

## The Rise of Technical and Career Education in the USA and Australia

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### Abstract

*Technical and career institutes in the United States of America and Australia seek higher education qualifications that are comparable in many ways to those offered by universities. In the United States higher education is primarily the responsibility of state governments, so there tends to be great diversity and a wide range of opportunity in the approach to higher education qualifications. The trend in Australia is strengthened by federal governmental policies that support a unified higher education sector with more people able to earn an undergraduate degree. Issues to consider include the importance of maintaining academic standards, and the need to consider matters of governance, funding, and cooperation between the competing sectors of higher education. Administrative officials from both technical institutes and universities in the United States of America and Australia need to begin exploratory discussions designed to learn the best practices from both countries to provide the best educational outcomes.*

**Keywords:** technical, career, vocational, further education, institutes, universities, higher education, qualifications

### 1. Introduction

The two countries surveyed in this paper, the USA and Australia, are facing an increasing drive by the technical and career training sectors of their respective countries to acquire higher education opportunities and qualifications. It also appears likely that the move into higher education by the technical and career training sectors will be successful. This paper outlines the major characteristics of the technical and career training sectors in the selected countries, and suggests the need for negotiation and compromise to affect a workable and beneficial solution to the looming problem of providing alternative career pathways for an increasing number of high school graduates.

### 2. United States of America

A major difference between higher education regulations and administration in the United States and Australia is that in the United States state governments are the main controlling body, and the federal government is relegated to involvement with student fee-assistance and research grant requests. Federal government involvement in vocational and technical training is centered in the Office of Vocational and Adult Education (OVAE), and operates through the Division of Academic and Technical Education (DATE) that administers the Carl D. Perkins Career and Technical Education Act (Perkins). Apart from administering fee-assistance and grant requests, OVAE provides “assistance to states to improve program quality, implementation, and accountability, and establish national initiatives that help states implement rigorous career and technical education programs” (Miller, 2011, 1-2). This *locus of control* in the United States means that there is considerable variation in the higher education programs offered by the individual states, although all community colleges and two-year colleges offer associate degrees, which in most cases, is their highest qualification (Moodie, et al., 2009). The role of community colleges concentrates on vocational and technical training, numerous continuing education courses, and transfer programs to four-year institutions.

In the last decade a number of states have given authorization to two-year colleges to offer bachelor degrees, and there are now a number of states with two-year colleges offering bachelor's degree in education, nursing, information technology, and business, according to the economic needs and priorities perceived by each individual state. Baccalaureate degrees in two-year colleges and other public, higher education institutions are state-funded, and are evaluated by state boards or departments that evaluate the programs for licensure purposes. In addition, most higher education qualifications leading to professional licensure, must be accredited by one of six region organizations, including: Middle States Association of Colleges and Schools (MSA), New England Association of Schools and Colleges Commission on Institutions of Higher Education (NEA), North Central Association of Colleges and Schools (NCA), Northwest Commission on Colleges and Universities (NWC), Southern Association of Colleges and Schools (SACS), Western Association of Schools and Colleges Accrediting Commission for Community and Junior Colleges, and the Western Association of Schools, and Colleges Accrediting Commission for Senior Colleges and Universities (WASC).

The accrediting organizations identified are recognized by the Council for Higher Education Accreditation (2010), which states, “Recognition by CHEA affirms that the standards and processes of the accrediting organization are consistent with the academic quality, improvement and accountability expectations that CHEA has established, including the eligibility standard that the majority of institutions or programs each accredits are degree-granting”. (<http://www.chea.org/default.asp>).

An advantage that United States higher education institutions have over their Australian counterparts is the comprehensiveness of their offerings. Dougherty (2008) noted that there are considerably fewer sub-baccalaureate programs included in the Australian sectors of higher education, and there is “strong evidence that the more comprehensive institutions are superior in providing broader access to higher education in the United States” (p.7). However, Dougherty (2008, p.6) cautioned that:

One of the principal ways in which community colleges encourage greater access is by providing a wide panoply of educational programs, ranging from academic education to vocational education and basic literacy education.

