What should students be

"Graduates have adequate technical skills and disciplinary knowledge but they are not able to apply their education effectively within the workplace. They lack communication and problem solving skills, their leadership ability is under-developed and they are not team players."


Graduate Skills Assessment
ACER has developed a new test to provide students and universities with an indication of students' generic skills when they begin university, and again just prior to graduation.

Project Director Ms Deidre Jackson said, "Universities have been looking forward to an instrument to assist them in gathering data to enable them to measure their students' generic skills."

ACER asked universities about the generic skills they valued in their students. The generic skills most frequently mentioned were:

- communication/structured writing
- problem-solving/applied reasoning
- interpersonal skills/teamwork
- critical thinking
- ethics/citizenship/social responsibility
- commitment to and capacity for lifelong learning
- IT familiarity/use of technology/information literacy/information management

On the basis of these responses, ACER has developed a test of generic skills for university students, the Graduate Skills Assessment.

The areas to be tested initially are critical thinking, problem-solving, interpersonal understandings and written communication.

Ms Jackson said, "One of the reasons we chose to include these areas is that they can be assessed in a way that is reliable and valid. The universities were also interested in assessing generic cognitive skills, rather than personality, discipline-specific skills or work-specific skills."

The format is a two-hour multiple-choice test and a one-hour writing test.

The test was commissioned by the Department of Education, Training and Youth Affairs (under the Higher Education Innovation Program).

At entry level, universities may use the test to identify, for example, those who write poorly or have trouble dealing with text-based critical thinking questions or quantitative problem-solving questions. Such students may be followed up and offered assistance. Students' results near the completion of their course may be used as an additional criterion for entry into post-graduate courses or as an indication of generic skills to an employer.

Universities will be able to compare skills at the beginning and end of a bachelor degree program, and may also wish to compare differences in student profiles between fields of study.

Employer Satisfaction with Graduate Skills: Research Report
Taking into account the relative importance of the skills to employers, the greatest skill deficiencies among new graduates were perceived to be in the areas of:

- creativity and flair;
- oral business communications; and
- problem solving.

These three skills show the greatest performance shortfalls, given their importance to employers.

In addition, the skill deficiencies most commonly cited by employers themselves were:

- a lack of communication skills;
- a lack of interpersonal skills; and
- a lack of understanding of business practice.

Graduate skills to be assessed

**Critical Thinking** – aims to measure the ability of candidates to apply critical thinking skills to text-based information.

Aspects of critical thinking include:

- analysis to identify definitions used, claims being made, arguments, lines of reasoning, assumptions, points of view, evidence for and against arguments, logical implications of statements, relevant unstated information
- evaluation to objectively judge the validity of arguments and claims, and the strength and credibility of evidence

**Problem-solving** – aims to measure the ability to apply problem-solving strategies to a range of generally accessible, non-specialist, practical problems presented in brief scenarios. The emphasis will be on information analysis and application to problems.

Aspects typical of problem-solving include:

- identify, comprehend, restate a problem
- analyse information relevant to a problem
- represent features of a problem
- identify, synthesise and apply information relevant to a problem
- explore, identify, generate solutions
- evaluate solution strategies and their outcomes

**Interpersonal Understandings** – aims to measure the ability to understand features of interpersonal relationships which enable people to work and live together.

Aspects of interpersonal understandings include:

- identification of roles and relationships
- making inferences about feelings, attitudes, motives, values, personality
- identification of features of effective team workers and factors that could affect team performance
- interpretation of team dynamics
- application of interpersonal understandings to solve problems and optimise team effectiveness
- identification of effective interpersonal communication and listening skills
- identification of individual differences and cultural diversity

**Written Communication** – aims to measure the ability to present information and ideas clearly in writing through:

- an expository reporting task in which candidates are offered information and ideas that they need to organise, paraphrase and present in clear, coherent form
- an argumentative task in which candidates are offered some views of an issue and are required to develop and clearly express a point of view about the issue
Assessing civics

How can teachers assess student achievement in civics and citizenship education?

