

Practice Attitude Quiz

Dental Assisting

Part 1: About this Dental Assisting Resource

QUIZ

Guidance

The Practice Aptitude Quiz is intended to be a general illustration of some of the key learning standards required of people attempting an Australian Apprenticeships entry level qualification in Dental Assisting.

This Practice Aptitude Quiz is neither a formal tool nor a direct pre-requisite for any job application.

This quiz has been developed with the assistance of industry, training providers and the secondary school sector as a careers resource.

The quiz focuses on literacy, numeracy, comprehension and problem solving questions contextualised to this specific industry.

The quiz can be utilised by numerous organisations and people such as careers practitioners working with young people, Group Training Organisations and Job Services Australia providers working with job seekers.

The Practice Aptitude Quiz can be:

- > Used by careers practitioners with individuals or in a class setting to provide general guidance on the level of study involved in undertaking an entry level qualification in this industry;
- > Provided to people to enable them to practice their skills before sitting an actual aptitude test;
- > Used by Mathematics teachers as a guide to industry maths requirements at the entry point of this particular Australian Apprenticeship.

The level of reading, writing and mathematical skills assessed by this quiz is equivalent to that of a typical young person at Year 10 level.

Please note that rates quoted in this assessment for various items, including pay rates, are not meant to reflect today's values, but are used purely for mathematical purposes.

The quiz should be able to be completed in approximately 45 minutes.

Calculators may be used to complete this practice exercise.

Answers are located at the end of the quiz.

Occupational Information and Job Hunting Resources

Information and links about the Dental Assisting careers, job prospects as well as career websites and job hunting resources can be found at www.aapathways.com.au/Quiz.

After the Quiz

There are a range of support services available to help you find out about courses that may help you improve your literacy and numeracy skills and also your readiness for work.

If you are still at school you should discuss any concerns you may have with your career practitioner. Further information may also be provided by a Job Services Australia provider, an Australian Apprenticeships Centre, a Group Training Organisation or a training provider.

Useful Contacts

Here are some links to job seeker support services:

- > Search for a Local Service Provider - www.aapathways.com.au/Search
- > Find a local Group Training Organisation - www.grouptraining.com.au/Find/find_gto.html
- > Job Services Australia providers work with eligible job seekers to develop an individually tailored Employment Pathway Plan. The plan maps out the training, work experience and additional assistance needed to find job seekers sustainable employment - www.jobsearch.gov.au/provider/default.aspx

Part 2: The Quiz

Section 1 - Literacy, Reading and Comprehension

1. Write the following words in alphabetical order.

Mandible	Alloy	Ceramic	Autoclave	Dentine
Sanitise	Veneer	Plaque	Tartar	Enamel
Orthodontic	Abscess	Cusp	Diagnostics	Injection

2. Read the following information about working as a Dental Assistant and answer the questions that follow.

A Dental Assistant (sometimes known as a Dental Nurse) works closely with a Dentist or Dental Hygienist in all stages of the patient's treatment.

An effective Dental Assistant needs to be able to communicate well, have good interpersonal skills, be well organised, manage their time effectively, and have an interest in health care.

The daily routine for a Dental Assistant

The first thing that a Dental Assistant does when they arrive at work is to change out of their street clothes into a clean uniform or surgery gown.

Sterilisation Room

This is where instruments are sterilised and reprocessed. The Dental Assistant turns on the autoclaves (sterilisation equipment) and runs all necessary tests to check the autoclaves are reaching the required temperature. The Dental Assistant also fills the ultrasonic cleaner with water and the appropriate cleanser.

Assisting with Administration

The Dental Assistant turns on the computer and opens the appointment book. They print out the day's appointment sheet. That is, the list of today's patients and procedures.

A morning meeting is held where staff have the opportunity to discuss the day ahead. This could include speaking with the Dentist about a particularly nervous patient, or a difficult procedure.

Most dental surgeries have a Receptionist, however from time to time the Dental Assistant may need to help out. This may entail answering the phone, greeting clients, making appointments, taking payments, accounts keeping and computer-based work.

Surgery set up

The surgery needs to be set up before the arrival of the first patient.

The Dental Assistant washes their hands and puts on appropriate Personal Protective Equipment (PPE).

The Dental Assistant checks the day's appointment sheet to see what the first appointment is. It may be for a:

- clean and scale;
- composite resin filling;
- crown preparation;
- root canal therapy;
- tooth extraction;
- surgical procedure.

