

QUEENSLAND MINERALS AND ENERGY ACADEMY OUTCOMES REPORT

AT A GLANCE

The Queensland Minerals and Energy Academy (QMEA) is a partnership between the Queensland Resources Council, the Queensland Government and many of the largest and most forward thinking resources companies in the world.

In assessing the outcomes of the program, quantitative and qualitative data including participant feedback has been sourced. Quantitative data collected at events delivered in 2014 has been collated, and additional data provided by the Department of Education Training and Employment (DETE) on students who have graduated since 2005 has been extensively interrogated. Analysis of this time series data is presented, however particular attention is paid to the 2013 graduating cohort, i.e. those surveyed in 2014.

Qualitative data has also been gathered from multiple sources, including extensive event evaluations and one on one interviews with industry, principals, key teachers and students.

QUANTITATIVE DATA RESULTS

The 'Next Step Destination Survey' results provided by DETE have identified a tendency for a higher proportion of QMEA students to consistently favour apprenticeships, traineeships and employment in the mining sector, or to consistently favour study within engineering and related technologies compared to students in non-QMEA schools.

Diversity trends within these results are pleasing, with a higher percentage of QMEA female students accessing preferred industry pathways compared to non-QMEA students. Also, a higher percentage of QMEA Indigenous students compared to non-QMEA Indigenous students are accessing the industry through a variety of pathways including direct employment.

QMEA ACHIEVEMENT 2005- 2014 ON AVERAGE:

- **21.9% of QMEA students entered engineering and related technologies** (13.2% non-QMEA schools). Across all fields of study (bachelor, certificate I-IV, apprenticeship and traineeship)
- **13.1% of QMEA students who entered a bachelor degree did so in engineering and related technologies** (9.9% non-QMEA schools)
- **13.8% of QMEA students who gained apprenticeships were employed in the mining industry** (3.2% non-QMEA schools)
- **9.9% of QMEA students who gained traineeships were employed in the mining industry** (1.4% non-QMEA schools)
- **9.3% of QMEA female apprentices and trainees entered the mining industry** (1.2% non-QMEA schools)
- **7.1% of QMEA employed Indigenous students found employment in mining** (1.8% non-QMEA schools)
- **4.4% of employed QMEA students gained employment in the mining industry** (0.7% non-QMEA schools).

QMEA ACHIEVEMENT 2014:

- Of **students entering all fields of study** (bachelor, certificate I-IV, apprenticeship and traineeship) **20.5% of QMEA students entered engineering and related technologies** (12.5% non-QMEA schools)
- Of **students entering a bachelor degree** **13.8% of QMEA students entered engineering or related fields** (9.6% non-QMEA schools)
- Of those **students who were employed as apprentices, 12.6% of QMEA apprenticed students were employed in the mining sector** (3.2% non-QMEA schools)
- Of **students who were employed as trainees, 6.7% of QMEA traineeship students were employed in the mining sector** (1.4% non-QMEA schools).

QMEA EVENT ANALYSIS

The collation of these results has identified:

- In 2014, more than **2,400 students** engaged directly in QMEA activities and participated in **77 events** across the state.
- Of these **47% were male, 48.7% were female** plus **4.3% identified as Indigenous** participants.
- More than **200 industry representatives** participated in activities to support student pathways into industry and increase their knowledge of the sector.
- **150 teachers and pre-service teachers** were involved in teacher professional development activities including workshops, seminars and online webinars.
- **190 QMEA/vocational education and training (VET) pathway students have successfully completed Certificate II in Resources Infrastructure and Workplace Preparation**, which is an entry level qualification favoured by industry.

QUALITATIVE DATA RESULTS

Event evaluations and one on one interviews with industry, principals, key teachers and students have identified that:

- Students consistently rated the opportunity to undertake team work and to meet new people as the most important or enjoyable aspects of attending a QMEA event.
- Industry participants generally advised that they found attending the QMEA event worthwhile, that the events ran quite smoothly and were conducted in a positive and efficient manner. Industry recommended the need for more guidance on activities through greater teacher involvement and lead in preparation and provision of a more informed overview to understand expectations.
- A selection of principal feedback indicated that:
 - QMEA influenced student pathways by broadening their perception of what is available especially outside their immediate environment.
 - Student engagement in QMEA activities and particularly exposure to industry influenced student choices and provided good articulation into engineering pathways.
 - QMEA assists in keeping students focused on why they are at school and in particular why they need to do maths and sciences.
 - Improvements could be made with increased teacher professional development, TRS funding and opportunities for students and teachers to attend industry conferences.

COMMUNICATION

Forty-five articles in various media mentioned QMEA. In addition there were five incidents of television coverage. Further to this numerous articles have appeared in industry journals and within school newsletters.