For Dr David Kemp, Minister for Employment, Education, Training and Youth Affairs, a major goal of government has been to ensure that "all students leave the compulsory years of schooling equipped to take their place as responsible and informed citizens." In order to do so, Dr Kemp suggests, students 'need to acquire a body of knowledge and intellectual and citizenship skills' as well as 'values and attitudes that enable the individual to participate in the political process and contribute to the healthy functioning of our political system and civic society.'

The aim of the Discovering Democracy program can be readily stated. We want students to understand the way we govern ourselves and to think of themselves as active citizens.

John Hirst, Chair, Civics Education Group

The Assessment Resources, which cover Years 3 to 10 and which will be sent to schools mid year, are designed to supplement the Discovering Democracy Units included in the Discovering Democracy kits and to help teachers assess student understandings in the area of civics and citizenship. Using marking guides—holistic rating scales—teachers can make judgements about the quality of student work against specified criteria. Each of the Discovering Democracy units has a set of indicators or outcomes and the assessment tasks allow teachers to determine how well students have been able to meet these outcomes.

For example, one of the four indicators in the Middle Secondary unit on the Franklin Dam issue is the ability to identify the role of the media in a political dispute. To enable teachers to make a judgement about how well students can meet this indicator, the ACER team adapted one of the unit activities to develop an assessment task in which students prepare the draft of a political speech about the Franklin Dam.

Work sample

Franklin Dam dispute

An extract from an annotated student work sample judged to be 'sound'. The task required students to prepare a speech to colleagues about the proposed Franklin Dam from the point of view of a politician of the time.

As a party we must remain firmly behind our Tasmanian colleagues in supporting the construction of the dam on the Franklin Below Gordon River. Unless we can sell the message to the Australian public about the need to go ahead with the Franklin Dam project we are looking at defeat in the next election. Bob Hawke is threatening to stop the dam if his party wins the election and the media's long campaign of support for Bob Brown and the 'greenies' has been successful in swinging public opinion behind him.

Excerpt from draft Middle Secondary Units Assessment Resources, p. 78.
from the point of view of a Liberal or Labor, state or federal, politician in the early 1990s. In making their judgement, teachers use the marking guide developed for this unit which, like the marking guides for other units, allows student understandings to be assessed against specific criteria in the four categories of sophisticated, sound, satisfactory or inadequate.

To assist teachers to interpret the marking guides in a comparable manner, annotated work samples are provided for each assessment task. The work samples illustrate responses at different levels on each rating scale and so provide a reference point for interpreting the scale. An excerpt from a work sample, included in the draft manuscript, on the Franklin Dam is included on the previous page.

Trial testing of assessment units took place in schools across the country and yielded some excellent examples of student work. Ms Bodey, ACER's project director for the Discovering Democracy Assessment Resources project, comments that "it was interesting to see what the students were capable of in the various tasks. We thought initially that some of the questions may have been too difficult for students but the results of the trial testing show that this wasn't the case. Some of the responses from students showed an excellent understanding of the key concepts and issues associated with civics and citizenship, such as the values that underpin competing human rights, or the qualities of a good law, or the nature of government in a democratic state." Where tasks were too difficult they were modified drawing on trial school teachers' advice.

One of the most satisfying aspects of the project, Ms Bodey suggests, has been the opportunity to develop a wide range of assessment tasks that are likely to be of interest to students. "Depending on the particular assessment unit being undertaken, students could find themselves designing an Australian values shield, producing a website on famous Australians, writing a leaflet warning against the disintegration of democracy in Nazi Germany, preparing an outline for a newspaper report about the Myall Creek massacre or interviewing a member of a local community group about the kind of work the group does."

