

STANDING COMMITTEE ON EDUCATION AND TRAINING – INQUIRY INTO VOCATIONAL EDUCATION IN SCHOOLS

From: Roger Atkins Principal and Raelene Fysh Deputy Principal of Toolooa State High School on behalf of the **Gladstone Schools and Industry Network**

The following comments relate to the terms of reference. Appendices have been included. As well, an invitation to the committee to visit the Gladstone Region to conduct hearings is included.

Vocational Education Development

- The Gladstone region is a growing industrial region in Central Queensland. Within this region there are three government high schools – Toolooa State High School (700), Gladstone State High School (1130), Tannum Sands State High School (82) and one non-government high school – Chanel College (470).
- Since 1994 Vocational Education has become an integral component of Senior Secondary Education with one of first grants of \$5000 from ASTF (now ECEF) to assist the implementation of Hospitality Studies.
- Following this in 1995 a 50:50 program in partnership with the local TAFE College saw 15 students (at risk of not completing year 12) attend TAFE to complete English, Maths and Science delivered at TAFE by Staff at Toolooa State High School. All of these students completed year 12 and moved into apprenticeships.
- In 1996 another ECEF grant of \$25000 was given to the Toolooa State High School to co-ordinate, develop, a regional approach to structured workplace learning. As well school and industry partnerships were promoted as important pathways for students to transition. Towards the end of 1996 these developing partnerships with TAFE and Group Training saw the implementation of Queensland's first school-based apprenticeships in Fabrication.
- Continued development of vocational programs has seen Toolooa State High School and Gladstone schools being nominated as State Finalists in the Queensland Training Awards.
- In 2002 an initiative of Toolooa State High School is being developed to establish a regional links for Engineering Excellence.

1. *The range, structure, resourcing and delivery of vocational education programs in schools, including teacher training and impact of vocational education on other programs.*

A. RANGE

- Schools as Registered Training Organisations have been able to deliver Queensland Studies Authority Subjects with embedded competencies such as
 - COMPUTER STUDIES
 - CONSUMER MATHS
 - EARLY CHILDHOOD STUDIES
 - ENGINEERING COMPETENCIES A
 - ENGLISH COMMUNICATIONS
 - FURNISHING
 - HOSPITALITY B
 - MARINE & AQUATIC PRACTICES
 - MULTI-MEDIA
 - PHYSICAL RECREATION
- These are mainly Certificate I and Certificate II courses.
- School using private providers can deliver programs such as Certificate III in Multi-Media from QANTM
- Certificate II in Business Administration can be found embedded in enterprise programs such as E-Teams and YAA
- Certificate I and II programs can be delivered in programs shared between schools and TAFE
- Schools can outsource vocational programs delivering Certificate II at TAFE (Hairdressing)
- On-line vocational programs (Certificate I in Auto-Tech)
- School Based Apprentices and Trainees (presently 100 in Gladstone)
- Outsourcing to TAFE vocational components that fit into academic programs eg, Geography Excursion to North West Island where competencies from recreational training packages are completed

B. STRUCTURE

- Structured workplace learning is an integral component of these programs
- Schools as Registered Training Organisations have to comply with AQTF
- Most students participating in vocational programs are 15 years or older. Some students with disabilities are engaged in vocational and enterprise programs from 12 years
- A SAIN (School and Industry Network) co-ordinator is funded by schools and ECEF to co-ordinate placements for structured workplace learning and work experience. This 'one-stop-shop' serves employers and schools well and meets the needs of all stakeholders

C. RESOURCING

- The continued sustainability of SAIN (School and Industry Network)

- Purchasing equipment needed for some courses (Engineering, Hospitality, Marine) to meet AQTF standards
- Teacher qualifications to meet HR standards
- Resourcing industry release for teachers

D. DELIVERY

- On line
- Class room teaching
- Private providers and TAFE

E. IMPACT

- The need for changes to the school/parent/industry culture to value vocational education
- Assessment issues regarding vocational education
- Approximately 80% of students are including vocational programs/subjects in their senior schooling programs
- Engaging in vocational programs has seen retention rates increase
- Transitioning from schools to work to university has become seamless
- Continued partnerships have and will deliver innovative practices to improve outcomes for students

The following diagram shows the extent of the partnership and pathways involving vocational education in the Gladstone area.



