Collaborative delivery of work-integrated learning to Indigenous Australians in a remote community

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Australian universities have demonstrated heightened investment in the concept of work-integrated learning (WIL) as a strategy for enriching student experiences while providing pathways leading to better employment opportunities. These endeavours are mainly for enrolled post-secondary students, both local and international, and managed by academic staff of universities that are sited in urban centres enabling linkages to industry. The content of this paper describes a vocational educational programme for Indigenous Australians with elementary and lower secondary school experience. This programme embraces all the various forms of WIL, is undertaken in a remote locality in northern Australia, and although the key objectives of the programme are closely aligned with Australian university WIL-cored courses (i.e., enrichment, employment), a salient difference is university academic personnel and staff of other registered training companies travel to the remote industry centre to deliver the programme content to the participants. Data from the programme, now approaching its fourth year, are presented and discussed to reveal challenges and opportunities for industry, academia, and the community. A concluding section advances the initiative as a promising alternative to existing traditional models, which has potential to substantially improve Indigenous Australian employment levels and lessen the persistently reported socioeconomic disadvantages of Indigenous communities in remote Australia. (*Asia-Pacific Journal of Cooperative Education, 2011, 12(2), 125-145*)

INTRODUCTION

Recently, there has been a resurgence of interest in WIL in Australian higher education. Prior to the rebadging of Australian Colleges of Advanced Education in the 1970s and 1980s (Evans & Juchau, 2009), para-professionals (e.g., school teachers, nurses) had been educated with pedagogies strongly aligned with particular industry needs at these campuses. But the transformation of these institutions led to formal tertiary education in Australia being divided into two parts – higher education (universities), and a training sector in the Australian, Technical and Further Education (TAFE) system (Marginson, 1993). While the technical system continued to prepare graduates with industry trade skills, students of Australian universities became embedded in institutions with the purpose of knowledge creation rather than knowledge application (Bush & Bush, 1998; Khan & Brunner, 2010). Marginson (1994) argued that these changes exacerbated transitional problems when graduates of higher education moved in ambiguous connections to employment. Despite strong political imperatives for "... greater convergence between school, vocational education and training ..." (Free, 1993, p. 7), and earlier theoretical notions of *life long training* by Faure (1972), only more recently have the manifestations of a changing demographic profile of

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students and a greater emphasis on employability capacity from government and industry (Jeffries & Keating, 2010) led to a shift in the institutional purpose of Australian universities.

Collaborative learning arrangements, that embrace WIL, are emerging as a substantial priority for contemporary education providers. In spite of continual calls for changes to the purpose of university functions to better meet the vocational aspirations of students (Gregory, 2000; Pearson & Chatterjee, 2000; 2004), as well as the provision of educational assistance to mining companies (Hilson & Nayee, 2002) and recognition of the importance of skills, talents, and competencies to meet both corporate and human development needs (Jasmeen, 2006; Warner, 2008), firms persistently claim to be human resource constrained, which reduces technical capability and lowers market opportunity (Niosi & Tschang, 2009; Nummela, Saarenketo & Punnmalainen, 2004) in accelerating economies with increasing consumer expectations. Responding to these criticisms, a majority of Australian higher education institutions are implementing mechanisms to support a range of WIL models while maintaining and expanding industry partnerships that are expected to lead to mutual benefits (Betts, Lewis, Dressler & Svenson, 2009; Wallace, Manado, Ager & Curry, 2009).

Despite the plethora of service and manufacturing companies with which Australian universities can collaborate in WIL programmes, the mining industry has a number of attractive features for such partnerships. Mining in Australia is undertaken in remote regions, sometimes with supporting established closed towns owned by the miner (Thomas, Burnside, Howard & Boladeras, 2006), and these locations provide rich greenfield sites for rigorous and systematic evaluations of WIL partnerships. A variety of benefits for partnerships between educational providers, mining companies, and government agencies in rural and remote regions of Australia have been voiced by a number of social scientists (Henry, Arnott, Clark, Dembreski & Wells, 1998; Miller, 2005). Special mention has been made of how social partnerships in learning and interdisciplinary relationships can develop understanding and facilitate connections with Indigenous people and employment opportunities in these remote communities (Guenther, Youngs, Boyle, Schaber & Richardson, 2005). A strong incentive for Australian universities to engage the mining industry in WIL-cored programmes is the extensive reach of the mining sector. In addition to building significant infrastructure throughout the country, and despite boom and bust cycles, the mining industry contributes about 10 percent to the Australian gross domestic product, which is reflected in labour market participation, capital investment, export trade and in endeavours of innovation and knowledge intensive services (ICMM, 2008; Martinez-Fernandez, 2010; Robertson, 2008).

Mining operates in a competitive global market, which obliges the industry to be cost conscious, innovative and self-reliant. These priorities are pursued by mining corporations in Australia while being intimately connected with government regulations (e.g., export controls, health and safety prescriptions) (Banks, 2003; Colley, 2005; Jonas, 2003). More recently, there have been legal developments that compel attention to the persistent, poor socio-economic conditions of Indigenous communities within the region of the mining operations (Crawley & Sinclair, 2003; Lertzman & Vredenburg, 2005). Indeed, the Native Title Act (Native Title, 1993) commits mining companies, governments and traditional land owners to negotiate land agreements, which frequently contain employment and training provisions for Indigenous people (Barker, 2006; Brereton & Parmenter, 2008). The

assumption is that these arrangements, in regions where normally there are few jobs, will lead to greater development of Indigenous communities and heightened economic independence of Aboriginal people, thereby lessening social dislocation (Buultjens, Brereton, Memmott, Reser, Thomson & O'Rourke, 2010; Lockie, Franettovich, Petkova-Timmer, Rolfe & Ivanova, 2009). But often these remote regions lack suitable infrastructure, while the mining company may be the only large scale employer (Tiplady & Barclay, 2007), and consequently, as reported in this paper, the mining corporation has provided suitable teaching and learning facilities.

This paper is presented in seven parts. Following the Introduction, the second part presents the foundation for the collaborative WIL programme that was instigated by the mining company at Nhulunbuy in the Northern Territory (NT) of Australia, for Indigenous people so they could be employed in the Australian minerals industry. Initially, the initiative was for the Yolngu people, who are from the Indigenous communities in the region of the Gove Peninsula of the NT, but the scheme has been extended to participants who come from the northern half of Australia. The third part of the paper outlines some of the unique features of the WIL initiative, and gives a historical review of how the programme has been reframed to address the outcomes of its earlier versions. In the fourth part, details are given about the remote region where the programme is delivered, the participants in the programme, and how they are selected. The fifth part documents achievements of the participants in terms of their employment status and educational attainments. The sixth part of the paper, the Discussion, centres on results of the WIL programme in relation to the advancing literacy and consciousness of Indigenous aspirations in this remote region of the NT. The conclusion identifies some challenges for the sustainability of collaborative undertakings by Australian universities and industry from the observations of the case presented in this paper.

WIL IN A MINING CONTEXT

Integrating WIL into an Indigenous training and education programme at Nhulunbuy in the NT began in 2006. At that time, the mining corporation was Alcan (currently Rio Tinto Alcan), and a document (Daff, 2007) was prepared which had the primary purpose of gaining support from a wide body of stakeholders for an ambitious training and employment programme for Indigenous people. The programme was named the Alcan Learning Education and Regional Training (ALERT) programme. After the change of ownership of the mining operations in 2009, for legal reasons and to retain the acronym, Alcan was replaced with Arnhem, as Nhulunbuy is in east Arnhem Land of the NT. The document had to cater for a wide range of interests that were held by the traditional owners, Indigenous organisations, the three levels of Australian government, the education sector (higher and technical), business and employer groups, relevant industry organisations and peak bodies of the mining sector as well as the mining corporation.

