

Department of Education and Training

# INDUSTRY SCHOOL ENGAGEMENT STRATEGY

## GATEWAY SCHOOLS PROJECT REPORT 2008

**INDUSTRY STRATEGY** | INDUSTRY DEVELOPMENT

*"Leading strategies to develop skills for a sustainable Queensland"*



## EXECUTIVE SUMMARY

The Industry School Engagement Strategy (ISES) is a key initiative of the Department of Education and Training (DET). This initiative is driven by the Industry Development Division and encompasses the Gateway Schools Projects. The Strategy is significant in meeting the Council of Australian Government's aim of transitioning young people from school to work, as well as meeting other key Queensland Government policy directions including Toward Q2 – Tomorrows Queensland, Queensland Skills Plan 2 and Blue Print for the Bush.

The Strategy aims to achieve results in four key areas which include: Employment or Tertiary Uptake, Curricula and Professional Development, Industry School Partnerships and Access to Contemporary Industry facilities.

The purpose of this report is to provide an overview of the investment made in the "Gateway Schools Projects" by the department and industry stakeholders, and to highlight through case studies some of the key activities and outcomes achieved throughout 2008 to meet the four key result areas of the ISES.

There are six projects that are considered to be "Gateway Schools Projects" in the department. These are: Agribusiness, Building and Construction, Manufacturing and Engineering, Wine Tourism, Queensland Minerals and Energy Academy (QMEA) and Aerospace Project.

Four of the "Gateway Schools Projects" are managed by the Industry Development Division, as they play a significant role in enabling the Centres of Excellence in Manufacturing Skills Queensland and Construction Skills Queensland, and the Skills Formation Strategies for Wine Tourism and Agribusiness, to meet the outcome of attracting young people to their industries.

The Department partnered with the Queensland Resources Council to establish the Queensland Minerals and Energy Academy. Through the Industry Development Division, a grant of \$125,000 (incl CPI) is provided to the QRC to assist in the operations of the QMEA, including the employment of a Director.

In 2006, due to the success of the initial model for "Gateway Schools Projects" – the Aerospace Project, the Beattie Government made an election commitment to establish Aviation High. The Aerospace Project transitioned in 2007 to Aviation High, and consequently is managed through Schooling Innovation.

Information for this report has been primarily sourced from 2008 end of year reports from the 5 Gateway Schools for which Industry Development is responsible: Agribusiness, Building and Construction, Manufacturing and Engineering, Wine Tourism and Queensland Minerals and Energy Academy.

Although not directly managed by Industry Development the Aerospace Project has been included in the report as it was the initial "Gateway Schools Project Model, established in 2004.

The report covers the financial investment and in-kind investment in the project from DET and industry. It also highlights the industry-school partnerships, school based apprentice and traineeship data and curriculum and professional development activities undertaken throughout 2008.

During 2008 the ISES, through the establishment and ensuing achievements of the Gateway School Projects, successfully provided opportunities to enable young people to acquire the knowledge, skills and attributes to participate effectively in society and employment in the globalised economy. This was made possible through the formation of strong and

purposeful partnerships between the education and training sectors, higher education and industry.

The financial investment made by the Department for the year was \$677,500, along with in-kind support. This includes the funding of salaries and operational costs for the five Gateway School Projects, managed by Industry Development.

Industry also made a significant investment during 2008, demonstrating commitment to the Gateway School concept. This investment can be measured through financial commitments or in-kind support. A total of \$1,410,750 was invested by industry stakeholders across five projects. This investment enabled the provision of opportunities for a range of student activities, professional development for staff and the development and implementation of curricula and teaching resources, ensuring the initiative delivers government targets of Year 12 attainments and school based apprenticeships and traineeships (SATs).

Whilst in-kind investment made by industry partners is difficult to measure, it is imperative to the function and success of the projects. In-kind investment was made by all industry partners in some way during 2008.

Attachment 1 of the report provides an overview of this support. Expertise, hands on training, materials, advice, consultation, attendance at workshops and awards ceremonies, and representation on governance boards all provided relevant industry experience and direction for the projects.

For the year 2008, the projects have seen the establishment of 133 industry partnerships resulting in the employment of 320 SATs; and 327 teachers undertaking professional development activities relevant to the industries.

The Manufacturing and Engineering, Building and Construction, Wine Tourism, Minerals and Energy and Agribusiness industries have endorsed this 2008 Report.

Attachments included in the report provide further details in relation to outcomes achieved in 2008.

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Detailed reports from each of the Projects is available on request from Industry Strategy, Industry Development.

## GATEWAY SCHOOLS PROJECT

There is currently a need for greater career awareness and opportunities to highlight the diversity of careers available in industry, not only for students, but for parents, teachers and the general community. An integral part of the Gateway Schools Projects' implementation is up-to-date and industry related career advice and information. Students need to be well informed to make the best career choice either while still at school or upon leaving school and experiencing these potential careers first hand aids this process.

There is also a strong desire amongst the industry sectors to change the perception and image of their industries. The Manufacturing and Engineering Industry for example is generally considered to be full of dirty, noisy trades. This however is not the case when looking at sectors such as aviation, fibre composites, food processing and pharmaceutical manufacturing. There is a move in this industry to highlight careers other than just the traditional manufacturing trades.

Agribusiness is another industry which is attempting to change its image and promote itself as a modern and diverse industry. The Gateway Schools to Agribusiness Steering Committee has been prominent in the development of the project and wants to see education and training play a major role in developing an understanding of sustainable practices and alternative career opportunities available throughout the sector.

Given the economic downturn, it is imperative that we begin to recognise and train in alternative industry sectors. The education and training policy direction aims to increase retention rates by encouraging young people to stay in school longer. To ensure retention new or more relevant education and training models need to be implemented so that students leave school with

some sort of qualification and real life work experience. The Gateway Schools Projects provide such a model.

The following provides a snapshot and a range of case studies which illustrates the outcomes achieved to date by the Gateway Schools Projects in meeting the outcomes of the Industry School Engagement Strategy.