However, this breadth of curriculum poses a great dilemma. Postsecondary Institutions pursuing very different programs may find that they cannot do all of them well, because those programs compete for a limited stock of organizational attention, energy, and material resources and may in fact undermine the effective functioning of other programs.

In the United States, educational outreach organizations affiliated with universities, community colleges, and higher education institutions constantly compete for undergraduate and graduate students, sometimes in separate course offerings, and increasingly as merged courses, when the enrolments are low. A recent trend now has university affiliated organizations cooperating with school districts to offer custom designed courses for teachers in a wide range of subjects, some of which can be transferred into existing university programs. In the United States, innovative ways to open up new opportunities for people seeking higher education qualifications continues. According to a January, 2011 news release by the *Louisiana News*, Murphy Oil USA has signed a partnership agreement with Louisiana Tech University that will enable the 7,000 employees of the oil company to earn university qualifications ranging from undergraduate certificates to doctoral degree through a company sponsored program of tuition reimbursement (MyArkLaMiss.com, 2011). This approach is similar in some respects to the advent of the CBT movement in Australia, where the clientele (industry) was given the opportunity for input in the programs being offered (Misko and Robinson, 2000).

### **3. Australia**

Before the 1960's, Australian higher education was distinguished by two major sectors offering very different qualifications and career opportunities. Australian universities and colleges traditionally offered curriculum-based qualifications including bachelors, masters, doctoral degrees, and a few diplomas, where the emphasis was on research and professional development. On the other hand, the vocational education and training (VET) institutes offered competency-based qualifications (which later became competency-based training [CBT]) leading to technical qualifications such as apprenticeships, para-professional diplomas/certificates, and ‘second chance’ education (Moodie, Wheelahan, Billett, & Kelly, 2009). Thus the two sectors were basically single-sector institutions, where the vast majority of student learning occurred in either higher education or VET institutions.

Competency-based training (CBT) has been used in a number of countries since the 1970s. It was initially used in the United States to improve teacher training, and then adopted by the United Kingdom in the 1980s for vocational training. Guthrie (2009) reported that the relatively new approach of competency-based qualifications in Australian education had its origins in the late 1980s and early 1990s, when the concept of CBT, developed from the United Kingdom competency model, became the basis of VET programs. Competency-based training was defined by the Australian Chamber of Commerce and Industry in 1992 as, “A way of approaching (vocational) training that places primary emphasis on what a person can do as a result of the training (the outcome), and as such represents a shift away from an emphasis on the process involved in the training (the inputs). It is concerned with training to industry-specified standards rather than an individual’s achievement relative to that of others in a group” (Guthrie, 2009, p.7). The National Centre for Vocational Education Research (NCVER) explains CBT as designed to “improve the skill levels of the Australian workforce, enable Australian industry to be more competitive in global markets, and establish new career structures for the Australian workforce” (NCVER, 2010b, p.1). However, CBT was not generally accepted by the higher education institutions, which viewed their role more as providers of a traditional general education, articulated by the Australian Vice-Chancellor’s Committee as:

While the development of knowledge, skills and understandings is central to the role of universities it is not the role of universities to shape and re-shape programs of study in response only to changes in current professional or workplace needs....Competencies are necessary but not sufficient outcomes of university education (Australian Vice-Chancellor's Committee, 1992, p.3).

In 1964 the Australian Government accepted the recommendation of the Martin committee to establish an advanced sector of higher education that would have as its major responsibility the offering of diplomas. The Australian Government further stated that it would fully fund diplomas only if they were offered by colleges of advanced education (Martin, 1964). Universities were encouraged to concentrate on higher degree programs and research, and as a result, colleges of advanced education quickly assumed the major responsibility of offering diplomas (Williams, 1979). The next major development in tertiary education occurred in 1975, when the Australian Government adopted the recommendation of the 1974 Kangan committee and established the Technical and Further Education (TAFE) system as a separate educational sector that would concentrate on vocational education, similar in some respects to the role of the colleges of advanced education.