The most exciting part of the project for those involved at ACER, however, has been the opportunity to assist teachers by providing models of assessment that they can readily adapt to their own teaching. The partnership between classroom teachers in the trial schools, Curriculum Corporation and ACER in this project has produced an accessible and yet challenging range of assessment tasks and marking guides to help teachers in all schools make confident and accurate judgements about their own students' work.

1 Ministerial Statement by The Hon Dr David Kemp MP, November 1997, available on www.curriculum.edu.au/democracy/about/project/kemp.htm
This year, more than thirty countries will collaborate to assess the reading, mathematical and scientific literacy of 15-year-olds.

"It's important to find out how prepared young people are to meet the challenges of the future," ACER's Dr Ray Adams, international director of the study, said.

ACER is leading a consortium appointed by the Organisation for Economic Co-operation and Development (OECD) to develop the Programme for International Student Assessment (PISA). Around the world more than 100 000 students from 32 countries will be surveyed.

PISA will survey 15-year-old students in reading, mathematics and science every three years. Reading will be the primary focus in 2000, mathematics in 2003 and science in 2006.

"Governments need to know if schools are preparing students for full participation in society, what educational structures and practices maximise opportunities for students from disadvantaged backgrounds, and how much influence the quality of school resources has on student outcomes," Dr Adams said.

"The results will enable countries to evaluate and potentially improve their approaches to education."

In Australia a random sample of 7000 students from more than 200 schools will participate in the survey in July and August. The schools selected have already been notified.

The selected schools will help to organise the assessment, but will not be responsible for any test administration or marking of students' answers.

A special Indigenous sample will be included in the Australian component of the study.

The test development challenge

The assessment materials take an innovative approach—they are not specifically linked to curriculum, and do not just test knowledge.

ACER has prime responsibility for developing the assessment tasks together with Dutch consortium partners, Netherlands National Institute for Educational Measurement (Cito). Developing assessment tasks for so many languages and cultures has presented an enormous challenge, which ACER and Cito have met through an inclusive and democratic approach.

All countries taking part were invited to submit material that could be used as the basis for assessment questions.

One of the ACER researchers developing assessment tasks for reading, Ms Juliette Mendelovits, says "The assessment needs to be interesting to 15-year-olds, as well as appropriate to all the cultures taking part. The aim is cultural diversity rather than cultural neutrality."

Familiarity with aspects of the materials will inevitably vary among cultures, but by having a great variety of content, these differences will balance out.

A further challenge was the translation of materials into many languages. "To ensure that the assessment was equivalent across languages, we had to avoid using material with highly idiomatic language," says Ms Mendelovits. "Questions needed to be at a more global level rather than focusing on the nuances of language."

The assessment tasks have undergone extensive trials, as well as reviews both by participating countries and by international panels of experts.

PISA will not only assess students' knowledge and skills in the key areas of reading, maths and science, but will also ask students to report on their interest in learning, on their learning methods and strategies, on their capacity for self-regulated learning and on their preferences for different learning situations.

---

Which of the figures has the largest area? Give explanations for your answer.

Describe a method for estimating the area of figure C.

Describe a method for estimating the perimeter of figure C.

Sample items

Sample items are available on the PISA website. (www.pisa.oecd.org)
Outcomes

PISA results will show:

- how student achievement relates to school setting, taking into account such features as how school programmes are organised, the staffing and material resources of schools, and how decisions about these are made;
- patterns of achievement within countries, including the extent of differences in achievement across schools; and
- how schools can affect the average relationship between student background and student achievement.

International reports will provide a variety of data that will inform national policy decisions on education. Reports may include international profiles of reading, mathematical and scientific literacy, along with reports on the relationship between social background and student achievement, under-achievement, gender and the effects of schools on learning.

In Australia, the students participating in PISA are the same age group who took part in the Third International Mathematics and Science Study in 1994 and 1998.

"This means we will also be able to do some analysis of development in maths and science achievement of groups of Australian students over time, between ages 9, 13 and 15," Dr Jan Lokan, the Australian national project manager for PISA said.