### EMPLOYMENT OUTCOMES

It is evident by the number of SATs achieved to date by the Gateway Schools Project (Attachment 2), that there has been a solid commitment to the initiative from all stakeholders, making this a viable and successful program to transition students from school to work.

**Manufacturing and Engineering Gateway School** Runcorn State High School has established industry partnerships which are proving to be successful in creating opportunities for students to gain SATs or employment. During 2008 ten students from Runcorn State High School's Engineering Studies program completed their Certificate I in Engineering.

During the year all students attended SkillsTech Australia for one day a week as well as giving up



some of their holidays to undertake industry placement at an industry partner. As a result, 3 students have commenced full-time apprenticeships at this organisation. Another 4 students were offered and accepted school based apprenticeships for 2009.

These students were successful in gaining employment due to the advanced skills sets and knowledge they had acquired through the real life work exposure and partnership arrangements between industry and school. Industry understands they now have access to skilled young people and not just a labour market.



**Wine Tourism** student Robert Cragg is one student from Stanthorpe SHS who has a definite future in the Wine Tourism Industry. By participating in the opportunities made available through the Wine Tourism Gateway Schools Project he was able to develop a solid understanding of the industry and the careers available.

Whilst at school Robert completed a School Based Traineeship in Food Processing (Wine) with Symphony Hill Wines. After finishing high school Robert went on to complete a Certificate III in Food Processing Wine with the assistance of the “Premiers Award for Wine Tourism”; a \$1500 scholarship offered to assist a young person continuing VET studies in the Wine Tourism Industry. Robert successfully completed his Certificate III and has taken up a job with Southern Highlands Wines to gain more experience in the industry.

### **CURRICULUM AND PROFESSIONAL DEVELOPMENT**

The Gateway Schools Projects have demonstrated that by linking subjects to practical learning applications, students can see how their subjects at school relate to possible careers in the future. The project recognises the importance of involving industry in the development and implementation of tailored curricula in the classroom, and professional development activities (Attachment 3). Industry practice is replicated as closely as possible in the school setting while curriculum is shared with other schools in the projects.



Industry provides expert advice and up to date information for the benefit of both the student and teacher. Partnerships between Gateway Schools, training providers and industry ensures the delivery of curriculum at an industry standard enabling a seamless and accelerated track from learning to employment.



Chemistry teachers from all **Wine Tourism Gateway Schools** have collaborated to develop a Wine Science 'Super Unit' leading Wine Science across the State. The development of this unit has seen chemistry teachers working closely with University of Southern Queensland Wine Science specialists to ensure this unit reflects the development skills required for further Wine Science study.

This unit provides an innovative approach to chemistry within a wine context that focuses on practical chemistry applications to an industry standard. A number of wineries and winemakers have provided input into the development of this unit. It is available to all 13 Gateway Schools and is now being circulated to interested schools in Queensland.

Two professional development workshops were held in December 2008 and January 2009 at the Queensland College of Wine Tourism involving teachers from all over Queensland. The program is designed to provide up-skilling in chemistry in association with the release of an optional wine science unit in the Senior Chemistry syllabus.

By providing professional development activities such as the Chemistry Unit, teachers have demonstrated greater confidence in teaching subjects and curricula they may not have been exposed to before. This has been made possible where industry representatives have worked with teachers in a mentoring role.

The Aerospace Project established in 2004 has developed "Aerospace Studies" a year 11 and 12 Queensland Studies Authority (QSA) Subject.

This curriculum has been developed by the QSA in collaboration with industry partners. This industry driven product is currently being delivered to 628 students in Aerospace Gateway Schools across Queensland.



## **INDUSTRY - SCHOOL PARTNERSHIPS**

The relationships established between Gateway Schools and their relevant industry partners have positioned the projects well to continue to enable a successful transitioning process for students from school to work or further education. It was found that through strong industry engagement, contextualised teaching and learning activities and structured work experiences/placements students have greater opportunities for making informed career choices and gaining employment, particularly in small or niche industries, such as Wine Tourism.

As can be seen in Attachment 2, all of the gateway projects have well established and a diverse range of industry partners, who provide support and employment opportunities for students in the Gateway Projects. These opportunities are vital to both the academic and personal development of students, providing young people with a head start into their chosen careers, as well as a broad education and insight into working life.

Through the Manufacturing and Engineering Gateway Schools Project the Gold Coast Digital Manufacturing Marine Challenge (GCDMMC) has been established to enable Year 10 students to develop the skills and understanding in Digital Manufacturing, creating potential career pathways in the industry. Six Gold Coast schools have partnered with 16 local manufacturing industries to design, analyse, test and manufacture radio controlled speed boats which will be judged by representatives from industry partner Riviera Marine.

King's Christian College, lead school for the challenge, was successful in securing funding through the State Government's Workplace Excellence Program Manufacturing Starter Initiative to purchase a 3D Digital Printer, which is being utilised by all the schools during the challenge. Industry partners are committed to the project, providing support for professional development

activities for teachers, advising on and judging the students' designs and facilitating various industry visits. All schools are embedding the program into existing Engineering and Technology curriculum, modernising current classroom teaching and making it relevant to industry practice.

Building and Construction Gateway School St Edmunds College has developed a strong partnership with Hutchinson Builders. Hutchinson's have employed curriculum developers and written Senior Curriculum for English Communication, Math A and Science 21 for the school. This curriculum is delivered in a construction context making it relevant to VET students, school based apprentices and trainees and existing Hutchinson apprentices and employees who wish to further their education.



As part of the Aerospace Project a highly structured 5 day work experience program is offered by the aerospace industry partners in a broad range of careers including Human Resources, Administration, Systems Engineering, Aircraft Technical Trades, Information Technology, Finance, Supply Management, Airport Development Drafting and Planning, and Quality Control.