VET PATHWAYS DEVELOPED IN PARTNERSHIPS

UNILINK

CQU Gladstone Campus
CQU Rockhampton Campus

Programs:

- ◆ *Courses with tertiary accreditation (Chemistry)*
- ◆ *Short Courses (9 Weeks) (Marketing, Journalism, Psychology, Education) (1999/2000/2001)*
- ◆ *SNAPS (HECS Payment) and tertiary accreditation*
Maths C – Engineering
Maths
IPT – Programming A

TAFELINK

Central Qld TAFE - Gladstone Campus

Programs:

- ◆ **School Based Apprenticeships/Traineeships (1997-2001)**
- ◆ *Hairdressing (1997-2001)*
- ◆ *In Metals*
- ◆ *Co-providing NBBBB Modules (Metals – 1996-2000)*
- ◆ *Hospitality (1995-2001)*
- ◆ *'50/50' TAFE Course (1995)*
North Queensland TAFE (External)

Programs:

- ◆ *Boyne Island Environmental Education Centre – TAFE modules in academic subjects; Geography/Biology (1998-2001)*
- ◆ *Part-time certificate courses – Engineering (1997-2001)*

Private Providers

- ◆ *Auto Tech by on-line delivery.(2001)*
- ◆ *QANTM – Certificate III in MultiMedia Studies*

COMMUNITY LINK

Boyne Smelter

Program:

- ◆ *Engineering Mentor Program (1999/2000)*

Office of State Development

Program:

- ◆ *Young Achievers Australia (YAA) (2000/2001)*

QRail

CQU Gladstone Campus
Gladstone Port Authority

Programs:

- ◆ *E Team (1997-2001)*

Rotary Club of Gladstone

- ◆ *Monitoring for independent living students (2000-2001)*

Sea FM

- ◆ *Training of School Radio Station Operators (1999-2001)*

- ◆ *Certificate II in Broadcasting*

- ◆ *Certificate III in Broadcasting*

Queensland Cement and Lime

- ◆ *Ecoman*

2. The accessibility and effectiveness of vocational education for indigenous students.

Within the Gladstone region, Gladstone Indigenous Vocation and Enterprise Network (GIVEN) program has been instituted to address the accessibility and effectiveness of vocational education for indigenous students.

The following outlines the important aspects of this program

Mission Statement

GIVEN will support schools in creating socially just pathways for indigenous students to walk from school into happy and healthy adult lives.

Statement of Intent

GIVEN is an innovative, district-wide program aimed at building the partnerships, pathways and programs which will enable rural and urban Indigenous students to access vocational and enterprise education opportunities and to achieve employment outcomes that are equal to, or better than, those of mainstream students.

Rationale:

Increasingly, vocational and enterprise-education is leading to high quality educational and employment outcomes for students in secondary schools. However, the level of engagement of Indigenous students in key *vocational* activities (such as structured work placement, school-based apprenticeships/traineeships) and in *enterprise* programs (which link with businesses in developing high-level skills in strategic decision making, negotiation, team work, communications, etc) is well below that of mainstream students. This is leading to inferior outcomes for our indigenous students.

Context:

Gladstone is a high-growth area with a looming skill shortage leading to strong growth in employment opportunities. Currently, there are many effective partnerships being formed both within educational communities and between those communities and small and large businesses, though the process is far from complete. This environment provides a significant 'window of opportunity' to engage these organisations and partnerships in ensuring that outcomes for Indigenous students rise to meet those of the broader community. GIVEN will be the 'seat at the table' for our indigenous students in a growing economic environment and dynamic social process.

Project Development

The project development team, which originally developed the range, scope and structure of the project, consisted of Toolooa SHS's Indigenous Support Team, including the Community Education Counsellor, Indigenous Youth Support Worker, Indigenous teacher aide, Principal and Deputy Principal. This was later expanded to include principals from across the region, ASSPAs from across Gladstone and input from DEST personnel.

The team began with the principles and objectives expressed in the *'Partners for Success' Strategy for the Continuous Improvement of Educational and Employment Outcomes for Aboriginal and Torres Strait Islander Peoples*, in particular those dealing with communities and school partnerships, literacy, employment and career development. The team sought to meet these objectives at the local level by combining the strengths of Toolooa SHS in vocational education and training with the benefits for employment and school-to-work transition that were seen to be emerging from enterprise education.

On the one hand, Toolooa SHS has an outstanding record of innovation and success in mainstream vocational education by building strong partnerships with industry, TAFE and the CQU. The school has the capacity, the will, the skills, the knowledge and the people to create the district-wide

school/industry/community partnerships that will build pathways into work and training for the young Indigenous people.