The Dental Assistant greets the patient and shows them through to surgery, all the while making light conversation to put the patient at ease.

The Dental Assistant asks the patient to sit in the dental chair and then places a bib and protective glasses on the patient.

Assisting the Dentist

A Dental Assistant is an important addition to the dental surgery. Without a Dental Assistant the Dentist could find it very difficult to operate efficiently. Dental Assistants help by using the high speed evacuation device, preparing and mixing materials, developing and mounting x-rays and passing instruments.

When the dental procedure is complete the Dental Assistant needs to prepare the surgery for the next patient. This must be done systematically to avoid mistakes. They must wipe down all surfaces with approved disinfectant or neutral detergent, place barriers on areas that are difficult to clean and set up for the next procedure according to the day's appointment sheet.

- a. **List five personal qualities that an effective Dental Assistant should possess.**

- b. List three types of dental procedures that a Dental Assistant may assist with.

- c. What is an autoclave?

- d. What does PPE stand for?

3. Read the following extract and answer the questions that follow.

An infection occurs when a pathogenic microbe is able to multiply in the tissue in which it is lodged. An infectious disease is one that is communicable or contagious. These terms mean that the disease can be transmitted (spread) in some way from one host to another. Therefore, it is essential that all Dental Health Care Workers have a full understanding of infection control policies and procedures.

- Dental staff should remove jewellery prior to commencing work within the dental surgery.
- Dental staff must wash their hands in the following circumstances:
 - Prior to seeing new patients;
 - Before and after gloving;
 - After touching contaminated objects or surfaces;
 - Prior to eating;
 - After using the bathroom.
- Dental staff who have open cuts must cover the wound with a waterproof plaster or Band Aid, to prevent microorganisms entering the body.
- Artificial nails are not allowed as they harbour bacteria and have potential to puncture the protective gloves.
- Some examples of infections could be Lockjaw better known as Tetanus, Hepatitis C, Hepatitis B or HIV.

Answer the following questions by circling the correct answer/s.

- a. The goal of an infection control program is to prevent disease transmission to:
- i. The patient from the staff.
 - ii. The staff from the patient.
 - iii. The patient from another patient.
 - iv. All of the above.

b. As a Dental Assistant when should you wash your hands?

- i. Before you glove.
- ii. After you remove your gloves.
- iii. Both of the above.
- iv. None of the above.

c. It is considered safe practise to wear jewellery under latex gloves.

- i. True.
- ii. False.

d. Another term for the disease called Lockjaw is:

- i. Hepatitis.
- ii. Bacterial endocarditis.
- iii. Tetanus.

4. Circle the correct spelling of the missing word in each of the sentences below.

a. Mr Aaron Dang came into the surgery today. He was very _____ about his appointment.

nervos nervous nervise nervouse

b. Mr Dang complained about the long _____ as he needs to be elsewhere by a certain time.

weight whate wate wait

c. Mr Dang has _____ with the Dentist his concerns and together they worked out a treatment plan.

discussed dicussed disccussed diccussed

d. Mr Dang has _____ to go ahead with Dr Lily Singh's suggestions and has booked in for his first appointment.

deecided desided deiceded decided

e. Mr Dang has telephoned the surgery and asked about _____ to park.

where wear were waer

f. Mr Dang arrives and requests to use the _____. The Receptionist indicates to Mr Dang where the men's room is located.

amenities amenitis armenitis ammennitis

- g. The Dental Assistant shows Mr Dang into the treatment room and makes light _____ until he feels comfortable.

confersation convisation conversation consifation

- h. Mr Dang wants to know what is going to happen today so you explain the _____ and let him know you will be there to help him at all times.

prrucdure procedure prudcedure procdure

- i. Dr Singh has asked Mr Dang to have some radiographs done and you explain why it is _____.

necessary necesary neasasary nesasary

5. Circle the seven spelling and grammar mistakes in the following passage.

Fluoride is a naturally occuring mineral that is found in many forms. it may be present in the water from wells; in the food we eat, which has absorbed fluoride from the soil; and as additives in many different products that we use.

Fluorides are effective in strengthening the enamel's resistance to dental decay. However, to acheive the maximum benefits of fluoride, an ongoing supply of both systematic and topical fluoride must be available throughout life. For over 40 years fluoride has been safely added to the communal water supply in most cities in australia.