## **ACCESS TO CONTEMPORARY INDUSTRY FACILITIES**

Through the ISES, access to contemporary industry facilities is made increasingly possible. By directly engaging with industry, students are able to access contemporary industry facilities. This access provides young people with an insight into a real

working environment whilst increasing their knowledge, skills and awareness of the career opportunities available and the requirements expected of them in a professional setting.

Students in all Gateway Schools have the opportunity to participate in structured work experience activities and work placements in an industry setting. Not only do they gain an understanding of the work place, but also develop a mature attitude and approach to the expectations of their potential employers.



The Queensland College of Wine Tourism (QCWT) provides students from Wine Tourism Gateway Schools with the opportunity to access the College for a range of professional and industry tailored activities such as winemaking and viticulture. The Young Winemakers program for example, is run out of the QCWT. The purpose of the Young Winemakers is to give students a complete winemaking experience, from the vineyard to the bottle. It involves students visiting the industry to pick grapes to be crushed and made into wine at the QCWT.

When working out in the field for picking, pruning and vineyard maintenance activities, students have the benefit of working alongside industry specialists who not only have relevant qualifications but many years of experience in the wine industry.

The Queensland Minerals and Energy Academy (QMEA) has developed an excursion aimed at Years 11-12 Chemistry and Physics students who

are interested in future “lab” style careers in the mining industry.

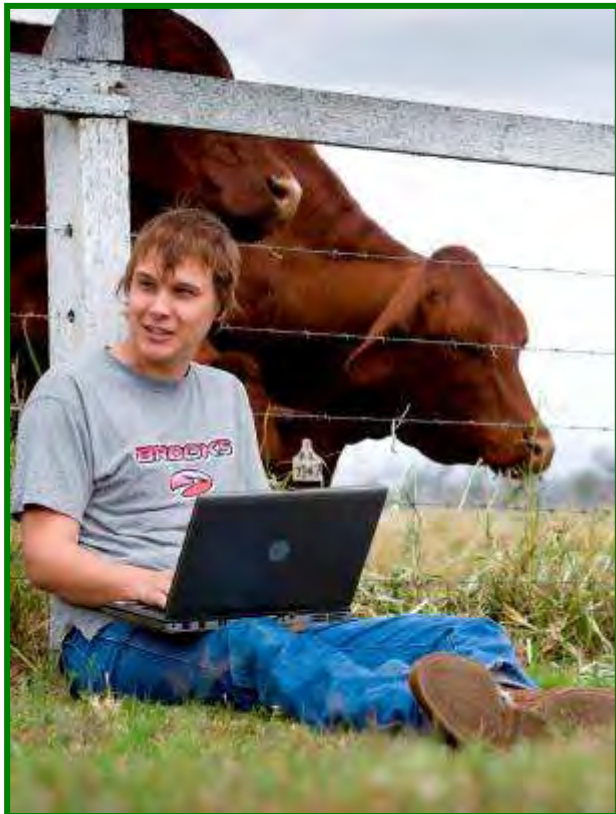


The Safety in Mines Training and Research Station (SIMTARS) program offers visits to the Safety in Mining Testing and Research Station where students are introduced to a wide variety of roles required in the mining industry and the various occupations required to undertake the work. This program is lead by the QMEA in conjunction with the Department of Mines and Energy.



Agribusiness Gateway School Jandowae Prep-10 State School was successful in securing funding from the National Stephanie Alexander Project to establish a kitchen garden at the school. The project is strongly supported by local industry, and aims to educate students in the benefits of growing, preparing and sharing fresh food through the management of their own garden. Students in the Gateway Project will gain valuable hands-on experience by building a garden and kitchen at their school.

As part of the Gateway Schools to Agribusiness Project, students will achieve key learning outcomes through the design and construction of the garden and develop a practical understanding of environmental issues. It is planned that with the anticipated success at Jandowae Prep-10 other schools in the project will also establish school gardens.



The **Queensland Minerals and Energy Academy** allows students to access a range of facilities, both in the minerals and energy sector, and higher education and training areas. The QMEA offers the choice of 2 annual one week camps: one at Mount Isa and the other at Dysart. During the camp students are given a project to work on which simulates problems faced in a real work environment, they have to present at the end of the camp their “solutions” to fellow students, teachers and industry leaders.

The **QMEA** also facilitates and funds a range of tours throughout Queensland. Mining tours such as the Mt Morgan History of Mining experience gives students the opportunity to see first-hand the effects of mining on a community and allows them

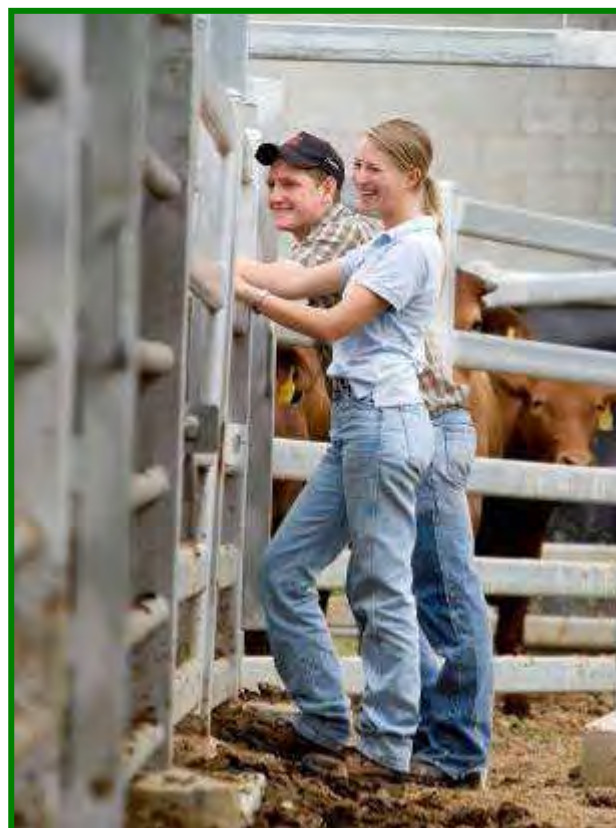
to compare past and present mining techniques and processes. Through Facing Island Tour which provides one school each year a \$500 grant, students live with no petroleum products for 3 days. Science students investigate getting back to basics in order to minimise their oil footprint.

