

# Andragogy & VARK Learning Styles

## Glencore Mangoola



Who are we?

Mangoola is a Glencore owned open cut coal mine in the upper Hunter Valley, located 20 km southwest of Muswellbrook.

Over 3 intakes a year we onboard approx. 12 new Trainee Truck Operators as well as the usual upskilling of current operators.

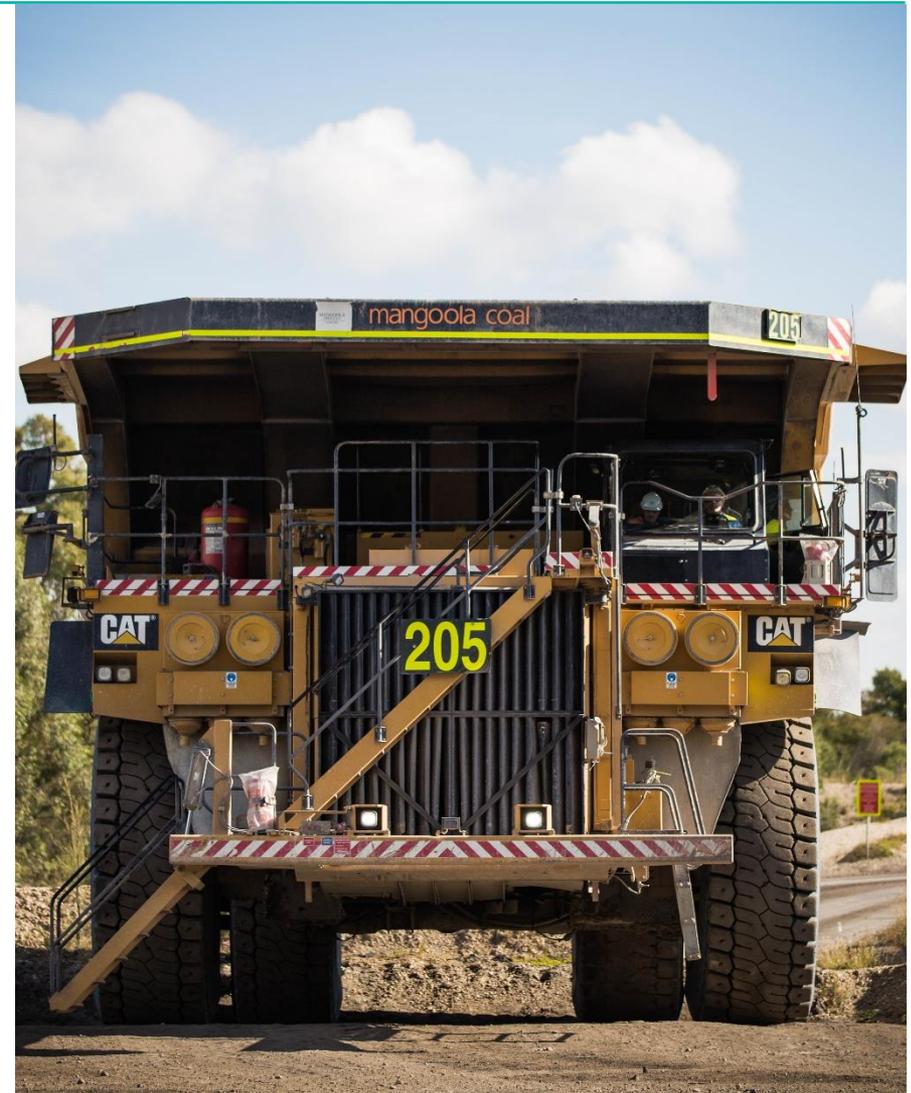
Trainees are typically new to industry and come from a variety of backgrounds such as public service, agriculture, hospitality etc.



Our challenge?

Mangoola face the same issue as all other mine sites that train new to industry workers:

- How do we most efficiently train our people in a new industry?
- How do we ensure that information and instruction is provided in an easily understood way?
- What tools can we offer our Trainer Assessors to help?