Legal developments affecting the Australian mining industry have driven the need to address the persistent, poor socio-economic conditions in Aboriginal communities. A formal agreement of industry commitment to deliver improved wellbeing to Aboriginal and Torres Strait Islander people is a Memorandum of Understanding between the Minerals Council of Australia and the Federal Government (Australian Government & MCA, 2006; ICMM, 2008; Tiplady & Barclay, 2007). Greater participation of Australian Indigenous people in the

mainstream mining workforce, and a focus on developing their future (Brereton & Parmenter, 2008) is expected not only to secure goodwill to facilitate better land agreements (Barker, 2006), but to be a pathway to improved socio-economic status and higher levels of employment. An extensive literature reports Australian Indigenous people are the most disadvantaged and underprivileged group in Australia (Giddy, Lopez & Redman, 2009; Pholi, Black & Richards, 2009; Tiplady & Barclay, 2007). Their marginalisation is demonstrated in a variety of social indicators that show they are under-represented in the workforce (Arbeláez-Ruiz, 2010; Gray & Hunter, 2005), have lower levels of formal education (Bradley, Draca, Green & Leeves, 2007; Hughes, 2008), lower life expectancy (Altman, Biddle & Hunter, 2005; McDonald, Bailie, Brewster & Morris, 2008), experience higher rates of incarceration (Edney, 2001; Kreig, 2006), have greater rates of social dislocation (e.g., poverty, family violence, unhygienic housing), and are more likely to live on welfare payments than the non-Indigenous population (Altman, Gray & Levitus, 2005; Jonas, 2003; Maddison, 2008; Rowley, Daniel, Skinner, White & O'Dea, 2000). These conditions, which are especially compounded in remote regions, present a serious challenge for the Australian government while providing mining companies with the important role of building sustainable communities to alleviate levels of economic and social disadvantage.

Most mining operations are conducted in remote areas within Australia (Brereton & Parmenter, 2008; Martinez-Fernandez, 2010). Initially, these operations were conducted in a framework of *terra nullius* (vacant land belonging to no one), which enabled mining companies to operate with little regard to the Aboriginal people who lived on the land that was being mined (Harvey & Brereton, 2005; Lertzman & Vredenburg, 2005). Led by Eddie Mabo, an action was taken to challenge the Queensland government intention to annex the Murray Islands in the Torres Strait, and on 3 June 1992, the Australian High Court made irrelevant the declaration of *terra nullius* (Native Title, 2009). The outcome is commonly referred to as Mabo (Mabo, 2009). To deal with the implications of Mabo, the Keating Labor government introduced the Native Title Act the following year. The legislation set procedures for dealing with native title claims, and retrospectively, validated the interests of non-Indigenous people. In a historic action, Indigenous people accepted the retrospective dimension for a guaranteed right to negotiate with mining entrepreneurs, and the legislation has profoundly changed the direction and scope of relations between miners and Indigenous communities (Crawley & Sinclair, 2003). One notable feature of the new arrangements, between Australian governments, peak industry bodies, and traditional Aboriginal land owners is that employment and training provisions have become entrenched in Indigenous land use agreements (Australian Government & MCA, 2006; Barker, 2006; O'Faircheallaigh, 2002).

This paper presents in detail a vocational educational programme for Australian Indigenous people, which is sponsored by an international mining corporation. The WIL programme is conducted at a remote region of Australia. Embedded within the programme are all the various forms of WIL, internships, cooperative education, work placements, industry-based learning, community-based learning, clinical (departmental/trade discipline) rotations, sandwich year, and practical projects. Important features of the programme are the extent of partnerships. These partnerships have been forged with the Charles Darwin University (CDU), the registered training organisation that provides academic personnel to deliver course material and to undertake accreditation. Other registered training

organisations deliver specialist knowledge and vocational training, which also requires staff from these organisations to travel to the region. Government agencies also have partnership roles (i.e., Department of Education, Employment and Workplace Relations, Group Training Northern Territory), as do a wide range of Indigenous and non-Indigenous organisations. Some of these entities provide input to the programme while others provide employment opportunities to the programme participants and graduates. Greater delineation of the programme and the work arrangements follow.

Features of the Indigenous WIL Programme

Hallmarks of the ALERT WIL programme are the ubiquity and pervasiveness of partnerships. The programme sponsor, Rio Tinto Alcan, is in partnership with the CDU whose academic staff deliver most of the content at the remote town of Nhulunbuy. There are mandatory units and elective units in the Certificate 1 and Certificate 2 streams of the programme, but as the university academic personnel cannot provide all the specialist knowledge, other registered training organisations send staff to the teaching facilities to deliver vocational training in subject material. For instance, first aid, working at heights or fork lift driving courses, and their accreditation is undertaken by training organisations other than CDU. These organisations have partnership contracts with the mining company. Also, the Australian Quality Framework, which is responsible for the identification of all vocational education units and the content specification to ensure benchmarking consistency across Australia, is in partnership with the mining corporation. The Department of Education Employment and Workplace Relations, which is responsible for the Australian Core Skills Framework (2008) and funding of vocational educational programmes, has a partnership agreement with Rio Tinto Alcan. When ALERT trainees are in *Work Starts*, they are managed by Northern Territory Group Training, which is in partnership with the mining company as the host employer. In addition, there are a great number of local Indigenous groups, employment agencies and employer companies in the region that have partnerships with the miner. A most enduring partnership has been between Rio Tinto Alcan and Curtin University, which commenced before the first ALERT intake in 2007, and is still operating. These elements of community engagement, focused on the development and training of Indigenous people, embrace concepts of social enterprise and partnerships in learning.

The ALERT programme had seven stages. In the first stage, *Application,* the potential candidate completed an application form to provide relevant personal information (i.e., gender, age, clan, shoe size) and the names of two non-clan referees. In the second stage of about one hour, the applicant completed a *Discovery Session*, which was developed (Pearson & Daff, 2008) to assess the aptitude of the candidate without prejudicing them because of any deficits in English literacy or numeracy skills. The objective of the third stage of the ALERT programme was the *Selection* of 15 candidates (a number determined by executive management) from the total applicants. The selection followed some rudimentary testing of applicant job relevant skills and educational abilities. An *Induction* period of at least one week was the fourth stage, and in this stage, personal hygiene, the issuing of personnel protective equipment, advice of the bus collection details, signing of a family contract and a host of other matters concerning the candidate and the family were addressed. The work readiness vocational part of ALERT had three stages. These stages were *Work Prep* (stage five), *Work Ready* (stage six), and *Work Starts* (stage seven). *Work Prep* was for four days a

week for three months, *Work Ready* was for four days a week for four months, and *Work Starts* was for five days a week for up to 29 months. The purpose of *Work Prep* was to build the ALERT trainee's confidence to start training, while *Work Ready* was to practice and reinforce work/learning behaviours in specific job contexts. *Work Starts* was the commencement of employment as on-the-job training. Trainees were paid once they were selected. There was a fixed rate of pay in *Work Prep*, but the rate of pay in *Work Starts* depended on the job position.

The seven stages of the ALERT programme had two primary objectives. First, from the total number of applicants who applied, the most suitable 15 candidates were chosen. Second, to provide the Indigenous Yolngu ALERT trainees with practical work skills that would enable them to be employed in community mainstream jobs. Preferably, these jobs would be at the Nhulunbuy refinery or the mine site. Embedded within the second stage was the focus to instil in the trainees robust work habits including regular daily attendance, provide a learning environment in which candidates could develop their English literacy skills and numeracy competencies, present the programme to generate enthusiasm and self esteem levels in the trainees, and teach them practical and valued work skills. The vision of executive management was there would be two ALERT programmes each year.