The numerous excursions, tours, camps and workshops are a successful and effective mechanism to bring together students from all over Queensland, both country and city, to experience the range of careers, available in the minerals and energy sector. The access provided to professional and real workplaces is invaluable to the knowledge development of both the student and the teacher, which is then utilised in the classroom.

The current Gateway Schools participating in this project are listed at Attachment 4.

The Industry School Engagement Strategy is listed at Attachment 5.

The Gateway Schools Project website is [www.gatewayschools.qld.gov.au](http://www.gatewayschools.qld.gov.au).



# ATTACHMENTS

## INDUSTRY STRATEGY | INDUSTRY DEVELOPMENT

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## ATTACHMENT I: EXAMPLES OF IN-KIND INVESTMENT AND RELATED ACTIVITIES

<b>WINE TOURISM</b>
<p><b>In-kind support by the Wine Tourism Industry</b></p> <p>To enable key activities for students and teachers, each of the 13 Wine Tourism Gateway Schools has an industry partner which provides extensive in kind support and expert advice in the form of industry tours, work experience and placements, curriculum and professional development, and hands on experiences in an industry setting.</p>
<p><b>Wine Tourism Related Activities</b></p> <ul style="list-style-type: none"> <li>• Alastair McLeod Weekend (Executive Chef – Bretts Wharf) facilitated the Virgin Blue Charity Ball and holds a degustation lunch event for students each year. Donated time of Alastair and his Sous Chef for 2 and half days Plus 1 day of food prep/ordering that they did on the Friday before coming</li> <li>• Wine Tourism Gateway School Forum – sponsored by Preston Peak winery</li> <li>• Label design PD day at Mr Labels 1 day, label judging 1 day</li> </ul>
<p><b>Visits and Work placement</b></p> <ul style="list-style-type: none"> <li>• 12 students completing 4 x days of work placement in Granite Belt Cellar doors</li> <li>• Completion of filming for Careers Kit DVD 3x days with industry partners</li> <li>• Sheldon College 3 day residential school – students visiting various industry partners for workshops, vineyard and processing tours</li> <li>• Laidley SHS 3 day res school visiting various industry partners - students visiting various industry partners for workshops, vineyard and processing tours</li> </ul>
<p><b>Industry consultation</b></p> <ul style="list-style-type: none"> <li>• 20 industry representatives attended Wine Tourism Awards day</li> <li>• Feedback on student wine by 7 judges at Aust Small winemaker show (1 hour)</li> <li>• 1 day Industry consultation to reinvigorate the Bremer vineyard so it can be utilised by school</li> <li>• 3 x soil analysis at Nudgee College and Tullawong SHS from DPI&amp;F and Landmark (2 days for each test)</li> </ul>
<p><b>Chemistry Professional Development Course</b></p> <p>Involving teachers from all over Queensland, the program is designed to provide up-skilling in wine science in association with the release of an optional wine science unit in the Senior Chemistry syllabus. This program, which is supported by the Queensland Studies Authority (QSA), is being conducted by Ursula Kennedy of the USQ Faculty of Sciences and is an excellent example of the cross-sector collaboration of industry and school partnerships.</p> <ul style="list-style-type: none"> <li>• Dylan Rhymer (Winemaker at Ballandean Estate) spent half a day with both groups</li> <li>• \$2500 worth of funding from Senior Science Officer Education Funding to subsidise costs</li> <li>• Participants paid \$110 each and had to provide own transport, accommodation and TRS costs</li> <li>• 2 x days of industry representatives input completing and checking unit and Professional Development booklet</li> </ul>
<p><b>Young Winemakers 2008</b></p> <p>The purpose of Young Winemakers is to give students a complete winemaking experience from the vineyard to the bottle. Students participate in all aspects of this process, aided by expert industry advice.</p> <ul style="list-style-type: none"> <li>• 6 x winemakers making 1 wine each approx 20 days worth of work each over year</li> <li>• 7 x chem. Sessions with USQ over the year</li> </ul>

- 3 x 8hr vineyard picking sessions with 2 industry personnel from vineyards
- 3 x 8hr pruning sessions with 1 industry member from vineyards
- 3 x 4hr shoot thinning sessions with 1 industry member from vineyards
- 6 x 2hr cellar door sessions with 1 industry member from winery

### **Steering Committee**

- Witches Falls
- Cranes Wines
- Ballandean Estate
- Sirromet
- Queensland College of Wine Tourism
- University of Southern Queensland
- Southern Queensland Institute of TAFE
- Queensland Wine Industry Association
- O'Rileys
- Department of Education and Training – DET

## **MANUFACTURING AND ENGINEERING**

### **In-kind Investment by the Manufacturing and Engineering Industries**

Each of the 24 Manufacturing Gateway Schools has various industry partners. There are 74 enterprises that currently have direct engagement with Gateway Schools. Industry works collaboratively with education to provide the best possible opportunities for students and their career pathways.

- Manufacturing Skills Queensland provides the Manager with an office, work mobile phone, administration, laptop, software, conference facilities, stationary, together with access to Industry Sector Consultative Groups
- Mackay Area Industry Network (MAIN), sponsor students in F1inSchools teams
- Institute of Automotive mechanical Engineers sponsor students in F1inSchools teams
- South Brisbane Industry School Partnership Manufacturing Group provides professional development, apprentice presentations and mentoring
- Food Spectrum and Parmalat provides support for teachers and input through personnel into the development of curriculum

### **Governance Board Manufacturing**

- Australian Manufacturing Workers Union
- Australian Workers' Union
- Australian Industry Group
- The Commercial Vehicle Industry Association of Qld
- Kitchen and Bathroom Designers Institute of Australia
- Food Spectrum
- QMI Solutions
- QMI Solutions (MSQ Division)
- Department of Education and Training - DET
- Department of Employment, Economic Development and Innovation - DEEDI

