

ANNUAL REPORT

A photograph of two male technicians in orange high-visibility work shirts and safety glasses. They are kneeling on a light-colored floor, working on a piece of equipment. The technician on the right is holding a yellow digital multimeter and connecting its probes to a device. The technician on the left is looking on. The background shows a workshop environment with various tools and equipment. The image is partially covered by a blue diagonal overlay on the left and bottom right.

Queensland
MINERALS & ENERGY
ACADEMY

2015

QMEA ANNUAL REPORT 2015

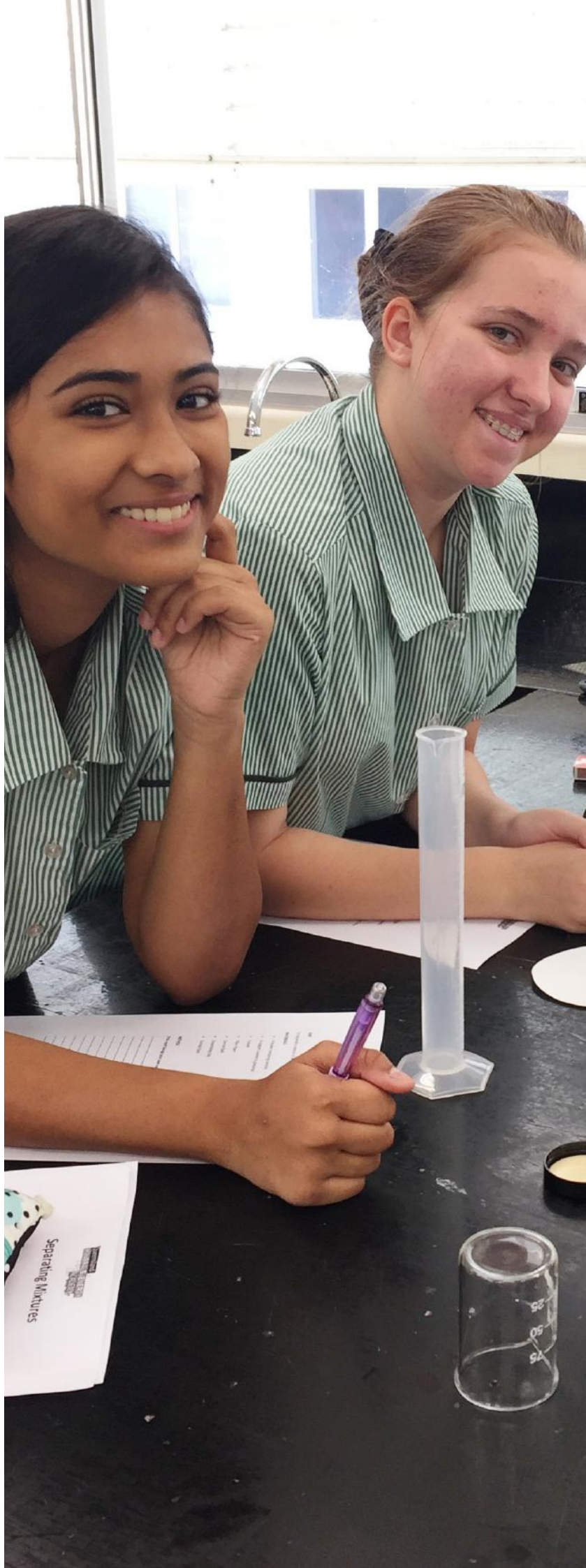
TALENT PIPELINE INTO THE RESOURCES SECTOR

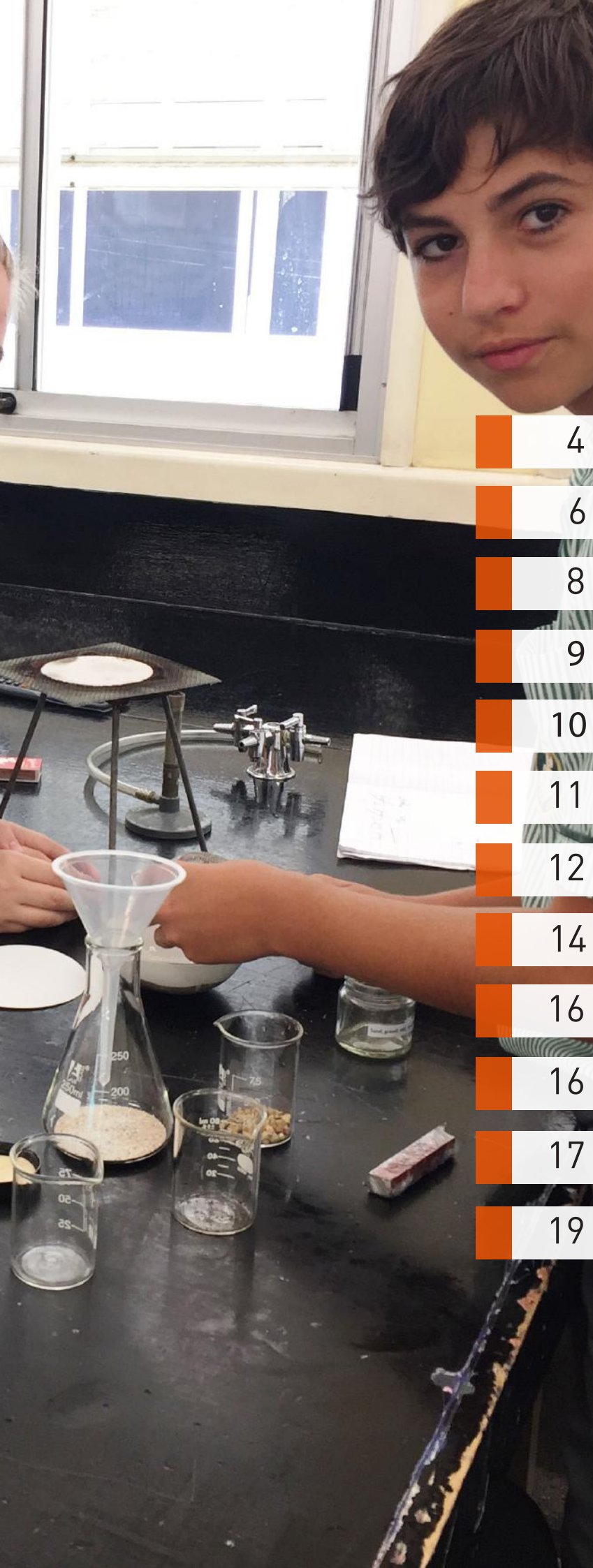
The Queensland Minerals and Energy Academy (QMEA) is Australia's largest and most successful industry/education schools partnership. The academy is operated in partnership between the resources sector, represented by Queensland Resources Council, and the Queensland government.