Prior to the commencement of the third ALERT intake of trainees, it was evident some changes were necessary. The first intake of 15 participants was in May 2007, and the second intake was at the beginning of 2008. It was found from the first two programmes, one third of the participants had withdrawn, over one third had returned to their communities, often to work in Community Development Employment Project (CDEP) schemes, and about one third had become employed in Rio Tinto Alcan positions at the Nhulunbuy refinery or mine site (Daff & Pearson, 2009; 2010; Pearson & Daff, 2010). The number of graduates who chose to work in mainstream jobs at the refinery or mine site was welcomed, as was an observation that other Indigenous participants withdrew from the WIL programme to work on their traditional lands. These outcomes were more favourable than about one third of the trainees choosing to return to welfare, but there was still a relatively large leakage, given the considerable collaborative investment of industry and the education sectors. Consequently, a review was warranted.

Reframing the WIL Programme

There were three prominent changes to the inaugural ALERT programme. First, the programme was restructured into the two streams of *Work Readiness* and *Work Starts*. Nominally, applicants who successfully completed the selection process, and had a formal education of Year 10, were employed in *Work Starts*, while those who completed the selection process, but whose formal education was less than Year 10 and greater than early level primary school were invited to enter the *Work Readiness* programme. The *Work Readiness* component was for 16 weeks, for five days a week when the trainees received education and training for paid casual work. On Friday afternoon, trainees were assisted with personal business matters (e.g., banking). Second, a more stringent selection process was introduced. This screening process employed national literacy and numeracy tests, the completion of a *Discovery Session*, a three day residential workshop, input from two non-clan referees, and a thorough medical examination. Third, the selection process stage was extended to enable the assessors more time to evaluate the applicants. While the 15 Yolngu applicants were being

assembled for the next *Work Readiness* element, they were given closely supervised paid casual work, usually at the training centre. This action was undertaken for two main reasons. First, applicants would have been required to incur considerable expenditure (e.g., air and road travel) to return to their community until the commencement of the next ALERT/WIL intake. Second, Australian mine sites and refineries are highly regulated (Banks, 2003; Colley, 2005) and until the Indigenous applicants acquire the appropriate certification and knowledge (the function of the WIL programme) they are denied entry to these work sites. As the intention was to have four intakes a year, and with some applicants moving directly into work, it was expected a greater number of Yolngu people could be employed in mainstream jobs than through the initial versions of the ALERT programme.

The refined WIL programme was conducted in 2009, but candidate leakage persisted. From a total of 126 Indigenous applicants, 42 were chosen for three programmes. By the close of 2009, there had been 22 departures (i.e., withdrew, were suspended or were removed for custodial sentences). Of the other 20 trainees/graduates, two left to work in their communities, while the remaining 18 elected to work in Rio Tinto Alcan mainstream jobs. However, nine of them subsequently withdrew, leaving nine of the 42 (i.e., 21.4%) in employment with the mining corporation.

Despite the high attrition rate of participants from the WIL programme in 2009, there were some unexpected highlights. These events had a substantial influence on the engagement selection practices and presented some challenges for the partnerships between the mining company and the vocational education providers. During 2009, ALERT won the NT Ministry of Education award for the most innovative vocational educational programme in the Territory. The unsolicited media exposure from this achievement, coupled with the availability of mobile phones in the Indigenous communities and access to popular formats like Twitter, led to a flood of applicants from across the northern half of Australia. To address this spike in potential ALERT participants, the screening process was made more restrictive. For the first intake of 2010, Indigenous applicants were required to provide documentation to demonstrate educational vocational competencies (i.e., formal education certificate, employer references, vehicle/operator licences). In addition, greater identification of the capabilities of the educational and vocational delivery capacity of the registered training organisations was undertaken to ensure progression of trainees into Certificate 2 courses could be accommodated.

Two intakes were undertaken in 2010. There were 26 applicants who travelled to Nhulunbuy in February and attended a one week residential assessment workshop. At the close of the week, 12 people were offered a contract for a 14 week *Work Readiness* module, while four others were invited to commence in *Work Starts*. In August 2010, a total of 20 Indigenous people travelled to Nhulunbuy for a one week residential assessment workshop. From this group, 12 Indigenous people were offered the *Work Readiness* option, while three Indigenous applicants were invited to complete personal contracts for *Work Starts*.

The ALERT trainees have an opportunity to complete university certificates and obtain full time employment in the minerals industry. With application, a trainee in *Work Readiness* can complete a Certificate 1 in Resources and Infrastructure Operations, a qualification that is awarded by the CDU. Participants of *Work Starts* can undertake a Group Training NT (GTNT) Certificate 2 in a variety of streams (e.g., Engineering, Administration,

Metaliferous Mining Operations). Full time employment is available to graduates at the mine site or the refinery. The ALERT site, participants and the programme delivery is described in the following section; followed by the Results section which outlines the outcomes of the ALERT programme since inception.

METHODOLOGY

Site

The WIL programme is a collaborative partnership between Rio Tinto Alcan and educational vocational registered training organisations. This programme is delivered in dedicated education teaching facilities at Nhulunbuy, which were specifically built by the mining corporation on the southern outskirts of the town. The NT TAFE Centre is employed to give trainees instruction in trade skills of welding, metal working, painting and carpentry. The refinery and the mine site provide a range of different industry type work where the Indigenous trainees are closely supervised by dedicated supervisors in personnel development programmes of instruction, and learning.

The coastal town of Nhulunbuy is on the Gove Peninsula, which is the north-east tip of the NT of Australia. The town of Nhulunbuy has a population of some 4,000 people. About one third of the population either work at the refinery, which is some 10 km to the west, or at the mine site some 13 km to the south east of the town. A feature of Nhulunbuy is the refinery, one of the largest in the southern hemisphere, with a capacity of 3.8 million tonnes of alumina per annum. Nhulunbuy is relatively isolated from other large Australian centres, but has all the infrastructure of other contemporary Australian towns (e.g., hospital, shopping centre, court, police, and emergency services).

Participants

The WIL programme is reserved for Indigenous people. Initially, the programme was preserved for the Indigenous Yolngu people of the Gove Peninsula within a 50 km radius of Nhulunbuy, as they had to be transported daily by the Rio Tinto Alcan bus. Indeed, the participants of the first two programmes, and a majority of those in the third programme, were from Yirrkala, Galuru, Galupa and Gunyangara. Yirrkala, which is 25 km south east of Nhulunbuy, has a population of about 800 people, mostly Indigenous; Galuru was demolished in 2008; Galupa is a handful of houses with about 25 people, adjacent to the refinery; while Gunyangara, about 10 km to the south of the refinery, has about 20 houses and about 150 people. These populations vary, as the Indigenous people regularly move to and from their homeland centres within the NT.

As Nhulunbuy, the mine site and the refinery are on Yolngu ancestral lands, these Indigenous people have been persistently represented in the WIL programme. Nevertheless, their inclusion has a rich legacy attached. Extending in an arc of some 300 km from Nhulunbuy are the lands of the Yolngu clan nation whose forebears occupied the region for over 50,000 years. More recent records reveal the Yolngu were the first Australian international entrepreneurs as they traded with the Macassanese from the 1700s to about 1910, when the trade was terminated by the South Australian government (Berndt & Berndt, 1999; Worsely, 1955). According to (Trudgen, 2009), the Yolngu acknowledged in their Madayin (the Yolngu law) visits by Portuguese and Dutch sailors, like William Jansz (in

1605), who explored Australia in the *Duyfken*; and in 1623 Joosten Van Colster named the region after his ship the *Arnhem.* More turbulent were the pastoral wars from the 1860s to 1908, which displayed a lack of Yolngu sovereignty for the land, and the decimation of a number of Yolngu clans. Beginning in 1916, was the establishment of a number of coastal missions (Yirrkala closed in 1975) and government settlements. This effectively led to Yolngu people increasingly congregating at these centres and abandoning their hinterlands (Altman, 2003), to provide cheap labour for the non-Indigenous businesses, as the Yolngu were restrained from movement about the region within a government policy of assimilation (Anderson, 2007; Smith, 2006). However, mounting pressures from national and international lobbyists led to the 1967 constitutional referendum to provide a new social and political environment for the Yolngu people (Kaplan-Myrth, 2005), followed by land rights legislation in 1976, and the Holt coalition government introduction of the Aboriginal policy of self determination. The cumulative effect of these events was a mass exodus of the Yolngu people back to their ancestral lands during the 1970s where they were able to maintain "… strong spiritual and religious connections" (Altman, 2003, p. 68) in communities of outstations (Altman, 2002). Collectively, these historical events, as well as cultural and economic circumstances enjoyed by the Yolngu people, residing on their lands enables them to engage in a fundamentally different customary economy to that of the dominant Australian society. Against this background, few of the early ALERT participants displayed an interest in being employed in full time industrial type jobs.