## **BUILDING AND CONSTRUCTION**

### **In-Kind Investment by the Building and Construction Industries**

- Construction Skills Queensland provides the Manager with an office, work mobile phone, printing, photocopying, stationary, and access to conference facilities.
- Hutchinson Builders have employed curriculum developers and written Senior Curriculum for English Communication, Math A and Science 21
- Air Conditioning and Mechanical Contractors Association (AMCA) run an upfront training program for Cert IV Mechanical Drafting
- 26 teachers were taking on a site visit by Commercial High Rise staff

<b>Governance Board</b>
<ul style="list-style-type: none"> <li>• Queensland Master Builders Association (Employer representative)</li> <li>• Department of Education and Training – DET</li> <li>• Australian Workers Union (Employee representative)</li> <li>• Construction Forestry, Mining and Energy Union (Employee representative)</li> <li>• Independent Chair, BCITF</li> <li>• Australian Manufacturing Workers Union (Employee representative)</li> <li>• Civil Contractors Federation (Employer representative)</li> </ul>
<b>AGRIBUSINESS</b>
<p><b>In-Kind Investment by Agribusiness Industries</b></p> <p>The Department of Primary Industries and Fisheries is committed to supporting the project and the Manager. DPI&amp;F's Toowoomba office provides the Manager with an office, vehicle, fuel, printing, photocopying, stationery and access to staff</p>
<b>Steering Committee</b>
<ul style="list-style-type: none"> <li>• Department of Education and Training - DET</li> <li>• Department of Employment, Economic Development and Innovation (Primary Industries and Fisheries – PI&amp;F)</li> <li>• Australian Agricultural Colleges Corporation - AACC</li> <li>• Canegrowers</li> <li>• AgForce Queensland</li> <li>• Queensland Farmers Federation - QFF</li> <li>• Northern Australian Pastoral Company - NAPCO</li> <li>• Rabobank</li> <li>• University of Queensland - UQ</li> <li>• Industry Rep – (PI&amp;F advisory group)</li> </ul>
<b>MINERALS AND ENERGY</b>
<p><b>In-Kind Investment by the Minerals and Energy sector</b></p> <ul style="list-style-type: none"> <li>• Department of Mines and Energy is a key partner in the Safety in Mines Training and Research Station - aimed at Year 11- 12 Chemistry/Physics students</li> <li>• Numerous tours, excursions, camps (mining, engineering science), programs, workshops, professional development courses. All of these activities have strong industry partner contribution</li> </ul>
<b>Governance Board</b>
<ul style="list-style-type: none"> <li>• Department of Education and Training - DET</li> <li>• Department of Employment, Economic Development and Innovation – DEEDI (Mines and Energy)</li> <li>• Queensland Resources Council</li> <li>• Stanwell</li> <li>• Mining Industry Skills Centre - MISC</li> <li>• University of Queensland - UQ</li> <li>• Xstrata</li> <li>• BHP Mitsubishi Alliance</li> </ul>
<b>AEROSPACE</b>
<b>In-kind investment by the Aerospace sector</b>
<b>Boeing Defence Australia Ltd</b>
Governance Board representation, mentoring of teachers in schools, and visitations to Gateways Schools, provision of Work Experience programs at Amberley, Boeing House and at Oakey, and major involvement in the Aerospace Education Awards including the planning committee, the event itself and the judging of nominations..

<b>Aviation Australia Pty Ltd</b>
Governance Board representation, mentoring of teachers in schools and visitations, professional development opportunities for staff from Aviation High and other Gateway Schools, major involvement in the Aerospace Education Awards, including the planning committee, the event itself and the judging of nominations, the provision of facilities for aerospace conferences and meetings, and in earlier years the provision of facilities for the Head of Department, Aerospace Industries. The course in maintenance engineering is also conducted through Aviation Australia.
<b>Australian Aerospace Ltd</b>
Governance Board representation, mentoring of teachers in schools and visitations, the provision of Work Experience programs at Brisbane Airport, and major involvement in the Aerospace Education Awards, including the planning committee, the event itself and the judging of nominations.
<b>Brisbane Airport Corporation Pty Ltd</b>
Mentoring of teachers in schools and visitations, particularly at Aviation High, the provision of Work Experience programs at Brisbane Airport, and involvement in the Aerospace Education Awards, including the planning committee, the event itself and the judging of nominations for BAC awards..
<b>GE Aviation Systems Australia Pty Ltd</b>
Mentoring of teachers in schools and visitations, particularly at Aviation High, the provision of Work Experience programs at Brisbane Airport, and involvement in the Aerospace Education Awards, including the planning committee, the event itself and the judging of nominations for GE Aviation awards.
<b>Qantas Airways Limited</b>
Governance Board representation, involvement with Aviation High including mentoring and visitations, and the provision of professional development for teachers in Sydney.
In addition to the six industry partners, regional Gateway Schools have local industry partners. For example Miami SHS has a relationship with Queensland Airports Limited, as has Good Shepherd Catholic College at Mount Isa and Townsville SHS. A number of industries now have involvement with Aviation High, particularly Virgin Blue Airlines, Roland DG Australia Pty Ltd and Raytheon Australia Pty Ltd.
<b>Governance Board</b>
<ul style="list-style-type: none"> <li>• Aviation Australia Pty Ltd</li> <li>• Boeing Defence Australia Limited</li> <li>• Australian Aerospace Limited</li> <li>• Qantas Airways Limited</li> </ul>