"We are fortunate that we are able to do this extra analysis in Australia. Most countries will not have the same groups of students participating in the two studies," Dr Lokan said.

The first Australian and international results from the project will be available in late 2001.

For further information, see the PISA web site (www.pisa.oecd.org), or contact Dr Jan Lokan, PISA National Project Manager, email: lokan@acer.edu.au, telephone (03) 9277 5505.

Countries participating in PISA

<table>
<thead>
<tr>
<th>Australia</th>
<th>Denmark</th>
<th>Ireland</th>
<th>The Netherlands</th>
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All except those marked * are members of the OECD.
Learning with

How do students feel about using laptop computers to learn? How do they perceive computers and how is learning changed through their use?

"When we have laptops I actually feel like working more than if I had to write anything out. Although there are a few sacrifices made for these laptops, I still say they are a big help in my schoolwork."

"Immediately when I come home from school I use the computer to complete most of my homework then I charge it, pack it up and don’t even think of touching it for the rest of the night."

A study conducted by ACER in conjunction with Balwyn High School and the University of Melbourne sought to answer these and other questions by asking Year 7 students to record important classroom, homework and out-of-school activities in diaries. The researchers then analysed diary entries that described how students used laptop computers.

"There has been widespread encouragement for the use of technology in the classroom, but we need to know more about the complex ways computers are linked to learning," says Dr John Ainley, ACER Deputy Director.

The study commenced in 1997 with a class of Year 7 students. Students had their own laptops and the computers were used across all subjects. The main aim was to look at student perspectives on learning with laptop computers.

In 1998 when these students moved to Year 8, they continued to use laptops across all their classes. Another three Year 7 classes entered the study in 1998, including one whose students were taking part in an accelerated learning program.

Tools for learning

Computers are often described as a ‘tool for learning’. It was important to find out whether students’ perspectives matched this vision. The challenge was to interpret what students were saying about their use of computers.

Diary responses across the three activity areas—schoolwork, homework and out-of-school activities—were used to identify five basic perspectives on the computer as a learning tool.

Students wrote about using their laptops as a tool for getting work done (In the past week I have been doing my homework on it ... I do projects and download files ...), as a machine with its own special procedures to be learnt (I shifted all my schoolwork files that I don’t need any more onto a floppy so that I can have more free space. I also organised my work into sections, for example: - the maths folder I sorted the files into different folders such as Geometers sketchpad, Word, Excel etc.), as a means of accessing knowledge and information (We are making charts to identify living things in Science), as a tool for presentation of work (I have used it mostly for powerpoint presentations and publisher presentations), and for playing games. The pattern of these different tool uses is displayed in Figure 1.

![Figure 1: Activities Diary; Proportion of Responses for each Tool Code in Three Activity Areas](image)

![Figure 2: Weekly Activities Diary; Proportion of Responses for Each Tool Code by Gender](image)

Work: a tool for getting schoolwork done; Procedures: a tool with its own special procedures to learn; Information: a tool for access to knowledge and information; Presentation: a tool for presentation of work; Play Games: a tool for playing games.
Findings

Interestingly, there were more similarities than differences between the responses of boys and girls. Both sexes perceived the computer as a means of getting work done, and as a machine with its own special procedures to be learnt. There was a small difference in that, out of school, boys commonly mentioned playing games on their computers, while girls referred to presentation uses (see Figure 2).

A key finding was that for both boys and girls, few of the diary responses focused attention on the computer as a means of accessing knowledge and information—a perspective educators have most closely associated with the expansion of students' learning horizons.

Another important finding was the high proportion of student comments about learning how to operate computers—learning the tool was part of their learning. One third of all the comments were about learning procedures and this was consistently reported across all three areas—schoolwork, homework, and out-of-school activities. The Adelaide Declaration on National Goals for Schooling in the Twenty-First Century articulated the importance of this function when it specified that students should leave school as ‘confident, creative and productive users of new technologies, particularly information and communication technologies’. The same concern was voiced by parents of students participating in the laptop classes. In Year 8 these students, now accustomed to using computers, focused more on the content of what they were doing with their laptops.