This year also marks a significant milestone, the 10 year anniversary of the Academy.

Over a decade of operation, the QMEA has delivered hundreds of programs and experiences to:

- Provide pathways for young people in years 7 to 12 into resource sector and other science technology engineering and mathematics (STEM) careers
- Broaden knowledge of the sector for both teachers and students and attract more students into STEM subjects





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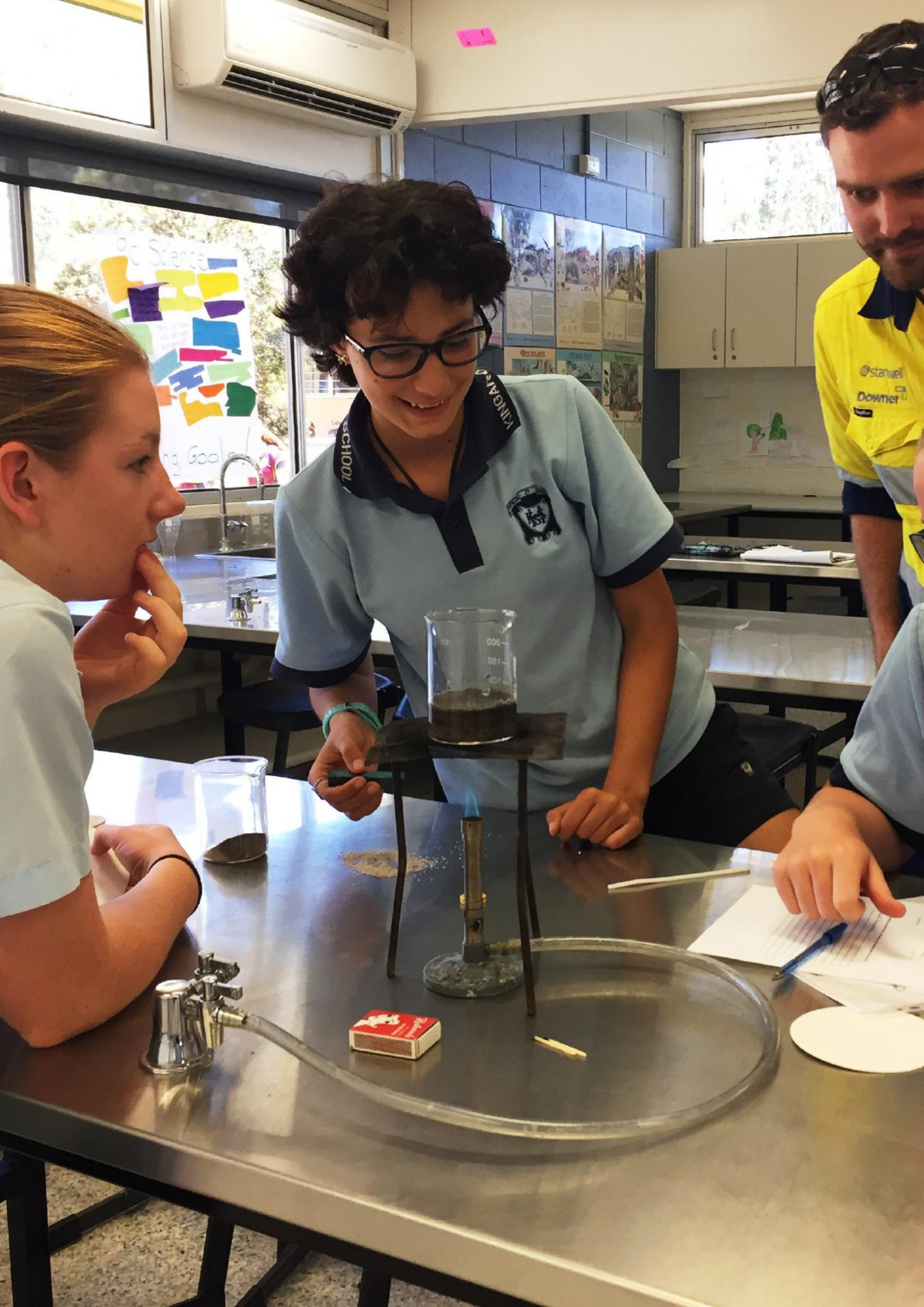
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10 YEARS