**ATTACHMENT 2:  
INDUSTRY PARTNERSHIPS AND SATs**

**WINE TOURISM PROJECT**

<b>School Name</b>	<b>Stakeholder Engagement</b>
Tullawong State High School	Nirvana Wines
Boonah State High school	Kooroomba Wines
Kingaroy State High School	Steve Upton Vineyard Kingaroy Cheese Cranes Wines Captains Paddock Wines
Nudgee College	Warrego Wines Symphony Hill Wines
Emmaus College	Albert River Wines Sarrabah Wines
Centenary Heights State High School	Preston Peak Wines Southern Queensland Institute of TAFE
Stanthorpe State High School	Golden Grove Estate
St Joseph's School - Stanthorpe	Casley Mt Hutton Wines
Sheldon College	Sirromet Wines
Laidley State High School	Bremer Institute of TAFE Warrego Wines Peppers
Maroochydore State High School	Maroochy Springs Wines
Scots PGC - Warwick	Whiskey Gully Wines
Murgon State High School	Clovely Estate Wines
<b>TOTAL Stakeholders Engaged</b>	<b>21</b>
<b>TOTAL SATs for '08</b>	<b>157</b>

## MANUFACTURING AND ENGINEERING PROJECT

School Name	Stakeholder Engagement
Smithfield State High School Manufacturing & Engineering Marine	<ul style="list-style-type: none"> <li>• Cairns Custom Craft</li> </ul>
Ignatius Park College Manufacturing & Engineering Plastics Design	<ul style="list-style-type: none"> <li>• TORGAS</li> <li>• Pacific Coast Engineering</li> </ul>
Pimlico State High School Manufacturing & Engineering Plastics / Fibre Composites Design	<ul style="list-style-type: none"> <li>• TORGAS</li> <li>• James Cook University</li> <li>• Barrier Reef TAFE</li> <li>• Bartell Trailers</li> <li>• Alexander Bodyworks</li> <li>• KG Engineering</li> <li>• Pacific Coast Engineering</li> <li>• Townsville Laser Cutting</li> <li>• Gough Plastics</li> </ul>
Mackay North State High School Mackay State High School Mirani State High School Pioneer State High School Sarina State High School Manufacturing & Engineering Design Agribusiness	<ul style="list-style-type: none"> <li>• Registered Training Organisations               <ul style="list-style-type: none"> <li>○ Skills Tech Australia (STA)</li> </ul> </li> <li>• Group Training Organisations               <ul style="list-style-type: none"> <li>○ Mackay Region Apprenticeship Employment Ltd (MRAEL)</li> </ul> </li> <li>• Australian Apprenticeship Centres               <ul style="list-style-type: none"> <li>○ Busy At Work</li> <li>○ Apprentice, Careers and Employment (ACE)</li> </ul> </li> <li>• Industry bodies               <ul style="list-style-type: none"> <li>○ Mackay Area Industry Network (MAIN)</li> <li>○ Manufacturing Skills QLD (MSQ)</li> <li>○ Mining Industry Skills Centre (MISC)</li> </ul> </li> <li>• Employers               <ul style="list-style-type: none"> <li>○ Mackay Regional Council</li> <li>○ Hastings Deering,</li> <li>○ Austchrome P/L,</li> <li>○ Mining Logic P/L,</li> <li>○ Rio Tinto Hail Creek Mine,</li> <li>○ Billiton Misubishi Alliance,</li> <li>○ Dalrymple Bay Coal Terminal P/L,</li> </ul> </li> <li>• Other local Industry and Local Community Partnerships               <ul style="list-style-type: none"> <li>○ Mackay Region School Industry Links Scheme (MRSILS)</li> <li>○ Whitsunday Industry School Links Scheme (WISLS)</li> </ul> </li> </ul>
Toolooa State High School (Cluster)  Engineering	<ul style="list-style-type: none"> <li>• NRG</li> <li>• Gladstone Schools Engineering Skills Centre and associated partners</li> </ul>
Bundaberg State High School Engineering Design	<ul style="list-style-type: none"> <li>• Central Queensland University</li> <li>• TAFE Bundaberg</li> <li>• CAD-CAM Design Centre Steering Committee</li> </ul>

<p>Bundaberg North State High School Aviation</p> <p>Kepnock State High School Agribusiness</p> <p>Gin Gin State High School</p> <p>Isis District State High School</p> <p>Rosedale State School</p>	<ul style="list-style-type: none"> <li>• AIEM Network</li> <li>• GHD</li> <li>• Bundaberg Technology Park</li> <li>• CAM-IT</li> <li>• ETRF Co-ordinator</li> </ul>
<p>Noosa District State High School Engineering Aviation</p>	<ul style="list-style-type: none"> <li>• McDermott Aviation</li> <li>• Pages Furnishing</li> <li>• Noosa Crane and Engineering</li> <li>• Speedline Engineering</li> <li>• Ken Mills Toyota</li> </ul>
<p>King's Christian College Digital manufacturing Marine</p>	<ul style="list-style-type: none"> <li>• Shapetec Pty Ltd</li> <li>• Azzura Marine</li> <li>• Riviera Marine</li> <li>• Ironbark Composites</li> <li>• DKG Marine</li> <li>• LEAP Australia Pty Ltd</li> <li>• P &amp; M Plastics</li> <li>• Cawthorne Composites</li> <li>• Max Kayaks</li> <li>• Maritimo Marine</li> <li>• Lidgard Yacht Design</li> <li>• Harvie Allison Photography</li> <li>• Complex Pty Ltd</li> <li>• Multipanel Pty Ltd</li> <li>• Sign Essentials Pty Ltd</li> <li>• Budget Hobbies</li> </ul>
<p>Concordia Lutheran College Manufacturing and Engineering Fibre Composites</p>	<ul style="list-style-type: none"> <li>• Russell Mineral Equipment (RME)</li> <li>• Wagners</li> <li>• Vanderfields Machinery</li> <li>• Toowoomba Regional Council – Engineering Department</li> </ul>
<p>Bray Park State High School Manufacturing and Engineering Marine Food Processing</p>	<ul style="list-style-type: none"> <li>• Brendale Industry School Partnership Group</li> <li>• WEP Belco Trailers and Noble Boats Partnership – manufacturing components</li> <li>• Lunchbox Solutions</li> </ul>
<p>Corinda State High School Manufacturing and Engineering Fibre Composites / Plastics</p>	<ul style="list-style-type: none"> <li>• Sun Engineering</li> <li>• Galvin Engineering</li> <li>• Century Batteries</li> <li>• Darra Welding Works</li> <li>• Lowline Engineering</li> <li>• Ian Boettcher Motors</li> <li>• Bradken Engineering</li> <li>• Barfab Sheet Metal Pty Ltd</li> <li>• Austin Engineering</li> <li>• Kador Engineering</li> </ul>