A lack of suitable local regional Indigenous applicants encouraged the searching of more distant centres. For example, the outstation of Dhalinybuy, which has 13 houses, a one-room school, a light aircraft landing strip, and a population of about 100 people, was visited. This recruitment drive by a team of Rio Tinto Alcan personnel was undertaken after an invitation by the Indigenous community leaders, and following formal visitation authorisation by the Dhimurru Land Management Aboriginal Corporation. Obtaining a permit to enter Yolngu land, which is native title classified, or to travel on the Central Arnhem Highway or any regional roads or tracks, is mandatory by Australian law. After testing the four presenting applicants, with national instruments, it was found they had English literacy and numeracy competencies that were less than grade two primary school. As other more distant outstations were likely to have fewer applicants and visits to them would require considerable expenditure of resources in preparation and visitation activity, this strategy was abandoned. Since the beginning of 2009, applicants have been sourced from Western Australia, New South Wales, Queensland and the NT, now that the mining company can provide single person, fully messed accommodation.

Selection Procedure

Since the initial WIL programme, applicant screening has become more intense. Hallmarks of the inaugural intake were a robust enthusiasm of executive management to get started, the absence of public knowledge of how recruitment of Indigenous people was undertaken by the Australian mining sector, an eclectic adoption of contemporary HRM selection practices, and recognition of the formal education limitations of the narrow pool (21) of applicants. Acknowledgement of the absence of prior work history and low levels of English literacy led to investment in a *Discovery Session* (Pearson & Daff, 2008) that was designed and employed to assess applicants' aptitudes without prejudicing them for literacy and numeracy deficits.

However, some literacy and numeracy screening was undertaken with flash cards. Nomination by non-clan referees was required and they were interviewed. All successful candidates were medically examined.

A great deal of knowledge, acquired from successive WIL programmes, has been embedded into refined screening mechanisms. For instance, endeavours to raise English literacy competencies with accelerated literacy procedures have generally been unsuccessful, and now national reading tests are employed in the selection procedure. Candidates with less than year 10 English literacy scores are seldom chosen, while there is some continued emphasis on selecting local Yolngu people from the clan of the traditional land owners. In addition, the one-to-one assessing was expanded in 2009 to include a one week residential workshop to observe problematic behaviours (i.e., substance abuse, dysfunctional team issues). The latest intake in August 2010 required selected *Work Readiness* or *Work Starts* trainees to complete all individual testing, to have provided all required work relevant documentation, and to undertake a compulsory medical examination before being invited to attend the week long residential segment at Nhulunbuy.

FINDINGS

From May 2007 to August 2010, a total of 284 Indigenous people have registered a formal interest in entering the collaborative WIL programme. In round figures, 120 were accepted after interviewing, but few progressed to obtain mainstream full time jobs in either the community, the refinery or the mine site. In summary, these results are shown as Table 1.

TABLE 1
Pathway of applicants to the ALERT programme from May 2007 to August 2010

All Applicants (N= 284)											
Non-selected (N= 167)						Selected (N= 117)					
						Eventual Placement					
Reason	%	N	Turnover	%	N	Community	%	N	Rio Tinto Alcan	%	N
W/draw	34.2	97	W/draw	11.9	35	CDEP	5.2	13	Mainline jobs	10.4	28
Literacy	10.8	31	dismissal	6.0	18	Gumatj Co.	1.1	3	Training	5.6	16
medical	13.7	39	custodial	1.1	4						

Table 1 presents categories of non-accepted and accepted applicants of the WIL programme. The extreme left hand block shows over one third did not proceed after application, and almost another quarter were found to be unsuitable because of literacy constraints or lack of medical fitness. The deficit in English literacy of Indigenous adults, who claim to have had extensive schooling, but cannot read a word of English, or do not know the letters of the alphabet, the days of the week, or the months of the year is to be appreciated against the curriculum and pedagogies of outstation schools, which place an emphasis on Indigenous cultural dimensions (Elliot, 2009; Hughes, 2008; Reynolds, 2005), and seldom introduce the teaching of English or numerary before grade five. Turnover accounted for a further 19 per cent of leakages when candidates withdrew, were suspended for continual absences, regularly presented unfit for work, or were removed to serve custodial sentences. The first job placement for trainees of the WIL programme, that was undertaken in collaboration and

partnerships between Rio Tinto Alcan and the Educational Vocational registered training organisations, was less than 20 per cent, and within a year some moved back to their remote communities.

Table 2 summarises educational and vocational attainments by the number of Indigenous WIL participants. The number of WIL trainees who have graduated with a Certificate 1 or a Certificate 2 are few, but outstanding. These recipients are the first Indigenous Yolngu to be awarded this achievement by the CDU, and the Indigenous Yolngu male, who has recently commenced an engineering apprenticeship, is also a prominent first event. Also shown in Table 2 is the first vocational destiny of WIL participants. A total of 18 members chose to work in the community, and several returned to their communities to work on specific tasks, usually a CDEP for the East Arnhem Shire. Indeed, some returned to the Gumatj Corporation cattle station at Garrathiya, some 100 km south south-west of Nhulunbuy. There they have been productively engaged in timber milling and dwelling construction (Pearson & Helms, 2010a). A total of 28 ALERT participants are employed in an array of full time jobs at the refinery or at the mine site, that includes working as a laboratory technician or operating heavy earthmoving equipment (e.g., 100 tonne haul truck). These appointments are gargantuan as they are the first Indigenous people to work in mainstream jobs at these locations since the Nhulunbuy mining operations were commissioned in 1972.

TABLE 2
ALERT programme accomplishments

Accomplishments			
Educational		**Vocational**	
Certificate 1[a]		**Community**	18
2007	7		
2008	9		
2009	12		
Certificate 2[b]		**Rio Tinto Alcan**	
2010	5	Refinery	24
Inaugural Yolngu	1	Mine site	4
Apprentice 2009		Training	16

Notes:
  a. Certificate 1 in Responses and Infrastructure Operations.
  b. Certificate 2 is a GTNT in a variety of streams such as Administration, Engineering or Metalliferous Mining Operations.

A number of Indigenous people, who were engaged with the WIL programme, have chosen not to work in the Australian mining industry. Some of these Indigenous people left before graduation, while others graduated and then transferred to mainline jobs in the local community (e.g., administration in Miwatj Health, hospitality), or in other more distant large centres. In the Nhulunbuy region, a number of Yolngu males of the Gumatj clan left before graduation to work in a social community entrepreneurial venture with a variety of timber streams. These activities, which include the selecting and felling of trees (*eucalyptus tetradonta*) in the savannah forest, milling of the logs to produce construction grade timber for the building of architectural designed houses by Yolngu men, as well as the manufacturing of furniture at Gunyangara (by Indigenous people) (Pearson & Helms, 2010b) fit nicely with a central pillar of the ALERT programme. Contained in the document that was prepared to gain widespread support for the ALERT programme, it is stated the central objective of the scheme is to prepare Indigenous people for sustainable long term permit mainstream jobs not only in the mining industry, but also to "… build the capacity of the community" (Daff, 2007, p. 3).