QMEA IN REVIEW

FROM 2005 TO 2015 ON AVERAGE:

OF STUDENTS ENTERING ALL FIELDS OF
STUDY OR EMPLOYMENT:

21% QMEA STUDENTS ENTERED
ENGINEERING OR RELATED
FIELD OF STUDY

COMPARED TO **13%** STUDENTS
FROM
NON-QMEA
SCHOOLS

OF STUDENTS ENTERING A BACHELOR
DEGREE:

13% QMEA STUDENTS ENTERED
ENGINEERING OR RELATED
FIELD OF STUDY

COMPARED TO **10%** STUDENTS
FROM
NON-QMEA
SCHOOLS

OF ALL STUDENTS EMPLOYED AS
APPRENTICES OR TRAINEES:

17.5% QMEA STUDENTS
WERE EMPLOYED
IN MINING SECTOR

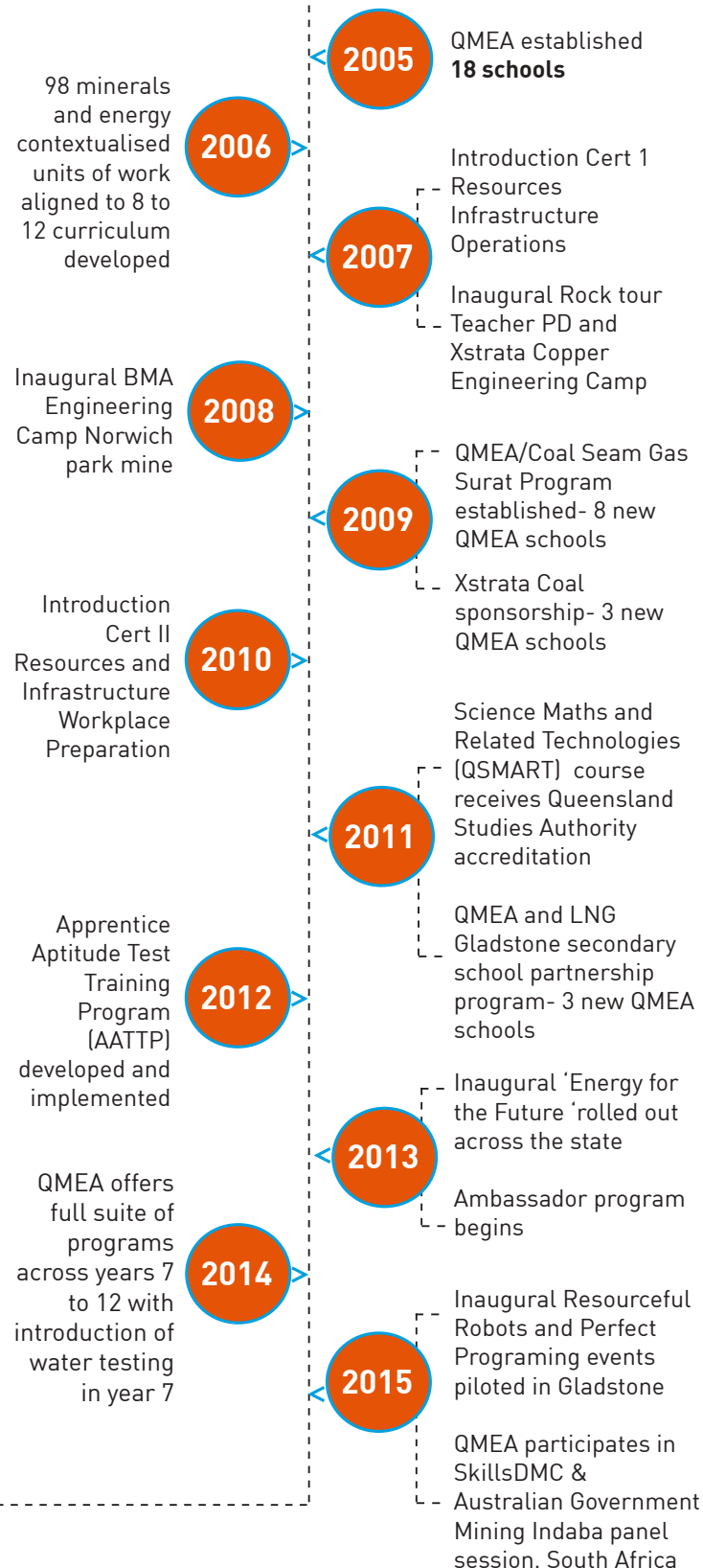
COMPARED TO **2.4%** STUDENTS
FROM
NON-QMEA
SCHOOLS

OF FEMALE STUDENTS EMPLOYED AS
APPRENTICES OR TRAINEES:

