Credit Transfer Guide* [www.det.nsw.edu.au/hsctafe](http://www.det.nsw.edu.au/hsctafe)
- The careers section of the most recent local/state newspaper.
- The most recent version of ‘The Right Choice’ *TAFE NSW* [www.tafensw.edu.au](http://www.tafensw.edu.au)

Note: Schools located near other states should explore interstate handbooks.

**Booklets**

- *Making Choices* (Work Sheets and CD Rom) Career Education Association of WA.

**Multimedia**

- *School to Work Planning* Video, Department of Education and Training (distributed to schools 2001).

**Other useful resources (list here)**

- 
- 
- 
- 
-
Useful websites

  The VET in Schools Directorate has developed this website for teachers, parents and students to provide information on and links to VET in Schools.

- [www.myfuture.edu.au](http://www.myfuture.edu.au)
  Australia's electronic career information service has an ‘assist others’ link from school Science subjects and HSC courses to careers and tertiary courses.

  Designed for teachers, this website supports the NSW Government’s Ready for Work, School to Work Program.

  A website with a career interest test.

- [www.newapprenticeships.gov.au](http://www.newapprenticeships.gov.au)
  This is a national website for traineeships and apprenticeships. This site contains the most up-to-date information on new apprenticeships including Apprenticeship Centres in your region.

- [http://apprenticeship.det.nsw.edu.au](http://apprenticeship.det.nsw.edu.au)
  The Department of Education website lists up-to-date information and statistics on traineeships and apprenticeships in NSW.

  One of Australia’s leading student and graduate employment and career resource websites, it contains over 35,000 jobs online. Do a ‘quick job search’ by typing ‘Science’ as the keyword and discover a plethora of jobs available requiring Science skills.


- [www.boardofstudies.nsw.edu.au](http://www.boardofstudies.nsw.edu.au)
  This website includes details of the Board of Studies Science curriculum.

- [www.det.nsw.edu.au](http://www.det.nsw.edu.au)
  The Department of Education and Training has a ‘Training and Industry’ link to BVET, Apprenticeships NSW, VETAB, Industry Programs, training market and new apprenticeship centres.

Other useful websites (list here)

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