Topical fluoride application is an esential part of a comprehensive dental program. Dentine is the hardest substance in our bodies. fluorid helps to maintain its integrity.

6. Circle the word which can replace the word in the sentence that is underlined.

- a. As a Dental Assistant you will provide assistance to the Dentist, Dental Hygienist, or front office, therefore staff in this role need to be flexible.

knowledge answers support opinions

- b. As a Dental Assistant it is important to maintain patients' confidentiality.

discretion secrecy gossip privacy

- c. When working as a Dental Assistant it is essential that you are aware of the correct Personal Protective Equipment PPE to wear.

important vital optional helpful

- d. Health and safety hazards can be reduced by following your surgery's Workplace Health and Safety (WHS) policies and procedures.

increased maximised minimised prevented

7. If you were a new trainee Dental Assistant how would you handle the following situations?

- a.** Mr Patrice Mutua telephoned the surgery and you answered the call.

Mr Mutua said to you “My tooth hurts very much”.

You ask Mr Mutua for more information about the type of pain, how long it has been painful and its location but you are unable to make yourself understood.

What should you do? Circle the correct answer.

- i. Tell Mr Mutua to ring back later.
- ii. Speak loudly and slowly to Mr Mutua.
- iii. Put Mr Mutua on hold after you have obtained his contact details and ask your supervisor for assistance with the call.

- b.** This is only the second time in his life that 14 year old Chris has been to the Dentist.

He has been living in a remote part of the world where there were no medical services.

His adopted family took him to the dentist a month ago for an examination. Jan, the Dentist, took x-rays and examined Chris’ teeth and mouth. Jan explained very carefully to Chris and his parents the treatment plan that Chris required. He needs seven fillings and the removal of all four severely impacted wisdom teeth before bracing may be considered to straighten his teeth.

Today, Chris is here to have his two upper wisdom teeth removed.

His parents have told both the Dentist and the Dental Assistant that Chris is very frightened and nervous about the procedure. He has not been able to sleep or eat for the last two days.

Jan and her Dental Assistant discuss Chris’ treatment before his appointment.

What can the Dental Assistant do to lessen Chris’ fear and nervousness when he arrives for his appointment? Circle the correct response/s.

- i. Explain that the Dentist will provide pain relief during and after the procedure.
- ii. Leave him alone in the waiting area for 30 minutes.
- iii. Quietly explain the full procedures and if possible show Chris a video or pamphlet.
- iv. Tell him to not be nervous.

8. First Aid

Dental Surgeries are required to have a plan of action in the event of an emergency.

It is important all staff have been trained in the latest First Aid procedures.

It is a good idea to have an emergency response chart in a place where it is assessable in the event of any emergency.

All surgeries should have a Cardio Pulmonary Resuscitation (CPR) chart.

These charts are available from many agencies such as the Ambulance Service in each State or Territory, St John's Ambulance and the Australian Red Cross.

Read the chart below and answer the questions that follow.

CPR chart Cardio Pulmonary Resuscitation	
D Check for danger	Check for danger eg electrical cords, petrol or other hazards
R Responsive	Check for responsiveness If no signs of life: > Unconscious > Unresponsive > Not breathing normally
SHOUT FOR HELP!	> Get someone to dial Triple Zero (000) immediately > Ask for AMBULANCE
A Clear airway	> Place person on their back > Tilt head back (not for infants or injured) > Remove foreign matter from mouth (and nose of baby) > Place on side if there is a lot of foreign matter
B Check breathing	> Look, listen and feel for breathing > If normal breathing is present leave or place patient on their side > If normal breathing is absent commence CPR 2 breaths to 30 compressions at 100 compressions/min – Place patient on their back – Tilt head back (not for infants or injured) – Lift jaw and pinch nostrils
C Circulation (at 100 compressions/min)	CHILD & ADULT: > Place hands over the centre of the chest (sternum). > Compress sternum one third the depth of the chest 30 times > Continue with 2 breaths to 30 compressions > Do not interrupt compressions for more than 10 seconds INFANT: > Position 2 fingers on lower half of the sternum > Depress sternum approximately one third the depth of the chest > Continue with 2 breaths to 30 compressions
D Defibrillation	If Automated External Defibrillator (AED) is available
CONTINUE CPR UNTIL PARAMEDICS ARRIVE OR SIGNS OF LIFE RETURN Beware of rescuer fatigue, if help is available swap rescuers every few minutes	

Chart Courtesy of Ambulance Service NSW

QUIZ

a. In an Emergency what number should you call?

b. Why is it important that all staff are trained in First Aid?

c. What are the three elements of responsiveness?

d. How do you check breathing?

e. What does CPR stand for?