10.2% QMEA STUDENTS
WERE EMPLOYED
IN MINING SECTOR

COMPARED TO **1.4%** STUDENTS
FROM
NON-QMEA
SCHOOLS

TIMELINE



^SOURCES: QUEENSLAND DEPARTMENT OF EDUCATION
AND TRAINING, NEXT STEP DESTINATION DATA 2015

2015 HIGHLIGHTS

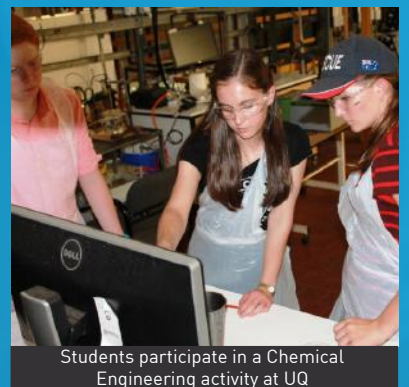
- The number of events increased by 5 percent from last year with 81 events delivered throughout 2015. These involved direct participation by more than 3,200 students, which represents a 35 percent increase from 2014
- 608 teachers, representing an increase of 305 percent (2014), have been involved in teacher professional development activities including onsite visits, workshops, seminars and online webinars
- More than 230 industry representatives have directly participated in activities to support student pathways into industry and impart their knowledge of the sector
- 20 high achieving trade and professional pathway students were selected as QMEA Student Ambassadors for 2016.



Students participate in a workshop at Wadja Wadja Community School



Anglo American MINT Camp in Biloela



Students participate in a Chemical Engineering activity at UQ



IN 2015:

OF STUDENTS ENTERING ALL FIELDS OF STUDY OR EMPLOYMENT:

21.9% QMEA STUDENTS ENTERED ENGINEERING OR RELATED FIELD OF STUDY

COMPARED TO **13.2%** STUDENTS FROM NON-QMEA SCHOOLS

OF STUDENTS ENTERING A BACHELOR DEGREE:

11% QMEA STUDENTS ENTERED ENGINEERING OR RELATED FIELD OF STUDY

COMPARED TO **9%** STUDENTS FROM NON-QMEA SCHOOLS

OF ALL STUDENTS EMPLOYED AS APPRENTICES OR TRAINEES:

8% QMEA STUDENTS WERE EMPLOYED IN MINING SECTOR

COMPARED TO **1.6%** STUDENTS FROM NON-QMEA SCHOOLS

OF STUDENTS ENTERING A BACHELOR DEGREE:

6% QMEA STUDENTS WERE EMPLOYED IN MINING SECTOR

COMPARED TO **0.8%** STUDENTS FROM NON-QMEA SCHOOLS

'QMEA has ultimately helped me to decide on what career path I want to take and that is definitely one in the resources industry.'

Elaine Elevera - QMEA 2014 Ambassador, 2015 QUT Engineering student



Queensland
MINERALS & ENERGY
ACADEMY
2015 MINT CAMP
BLOELA
JAKE

Queensland
MINERALS & ENERGY
ACADEMY
2015 MINT CAMP
BLOELA
JAKE

Anglo American

ABOUT US

34 SCHOOLS

Alexandra Hills State High School
Anglican Church Grammar School
Biloela State High School
Blackwater State High School
Bundamba State Secondary College
Chanel College Gladstone
Chinchilla State High School
Cloncurry State School
Dalby State High School
Downlands College, Toowoomba
Dysart State High School
Emerald State High School
Gladstone State High School
Kirwan State High School, Townsville
Middlemount Community School
Miles State High School
Moranbah State High School
Moura State High School

Nanango State High School
North Rockhampton State High School
Oakey State High School
Pioneer State High School, Mackay
Pittsworth State High School
Roma State College
Spinifex State College, Mount Isa
St John's School, Roma
Tannum Sands State High School
Tara Shire State College
Taroom State School
Toolooa State High School, Gladstone
Toowoomba State High School
Wadja Wadja Community School
Wandoan State School
Wavell State High School, Brisbane

QMEA BOARD MEMBERS

Michael Roche (Chair)

Chief Executive,
Queensland Resources Council

Adam Chapple

Manager Organisational
Capability, BMA

Bevan Brennan

Assistant Director General,
Dept Education Training and
Employment

Matt O'Neill

Chief Mining Officer Copper Assets
North Queensland,
Glencore Mount Isa Mines

Jane Roberts

Social Investment Manager
Sustainability, QGC

Helen Huntly

Deputy Vice-Chancellor (Industry &
VET)

Industry, Vocational Training and
Access Education Division,
Central Queensland University

Karen Whelan

Assistant Dean (Learning & Teaching)
Science & Engineering Faculty, QUT
Queensland University of Technology

Steve McDonald

Board Chair,
SkillsDMC

Debbie Butler

Talent Manager Australia and Canada,
Anglo American Metallurgical Coal

FROM THE QMEA BOARD CHAIR

On 23 November 2005, Queensland Premier Peter Beattie officially launched the Queensland Minerals and Energy Academy.

The concept of a 'virtual' academy of secondary schools across the state working to provide pathways for young people into resource sector-related careers was unique and has continued to shine for a decade.