Forest Lake State High School Manufacturing and Engineering Food Processing	<ul style="list-style-type: none"> <li>• Lincoln Electric Welding</li> <li>• Brisbane South West Work Education program</li> <li>• Darra Welding Works</li> <li>• Beacon Foundation</li> <li>• Coca-Cola Amatil (Aust) Pty Ltd</li> </ul>
Kelvin Grove State College Engineering Food Processing	<ul style="list-style-type: none"> <li>• QUT</li> <li>• TAFE</li> <li>• G James Glass and Aluminium</li> <li>• Parmalat</li> </ul>
Runcorn State High School Light & Heavy Engineering Food Processing	<ul style="list-style-type: none"> <li>• Tom Stoddart Pty Ltd</li> <li>• Institute of Automotive Mechanical Engineers</li> <li>• WDT Engineering</li> <li>• Sunnybank Signs</li> <li>• Bradken Engineering</li> <li>• Skills Tech Australia</li> <li>• Metropolitan South Institute of TAFE</li> <li>• Griffith University – Griffith Connect Valued Partners Program</li> <li>• South Brisbane Industry School Partnership Manufacturing Group</li> <li>• Southside Cluster Industry Placement Scheme (SCIPS)</li> <li>• Food Spectrum</li> </ul>
<b>TOTAL Stakeholders Engaged</b>	<b>74</b>
<b>TOTAL SATS for '08</b>	<b>42</b>

#### BUILDING AND CONSTRUCTION PROJECT

School Name	Partners
St Edmunds College	Hutchinson Builders
St Joseph's, Nudgee College	Hutchinson Builders Oswald Brothers Civil Contractors
Caboolture State High School	Trackstar Alliance McIlwain Civil Ridgemill Boral Ltd
Harristown State High School	Hutchinson Builders
Marsden State High School	Plantation Homes
Upper Coomera State High School	
<b>TOTAL Stakeholders Engaged</b>	<b>9</b>
<b>TOTAL SATs for '08</b>	<b>65</b>

**QUEENSLAND MINERALS AND ENERGY ACADEMY**

QMEA Industry Partners - 2008	
Anglo Coal	
BMA	
Ensham Res.	
Golding Con.	
Incitec Pivot	
Jellinbah Resources	
Macarthur Coal	
Peabody Pacific	
Rio Tinto Coal	
Sedgemena P/L	
Stanwell Corp.	
Tarong Energy	
Theiss P/L	
Wesfarmers Coal	
Xstrata	
<b>TOTAL Stakeholders Engaged</b>	<b>15</b>
<b>TOTAL SATS for '08</b>	<b>56</b>

**AGRIBUSINESS PROJECT**

School Name	Stakeholder Engagement
	Industries involved overall
Jandowae Pre-10	<ul style="list-style-type: none"> <li>Rabobank</li> <li>AgForce</li> <li>Queensland Farmers Federation</li> <li>University of Queensland</li> <li>Northern Australian Pastoral Company - NAPCO</li> <li>Australian Agricultural College Corporation</li> <li>Canegrowers</li> <li>Pacific Seeds</li> </ul>
Nambour State High School	
Downlands College	
Kepnock State High School	
Goondiwindi State High School	
St George State High School	
Pittsworth State High School	
Loganlea State High School	
<b>TOTAL Stakeholders Engaged</b>	<b>8</b>

**AEROSPACE PROJECT**

Aerospace Industry Partners - 2008	
Aviation Australia Pty Ltd	
Boeing Defence Australia Limited	
Australian Aerospace Limited	
Brisbane Airport Corporation Pty Limited	
GE Aviation systems Australia Pty Ltd	
Qantas Airways Limited (from 2008)	
<b>TOTAL Stakeholders Engaged</b>	<b>6</b>

**ATTACHMENT 3:  
PROFESSIONAL DEVELOPMENT ACTIVITY EXAMPLES  
– GATEWAY SCHOOLS PROJECT**

Wine Tourism	Participants
<b>Senior Chemistry Unit Professional Development Workshop</b> - Two professional development workshops were held in December 2008 and January 2009 at the QCWT. Involving teachers from all over Queensland, the program is designed to provide up-skilling in wine science in association with the release of an optional wine science unit in the Senior Chemistry syllabus.	40
<b>Study Tour Barossa</b> - to provide staff with an overview of the Australian Wine Industry and looking at different training options for Wine Tourism. Staff who attended have taken activities and resources into their classroom to increase student involvement and engagement.	13
<b>Viticulture and Winemaking PD</b> - 1 staff member from Tullawong State High School is currently completing studies in viticulture and winemaking to lead the vineyard development and testing.	1
<b>Tourism and Hospitality up-skilling</b> - staff from Tullawong, Laidley and Maroochydore State High School's are currently completing tourism and hospitality up-skilling to meet HR requirement for VET delivery in schools.	7
<b>Art PD with Mr Labels company</b> -to give staff an understanding of the graphic design process involved in label making to assist with involvement in the label competition. *The top 15 entries in the competition were from schools that sent a staff member to the PD day at Mr Labels*.	7
<b>TOTAL</b>	<b>68</b>
Manufacturing and Engineering	Participants
<b>Food Spectrum</b> - 12 Head of Departments participated in PD at Food Spectrum with industry partners	12
<b>MEGS Workshop</b> - Principals and teachers participated in the Manufacturing and Engineering Project Workshop at MSQ.	28
Use of Professional Development in the implementation of curricula	
<b>TOTAL</b>	<b>40</b>
Building and Construction	Participants
Seven construction teachers from Gateway Schools completed 1 week industry placements	7
<b>Try a Trade</b> - teachers participated in the Try a Trade and Careers Expo visiting commercial high rise construction sites in North and South Brisbane.	35
<b>Hutchinson Builders</b> - two PD days have been facilitated for the Gateway School teachers with Hutchinson Builders and QSA personnel this year.	31
Gladstone SHS/Golding Civil Contractors Cert I Resources & Infrastructure Operations - Kevin McAndrews from Caboolture SHS travelled to Gladstone SHS to complete PD in several essential Construction training to deliver up to date and auditable training to his students.	1
<b>TOTAL</b>	<b>74</b>
Agribusiness	Participants
<b>Gateway Schools Workshop</b> - held at the Australian Agricultural College campus, Dalby. Teachers and Principals from the schools attended to discuss the future of the project, share ideas, and meet with key industry stakeholders that are involved in the project.	15
<b>TOTAL</b>	<b>15</b>