On the other hand, many employers are asking for more than just discreet 'vocational' skills and competencies. They are seeking the high-level teamwork, thinking, and planning and communication skills, which are developed in enterprise education. As for mainstream students, Indigenous students who effectively make the transition from school to work and into further study have manual skills synthesised with strong social and intellectual skills.

The project development team believes that enterprise education, combined with supported, industry-based vocational training and industry experience and focussed literacy support programs will deliver these strong positive outcomes for our indigenous students.

Key Outcomes

- All Indigenous Students will have an owned portfolio for the future incorporating learning plans, aspirations and progress.
- Improved literacy skills for Indigenous Students.
- All Indigenous Students have achieved success in an enterprise program as per their portfolios.
- Increase in outcomes achieved in further education, training and employment.
- Comprehensive and extensive database of "Indigenous Friendly", Employment and Training opportunities is established and maintained.
- Innovative and culturally appropriate enterprise education programs are developed and implemented across the district.
- Increased level of parent involvement in the education program of their student/s.

Key Strategies:

To achieve its mission, the GIVEN team will:

- a) link with community, welfare, justice and health organisations to support individual student participation in school and work-place training
- b) identify and target Indigenous secondary students from P-10 and secondary schools across the Gladstone district by developing and maintaining:
 1. a student aspiration data base (including exit and outcomes data)
 2. individual aspiration development plans (IAPs)
 3. district-wide indigenous-friendly work place data base
 4. indigenous business mentors data base
 5. new links with community organisations (ie. Billabong, Gehgre, Nhulundu Woorabinda, etc) and indigenous owned and operated businesses (ie. Dreamtime Centre, Rockhampton) in and around the Gladstone district
 6. links with TAFE and CQU to deliver training and educational programs appropriate to Indigenous students
- c) coordinate with, and focus for outcomes for Indigenous students from, mainstream vocational and school-industry organisations currently delivering career guidance, work experience, structured workplace learning and School Based Apprenticeships and Traineeships, such as:
 1. School and Industry Network [SAIN],
 2. Gladstone Area Industry Network [GAIN],
 3. Gladstone Area Group Apprenticeship Limited [GAGAL]
 4. Job Pathways
 5. CHR
- d) monitor and support indigenous students engaged in *work-placements* and in *enterprise education* projects

- e) develop *support, transport and training* strategies and resources needed to ensure the *equitable* access of indigenous students from *remote schools* to the full range of programs developed by GIVEN
- f) develop and implement intensive *literacy strategies and benchmarks* (eg. FELIKS and Bandscales) focussing on trade and business communication skills and *integrated* into the enterprise education programs
- g) developing *Indigenous-based enterprise programs* in partnership with existing enterprise organisations (such as Young Achievement Australia, ECOMAN, the Queensland Private Enterprise Centre, Qld Chamber of Commerce, etc) linking with Indigenous enterprises and incorporating these into the school curricula

Management Structure

Responsibility for GIVEN's broad strategic direction, responsibility for review and evaluation and reporting on outcomes to DEST will be assumed by the **Reference Group**. Meeting at least once per term, the Reference Group will be composed of:

- Toolooa State High School's Principal and a Deputy Principal
- The Joint Secondary Schools Community Education Counsellor
- Rural Principal
- Urban Principal
- Community representative
- P10 Principal
- District Office representative
- DEST Representative
- Central Queensland University representative
- TAFE representative
- SAIN representative
- GIVEN Project team members

Responsibility for recruitment and selection, line management, performance monitoring and operational guidance will be assumed by a Management Group, composed of:

- Toolooa State High School's Principal and a Deputy Principal
- The Joint Secondary Schools Community Education Counsellor

The Project Team:

The GIVEN project team will consist of two full-time staff, supported by a part-time Administration Officer, will be based at Toolooa SHS and will be formed by:

- a *Project Coordinator*, responsible for: developing data bases; coordinating work experience and industry placement; supporting students in the workplace; ensuring equity for rural students
- a *Literacy, Enterprise and Continuing Education* teacher, responsible for: developing and delivering intensive trade and business based literacy programs

School-based tutors will support GIVEN project activities on each site.

3. ***Vocational education in new and emerging industries***

The current and future growth prospects of manufacturing and industry in the Gladstone area will provide excellent opportunities for our young people to effectively transition from school to work, further training and higher education. However, this does not mean ‘more of the same’ or business as usual – currently too many of our young people do not make this transition, often with life-long consequences for them and too few productive and competent employees for our industries.