Discussions with the Indigenous workers at these remote work sites provided a better understanding of why they withdrew from the collaborative WIL programme. Some of the respondents said that as they were embedded in an extant oral culture they were reluctant to learn to write English and regularly attend the classroom. When asked why they attended irregularly or seldom displayed mature classroom behaviours, the respondents said the teaching rooms brought back distasteful memories of their early school lives. These comments replicate the words of Reynolds (2002), who wrote that not understanding Standard English lowers the motivation and contributes to the absenteeism of Indigenous students. Elliot (2009), Kral (2009), and Altman, Biddle and Hunter (2005) write that hallmarks of remote schools in northern Australia are a lack of suitable staff, inadequate equipment and inappropriate pedagogies. A persistence in retaining these conditions including "separate curriculums and teaching arrangements" (Hughes, 2008, p. 9), which contributes to a huge gap in academic achievement between Indigenous and non-Indigenous students (Bradley et al., 2007; Elliot, 2009), may be underpinned by a perception that the Australian education system is an instrument of assimilation for weaning students away from their culture (Reynolds, 2005). Also, at the refinery or mine site they (the respondents) were required to wear constrictive personal protective equipment (i.e., gloves, goggles, full cover clothing, steel-capped boots) whereas in their traditional lifestyle as hunter gatherers they are accustomed to wearing minimal clothing. Moreover, they wanted to work on their ancestral land where their forebears had been the custodians for over 50, 000 years.

DISCUSSION

A hallmark of the WIL programme is the extent of collaboration between the partners to install modifications and refinements to the delivery agenda. Selection of suitable applicants is a challenging task made problematic by a lack of public documentation specifying how Indigenous people are prepared for contemporary work and the type of industrial jobs they undertake in the Australian minerals sector. For instance, often the number of Indigenous people employed in the Australian mining industry is given as a global number (Brereton & Parmenter, 2008) or Indigenous job types can be expressed as percentages of skilled or non-skilled employees in the industry (Tiplady & Barclay, 2007). Information imprecision ensures

difficulty in accurately forecasting the content delivery profile which compels building flexibility into the visitation timetable of the course content presenters. In the first two years, almost every applicant presented without evidence of exposure to contemporary work experience, but all reported backgrounds rooted in hunting and fishing with regular attendance at cultural events, which are preferences of Indigenous people documented in the relevant literature (Altman & Gray, 2005; Altman, Gray & Levitus, 2005). Consequently, arrangements for remedial adult learning in English literacy and numeracy, and vocational training for the Indigenous participants of the WIL programme, specifically, for mechanical and electrical equipment as well as for the operation of moveable machinery, were determined with the partners in robust and energetic negotiations.

The fundamental concept for conducting a collaborative WIL programme at Nhulunbuy is substantially different from that of Australian universities which are realigning their relevance with industry. Investment by Rio Tinto Alcan in the educational vocational initiative for Indigenous people (at Nhulunbuy) has underpinning in Australian law, in addition to claims by miners, there are economic community benefits (Harvey & Brereton, 2005; Tiplady & Barclay, 2007), or the pursuit of ideals of corporate social responsibility (Crawley & Sinclair, 2003; Lockie et al., 2009). Introduction of the Australian Native Title Act enabled Australian Indigenous groups to prevail upon the law makers to incorporate the right of Aboriginal Traditional Land Owners to negotiate with mining corporations for reimbursements, including employment opportunity (Barker, 2006; DEEWR, 2005; O'Fairchaellaigh, 2002). Consequently, a feature of the land agreements has been a stipulation for educational and vocational training to facilitate competency preparation of Indigenous people for working in the highly regulated Australian mining sector (Banks, 2003; Brereton & Parmenter, 2008; Colley, 2005). In contrast, Australian universities have sought alignment and partnerships with industry to host students in different types of WIL in pathways undergoing evaluation for objectives yet to have consensual agreement (Hunt, 2009, Universities Australia, 2008). Historically, Australian universities have claimed responsibility for providing appropriate learning opportunities in distinctive professional disciplines. However, now these long term ideals of higher education are becoming blended under the umbrella of WIL programmes, not only to prepare students for life, but with a greater emphasis on developing employability skills (Kaider, Henschke, Richardson & Kelly, 2009). These changes are being driven by a number of social pressures, both national and global, which include free market forces, funding restrictions, stakeholder expectations and economic sustainability which triggers proactive responses (Knight, 1999), demonstrated by an uncoordinated strategy as Australian universities separately pursue contextual opportunity.

The collaborative educational vocational programme delivered at Nhulunbuy has features comparable with Australian university WIL content courses. Most noticeable is that the university personnel deliver the course material to the Indigenous participants at the site, while Australian universities have resident academic personnel and the students visit industry. Also as the Indigenous participants are initially invited to Nhulunbuy to engage with the WIL programme and are in paid positions thus, insurance is irrelevant, whereas, insurance is a matter of concern for students of Australian universities, who are visiting industrial sites as a component of a WIL programme. Moreover, information dispersion can become a problem for Australian employers hosting university students, who can be in a

position to view or hear sensitive information, which at the close of the placement is still in the keeping of the quasi-employee. In contrast, the Indigenous participants of the collaborative WIL programme, sponsored by Rio Tinto Alcan, are only exposed to such work relevant information as is needed for their educational knowledge or vocational activity. While students enrolled in Australian university WIL courses may withdraw for a variety of personal and family reasons, Indigenous participants of the Nhulunbuy collaborative WIL programme require considerable commitment by employers to retain their presence (Giddy et al., 2009; Trudgen, 2000). Indigenous Australians, who are from extant oral cultures, are obliged to interrupt their course progress to attend cultural days and ceremonies that define them so they can learn the laws, and rules by which they live, and the traditions that give them ownership of their land and seas (Yunupingu, 2009). These laws, learned through the cultural mechanisms of the ceremonies, that influence the order of the lives of the Indigenous people in a holistic spiritual way (the *Dreamtime*) cannot be overlooked by Australian educators responsible for the creation and delivery of Australian Aboriginal WIL programmes. Australian Aboriginals who attend educational vocational courses described in this paper are engaging in fundamentally different circumstances than their customary hunter-gatherer lifestyle and these extremes present serious challenges for Western educational systems and industrial employment.

CONCLUSION

A growing number of Australian universities are investigating acquiring a niche in the phenomenon of WIL. This is not an entirely new venture, as Australian universities have in the past employed pedagogies and traditional programmes for students to engage with the workplace to gain a superficial level of work experience. Escalating holistic pressure for learning to enhance student employability has intensified collaborative endeavours in advance of reflective and conceptual investment to identify the effectiveness of the diverse levels of complexity of the different strategies exploited by Australian universities. Some of these customised WIL programmes will be inhibited by the inertia of physical architecture, rich tradition, stakeholder numbers, and aspirations and location of the partners, and disturbingly, failures have potential to retard a renaissance in pedagogy and operational procedures.

Outcomes of the WIL collaborative programme (for Indigenous people in a remote region of Australia) contribute to the ongoing WIL debate. Clearly, there were boundary conditions that restricted the anticipated expected outcomes. But because mining companies in Australia seldom provide data on Indigenous training and employment, arguing it is confidential information within the land agreement, required the WIL initiative at Nhulunbuy to be amended as new, unforeseen circumstances arose, which resulted in a more robust programme, better suited to the context. Although the concept of Australian university presenters going to the student is not unique (as Australian university academic staff have for many years taught at overseas institutions), the difference with the Nhulunbuy WIL programme is all the students would be assured of a meaningful job in the mining industry on graduation. This condition cannot be confidently guaranteed for many students graduating from WIL programmes of Australian universities. A salient, different topic is that the funding arrangements for collaborative education vocation programmes warrant

evaluation by those people, who have a pecuniary stake in the various forms of WIL being undertaken by Australian universities and industry.