Today, the QMEA is Australia's largest and most successful industry-education schools partnership with 34 secondary schools and 12 industry sponsors involved.

It is a lasting credit to the foresight of Queensland Resources Council members and then Education Minister (later Premier) Anna Bligh, and successive governments.

Through its partnerships, the QMEA offers a range of programs and experiences to broaden students' and teachers' knowledge of the resources sector and learn more about career opportunities from industry experts.

Inspiring students to take an interest in Science, Technology, Engineering and Maths (STEM) was the QMEA's core objective, which it continues today in an environment where STEM subjects are regarded as essential to success in the digital age.

Since its beginnings, the Australian resources sector has eagerly embraced so-called disruptive technologies, which have not only delivered world class operating standards but also fostered the development of globally successful technology providers...and behind every one of these technologies are savvy young people.


But the QMEA is not only about technology, its programs embrace environmental streams, important to the future sustainability of an industry that supplies the building blocks of modern life, especially as some 2.5 billion more people across the world become middle class consumers in coming years.

The QMEA has cemented its position as a talent pipeline for the resources sector through the delivery in 2015 of more than 80 events from Years 7 to 12.

This has put more than 3,000 students into direct contact with academic and industry professionals this year alone, and there is not one person from either side of that equation who has not come away better informed and excited by what the future holds.

QMEA students have a global industry at their feet, and the example of previous students from the last 10 years making their way throughout the industry to guide those who choose to become in turn the custodians of our natural resources, our environment and our communities.

Michael Roche,
Chief Executive, Queensland Resources Council



'I am truly grateful to everything they have done for me and am inspired by all the things they can do for other high school students aspiring to be a part of the mining industry, in whichever career they decide. The possibilities are endless and the experience is very rewarding.'

Sarah Coughlan, former QMEA student, 4th year Mining Engineering UQ 2015



FROM THE QMEA DIRECTOR

This year QMEA celebrates 10 years of providing a talent pipeline into the resources sector. The Academy has evolved through the peaks and troughs of industry cycles and the milestone marks more than just an anniversary, it is a tribute to the Academy's dynamic nature and enduring relevance.

QMEA's evolution has constantly positions students to take advantage of incredible opportunities in our sector, here and globally, and more broadly across STEM industries.

Over the decade, hundreds of students have, and continue to, enjoy experiences that have been the catalyst to seeking a career in the sector.

Data, kindly provided by the Queensland government, on student destinations post year 12, speaks volumes. The findings reveal consistently higher percentages of students from our schools (21 percent) enrol in engineering and related technologies pathways, compared to just 13 percent of non-QMEA students.

Similarly, in responding to industry's diversity targets, the data shows that for more than 10 years there has been an increase in the percentage of females and Indigenous students entering the pathway compared to non-QMEA students.

VET outcomes continue to remain strong. Some of our sponsors reveal that more than 1,000 QMEA students were employed as apprentices or trainees. What's more, trade camps are now routinely considered an integral part of recruitment.

This year there was increased engagement compared to 2014 with more students and industry participants attending more events; and a significant increase in teacher professional development.

In celebrating the successes of QMEA, I would like to recognise our small but talented team that brings these outstanding results to fruition.

Senior project officer Tammy Grady, effectively manages the QMEA/LNG Schools Partnership Program from her base in Gladstone. She delivers other state wide events that target the early years of secondary schooling.

STEM outreach officer Dan Rea helps students connect with industry and has provided a range of challenging experiences for professional pathway students in years 10 to 12.

Newcomer, Kym Frost, joined the team directly from industry as VET project officer and has already delivered a program focused on students truly understanding what is required to be successful in the world of work.

Our success would not have been possible without the backing of Queensland Resources Council (QRC). We extend an offer of thanks to those who support us in a multitude of ways from QRC. I also wish to acknowledge our industry sponsors, the Queensland government and the QMEA Board, which have been instrumental in strategic advice. In addition, thanks goes to QMEA principals, teachers and our industry participants.

I trust you will enjoy reading our year in review and highlights from the past decade.

We look forward to the continuing evolution of QMEA as it delves into new innovative ways of learning that will prepare our students for the roles of the future.

Katrina-Lee Jones
Director, QMEA



WHAT WE DID IN 2015

QMEA hosts a range of professional and trade pathway events as well as industry contextualised experiences. Tailored for both students and teachers, the events relate to minerals and energy careers as well as education.

The QMEA has delivered a sequenced program of 81 activities in 2015. These experiences aim to stimulate student interest, make connections, inform decisions, influence pathways, while challenging and preparing our employees of the future.

STIMULATING INTEREST AND MAKING CONNECTIONS

Years 7 and 8 students engage in activities to increase their awareness of the resources sector and the range of careers that exist in the minerals and energy industry.



Far right, Ashfaque Chowdhury, Lecturer of Mechanical Engineering at CQUniversity with Tammy Grady of QMEA and Engineering students at CQUniversity



Principal of Toolooa SHS with representatives from McCosker Contracting, WrightKunsult Environmental and APLNG



'I am very impressed by the level of understanding and comprehension these students have of the issues and challenges facing the energy industry over the next 50 years. Our energy future is in good hands.'