Extensive research by the Education Career and Enterprise Foundation’s (ECEEF) report **Destinations of 2000 School Leavers** shows that students most effectively transition from school to work when they are effectively supported and have multiple pathways. The Gladstone regional “Making it Real – Links for Excellence in Engineering” initiative seeks to develop itself as a best practice model in this process. It is comprised of a range of partnerships and strategies to ensure that more young people will *want* to make engineering their career of choice and that they will have the necessary experiences, knowledge, skills and attitudes to *make* this happen.

Broadly, the initiative aims to meet the needs of two main groups of students: *Certificate Strand* students, whose aim is to go into work with associated training (traineeships and apprenticeships) and *Degree Strand* students seeking to become professional engineers through higher education. Meeting the needs of both groups will not only require extensive external links with industry and organisations such as TAFE and CQU. It will also require an extensive redirection and reorganisation of Toolooa High’s curriculum – we will be making it real by linking *what* we teach and *how* we teach with workplace learning and enterprise education throughout the curriculum.

The ‘Links for Excellence in Engineering’ initiative has received strong government support as it is directly aligned with meeting the targets identified in Queensland’s:

- Department of Education and Training’s (DET) *Regional Employment Strategy* for the Gladstone area
- Smart State agenda
- Education Queensland’s Education Reform Framework and 2010 Strategy

The initiative seeks to more closely link learning institutions, whereby the three Gladstone high schools would coordinate share physical resources, teaching staff, student enrolments between themselves and with TAFE and CQU.

Toolooa SHS – Excellence in Engineering: Planning Overview

| Partner/ Year | Junior | Senior - Work, VET & Academic Inputs & Outcomes | | Stakeholder Outcomes |
|---|---|---|---|---|
| | Year 8/9 | Year 10 | Year 11/12 – | |
| Industry, Business Groups & Institutes | <ul style="list-style-type: none"> ▪ Site excursions to raise positive perceptions & knowledge of manufacturing ▪ School visits by industry representatives ▪ Initial work-shadowing & work experience | <ul style="list-style-type: none"> ▪ Provide positions for work experience and placement ▪ Mentoring program begins ▪ Participate in manufacturing career guidance and development ▪ Support & sponsor enterprise programs ▪ Positive attitude & motivation for work | <ul style="list-style-type: none"> ▪ Industry standard experience, ethics, behaviour and learning on NRG off-site campus ▪ School-based traineeship & apprenticeship positions ▪ Participate in mentor program (school and CQU) ▪ Provide Structured work placement sites, school-based traineeships & apprenticeships ▪ Support for student transport and small-business incentives for School-based training positions (Comalco) ▪ Support Certificate II assessment validation systems and practices to ensure industry standards | <ul style="list-style-type: none"> ▪ Improved quality employees in work skills and readiness ▪ Scarce skills developed – Certificate and Degree strands ▪ Local, stable and house employees ▪ Improved community profile/perceptions ▪ Community obligations met |
| TSHS | <ul style="list-style-type: none"> ▪ Organise visits & speakers ▪ Begin career education & guidance ▪ Initiate enterprise education | <ul style="list-style-type: none"> ▪ Work experience ▪ Structured work placement ▪ Begin Senior VET subjects ▪ Expanded curriculum offerings in VET, English & Mathematics ▪ Enterprise education offered as a curriculum option and integrated into existing subjects ▪ Expand YAA and Ecoman opportunities and spread across years 8 - 12 | <ul style="list-style-type: none"> ▪ Off-site & industry based learning ▪ Off-site enterprise program developed and implemented to improve work attitudes, ethics and readiness ▪ Offer structured workplace learning program ▪ School-based traineeships for Degree strand students ▪ School-based apprenticeships for Certificate strand students ▪ Students gain Certificate II? ▪ Engineering Technology implemented ▪ Quality/relevance of academic studies improved for Certificate Strand students ▪ Hands-on experience & competencies for Degree Strand students ▪ Management of NRG site, mentoring and work placement programs ▪ Student NRG transport, access & behaviour ▪ Marketing & reporting ▪ Improved students transition into employment, further training and tertiary education ▪ Support & monitor industry placements to ensure quality experiences for students and employer | <ul style="list-style-type: none"> ▪ Increased enrolments & community profile ▪ Clients needs met ▪ Retention and transition targets met ▪ Pathways for students expanded ▪ Increased access to physical and human resources ▪ Improved Junior to Senior transition |
| TAFE | <ul style="list-style-type: none"> ▪ Site excursions to raise positive perceptions & knowledge of TAFE | <ul style="list-style-type: none"> ▪ Safety certification ▪ Resource sharing ▪ Extended learning programs ▪ End-of-year 10 enrolment program | <ul style="list-style-type: none"> ▪ Enrol students in pre-vocational courses (Cert. II) ▪ Safety training & certification ▪ Resource sharing (engineering & other) ▪ Dual/shared enrolments ▪ TAFE teachers employed in off-site learning ▪ Team teaching with TSHS staff ▪ RTO status? | <ul style="list-style-type: none"> ▪ Increased enrolments in pre-vocational, apprenticeship and Diploma level training & education ▪ TAFE teacher income & employment |