Workplace Health and Safety



9. Read part of an extract about how to pass instruments to the Dentist.

The Zone Transfer: Every exchange between the Dental Assistant and the Dentist takes place in the transfer zone, which is over the patient's chest, near his or her chin. Instruments are exchanged here so they are not accidentally dropped on the patient's face. Every exchange must be done with minimal motion using movements of elbows, wrists and fingers only.

The One-Hand Exchange: With the one-hand exchange, the Dental Assistant uses four steps to pass an instrument to the Dentist. The first step, the working step, involves the Assistant picking up an instrument by its end with their left hand, using their thumb and first two fingers only. The Assistant holds the instrument parallel to the instrument being used by the Dentist. The second step is a signal given by the Dentist that he/she needs another instrument. The Dentist will give this signal by raising the instrument he/she is already using slightly from the patient's tooth. The pre-transfer step involves the Assistant using their little finger to retrieve the old instrument from the Dentist's hand. The Assistant may prefer to use their last two or three fingers as well in the step. The final step, the mid-transfer step, involves the new instrument being placed in the Dentist's hand from the Dental Assistant's hand.

The Hand Piece Exchange: The dental hand piece, or dental drill, is also exchanged between the Dental Assistant and the Dentist in the transfer zone, above the patient's upper chest. If the Dentist communicates that he/she needs a new bur (or drill bit) for the hand piece, the Assistant will loosen and remove the bur and place the new bit in the piece and secure it. This is also done over the transfer zone. But, if the Dentist uses a different instrument between bur exchanges, the Dental Assistant may change the bur outside the zone and over the tray setup. When exchanging two hand pieces, the Dental Assistant must avoid tangling the hoses.

a. How does a Dental Assistant avoid injuring a patient's face?

b. What is a bur?

c. What does the mid-transfer step involve?

d. Every exchange must be done with minimal movement of what three body parts?

10. Read the following information and answers the questions below.

Tooth development and eruption of permanent (adult) teeth.

Teething usually occurs between the ages of 6 months and 3 years. Children usually replace their baby teeth at around 6 years of age. Back baby teeth are replaced at 10-12 years of age. If a child's baby teeth erupted late, the adult teeth will probably erupt late as well.

Tooth	Eruption month (approximately)	Shed year (approximately)	Eruption sequence
Lower central incisor	6-10	6-7	<p>8-12 months</p> <p>9-13 months</p> <p>16-22 months</p> <p>13-19 months</p> <p>25-33 months</p>
Lower lateral incisor	10-16	7-8	
Upper central incisor	8-12	6-7	
Upper lateral incisor	9-13	7-8	
Lower first molars	14-28	9-11	
Upper first molars	13-19	9-11	<p>23-31 months</p> <p>14-28 months</p> <p>17-23 months</p> <p>10-16 months</p> <p>6-10 months</p>
Lower canines	17-23	9-12	
Upper canines	16-22	10-12	
Lower second molars	23-31	10-12	
Upper second molars	25-33	10-12	

Courtesy of Dental Health Services Victoria <https://www.dhsv.org.au>

a. At what age do children usually shed their baby teeth?

b. When do the upper canines erupt?

QUIZ

c. What is another name for adult teeth?

d. How old is a child when they shed their upper lateral incisors?

e. What are the only primary teeth with the potential to remain in a child of 12 years of age?

f. List all types of molar teeth.

Section 2 - Mathematics

Calculators may be used.

- Ms Toscano has just had her annual check-up. Included in her check-up were a scale, clean and fluoride. Dr Singh, the Dentist, recommended that as Ms Toscano has not had x-rays for three years she should have two bite wing x-rays taken to check between the teeth for any cavities.

Itemised account items for Ms Toscano

012 Exam
114 Clean
121 Fluoride
2 x 022 x-rays

The full amount of her account is \$335.00.

Ms Toscano uses her ACME Private Health Fund card in the payment processing machine and the ACME Health Fund fee contribution is \$165.30.

How much remains for Ms Toscano to pay?

\$ _____

- Heidi, the trainee Dental Assistant, has been asked to go to the local store for some supplies. Heidi is given \$50.00 from the petty cash.