Australian universities serving remote regions are unlikely to have the infrastructure for effective implementation of WIL programmes. Currently, Australian higher education institutions are funded by the Australian government, but because of their historical roots are unlikely to have residual talent for delivering all knowledge of industry and equipment usage. Although CDU was adequately funded, the institution was unable to deliver all the mandatory and elective units specified by the client, Rio Tinto Alcan, for the Certificate I and Certificate 2 courses. Consequently, other non-funded registered training organisations were engaged to deliver these units, and funding was provided by the mining corporation. While the problem might be resolved through trisector frameworks, alternative pathways are worthy of evaluation. Indeed, separate funding arrangements are essential to ensure sustainable community collaboration with WIL initiatives. The content of this paper at least encourages the re-evaluation of policies to give effective linking of business competitiveness and the functioning of Australian universities in collaborative WIL programmes with industry.

The unique evidence presented in this paper demonstrates the need for continuing investigation of Australian WIL programmes. A feature of the paper is a warts and all disclosure, which is seldom reported by mining companies in Australia. Rio Tinto Alcan is to be congratulated on breaking the ice. Metaphorically, the account described has the qualities of a flawed diamond. The qualities are the ethical and moral elements that emerge in the reported processes of building quality capacity in the regional communities of the Yolngu people. Indeed, linking the social protection of the people and providing them with inaugural avenues for sustainable futures while giving importance to stakeholder interests blends well with the notion of corporate social responsibility. In short, the strengths of the WIL programme are the integration of business competitiveness with a reinvigoration of regional partnerships. This quality is occurring with substantial structural changes being made as a result of the introduction of significant Australian legislative reforms and government policy realignments. The flaws, which are evidenced as the marginalisation of the Indigenous Australians, reflect that progressive change has been slow. Indeed, only in recent times, after more than 200 years of majority rule, are the shifts, such as the importance of Indigenous education, being observable. What is also clear is WIL systems, that give access to educational services, opportunity for participation in them, and equitable useful outcomes, are likely to articulate the motives and attitudes of Australian Indigenous participants. Programmes, like the one described in this paper, will need continuous reframing to adjust to new, emerging challenges. Insights into how to improve Indigenous educational opportunities and the subsequent progression towards a sustainable future for the community are at the heart of systematic assessments of Indigenous WIL programmes being undertaken in remote regions. These insights will be the footpaths to flaw diminution.

Policy for delivering of WIL and variant programmes, that is facilitated through Australian education and industry collaborative frameworks, warrants revisitation. The content of the paper reveals the combined capacity of the responsible NT university (the registered training organisation), and the resident College of TAFE was inadequate for providing the core content of the WIL initiative at the remote centre of Nhulunbuy. Indeed, there was a gap between the client needs and the product that could be delivered. Yet these

educational and vocational institutions are funded by the Australian governments to provide the client-nominated services (in this case for an international mining corporation) in accordance with core content delineated by a Federal department and administered as a requirement of the relevant legislation. This issue is uncommon in Australian cities where there may be several universities marketing a variety of WIL courses in collaboration with a range of industries, which enables students to pursue career aspirations by eclectic selection of university. As these large urban regions will have a number of Colleges of TAFE, each with a particular speciality stream, students can enrol in the one that delivers the preferred course material. But in rural and regional Australia, the establishment of a university or a College of TAFE is unlikely, although the latter may exist in towns with a population similar to that of Nhulunbuy. While correspondence can be an option (with internet access), often unit availability is severely constrained. Consequently, addressing the gap is likely to be undertaken by other non-government funded registered training organisations. Although enthusiasm for WIL is admirably founded, the operational programmes undertaken in collaborative frameworks by Australian universities are overly optimistic and lack the principle of universalism, qualities which call for an urgent reform for the administration of these initiatives in remote Australian communities.

REFERENCES

Altman, J.C. (2002). Indigenous hunter-gatherers: Beyond the limits of universalism in Australian social policy. In T. Eardley & B. B. Bradbury (Eds), *Competing visions: Refereed Proceedings of the National Social Policy Conference 2001* (pp. 35-44). Sydney, Australia: Social Policy Research Centre, University of New South Wales.

Altman, J. C. (2003). People on country, healthy landscapes and sustainable Indigenous futures: The Arnhem Land case. *The Drawing Board: An Australian Review of Public Affairs, 4*(2), 65-82.

Altman, J. C., Biddle, N., & Hunter, B.H. (2005). A historical perspective on Indigenous socioeconomic outcomes in Australia 1971-2001. *Australian Economic History Review, 45(3), 273-295.*

Altman, J.C., & Gray, M.C. (2005). The economic and social impacts of the CDEP scheme in remote Australia. *Australian Journal of Social Issues, 40*(3), 399-410.

Altman, J.C., Gray, M.H., & Levitus, R. (2005). *Policy issues for the community development employment projects scheme in rural and remote Australia*. Canberra, Australia: Centre for Aboriginal Economic Policy and Research, The Australian National University.

Anderson, I. (2007). The end of Aboriginal self-determination? *Futures, 39*(2/3), 137-154.

Arbeláez-Ruiz, D.C. (2010). *Mining supervisors' experience in working with Indigenous employees: Perceptions on leadership, training, development and promotion*. Melbourne, Australia: School of Philosophy, Anthropology and Social Enquiry, The University of Melbourne.

Australia Core Skills Framework. (2008). *5 core skills: Learning, reading, writing, oral communication, numeracy*. Canberra, Australia: Department of Education, Employment and Workplace Relations.

Australian Government, & Minerals Council of Australia (MCA). (2006). Retrieved June 10, 2006 from http://www.minerals.org.au/_data/assets/pdf_file/11515/Regional-Partnerships_March2006.pdf

Banks, G. (2003, June). *Minimum effective regulation and the mining industry*. Address to the Minerals Council of Australia's Annual Industry Seminar. Old Parliament House, Canberra, Australia.

Barker, T. (2006). *Employment outcomes for Aboriginal people: An exploration of experiences and challenges in the Australian minerals industry*. Brisbane, Australia: Centre for Social Responsibility in Mining, Sustainable Minerals Institute, University of Queensland.

Berndt, R.M., & Berndt, C.H. (1999). *The world of the first Australians: Aboriginal traditional life past and present*. Canberra, Australia: Aboriginal Studies Press.

Betts, K., Lewis, M., Dressler, A., & Svensson, L. (2009). Optimising learning simulation to support a quinary career development model. *Asia-Pacific Journal of Cooperative Education, 10*(2), 99-119.

Brereton, D., & Parmenter, J. (2008). Indigenous employment in the Australian mining industry. *Journal of Energy and Natural Resources Law, 26*(1), 66-79.

Bradley, S., Draca, M., Green, C., & Leeves, G. (2007). The magnitude of educational disadvantage of Indigenous minority groups in Australia. *Journal of Population Economies, 20*(7), 547-569.

Bush, V.D., & Bush, A.J. (1998). Preparing students for the international marketplace: Practitioner's perception of specific skills and characteristics needed for success. *Journal of Teaching and International Business, 10*(2), 1-16.

Buultjens, J., Brereton, D., Memmott, P., Reser, J., Thomson, L., & O'Rourke, T. (2010). The mining sector and Indigenous tourism development in Weipa, Queensland. *Tourism Management, 31*(5), 597-606.

CMM (International Council on Mining and Metals). (2008). *Position statement: Mining and Indigenous peoples' issues*. London, UK: ICMM.

Colley, P. (2005, November). A career and a life in mining: What needs to be done. Paper presented at to the *Sustainable Development 2005 Conference of the Minerals Council of Australia*, Alice Springs, Australia.