The study also found that students were generally very positive about using laptops (see Figure 3). Although the level of positive response in Year 8 was lower than in Year 7, it was still positive. Schoolwork and homework activities, as shown in other research, were not as enjoyable as leisure activities. Anxieties and frustrations about hardware and software (eg. in the past week I have been troubled by the failure of my printer to print) were also evident as students learned to master the technology and its limitations.

“We need to follow up these findings with research that will tell us if higher levels of mastery of the tool will free students to get more work done. Will it focus more attention on the potential of computers to access and manipulate knowledge?” asks Dr Mary Ainley, a researcher from the University of Melbourne who collaborated on the research.

The use of laptops in the classroom affected not only student perceptions of their learning, but also the way classes were run. In the laptop classes, students were more likely to make presentations, they were more likely to be working on individual research projects, and teachers came to expect laptops to be used by students in classroom tasks.

Some teachers said laptops were yet another way to provide students with options in an attempt to cater to individual differences. Others said that having the laptops magnified differences between students. Just as there was variability among student responses there were also differences between teachers as they evaluated how their classes had changed.

“The findings indicate that there are a variety of ways in which the computer becomes part of and influences how students learn,” says Dr John Ainley.

The full report is available from ACER Press Customer Service. Computers, Laptops and Tools (A8448K; $29.95 plus p&h), telephone (03) 9277 5666; fax (03) 9277 5678; email: sales@acer.edu.au
Latest findings from the Longitudinal Surveys of Australian Youth

The Longitudinal Surveys of Australian Youth research program is jointly managed by ACER and supported by the Commonwealth Department of Education, Training and Youth Affairs. The following reports have been released recently:

Curriculum and careers
The subjects chosen by Year 12 students can affect their opportunities for further education and employment.

In the year after completing Year 12, two-thirds of the students who studied science, maths and business studies combinations of subjects entered university or vocational education and training. This was higher than for students undertaking studies from most other parts of the Year 12 curriculum.

Students doing vocational education and technology courses in Year 12 more often sought entry to the workforce than entry to further education. These students had the highest rate of participation in full-time work at age 19. However, while many were in full-time jobs at age 19, over 20 per cent were not.

Curriculum was found to have an independent effect on outcomes. Students from the same background, of the same sex, attending the same type of school and with the same levels of achievement at age 14 have different work and further study experiences depending on the subjects they take in Year 12.

The findings have implications for curriculum policy and counselling and information services provided for students. In an attempt to cater for diversity of students, many schools now offer a greater range of subjects. However, some courses do not have clear links with further education and training and with employment. This may work to increase inequality in post-school education, training and employment outcomes.

Participation in education and training
Overall participation in education and training has increased significantly from the early 1980s to the mid-1990s.

Participation by 19-year-olds in post-school education and training—including TAFE courses, apprenticeships, traineeships and higher education—increased from 49 per cent in 1980 to 67 per cent in 1994.

The study also found that the number of students completing Year 12 more than doubled between the early 1980s (35 per cent) and the mid-1990s (78 per cent). This growth was accompanied by significant changes in the social backgrounds of Year 12 students.

Completing Year 12 remains an important prerequisite for entry to post-school education and training, but the opportunities for early school leavers to participate in further education and training also improved over the period studied.

Higher completion rates for Year 12 were complemented by an increased rate in participation in higher education (20 per cent in the early 1980s compared with 39 per cent in the mid-1990s), with students entering TAFE in 1994 more likely to have completed Year 12 (75 per cent) compared with those in 1980 (43 per cent).

More further education and training participation in Australia than United States
Early school leavers in Australia are more likely than those in the United States to pursue post-school education and training. However, more United States than Australian early school leavers later go on to complete secondary school.