Heidi has been ask to buy the following items.

Calculate the total costs of the items and the amount of change Heidi will receive. Write your answers in the shaded section of the right hand column below.

5 packets of tissues for the stock cupboard	\$2.35 each
2 x 100 envelopes	\$2.40 each
1 writing pad	\$3.60
1 carton of milk	\$2.70
Calculate the total	
How much change should Heidi receive?	

3. Answer the following arithmetic questions:

- a. Write this number in words - 157,802

- b. Round 36,993 to the nearest thousand

- c. Round 6.724 to the nearest hundredth

- d. 324×87 = _____

- e. 81.32×0.3214 = _____

- f. $4356 \div 89$ = _____

- g. What is 100 as a percentage of 80? _____

- h. Convert $\frac{2}{5}$ to a percentage _____

- i. What is the elapsed time between 5.45 AM and 4.10 PM?

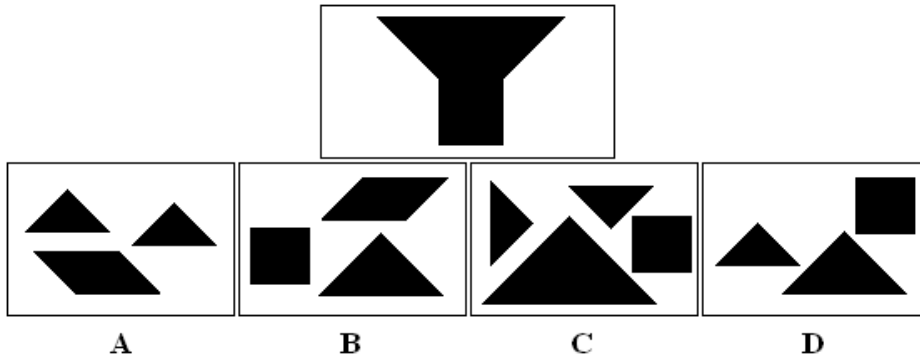
4. Alison and Blythe, the two Dental Assistants in the dental practice, have been asked to do a stocktake of retail supplies for patients.

Input the correct numbers and costs into the shaded columns below.

Item	Price each	Total stock required	Total stock remaining	Stock to be ordered	Total price of additional stock
Mouthguards	\$14.30	60	10		
Interdent brushes (per pkt of 10)					
Size 1	\$7.95	75	50		
Size 2	\$7.95	50	30		
Size 3	\$7.95	100	84		
Size 4	\$7.95	50	0		
Size 5	\$7.95	35	23		
Fluoride toothpaste					
Normal	\$9.30	150	112		
Sensitive	\$12.80	100	87		
Teeth Whitening gel syringes (sets of 4 syringes)					
Day					
3% hydrogen peroxide	\$37.95	5	2		
6% hydrogen peroxide	\$37.95	5	1		
7.5% hydrogen peroxide	\$37.95	10	9		
9.5% hydrogen peroxide	\$37.95	15	3		
Night					
10% carbamide peroxide	\$37.95	10	2		
16% carbamide peroxide	\$37.95	25	15		
18% carbamide peroxide	\$37.95	10	3		
22% carbamide peroxide	\$37.95	10	0		
				Total cost of order	

Spatial Reasoning

- Which group of shapes can be assembled to make the shape shown? Hint: Begin by eliminating as many options as you can on the basis of size. Circle the correct letter.



Section 1 - Literacy, Reading and Comprehension

1.

Abscess
Alloy
Autoclave
Ceramic
Cusp
Dentine
Diagnostics
Enamel
Injection
Mandible
Orthodontic
Plaque
Sanitise
Tartar
Veneer
2.
 - a. interpersonal skills, good communication skills, well organised, interested in health, time management.
 - b. clean and scale, composite resin filling, crown preparation, root canal therapy, tooth extraction, surgical procedure.
 - c. Sterilisation equipment.
 - d. Personal Protective Equipment.
3.

a. iv. All of the above.	b. iii. Both of the above.	c. ii. False.	d. iii. Tetanus.
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4.

a. nervous	b. wait	c. discussed	d. decided
e. where	f. amenities	g. conversation	h. procedure i. necessary
5.

Fluoride is a naturally **occurring** mineral that is found in many forms. **It** may be present in the water from wells; in the food we eat, which has absorbed fluoride from the soil; and as additives in many different products that we use.

