



Submission

Federal Government
Review of Australian Higher Education

Integrated Industrial Education Model

INDUSTRY + COMMUNITY + ENVIRONMENT

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The Kwinana Industrial Area



Submission –Review of Australian Higher Education

Kwinana Industries Council

Integrated Educational Model

Our Desire

Kwinana Industries Council (KIC) offers itself and its members and the educational liaison programs it has instigated to work with the Federal Government to take those programs to their next step: the creation of a viable national model for integrated skills-based education, ideally featuring an Industry Education Technology Centre.

Overview

The Kwinana Industrial Area (KIA) is Australia's most concentrated industrial zone, with a cross section of operations ranging from large heavy process industries (such as alumina, nickel and oil refineries and chemical and power generation plants) through to a diverse range of service industries such as fabrication, construction, trade labour provision and other infrastructure companies. Its relative isolation from the rest of Australia means that unless items are manufactured or services are provided locally, they have to be expensively imported. This economic necessity has led to the strategic co-location of the complete range of heavy to light commercial and associated support enterprises.

Kwinana Industries Council represents the interests of the 12 major and 29 smaller companies of the KIA and has watched with growing alarm as the gap between the employment requirements of local industry and the skills of the local population has widened. It has established a series of measures designed to overcome this problem and has conducted research into the issue.

As a result of this work, conducted over several years, KIC believes the potential exists to devise a working model for an Integrated Industrial Educational Model which will not only address the growing gap in its local region but can also be applied to other regions where the elements found within the proximity of the KIA are more widely dispersed.

KIC believes this proximity of elements makes the KIA the ideal place to trial measures designed to ensure higher educational institutions¹ have an integrated relationship with employers seeking a diverse range of skilled workers.

KIC has already created a body which connects industry with the educational sector – the Kwinana Industries Educational Partnership (KIEP). KIEP is a formal agreement and commitment between the Kwinana Industries Council (KIC) and 12 high schools (government and non-

¹ By this we mean TAFE colleges, Universities and Vocational Education and Training Centres.

government) located in the Rockingham, Kwinana, and Hamilton Hill regions of Western Australia.

The Kwinana-Rockingham region presents challenges to educators and industry alike. To put it simply: if a successful integrated educational model is devised in this region, then it is bound to succeed (with minor adjustments for local conditions) elsewhere.

Through its implementation of training schemes for the local indigenous community, KIC has seen how a sector of the community with long term skill and therefore great employment challenges can be given the confidence and understanding needed before taking a step into employment or further skills (and in some cases initial skills) training.²

The KIA's unique and intensely local co-location of a wide range of industry and educational facilities in close proximity to growing residential sectors makes it the ideal site for a pilot program which KIC believes has the potential to transform the way young Australians receive the skills necessary to take a successful place in the workforce.

KIC and its member companies in the KIA offer themselves to and will work co-operatively with the Federal Government to achieve an integrated educational model which it believes will:

- Take the work it has already begun to a new level of excellence; and
- Contribute to the innovation and productivity gains required for long term economic development and growth; and
- Ensure that there is a broad-based tertiary education system producing professionals for both national and local labour market needs; and
- Smooth the passage from learning to earning for secondary students – whether they be seeking careers in industry or commerce.

Local Issues, National Concern

The companies operating within the Kwinana Industrial Area (KIA) have been warning for several years there is a serious workforce shortage challenge looming as “baby boomers” retire. The twelve major companies in the KIA employ 5,000 people directly and 26,000 indirectly. Of this group, 65% are aged over 40, and 75% of this older group say they will retire within 10 to 15 years. Only six percent of the local heavy industry workforce is under the age of 24.

Training a replacement workforce is a key component in resolving this problem and will also do much to resolve a concomitant issue: a high local unemployment rate which holds itself in stark contrast to the booming economy and historically low unemployment rate throughout the rest of the state.

² 40 percent of participants found full time work and 50 percent decided to seek further skills training.

The problem is not limited to the immediate vicinity of the KIA. There is a significant maritime industry to the north (Henderson and the Australian Marine Complex) and the defence industry. All of these industry groups are under expansionary pressure, which raises the incidence of “worker rustling”. If poaching workers becomes the norm then local commerce, small to medium industry and the public sectors will suffer the most as the larger companies are able to pay higher wages and will not only pass on the costs to customers, but create a talent shortage in their wake. It is imperative to all industry and to the economy that we avoid this scenario taking hold.

Why Here?

The Kwinana/Rockingham area has unique and distinct characteristics that make the community well positioned to be a part of the solution:-

- A very good secondary school (public and private) system,
- Tertiary education facilities at the Challenger TAFE campuses and the Murdoch University campus,
- Intergenerational issues associated with lower socio-economic communities,
- Several commercial and not-for-profit organisations operating within the community assisting with social and employment issues,
- A relatively high indigenous population with a good social network,
- A significant presence of industry and commerce offering employment opportunities,
- Major industry needing trained and experienced employees, thus career progression opportunities exist to get people from unskilled and inexperienced to being able to take on jobs in heavy industry,
- Proven willingness by industry to take a long term view of future employee development,
- Kwinana Industries Education Partnership (KIEP): a key player in facilitating the coming together of the players,
- Kwinana industries individually have much more to offer than the traditional blue collar jobs, there are the para-professional and professional fields as well,
- A high ‘fly in/fly out population living locally which could be enticed to stay local,
- Industry as a good corporate citizen – with a track record of being involved in community development initiatives, particularly through KIC.