Almost half the early school leavers in the United States complete high school within two years of normal high school graduation, whereas fewer than 10 per cent of early school leavers in Australia eventually complete high school.

Even though a higher proportion of Australians than Americans never complete high school, Australian early school leavers are more likely than their American counterparts to enrol in postsecondary education and training.

In the United States one in ten early school leavers who never completed high school participated in education or training during the first two years after high school. In Australia, about two in three male early school leavers had participated in post-school education or training. This was the case for only about one in three female early school leavers. However, the rate for females was still five times that of females in the United States.

The full reports are available from ACER Customer Service telephone (03) 9277 5656; fax (03) 9277 5678; email sales@acer.edu.au


Cost effective instruments for literacy and numeracy assessment in Years 3 and 5

ACER is providing literacy and numeracy assessment at Years 3 and 5 to allow non-government schools to participate in standardised assessment, including reporting of student achievement against national benchmarks.

The Cost Effective Instrument test will be held in August to support Catholic and Independent Schools not involved in statewide testing programs. ACER develops and provides the test and instructional material for schools to administer the test. ACER will provide reports on school, class and student performance.

In 1999 a pilot project was funded by the Commonwealth Department of Education, Training and Youth Affairs. This year the test will be available to non-government schools on a per candidate fee for service basis.

Sample questions from the 1999 Cost Effective Instrument test and further information are available on the ACER web site. (www.acer.edu.au)

EXAMPLE
Bob wants to cut the ribbon in half.
Colour the where he should cut.

An example of a question from the Year 3 Numeracy test.

News from the Monash University-ACER Centre for Economics of Education and Training (CEET)

CEET Conference:
‘Resources for lifelong learning’

CEET Melbourne Seminar Program
Developing a regional agenda for VET and employment: lessons from Whittlesea and other innovative communities
18 May – John Spierings
12.30-1.45pm; all welcome, no charge
Monash City Centre, 7th floor, 30 Collins Street, Melbourne

Australia Centre Potsdam Germany
CEET is convening a conference for the Australia Centre on 29-31 May 2000 on ‘Vocational Training and Lifelong Learning in Australia and Germany’. Details on www.australiacentre.org

New report:
Trends in the TAFE Workforce

Further information
Ms Amanda Crichton, fax (03) 9905 9184,
email ceet@education.monash.edu.au;
tel (03) 9905 9157, CEET, Faculty of Education,
PO Box 6, Monash University, Victoria 3800, Australia
www.education.monash.edu.au/centres/CEET

ACER RESEARCH CONFERENCE 2000

Improving Numeracy Learning: What does the research tell us?

16-17 October 2000
Carlton Crest Hotel, Brisbane, Queensland

This conference brings together leaders in numeracy research to review the current state of knowledge on ways of improving numeracy learning. International and national researchers will review and report on a range of recent research findings, including:
• Numeracy in the early years
• Numeracy in the middle years of schooling
• Longitudinal studies of numeracy development

The conference will include: plenary speakers; respondents to the plenary speakers; concurrent sessions presenting key Australian research; small group workshops; panel discussions; opening reception on October 15, and conference dinner.

Keynote Speakers
Professor Margaret Brown, Professor of Mathematics Education, Kings College London
Professor Sue Willis, Dean, Faculty of Education, Monash University

Further information
Provide your postal details to the address below to receive further information: conference@acer.edu.au, ACER Conference, Private Bag 55, Cambrarwell VIC 3124
Further information will be available later in the year on the ACER website. (www.acer.edu.au)
Early Bird registrations will close on 1 September 2000. Registrations will close 9 October 2000.
PD Workshops

PARENT EDUCATION / SOCIAL WELFARE

Sandplay and Symbol Work to Resolve Conflict
15 June
Presenter: Mark Pearson and Helen Wilson
Location: ACER, 347 Cambewell Rd, Camberwell
Cost: $95