## Back to first principles of learning – Andragogy

---

### What is Andragogy?

Methods and principles used in adult education, translate from Greek to mean 'leader of man'.

Malcolm Knowles is widely regarded as the modern authority on Andragogy, Knowles developed principles of adult learning which are:

1. Adults need to know why they need to learn something
2. Adults need to learn experientially
3. Adults approach learning as problem-solving, and
4. Adults learn best when the topic is of immediate value.

Knowles made 5 assumptions about adults that underpin his principles:

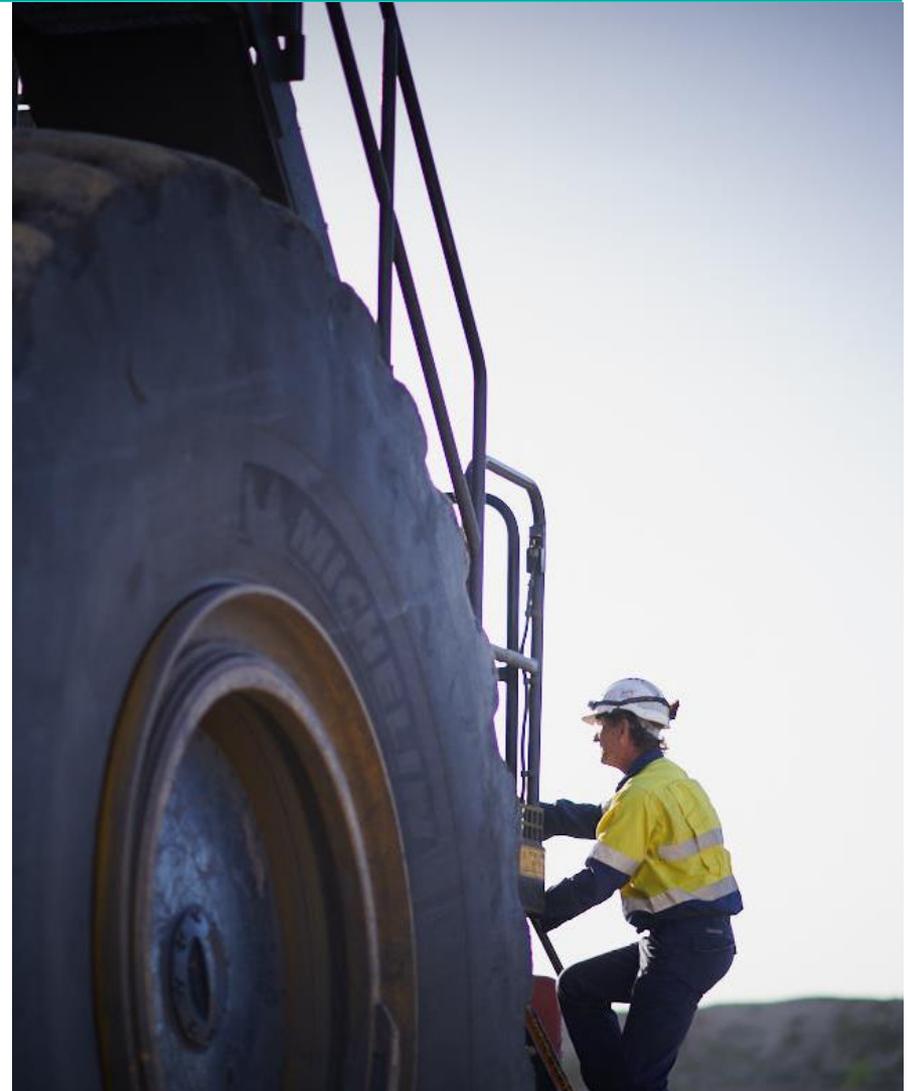
1. Self-concept – adults are self-directed beings rather than dependent
2. Adult Learner Experience – need experience to increase our learning
3. Readiness to Learn – as we mature we focus on development of our social and professional roles
4. Orientation to Learning – adults are problem-centric
5. Motivation to Learn – motivation is internal rather than external.