Clint Windsor, Superintendent Production Commercial, NRG



Joanne Whiteway, Mechanical Engineer with QGC with students from Chanel College

ENERGY FOR THE FUTURE

In this event, high-achieving year 8 students are invited to attend a full-day event corresponding to the delivery of the energy topic in the curriculum. The event focuses on energy types, production, generation and use.

'Energy for the Future' was well attended again this year with more than 200 year 8 students and close to 50 industry and university representatives.

In a first for the program, QMEA, this year saw the introduction of a grading system whereby students were marked on how well they performed on the day. Its successful implementation is reflective of how closely aligned to the national curriculum it is, ensuring authentic links to the classroom content.

QUT and CQUniversity partnered with QMEA to deliver 'Energy for the Future' to 11 schools across the State.

Ambassadors from CQUniversity and QUT worked with students throughout the program, guiding them in a day of discussion and debate of global energy needs.

Ashfaque Chowdhury, Lecturer of Mechanical Engineering at CQUniversity has been a part of every 'Energy for the Future' in Gladstone since its inception in 2011.

CAREER CAFES

This program demonstrates the pathways from classroom to careers and enables students to see the real world value of their studies.

The variety of discipline delivery reflects the need education has for contextualisation of the national curriculum. 'Career Cafes' allow teachers to draw upon real life experts and place this expertise in front of their classes.

Direct links to schools' curriculum were provided through 25 'Career Cafe' sessions.

Thanks to the generous access to staff provided by QMEA, these events allowed school visits from industry experts across the state.

'Career Cafe' topics were wide ranging from water purification and desalination techniques to refinery processes and chemistry as well as environmental management, marine and harbour testing.

Hosted at every year level from grades 7 through 12, 'Career Cafes' engaged with over 1,500 students across 2015.

For example in Term 1 'Career Cafes' showed our younger students how fun and engaging science can be. Wesfarmers Curragh sent their full environmental team to North Rockhampton SHS for an afternoon of water testing and data tracking. A number of testing stations were set up and the full 200-strong year 8 cohort participated. Proving very popular, students were even quoted requesting the sessions every term!

INFORMING DECISIONS, INFLUENCING PATHWAYS

Extended periods of engagement within this phase leads to greater depth of understanding of the resources sector.

EXPAND YOUR MIND

'Expand Your Mind' promotes career opportunities in the resources sector and is customised for a high-achieving year 9 audience with an interest in science and engineering.

'Expand Your Mind' was hosted at Moura SHS, Toolooa SHS, Alexandra Hills SHS, Wandoan SHS and for the first time, Pittsworth SHS, with 13 schools participating in total.

Each day was supported generously by QMEA partners with industry representatives ranging from chemical engineers, metallurgists, geologists and human resources team members. Year 9 students were given the opportunity to work one-on-one with professionals and intrinsically learn the details of the potential careers. It is this type of engagement that allows students to map their own pathways.

Close to 200 students attended 'Expand Your Mind' and participated in activities ranging from robotics, design and engineering, chemistry and environmental.

STEM 4 SCHOOL KIDS

This exciting new event aims to engage Year 10 students interested in pursuing an 'academic pathway' in years 11 and 12. The program teams industry mentors with students on a number of hands-on, problem-based challenges.

During the 10 'STEM 4 School Kids' events held this year, industry professionals told more than 200 students about their pathway from high school to their current career. The students worked on activities that followed the mining process from exploration and extraction through to processing and rehabilitation.

Students from a range of schools participated in events in Brisbane, Rockhampton, Moranbah, Emerald, Wandoan, Mackay, Gladstone, Biloela, Townsville and Mount Isa. Participants had the opportunity to hear from a variety of resource industry professionals including geologists, mining engineers, geotechnical engineers, metallurgists, process engineers, environmental scientists, human resources and many more.

'The activities were a great opportunity to learn more about the science of minerals and energy industry. It was also a great opportunity to meet new people.'

Student at Gladstone STEM 4 School Kids



Downer EDI and Stanwell staff with students from Yarraman, Nanango and Kingaroy SHS at an Expand your Mind event

'A great way for students to learn about different pathways into the resources and energy sector. With many things to offer, this guidance is invaluable.'

**Bobby Penm, Electrical Engineer
Wesfarmers Curragh**



Students participate in a Brisbane STEM 4 School Kids activity



Students undertake an activity at the STEM 4 School Kids event in Biloela



Toolkit for School Kids held in Emerald

TOOLKIT FOR SCHOOL KIDS

QMEA through its industry network, delivers a range of VET related experiences for students, which prepare them for apprenticeships or training pathways into the resource sector, and other related industries. The programs are designed educate on the types of VET roles and the level of skills required, by connecting them directly with industry employees.

'Toolkit for School Kids' events provide a unique opportunity for students to gain insight into what people undertake in a trade or operator role in the sector. The full-day events are designed so that expert industry representatives can talk to the students about their current role and the vocational pathway they chose to get there. The students also have an opportunity to try some trade related hands-on activities complete with guidance from the industry experts. Activities used for 2015 included welding, prestart checks, working at heights, electrical wiring, dismantling engines; all being underpinned with some basic safety training.

As students begin to consider pursuing roles as apprentices or trainees after school, it is a perfect platform to hear about local industry opportunities and develop networks with local sector representatives.



Female students participate in a Toolkit for Girls

'This was a great opportunity for students to try out trades that they were interested in and also gain an insight into others that are available.'