Crawley, A., & Sinclair, A. (2003). Indigenous human resource practices in Australian mining companies: Towards an ethical model. *Journal of Business Ethics, 45*(4), 361-373.

Daff, S. (2007). *A response to the Australian and Northern Territory's government bilateral steering group boosting Indigenous employment and economic development*. Nhulunbuy, Northern Territory, Australia: Alcan Gove.

Daff, S., & Pearson, C.A.L. (2009). Indigenous employment: The Rio Tinto Alcan initiative in northern Australia. *Journal of Contemporary Issues in Business and Government, 15*(1), 1-20.

Daff, S., & Pearson, C.A.L. (2010). Realising the capacity of Yolngu Aboriginals: An educational vocational scheme underpinned with family support. *Journal of Australian Indigenous Issues, 13*(1), 3-18.

DEEWR (Department of Education, Employment and Workplace Relations.) (2005). *Corporate leaders for Indigenous employment project: Guidebook to success.* Retrieved August 6, 2010 from http://www.worplace.gov.au/

Edney, R. (2001). Self determination and Aboriginal imprisonment. Paper presented at the *Best Practice Interventions in Corrections for Indigenous People Conference* convened by the Australian Institute of Criminology Sydney, 8-9, October.

Elliot, A. (2009). Empowering Indigenous learners in remote Australian communities. Refereed Paper *CIRN Community Informatics Conference 2009*. Retrieved April 10, 2010 from http://www.ccnv.net/pratoconf2009/pdfs/Elliot-pdf

Evans, E., & Juchau, R.H. (2009). *Colleges of advanced education in Australia – a lasting legacy: A history of accounting education in Australian colleges of advanced education*. Saarbrucken, Germany: VDM Verlag.

Faure, E. (1972). *Learning to be: The world of education today and tomorrow*. United Nations Educational, Scientific and Cultural Organization (UNESCO), Paris, France: Harrop.

Free, R. (1993, April). Opening Address 1993 *Consultative Forum on Credit Transfer and Skill Recognition, Melbourne Proccedings,* (pp. 2-9). National Board of Employment Education and Training, Canberra, Australia: Australian Government Publishing Service.

Giddy, K., Lopez, J., & Redman, A. (2009). *Brokering successful Aboriginal and Torres Strait Islander employment outcomes. Common themes in good-practice models: Literature review*. Canberra, Australia: National Centre for Vocational Education Research.

Gray, M.C., & Hunter, B.H. (2005). Labour market dynamics of Indigenous Australians. *Journal of Sociology, 41*(4), 386-405.

Gregory, M. (2000). Employment and labour markets: Some issues for the new millennium. *International Journal of Manpower, 21*(3/4), 160-176.

Guenther, J., Young, M., Boyle, A., Schaber, E., & Richardson, J. (2005). *Growing the desert: Effective educational pathways for remote Indigenous peoples*. Adelaide, Australia: Desert Knowledge SRC and National Centre for Vocational Education Research.

Harvey, B., & Brereton, D. (2005, August). Emerging models of community engagement in the Australian minerals industry. Paper presented to the *United Nations Conference on Engaging Communities, Brisbane, Australia.*

Henry, J., Arnott, A., Clark, T., Dembski, M., & Wells, J. (1998). *Djama and Yet: Exploring partnerships and practices in the delivery of vocational education and training in rural and remote Aboriginal communities*. Darwin, Australia: Northern Territory University Press.

Hilson, G., & Nayee, V. (2002). Environmental management system implementation in the mining industry: A key to achieving cleaner production. *International Journal of Mineral Processing, 64*(1), 19-41.

Hughes, H. (March 3, 2008) Northern Territory's education apartheid must end. *Canberra Times*, 9.

Hunt, L. (2009). Sustainable innovation in work-integrated learning. Professor Lynne Hunt maintains that negotiation is key to running effective WIL programs. *Communiquė,* 3(2). Retrieved July 7, 2010 from http://www.altci.edu.au/march2009-sustainable-innovation-wilICMM

Jasmeen, S. (2006). Strengthening human capital through building competencies. *IME Journal, 1*(2), 33-42.

Jeffries, A., & Keating, S. (2010, September). Work-integrated learning partnerships: Key messages from host organisations. *The Australian Collaborative Education Network National Conference Proceedings,* Perth, Australia, 211-220.

Jonas, W. (2003). *Indigenous employment and family violence in Australia: Issues and initiatives*. Aboriginal and Torres Strait Island Social Justice Commissioner. Retrieved May 28, 2009 from, http://163.14.19.36/userfiles/file/essay/country/William%20Jona.doc

Kaider, F., Henschke, K., Richardson, J., & Kelly, M. P. (2009). Designing blended spaces to maximise student learning in work-integrated learning programs. In *Same places,*

different spaces. *Proceedings ASCILITE Auckland 2009*. Retrieved October 4, 2010 from http://www.ascilite.org.au/conferences/auckland09/procs/kaider.pdf

Kaplan-Myrth, N. (2005). Sorry mates: Reconciliation and self-determination in Australian Aboriginal health. *Human Rights Review,6*(4), 69-83.

Khan, S., & Brunner, J. (2010, September). Can we rely on the workplace to bridge the theory-practice gap in planning? *The Australian Collaborative Education Network National Conference Proceedings*, Perth, Australia, 235-250.

Knight, J. (1999). Internationalisation of higher education. In H. de Wit & J. Knight (Eds), *Quality and internationalisation in higher education* (pp. 13–28). Paris, France: Organisation for Economic Co-operation and Development.

Kral, I. (2009). *The literacy question in remote Indigenous Australians.* Canberra, Australia: Centre for Aboriginal Economic Policy Research, The Australian National University.

Kreig, A.S. (2006). Aboriginal incarceration: Health and social impacts. *MJC, 184*(10), 534-536.

Lockie, S., Franettovich, M., Petkova-Timmer, V., Rolfe, J., & Ivanova, G. (2009). Coal mining and the resource community cycle: A longitudinal assessment of the social impacts of the Coppabella coal mine. *Environmental Impact Assessment Review, 29*(5), 330-339.

Lertzman, D. A., & Vredenburg, H. (2005). Indigenous people, resource attraction and sustainable development: An ethical approach. *Journal of Business Ethics, 56*(3), 239-254.

Mabo. (2009). *The High court decision on native title: Extracts from the commonwealth government's discussion paper - June 1993.* Retrieved September 1, 2009 from, http://www.austlii.edu.au/au/journals/Anorginal/LB/1993/18.html

Maddison, S. (2008). Indigenous autonomy matters: What's wrong with the Australian government's 'intervention' in Aboriginal communities. *Australian Journal of Human Rights, 14*(1), 41-61.

Marginson, S. (1993). *Education and policy in Australia*. Cambridge, UK: Cambridge University Press.

Marginson, S. (1994). *Arts, science and work*: *Work related skills and the generalist courses in higher education*. Department of Employment, Education and Training, Higher Education Division Evaluations and Investigation Programme. Canberra, Australia: Australian Government Publishing Service.

Martinez-Fernandez, C. (2010). Knowledge-intensive service activities in the success of the Australian mining industry. *The Service Industries Journal, 30*(1), 55 – 70.

McDonald, E., Bailie, R., Brewster, D., & Morris, P. (2008). Are hygiene and public health interventions likely to improve outcomes for Australian Aboriginal children living in remote communities? A systematic review of the literature. *BMC Public Health*, *8*(153), 1-14.

Miller, C. (2005). *Aspects of training that meet Indigenous Australians' aspirations: A systematic review of research.* Adelaide, Australia: National Centre for Vocational Education Research.