Emotional Release for Children
16 June
Presenter: Mark Pearson
Location: ACER, 347 Cambewell Rd, Camberwell
Cost: $95

HUMAN RESOURCES

Pin-Point Personality Instrument Training Course
3 day course
Sydney: 14-16 June & 15-17 November
Melbourne: 5-7 July & 18-20 October
Cost: $1495

Occupational Testing Course
Intensive 5 day program
Sydney: 23-27 October
Melbourne: 14-18 August
Cost: $2395

Test Administration Course
A practical 1 day workshop
Sydney: 8 August & 28 November
Melbourne: 27 June & 17 October
Cost: $895

Assessment Centre Exercises Course
For selection and development of personnel
Sydney: 13-14 July & 9-10 November
Melbourne: 19-20 June & 7-8 September
Cost: $1095

Further information:
Professional Development Unit
Administration Officer,
Ms Margaret Taylor
Phone: (03) 9835 7463
Fax: (03) 9277 5678
Email: workshops@acer.edu.au

MBTI

MBTI Qualifying Programme
Presenter: Peter Geyer
Melbourne: 10-14 July, 18-22 September,
27 November-1 December
Perth: 26-30 June
Hobart: 4-8 December
Cost: $1590

MBTI Step II
Presenter: Peter Geyer
Melbourne: 8-9 May, 2-3 August,
25-26 September
Perth: 3-4 July
Adelaide: 22-23 November
Cost: $490

Do What You Are - MBTI and Careers
Presenter: Jo Fleischer
Brisbane: 25 May
Sydney: 30 June
Cost: $230

MBTI and Team Building
Presenter: Jo Fleischer
Melbourne: 1-2 June
Perth: 8-9 June
Sydney: 22-23 June
Cost: $420

Counselling and Type
Presenter: Peter Geyer
11-12 May
Location: ACER, 347 Cambewell Rd, Camberwell
Cost: $490

Familiarisation for Psychologists - how to administer, use & apply the MBTI
Presenter: Jo Fleischer
Sydney: 23 June
Brisbane: 26 May
Cost: $230

Form M Refresher
Presenter: Peter Geyer
7 August
2 x half day workshops
ACER
Cost: $90

Understanding the 16 Types
Presenter: Peter Geyer
9-11 August
ACER
Cost: $695

EDUCATION

StopThink Do
A programme for motivating children's social and learning skills
Presenter: Lindy Petersen
Cost: $110

SA
6 May Cudaluna
8 May Whyalla
10 May Port Lincoln

VIC
23 May Melbourne

WA / NT
28 April Darwin
2 May Perth
3 May Bunbury

Thinking Mathematically
Presenter: George Bokker
6 June & 7 June
1 day workshop
Location: ACER, 347 Cambewell Rd, Camberwell
Cost: $110

Emotional Resilience Workshop
Presenter: Jenny Rickard
8 June - primary school focus
9 June - secondary school focus
Location: ACER, 347 Cambewell Rd, Camberwell
Cost: $100

PSYCHOLOGY

Strong Interest Inventory Training Course
Intensive 1 day program
Presenter: Delia Vettlby
7 September, 28 October, 23 November

16 PF Master Class Introduction
Sydney: 23 August
Melbourne: 28 August

16 PF Master Class - Maximising Feedback
1 day workshop
Sydney: 24 August
Melbourne: 28 August

16 PF Master Class - Selection
Sydney: 25 August
Melbourne: 30 August

ACER Press move
ACER Press, the publishing and distribution division of ACER, has moved to a separate building.
Customers wishing to purchase products in person should visit 347 Cambewell Road, Camberwell, Melbourne.
Please continue to place orders at the usual postal address, fax and telephone numbers.
ACER Press Customer Service, Private Bag 55, Camberwell VIC 3124 AUSTRALIA
Telephone (03) 9277 5656, Fax (03) 9277 5678, Email: sales@acer.edu.au, www.acer.edu.au

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