Fluorides are effective in strengthening the enamel's resistance to dental decay. However, to **achieve** the maximum benefits of fluoride, an ongoing supply of both systematic and topical fluoride must be available throughout life. For over 40 years fluoride has been safely added to the communal water supply in most cities in **Australia**.

Topical fluoride application is an **essential** part of a comprehensive dental program. Dentine is the hardest substance in our bodies. **Fluoride** helps to maintain its integrity.
6.

a. support	b. privacy	c. vital	d. minimised
------------	------------	----------	--------------
7.

a. iii.	b. i. & iii.
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8.

a. 000	b. So that there is a plan of action in the event of an emergency.
c. Unconscious, Unresponsive, Not breathing normally.	
d. Look, listen and feel for breathing	e. Cardio Pulmonary Resuscitation
9.
 - a. Every exchange between the Dental Assistant and the Dentist takes place in the transfer zone, which is over the patient's chest, near his or her chin. Instruments are exchanged here so they are not accidentally dropped on the patient's face.
 - b. Drill bit for a dental drill.
 - c. The new instrument being placed in the Dentist's hand from the Dental Assistant's hand.
 - d. Elbows, wrists and fingers.

10. a. Around six years of age. b. 16 to 22 months. c. Permanent.
d. 7 to 8 years.
e. Upper second molars, Upper canines, Lower canines, & Lower second molars.
f. Lower first molars, Upper first molars, Lower second molars & Upper second molars.

Section 2 - Mathematics

1. \$169.70
2. Total \$22.85, change \$27.15
3. a. One hundred and fifty-seven thousand, eight hundred and two
b. 37,000
c. 6.72
d. 28,188
e. 26.14
f. 48.94
g. 125%
h. 40%
i. 10 hours and 25 minutes

4.

Item	Stock to be ordered	Total price of additional stock
Mouthguards	50	\$715.00
Interdent brushes (per pkt of 10)		
Size 1	25	\$198.75
Size 2	20	\$159.00
Size 3	16	\$127.20
Size 4	50	\$397.50
Size 5	12	\$95.40
	Subtotal	\$977.85
Fluoride toothpaste		
Normal	38	\$353.40
Sensitive	13	\$166.40
	Subtotal	\$519.80
Teeth Whitening gel syringes (sets of 4 syringes)		
Day		
3% hydrogen peroxide	3	\$113.85
6% hydrogen peroxide	4	\$151.80
7.5% hydrogen peroxide	1	\$37.95
9.5% hydrogen peroxide	12	\$455.40
Night		
10% carbamide peroxide	8	\$303.60
16% carbamide peroxide	10	\$379.50
18% carbamide peroxide	7	\$265.65
22% carbamide peroxide	10	\$379.50
	Subtotal	\$2,087.25
	Total cost of order	\$4,299.90

Spatial Reasoning

1. B

Contributions

This Practice Aptitude Quiz was developed by:



Australian Apprenticeships Pathways Website - www.aapathways.com.au

This website provides sample Australian Apprenticeships job descriptions and links to more Australian Apprenticeships information and resources. The site is funded by the Department of Industry.



Community Services and Health Industry Skills Council - www.cshisc.com.au

CS&HISC provides the direction for workforce development for Australia's Community Services and Health industries. CS&HISC works closely with industry, education and government to ensure that the qualifications in these sectors reflect real industry skill requirements and to build capability, professionalism, and innovative capacity in Australia's workforce.



Foundation Education - www.foundationeducation.edu.au

Foundation Education provides you with outstanding education solutions; delivering new skill sets and revealing an additional revenue stream for your businesses.

Supported by the latest technology, Foundation Education represents value for money while maintaining the highest standards in terms of content, delivery and support.



The Career Education Association of Victoria - www.ceav.vic.edu.au

The CEAV is the Victorian peak body for secondary school career practitioners, work experience coordinators, VET coordinators and MIPS coordinators. The CEAV provides professional development opportunities for members and also works with business, industry, and the education and training sector.



Industry Training Australia P/L - www.itaust.com.au

Industry Training Australia (ITA) delivers consultancy services to government and non-government organisations in the education and training sector. ITA develops and delivers information and communication services, including the Australian Apprenticeships Pathways website, for service provider networks and the general public.

For enquiries about this Practice Aptitude Quiz contact the Australian Apprenticeships and Traineeships Information Service on 1800 338 022

www.aapathways.com.au/quiz