Native Title (2009). *The rights of Indigenous Australians*. Retrieved July 22, 2009 from, http://rodhagen.customer.netspace.net.au/nativetitle.html

Niosi, J., & Tschang, F.T. (2009). The strategies of Chinese and Indian software multinationals: Implications for internationalisation theory. *Industrial and Corporate Change, 18*(2), 269-294.

Nummela, N., Saarenketo, S., & Puumalainen, K. (2004). A global mindset: A prerequisite for successful internationalisation. *Canada Journal of Administrative Sciences, 21*(1), 51-64.

O'Fairchaellaigh, C.S. (2002). *A new approach to policy evaluation: Mining and Indigenous people*. Burlington, England: Ashgate Publishing Limited.

Pearson, C.A.L., & Chatterjee, S.R. (2000). Outcome expectations and learning effectiveness in an internationally orientated classroom: A qualitative assessment. *Journal of International Business, 12*(1), 61-78.

Pearson, C.A.L., & Chatterjee, S.R. (2004). Expectations and values of university students in transition: Evidence from an Australian classroom. *Journal of Management Education, 28*(4), 427-446.

Pearson, C.A.L., & Daff, S. (2008). Recruitment challenges of Yolngu Aboriginal groups remote communities in Australia: A case study of the Rio Tinto Alcan Gove initiative at Nhulunbuy. *Journal of Australian Indigenous Issues, 11*(3), 19-36.

Pearson, C.A.L., & Daff, S. (2010). Education and employment issues for Indigenous Australians in remote regions: A case study of a mining company initiative. *Journal of Human Values, 16*(1), 21-35.

Pearson, C.A.L., & Helms, K. (2010a). Releasing indigenous entrepreneurial capacity: A case study of the Yolngu clan in a remote region of northern Australia. *Global Business and Government Review, 12*(1/2), 72-84.

Pearson, C.A.L., & Helms, K. (2010b). Building social entrepreneurship in a remote Australian Indigenous community: The East Arnhem Land housing construction case. *Journal of Australian Indigenous Issues, 13*(4), 2-18.

Pholi, K., Black, D., & Richards, C. (2009). Is 'close the gap' a useful approach to improving the health and wellbeing of Indigenous Australians? *Australian Review of Public Affairs, 9*(2), 1-13.

Reynolds, R.J. (2002). The education and socialisation of Australian Aboriginal students. *International Education, 3*(2), 18-32.

Reynolds, R.J. (2005). The education of Australian Aboriginal and Torres Strait Islander students. *Childhood Education, 82*(1), 31-36.

Robertson, P.L. (2008). *Resource based or resource cursed? A brief (and selective) history of the Australian economy since 1901*. Tasmania, Australia: University of Tasmania, Australian Innovation Research Centre.

Rowley, K.G., Daniel, M., Skinner, M., White, G.A., & O'Dea, K. (2000). Effectiveness of a community-directed 'healthy lifestyle' program in a remote Australian Aboriginal community. *Australian and New Zealand Journal of Public Health, 24*(2), 136-144.

Smith, A. (2006). Indigenous development – without community, without commerce. *Australian Review of Public Affairs.* Retrieved October 14, 2008 from http://www.australianreview.net/digest/2006/09/smith/html

Thomas, L., Burnside, D., Howard, B., & Boladeras, S. (2006). *'Normalisation' in a non-normal environment: Issues in building sustainable mining communities*. Retrieved March 10, 2010 from http://www.minerals.org.au/_data/assets/pdf_file/0017/17072/LouiseThomas.pdf

Tiplady, T., & Barclay, M.A. (2007). *Indigenous employment in the Australian minerals industry.* Brisbane, Australia: University of Queensland, Centre for Social Responsibility in Mining Institute.

Trudgen, R. 2009. *Why warriors lie down and die*. Darwin: Aboriginal Resource and Development Services Inc.

Universities Australia (UA). (2008, May). A national internship scheme: Enhancing the skills and work-readiness of Australian university graduates. *Position paper No. 3/08.*

Wallace, R., Manado, M., Agar, R., & Curry, C. (2009). Working from our strengths: Indigenous community enhancement through enterprise development and training. In M. Campbell & M. Christie (Eds), *Learning Communities: International Journal of Learning in Social Contexts, Indigenous Community Engagement edition* (pp. 104-122). Darwin, Northern Territory: Charles Darwin University.

Warner, M. (2008). Reassessing human resource management 'with Chinese characteristics': An overview. *The International Journal of Human Resource Management, 19*(5), 771-801.

Worsely, P.M. (1955). Early Asian contacts with Australia. *Past and Present*, *7*, 1-11.

Yunupingu, G. (2009). Tradition, truth and tomorrow. *The Monthly* (December 2008 – January 2009), 32-40.

ABOUT THE JOURNAL

The Asia-Pacific Journal of Cooperative education (APJCE) arose from a desire to produce an international forum for discussion of cooperative education, or work integrated learning (WIL), issues for practitioners in the Asia-Pacific region and is intended to provide a mechanism for the dissemination of research, best practice and innovation in work-integrated learning. The journal maintains close links to the biennial Asia-Pacific regional conferences conducted by the World Association for Cooperative Education. In recognition of international trends in information technology, APJCE is produced solely in electronic form. Published papers are available as PDF files from the website, and manuscript submission, reviewing and publication is electronically based. In 2010, Australian Research Council (ARC), which administers the Excellence in Research (ERA) ranking system, awarded APJCE a 'B' ERA ranking (top 10-20%).

Cooperative education/WIL in the journal is taken to be work-based learning in which the time spent in the workplace forms an integrated part of an academic program of study. More specifically, cooperative education/WIL can be described as a strategy of applied learning which is a structured program, developed and supervised either by an educational institution in collaboration with an employer or industry grouping, or by an employer or industry grouping in collaboration with an educational institution. An essential feature is that relevant, productive work is conducted as an integral part of a student's regular program, and the final assessment contains a work-based component. Cooperative education/WIL programs are commonly highly structured and possess formal (academic and employer) supervision and assessment. The work is productive, in that the student undertakes meaningful work that has economic value or definable benefit to the employer. The work should have clear linkages with, or add to, the knowledge and skill base of the academic program.

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The editorial board welcomes contributions from authors with an interest in cooperative education/WIL. Manuscripts should comprise reports of relevant research, or essays that discuss innovative programs, reviews of literature, or other matters of interest to researchers or practitioners. Manuscripts should be written in a formal, scholarly manner and avoid the use of sexist or other terminology that reinforces stereotypes. The excessive use of abbreviations and acronyms should be avoided. All manuscripts are reviewed by two members of the editorial board. APJCE is produced in web-only form and published articles are available as PDF files accessible from the website http://www.apjce.org.

Research reports should contain; an introduction that describes relevant literature and sets the context of the inquiry, a description and justification for the methodology employed, a description of the research findings-tabulated as appropriate, a discussion of the importance of the findings including their significance for practitioners, and a conclusion preferably incorporating suggestions for further research. Essays should contain a clear statement of the topic or issue under discussion, reference to, and discussion of, relevant literature, and a discussion of the importance of the topic for other researchers and practitioners. The final manuscript for both research reports and essay articles should include an abstract (word limit 300 words), and a list of keywords, one of which should be the national context for the study.

Manuscripts and cover sheets (available from the website) should be forwarded electronically to the Editor-in-Chief. In order to ensure integrity of the review process authors' names should not appear on manuscripts. Manuscripts should be between 3,000 and 5,000 words, include pagination, be double-spaced with ample margins in times new-roman 12-point font and follow the style of the Publication Manual of the American Psychological Association in citations, referencing, tables and figures (see also, http://www.apa.org/journals/faq.html). The intended location of figures and diagrams, provided separately as high-quality files (e.g., JPG, TIFF or PICT), should be indicated in the manuscript. Figure and table captions, listed on a separate page at the end of the document, should be clear and concise and be understood without reference to the text.