Rationale

Kwinana, as Western Australia’s most productive industrial area, illustrates the unique way in which industries are interconnected and their importance to the national economy. The location of an integrated education model becomes logical both from the criterion of need and from the criterion of applicability. Industry, through its membership of KIC, has proven its acceptance of working together to achieve beneficial

outcomes for the local community. The creation of an integrated educational model within the Kwinana Industrial Area will allow world class industries to demonstrate their sophistication and innovative attitude towards interface with the local community, to the people of Western Australia and beyond.

The foundational work has been done, through KIC's establishment of KIEP and its own Workforce and Education working committee.³ KIEP aims to cultivate relationships between local high schools and industry partners with the broader goal of meeting the evolving needs of both local industry and education. KIEP's primary focus, through mutual cooperation, is to broaden the learning experiences of students through a wide range of community related education and training activities.⁴

The Kwinana Statistical Local Area is deemed the most disadvantaged in Greater Perth.⁵ Kwinana has a high proportion (11.5%) of households with weekly incomes of \$300-\$399 compared to the Perth metropolitan area (8.2%). Kwinana also has a high proportion of households with weekly incomes of less than \$500 per a week (34.7%) compared with the Perth metropolitan area (27.5%). It has a higher proportion of 30-34 years olds in Kwinana compared to the Perth metropolitan area (8.8% compared to 7.4%). There are similar proportions of secondary school age students in Kwinana (10.7%) compared with the Perth metropolitan (10.6%). There is a lower proportion of the population undertaking tertiary education (1.5%) than in the Perth metropolitan area (4.8%).⁶

Yet it is home to Western Australia's largest industrial area with:

- A total factor income (sum of wages, salaries and gross margin before tax or depreciation) of \$3 billion. This accounts for 3.3% of Western Australia's total factor income, compared to the entire agricultural sector of the state, which accounts for 4.5%.
- An annual output worth \$16 billion.
- 4,804 people employed directly (64% live locally) and 26,000 people employed indirectly.⁷

The KIA contributes a high degree of social benefit to employees and the community, with a high level of employee services and at least half of industry's community activities funding budget being spent locally. Most companies are involved in either direct consultation with the community or do so via the KIC's Communities & Industries Forum. The KIA has grown

³ See kic.org.au/KIC_Committees.asp for further information.

⁴ For further information about KIEP, see www.kiep.com.au

⁵ Source: ABS media release March 26 2008.

<http://www.abs.gov.au/AUSSTATS/abs@.nsf/mediareleasesbyReleaseDate/87E66027D6856FD6CA257417001A550A?OpenDocument>

⁶ ABS Census Data comparison

⁷ 2005 data, collated for the 2007 *Kwinana Industrial Area Integrated Assessment*, which can be downloaded from: <http://kic.org.au/Reports.asp>

significantly since its inception in 1952 and represents a unique blend of connecting heavy, support and infrastructure industries.

KIC is widely regarded in the area as the interface between industry and the community. It has a history of stepping up to the plate and addressing issues such as community health, environmental protection and improvement and educational issues.

Its establishment of KIEP illustrates this and provides part of the infrastructure necessary for an integrated industry educational model.

KIC is deeply concerned about the employment timescale revealed by its research. The area's looming problem with anticipated retirements will begin to gather momentum within about eight years. Given that it takes three years for an apprentice or trainee to reach the experience level where they don't require full time supervision, the time is short.

A whole of region solution is required. The problem, whilst being tackled by KIC, is too big for us to handle by ourselves.

We can continue to take a lead role but our effectiveness will be limited due to the fact that it is now a broader issue than being limited to the KIA. There are numerous players involved. The problem is getting worse - quickly.

Implementation

KIC considers the Australian Technical College concept presented a less than optimal solution. The local TAFE and secondary school system is potentially capable of meeting the area's needs, but is currently under-resourced to tackle it. A coordinated, efficient approach which matches educational output with desired industry skills is needed.

KIC is of the view that an integrated educational model is the solution, but lacks the immediate resources to create this model. It would ideally focus students on careers in industry from an early age through an interactive, high tech introduction to industry operations and careers.

There is an opportunity to purpose-design a solution for this region which will then be useable as a blueprint across the nation.

In order to achieve this, KIC considers it essential there be Federal Government engagement with key stakeholders from the educational, community and industry sectors which is designed to create solutions to the persistent problems which arise when there is no smooth transition from training to working.

KIC is aware it is not offering a short term fix – and considers that seeking to do so would be disingenuous. The creation of an integrated industrial education model has the potential to resolve both the skills shortage and skills mis-alignment issues.

KIC recommends this approach as a federally funded educational initiative and envisages five phases are needed to achieve this goal:

Leadership Group

Form a project leadership group, containing representatives from TAFE, University and Secondary sectors, the Community (ie Local Government), Federal and State Government and Industry (KIC).

Task: Scope study to determine need and resources and budgetary requirements.

Study completed

Comprehensive study designed to identify current and potential educational synergies between the educational and industrial sectors.

Task: Gain input through community consultation and present a fully costed draft model for funding consideration by Federal Government.

Funding obtained

Assuming federal government approval, model funding is approved and implemented.

Task: Begin implementation process.

Consultation process

Approved model is re-presented to stakeholders and reviewed.

Task: Evaluate and proceed.

Model implemented and evaluated.

Task: Implement final model, which is subject to constant evaluation and appraisal with the aim to creating a workable model for the rest of the nation.



Chris Oughton,
Director