| | <i>Junior</i> | Senior - Work, VET & Academic Inputs & Outcomes | | |
|-------------------------|--|--|---|--|
| | | | <ul style="list-style-type: none"> ▪ Automatic entry into Diploma course for Certificate strand students ▪ Students apprenticeships and continue TAFE training post-school | |
| Other Schools | <ul style="list-style-type: none"> ▪ Engineering students gain access to NRG site & Cert. II ▪ Share facilities/staff with TSHS ▪ Increased retention, certification, employment and further training & education | | | <ul style="list-style-type: none"> ▪ Increased enrolments ▪ Retention and transition targets met |
| CQU | <ul style="list-style-type: none"> ▪ Engineering lecturer involvement in science/other classes ▪ Business lecturers involved in Enterprise education | <ul style="list-style-type: none"> ▪ Engineering lecturer involvement in science/other classes ▪ Business lecturers involved in Enterprise education | <ul style="list-style-type: none"> ▪ Joint industry/ lecturer mentoring program for Degree strand students ▪ Continued mentor and work placement program for University students ▪ Guaranteed (non-QTAC) entry into Engineering ▪ Course credit and accelerated progression ▪ Expanded school/CQU subjects/links | <ul style="list-style-type: none"> ▪ Increased number and quality of enrolments ▪ Higher student retention and completion ▪ Improved links with industry |
| DEST/ ECEF/ SAIN | <ul style="list-style-type: none"> ▪ Sponsor enterprise education curriculum development | <ul style="list-style-type: none"> ▪ Initiate & maintain Junior work experience program ▪ Develop & maintain school & industry links to support placements | <ul style="list-style-type: none"> ▪ Fund VET coordinator position ▪ Seed funding for program implementation and evaluation ▪ SAIN to collaborate with VET coordinator in identifying student work placement sites and school-based apprenticeship & traineeship opportunities ▪ Improved employer retention | <ul style="list-style-type: none"> ▪ Manufacturing career strategies model in place ▪ Increased training opportunities ▪ Improved cluster operations ▪ Group's targets met |
| EQ | <ul style="list-style-type: none"> ▪ Provide Continuing Education Head of Department and additional teacher for NRG site ▪ Fund maintenance & operating expenses of NRG site ▪ Support Enterprise education curriculum development & implementation | | | <ul style="list-style-type: none"> ▪ 2010 targets closer ▪ Model for school/industry and school/uni links developed ▪ Green Paper initiative |
| ANTA | <ul style="list-style-type: none"> ▪ Fund Skills Centre development of NRG site (existing building replacement with modular training rooms, kitchen, offices, toilets, etc) ▪ Support teacher training and industry currency program | | | <ul style="list-style-type: none"> ▪ Industry skills training needs met ▪ Group's targets met |
| GAGAL | | <ul style="list-style-type: none"> ▪ Interview training ▪ Career development | <ul style="list-style-type: none"> ▪ Engage and operate school-based traineeships and apprenticeships ▪ Support Certificate II assessment validation systems and practices to ensure industry standards | <ul style="list-style-type: none"> ▪ Increased apprenticeship placements |
| State Dev. | <ul style="list-style-type: none"> ▪ Assist/mentor in developing Engineering Excellence business plan ▪ Sponsor/support enterprise education programs ▪ Provide industry development, skills needs and demographics data ▪ Interagency liaison and support at DG level | | | <ul style="list-style-type: none"> ▪ Gladstone skills targets met ▪ Queensland government objectives met |

This initiative will deliver industry acceptance of school based programs because of the breadth and depth of partnerships developed. Please see attachment Engineering Project where the program is discussed more fully.