Queensland Minerals and Energy Academy	Participants
<b>Mine Mapping Robotics Program</b> - 6 teachers have undertaken professional development in the program, with QMEA providing robotic kits and links to SIMTARS	6
<b>Engineering Camps</b> - there are 2 one week camps during the year in Dysart and Mount Isa. During the camp students and teachers are given real problems and projects to work on with engineers on site.	11
<b>Tours, excursions</b> - teachers have the opportunity to travel on mining and geology tours, excursions and on site visits throughout the year	23
<b>Women in Mining Workshop</b> - teachers engaged in Trade Secrets workshop/seminar with BMA	10
<b>Energy - Your Future Conference</b> - an innovative and interactive seminar were teachers, students and industry mentors work with CQU engineering students to develop long-term energy strategies.	80
<b>Governance Board</b>	
<b>TOTAL</b>	<b>130</b>

**ATTACHMENT 4:  
CURRENT GATEWAY SCHOOLS**

<b>Gateway Schools as at January 2009</b>			
Wine Tourism	Manufacturing & Engineering	QMEA	Aerospace Project
Centenary Heights SHS	<b>Bundaberg Cluster</b>	<b>Mount Isa HUB</b>	Redbank Plains SHS
Kingaroy SHS	Bundaberg State High School (Lead)	Spinifex State College	Hendra Secondary College
Murgon SHS	Bundaberg North SHS	Cloncurry SS	Bremer SHS
Stanthorpe SHS	Kepnock SHS	Kirwan SHS	Balmoral SHS
Sheldon College	Isis District SHS	Wavel Heights SHS	Iona Secondary College
Nudgee College	Gin Gin SHS	Anglican Church Grammar School	Ipswich Grammar
Boonah SHS	Rosedale State School	Bundamba State Secondary College	Cairns SHS
Laidley SHS	Forest Lake SHS		Townsville SHS
Maroochydore SHS	Pimlico SHS	<b>Moranbah HUB</b>	Caloundra SHS
Tullawong SHS	Ignatius Park College	Moranbah SHS	Brisbane SHS
Emmaus College - Jimboomba	Smithfield SHS	Blackwater SHS	Good Shepherd Catholic College
Scots PGC - Warwick	Corinda SHS	Emerald SHS	Indooroopilly SHS
St Joseph's School - Stanthorpe	Kelvin Grove State College	Dysart SHS	Miami SHS
	Gladstone Region Cluster	Pioneer SHS	Oakey SHS
<b>Building &amp; Construction</b>	Runcorn SHS	Alexandra SHS	Springwood SHS
St Joseph's, Nudgee College	King's Christian College	Marist College	St Patrick's College
Harristown SHS	Noosa District SHS		Toowoomba SHS
Marsden SHS	Bray Park SHS	<b>Gladstone HUB</b>	
Upper Coomera State College	Concordia Lutheran College	Toolooa SHS	
Gladstone SHS Cluster		Moura SHS	
St Edmunds College	<b>Gladstone Cluster</b>	Biloela SHS	
Caboolture SHS	Toolooa SHS (Lead)	Nanango SHS	
	Gladstone SHS	North Rockhampton SHS	
<b>Agribusiness</b>	Tannum Sands SHS		
Goondiwindi SHS			
Loganlea SHS	<b>Mackay Cluster</b>		
St George SHS	North Mackay SHS (Lead School)		
Kepnock SHS	Sarina SHS		
Pittsworth SHS	Mackay SHS		
Downlands College	Pioneer SHS		
Nambour SHS	Mirani SHS		
Jandowae P-10 State School			

**DEPARTMENT OF EDUCATION, TRAINING AND THE ARTS**  
*A clever, skilled and creative Queensland*

**INDUSTRY SCHOOL ENGAGEMENT STRATEGY**

Partnering with industry to enable young people to acquire the knowledge, skills and attributes to participate effectively in society and employment in the globalised economy

**Objective 1**

Engage school communities, industry and government in providing relevant learning experiences to enable access to relevant career pathways.

**Objective 2**

Develop and deliver contemporary relevant industry focused curricula and experiences to create a pool of future employees relevant to industry.

**Objective 3**

Create or provide access to flexible, contemporary infrastructure / technologies to support learning and skilling within a “working” environment.

**Objective 4**

Create opportunities for young people to undertake structured work place learning, SAT’s, take on full time employment or further study.

**INITIATIVES**

**Gateway School Projects**

**Industry, Education and Training Alliances**

**School Industry Trade Centres  
C’wealth Trade Training Centres**

**Skill Centres**

**KEY RESULTS AREAS**

**Industry School Partnerships**

Strong education, training, industry and community partnerships developed to address employment needs.

**Innovative Curricula**

Contemporary industry relevant curricula across a range of schools or in partnership with TAFE / University is implemented

**Access to contemporary industry facilities**

Increased access gained by young people to a contemporary industry focussed working environment that supports the development of knowledge, skills and attributes required by industry

**Employment or Tertiary Uptake**

Increased number of young people being offered SATs, fulltime work, cadetships - taking up tertiary study related to key industries.

**OUTCOME**

**Young people make a successful transition from school to work or further study in those areas of direct relevance to the economy**