Teacher, Biloela Toolkit day



Students from Biloela and Moura schools participate in the Anglo American toolkit day in Biloela

This year, QMEA also facilitated two 'Toolkit for Girls', all-female events, which encourage gender diversity and employment in male-dominated trade roles. The events were held in Moranbah and Mackay and attended by local apprentices and industry representatives.

In 2015, 169 students and 39 teachers attended Toolkit events in Mackay, Moranbah, Emerald, Mt Isa, Townsville, Rockhampton, Gladstone, Biloela and Brisbane.

In addition to these events, QMEA ran combined STEM and Toolkit days for 27 students at Wandoan State School and Wadja Wadja Community School.

The events would not be possible without the ongoing support from our industry partners, local schools and the combined vision of ensuring school leavers have an understanding of opportunities in the resources sector.



Participants of Mackay Toolkit for School Kids

SENIOR PROFESSIONAL PATHWAY

QMEA 'Professional Pathway' students complete an academic program of work across years 11 and 12, with the aim of gaining an Overall Position (OP) for entry into tertiary education. These students are considering a range of careers in areas such as engineering, geology and environmental science.

To challenge and prepare for roles in the sector, students are invited to take part in a number of STEM related opportunities including taking part in one of the three QMEA 'Make It Now in Engineering' (MINE) Challenges.

MINE Challenges provide an amazing opportunity for high achieving senior students to work alongside industry professionals to solve genuine problems - while experiencing the life of a resources sector worker. In 2015, 30 students and six teachers from QMEA schools attended a MINE Challenge.

In June, six of the brightest QMEA students joined with others from the Whitsunday region to take part in the QUT/QMEA process engineering MINE Challenge held at QUT's Renewable Bio-commodities Pilot Plant in Mackay. Students worked hard in both the plant and lab before they presented a case for a new research project to a panel of QUT's top academics and the head of Mackay Sugar.

During the July school holidays, eight students participated in the Glencore Mount Isa MINE challenge, which made a welcome and positive return after a break in 2014. For the challenge, the students formed two teams and were charged with solving real-life problems faced at the mine site.

The BMA MINE Challenge in September involved 14 students who travelled to Moranbah to spend a week experiencing the life as a coal mine professional and living in Civeo's MAC village accommodation. Positive feedback was received around the opportunity to go out on site and learn from professionals in the field.

Split into two teams, one based at BMA's Peak Downs and the other at Goonyella Riverside mine, the teams met with key staff, toured facilities and undertook a challenge to design, cost and propose a new box-cut coal mine. The week concluded with each team presenting their cases to a panel of BMA's mine planners and site managers. While the judges unanimously agreed everyone had done a brilliant job, the Goonyella Team were awarded the top gong, winning the 2015 BMA Mine Challenge Trophy.

SENIOR VET PATHWAY

QMEA's signature event in year 12 is the 'Make it Now in Trade' (MINT) camps. The week-long events involve solving a trade-based problem with the assistance of resources professionals. Run in a simulated resource environment in trade training centres, the students work in teams to solve the problem while demonstrating an industry level of safety, teamwork, problem solving and trade skills.

QMEA makes available several additional programmes to support the VET pathway. The first is QSMART maths, a trade based maths designed by QMEA with strong input from industry as an option available for year 11 and 12 students. Apprentice Aptitude Test Training Program (AAPT) is an industry level aptitude test made available to all QMEA school students. In addition, QMEA encourages students in the take up of the industry's preferred recognised entry level qualification; Certificate II in Resources Infrastructure Workplace Preparation (RIWP). This qualification focuses on safety, environment, maintenance, communication and organisational skills.

During 2015, 95 students were enrolled in the Cert II RIWP while 44 students had an opportunity to participate in one of three MINT challenges across the state. The MINT challenges for 2015 included the BMA challenge held at Dysart SHS, Glencore Mt Isa mine challenge held at Spinifex College and Anglo American challenge held at the GAGAL best trade training centre in Biloela. All three camps were supported by a mix of apprentices and tradesmen from the local mines, involved a visit to a local mine site and culminated with judging by industry representatives.

Feedback from students indicated great enthusiasm for this event, and some of the industry apprentices leading the program were familiar faces having undertaken the program a few years earlier. The sector has also advised that due to the quality of students presenting in these experiences, these camps are routinely being included as part of their recruitment process.



Participants of the Moranbah MINE camp

'The camp provides us with the chance to inspire Queensland secondary school students to build a career in the mining and resources sector, and gives students the chance to get a taste of what working life at a mine site is like.'

Matt O'Neill, Glencore Mount Isa Mines



Student working on his project at the Biloela Anglo American camp



Students at the MINT Camp held in Biloela

CHALLENGING AND PREPARING

The challenging and preparing phase targets year 11 and 12 students who have demonstrated a genuine interest in a career in the resources sector. Students participating in this phase have generally completed earlier activities with QMEA.



The QMEA ambassadors at Hastings Deering Institute of Technology

AMBASSADOR PROGRAM

The QMEA Ambassador Program attracts Queensland's most talented students who are considering professional and VET pathways into the resources sector. The selected students participate in a number of activities across a twelve month period that increase their understanding of the resources sector, provide unparalleled opportunities for networking with other students and industry representatives and develop leadership skills.

