Submission to the Productivity Commission Inquiry into the VET workforce

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This submission is derived from research I am currently undertaking into the relation between the education and training system and innovation in the mining, solar energy and computer games sectors. This research is being funded by the National Centre for Vocational Education Research (NCVER) under the National Vocational Education and Training Research and Evaluation Program (NVETRE), through a grant from the Department of Education, Employment and Workplace Relations (DEEWR). This submission and its contents are my own work and do not reflect the views of the NCVER. In each sector I have investigated the nature of the teaching workforce, and the dynamics as to why it is this way. Thus I can provide useful input to this inquiry. My research is qualitative, not quantitative, the teaching workforce is part of my research rather than being its focus. Therefore, although my work may provide some insight into the dynamics of VET teachers in three areas it is not a statistical overview or covers the entire VET system.

In each of the three sectors I studied the characteristics of the VET workforce differ dramatically. In particular, the relationship of whether teaching was through a public versus private organisation was important. A vital driver of the workforce was the relevance of specialised training to industry. However, the main area I found problems in the VET teaching workforce was in traditional trades. The traditional trades are typically taught through the public TAFE system, where the attractiveness of teaching versus working in industry is a problem in recruiting adequate quality and numbers of teachers. Below I go through my findings in relation to each sector, followed by some overarching comments.

In the mining sector training is split between 1) TAFE's and 2) enterprise or specialised private RTOs. TAFEs teach the traditional trades, which are in high demand in the mining industry. Industry specific training is relatively straightforward, as long as the workers have solid trade qualifications. This mining specific training is usually done through private RTOs, with workforce implications discussed later. Because trade skills are stable and TAFEs are well set up teach these skills the mining companies and private RTOs tend to avoid this area of VET. TAFE trade teachers are often long term professionals, with anecdotally not enough younger people entering to replace potential retirees. The private RTOs teaching trade skills specific to mining employ tradespeople with the certificate IV in training. These private RTOs explained to me that they only employ people with the specific experience that is being taught, and they provide up to date industry specific equipment. TAFEs cannot afford the wages or equipment offered by these private RTOs. Additionally, I found that the people employed in these private trade oriented RTOs would not work for TAFEs due to low wages, old equipment, and the bureaucratic nature of the TAFE system. Outside of the trade area training in mining is dominated by enterprise or specialised private RTOs. There is a large amount of safety

related training done in the mining industry. This is usually done by firms themselves or specialised private RTOs. There are a number of specialised private providers for training in areas such as safe working at heights, or working in confined space, who can meet the needs of the mining companies exactly. Additionally the mining companies provide training on equipment to operators. The trainers are usually experienced professionals in each area, and typically provide training at the mine sites themselves. This means that fixed site operations, such as TAFEs are locked out from much training provision. Additionally the specificity and expense of mining equipment and sites means that training is best delivered by people experienced in the specific equipment and sites. These people can earn large amounts doing non-training roles in the mining industry and so are paid very well to be trainers. These trainers are either recruited from mining operations, or develop their mining experience based on specialised skills. Often trainers are experienced operators wanting to move to a less physically demanding role, or have naturally progressed to a teaching role. As long as the mining companies are willing to pay enough for training, and require such specificity of training, suitable people will be able to be found. Given that it is legislatively mandated that such training takes place at all mine sites, and the requirements that operators be capable to operate such expensive pieces of equipment, it is unlikely that mining companies will stop paying large sums for this specific safety and operator training. Thus, in the private training arena enterprise and private RTOs will often pay for specialised and experienced people, and provide high pay, high quality facilities and low bureaucracy as compared to TAFE.

In the solar energy sector, which is primarily the design and installation of photovoltaic (PV) cells for electricity production, training is primarily through public TAFEs or industry bodies. The driver of training is to gain accreditation for the Clean Energy Council, which then allows the customers to access government incentives for installing PV cells. Currently training for solar energy, and renewable energy generally, is mostly done through a dedicated certificate IV, or higher, qualification, or a focused short course. Teachers in these renewable energy specific courses are mainly industry practitioners, often trade qualified electricians. These people are passionate and skilled, and often gain advantageous experience and contacts through their teaching for their industry practice. I was told that the pay for teaching is a motivation, but the internal motivation to assist the renewable energy industry is the major driver for teaching. Overall, these teachers seem relatively available to the RTOs as they are often driven by a desire to help the industry in its growth. Renewable energy training has been added to the new electricians training package. Thus, apprenticeship, usually full time TAFE, teachers are doing renewable courses to be able to teach apprentices. The renewable energy teachers I talked to expressed little interest in teaching full time in the electrical trades area, because they were focused on renewable energy and saw their main role as working in the private sector.

In the computer games sector VET training is through private colleges and TAFEs. For many TAFEs and some private colleges games specific training is simply a few modules added to a standard programming or arts course. These RTOs tend to have few linkages to industry and are very cost focussed. Those RTOs that offer 'pure' games courses source their teachers from industry. Not only are the teachers experienced in games themselves, they have strong networks and linkages into the

sector. Often the teachers still produce games part time. The Australian games sector pays below general industry wages, as many people are passionate about games and are willing to work for less than the market rate their skills could demand. Therefore, experienced people face low barriers in terms of opportunity cost in moving to teaching as wages are comparable. The games companies rely on mentoring and internal training to advance their staff, thus creating the potential for a path to teaching for some staff. Some of the staff that most enjoy the teaching side then move into a formal VET teaching role.

My overall findings relating to the VET teaching workforce from this study is that where VET is able to offer pay and conditions comparable to industry there appears no major problem in getting teachers. The major issue I have found is in the traditional trades, especially in TAFEs. The drivers of TAFE's difficulty in attracting suitable teachers are primarily related to the attractiveness of a teaching career versus what is available in industry. The pay is usually poor compared to industry, and often the budget is inadequate to replicate an industry environment. Therefore, potential teachers find themselves underpaid and unable to teach to the standard they would like. Beyond this TAFEs have a reputation for a much greater bureaucratic and administrative burden than industry. Therefore, the key driver for a tradesperson to become a teacher is a passion to educate.

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