## Andragogy in practice

---

Our Trainee onboarding program focusses on:

- Communicating the 'why' behind the things that we do
- Chunking of topics and the use of theory and practical training on that topic before progressing to the next
- Providing regular challenges and reflection in the form of quizzes and debriefs
- A strong personal accountability, we have the support of management to move people on who are not suited to mining



## VARK model

---

### How do we learn?

Neil Fleming and Colleen Mills (both New Zealanders) proposed the VARK model to describe how we best learn information.

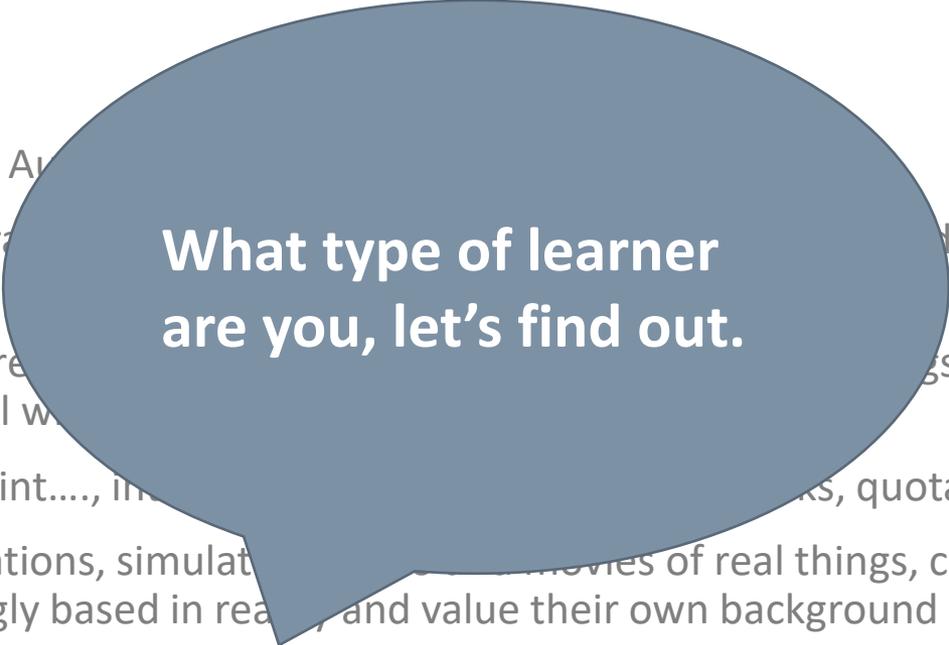
**VAR**K stands for Visual, Aural, Read/Write, Kinesthetic.

**Visual:** maps, charts, graphs, diagrams, photographs or videos.

**Aural / Auditory:** lectures, audio recordings, podcasts, emails through, email. People that prefer aural will learn best through audio.

**Read / Write:** PowerPoint..., infographics, articles, quotations.

**Kinesthetic:** demonstrations, simulations, role plays, movies of real things, case studies, practice and application. Strongly based in real life and value their own background and experience.



**What type of learner  
are you, let's find out.**

**A person may fit into more than one (1) type of learning preference**

## Scoring you questionnaire

**Scoring Chart**

| Question | a category | b category | c category | d category |
|----------|------------|------------|------------|------------|
| 1        | K          | A          | R          | V          |
| 2        | V          | A          | R          | K          |
| 3        | K          | V          | R          | A          |
| 4        | K          | A          | V          | R          |
| 5        | A          | V          | K          | R          |
| 6        | K          | R          | V          | A          |
| 7        | K          | A          | V          | R          |
| 8        | R          | K          | A          | V          |
| 9        | R          | A          | K          | V          |
| 10       | K          | V          | R          | A          |
| 11       | V          | R          | A          | K          |
| 12       | A          | R          | V          | K          |
| 13       | K          | A          | R          | V          |
| 14       | K          | R          | A          | V          |
| 15       | K          | A          | R          | V          |
| 16       | V          | A          | R          | K          |