The students participated in a three day camp which saw them engaged with the cutting edge of mining and resources innovation through their tour of the Rio Tinto Process Excellence Centre, the CSIRO's Queensland Centre for Advanced Technology (QCAT), the Hastings Deering Institute of Technology and SIMTARS; the Queensland Governments safety in mining research station, as well as experiencing a taste of life at the University of Queensland. The camp provided a perfect opportunity for the students to increase their knowledge of the sector in order to inform their own pathways and to encourage other students to consider resources sector subjects and careers.

The students were presented with their certificates by representatives from industry, government and academia at a gala breakfast event attended by a wide range of education and industry supporters that celebrated ten years of QMEA.

Congratulations to our 2016 QMEA Student Ambassadors:

Isabella Aitkenhead, Chanel College
Sarah Bock, Moura State High School
Nic Bracher, Kirwan State High School
Jeremy Curran, Moranbah State High School
Eugene Dragut, Anglican Church Grammar School
Abbie Earl, Moranbah State High School
Sabrina Finucane, Spinifex State College
Hayley Jones, Moranbah State High School
Andrew Kessler, Biloela State High School
Sasha Kimber, Emerald State High School
Curtis Mayne, Kirwan State High School
Janaya Ray, Toolooa State High School
Lindsey Ricketts-Mol, Moura State High School
Ben Russell, Spinifex State College
Emma Shepherd, Pioneer State High School
Riley Stewart, Biloela State High School
Tara Toshack, Dysart State High School
Annaliese Trappett, Wavell State High School
Czerina Tupas, Emerald State High School
Sarah Waters, Nanango State High School



Ambassador students complete a Chemical Engineering activity at UQ



QMEA student ambassadors participate at UQ in a Chemical Engineering activity

QMEA AND LNG SECONDARY SCHOOLS PARTNERSHIP

The 'QMEA and LNG Secondary Schools Partnership' is a unique collaboration between QMEA, Education Queensland and three LNG companies (APLNG, Santos GLNG and QGC). The program operates across the Gladstone region and engages thousands of students.

Focusing on STEM pathways, the partnership is made up of several regionally specific programs designed in conjunction with the local Industry Reference Group; consisting of QMEA, our LNG partners and principals from our four secondary schools in Gladstone. The partnership also supports the delivery of QMEA's state wide suite of programs.

As in previous years, activities such as 'Energy for the Future', 'Expand your Mind', 'Biology Field Days', 'It's all about M.E - Minerals and Energy' and 'Career Cafes' have been well attended.

In its fifth year, 'Energy for the Future' at CQUniversity, Gladstone had close to 100 year 8 students participate.

In a first for both the 'Energy for the Future' QMEA more broadly, this year was a graded event. That is, all students were given an A to C score based on how they performed on the day. These marks were added to the student's portfolio and is a reflection of how closely aligned to the national curriculum the energy forum has become.

The 'QMEA and LNG Secondary School Partnership' was responsible for delivering the largest roll out of 'Teacher Professional Development' in QMEA's 10 year history. The workshop was delivered by MENSA officers who work closely with their younger members.

What's more, 'Bright to Brilliant' gave useful, take away tools to allow our education professionals to increase the skill level of the already high performing students. Delivered on the pupil free day in October, more than 300 teachers participated from our four Gladstone academy schools.

Another milestone for the QMEA and LNG partnership was the implementation of 'Perfect Programming,' a full-day event focusing on coding and programing. The year 10 students were tasked with managing the flow rates of a remote reservoir. Supported by CQUniversity academic professionals and fourth year control systems students, the day was designed in response to both education and industry need for greater skills development in this field.

'Being involved with QMEA has reinforced my desire to follow a career in science.'

Kaitlyn Read, QMEA Student Ambassador and Toolooa SHS Captain

PROFESSIONAL DEVELOPMENT

QMEA's annual professional development (PD) program includes a range of activities and support for teachers in QMEA schools.

The plan, informed by QMEA school input and industry innovation, focuses on STEM, QSMART and VET qualifications for teachers. It also engages with pre-service teachers via QMEA's relationship with the tertiary sector.

In 2015, more than 600 teachers engaged with QMEA events, or were supported to participate in a range of activities to improve their professional knowledge.

The QMEA delivered a number of specific teacher PD opportunities in 2015 including QSMART, Certificate II Resource Infrastructure Work Preparation training, Apprentice Aptitude Test Training Program and STEM teacher workshops in a number of locations. Some of the highlights were the biennial "Rock Tour" alongside BMA geologists for earth science teachers throughout the Central Highlands, a chemistry teacher event hosted at the Central Queensland University laboratories in Rockhampton and 'Bright to Brilliant' workshop in Gladstone.



Jennifer Ross, Graduate Engineer with Santos GLNG works with Year 8 students during Energy for the Future



Year 10 students from Gladstone SHS and Toolooa SHS work through the steps at Perfect Programming



Pam Mackie and Jarrod Baker, Gladstone Ports Corporation discuss 'coal power' with Toolooa SHS student at Energy for the Future



Chanel College teachers work through a Chemistry practical activity



OUR SPONSORS

The QMEA is founded on significant resources provided by Queensland Resources Council and the Queensland government alongside substantial sponsorship support from the minerals and energy sector.





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