The first move by the Australian Government to create a unified national system of higher education occurred in 1988, when divisions between universities and advanced education institutions were dissolved (Dawkins, 1988). This legislation established international university procedures as the norm for higher education in Australia, and universities now began to withdraw from offering diplomas to focus on postgraduate programs and research projects. VET institutes quickly reacted to the new situation and the continuing demand for diplomas, by increasing its offerings in sub-baccalaureate programs, and by 2006, over 90% of students in diploma and advanced diploma courses were enrolled in VET institutions (Moodie, 2003). The process of using VET qualifications as a pathway to higher education opportunities was reinforced when the International Standard Classification of Education (ISCED) declared that Australian VET diplomas and advanced diplomas were the equivalent of those offered by higher educational institutions (Moodie, et al., 2009, p.13). However, recent developments suggest that the bachelor's degree will soon replace the diploma as the pathway qualification between VET institutions and higher education opportunities.

In recent years the qualifications offered by VETs and higher education institutions have become less distinct with both sectors moving to a mixed-sector model, where institutions have between 3-20% of their student load in a minority sector (Wheelahan & Moodie, 2008, p.2). In 2002, the Australian National Training Authority, the TAFE Directors Australia, and the Australian Vice-Chancellors' Committee all agreed that the distinction between the role of the higher education and the vocational education sectors had become blurred, and would probably continue to overlap in the future. The latter committee made what could be a prophetic observation by stating that, "The line between which occupations require university-based teaching and which do not will continue to shift" (Australian Vice-Chancellors' Committee, 2002, p.21).

In this new arrangement VETs are offering some curriculum-based courses leading to bachelor's degrees, and the higher education institutions are including some competency-based courses in their programs. By 2009, there were 10 TAFE institutes, mainly in the state of Victoria that had been registered by their state higher education registering body to offer higher education qualifications that included two higher education diplomas, 30 associate degrees, 35 bachelor's degrees, and one graduate diploma. The programs covered "creative, performing and visual arts; design/multi-media/IT; business (including commerce, accounting and various types of management); hospitality/recreation; engineering (including built environment); environmental sciences (including forensic science); and human services (including nursing, early childhood education, and justice). Other offerings were programs in aviation, aquaculture, viticulture and equine studies (Wheelahan, Moodie, Billelt, & Kelly, 2009a, p.16). TAFE institutes now offer higher education programs in Victoria, Queensland, South Australia, and Western Australia, with New South Wales likely to follow, although the total enrollment in VET bachelor and associate degrees is extremely small (Moodie, et al., 2009).

In 2011, there were 61 TAFE colleges in Australia offering vocational education programs that could be used for employment or as the basis for further academic study. The number of TAFE colleges in each state was as follows: New South Wales 12; Victoria 17; Queensland 15; Western Australia 11; South Australia 4; Australian Capital Territory (Canberra) 1; Tasmania 1. The programs offered by these colleges can be used as a preparation for a desired occupation, or the opportunity to enter an Australian university and achieve a degree-level qualification.. Australian Colleges are therefore an excellent choice for students who want to get real experience in the vocation of their choice before they either commence employment or pursue further university-level studies (Australian Education Network, 2011).

#### **4. Future Trends**

Recent developments in Australian higher education have seen TAFE institutions seeking to expand their role as a new category of non-university institutions that would offer degrees at bachelor and masters levels in addition to vocational courses. According to a report by a leading Australian newspaper, this initiative is part of the drive to win commonwealth funding for degrees in the post-2012 uncapped system. (Trounson, A, 2010). Reaction from the university sector has been understandably swift, with the higher status of a university qualification over those offered by TAFE institutions stated, and concern that the expansion of degree providers could pose a risk to quality. “Australia chairman Peter Coaldrae said new national regulatory arrangements should be in place first. He also noted that universities were already expanding enrolments and were well positioned to meet the government's expansion targets”. (Trounson, 2010).

Proponents of higher education programs in TAFE point to that sector's goal of blending theory and practice in its courses that are directed to the needs of industry and employment opportunities for students. They argue that the TAFE programs cater to a more diverse student population, and offer a more student-centered approach with numerous pathways for higher education qualifications. (Wheelahan, et al., 2009). It appears very likely that the TAFE sector of higher education in Australia will continue to strive for an expanded role in the development of programs, closely linked to the needs of industry, and leading to bachelor and master's degrees. As stated in the preamble to the TAFE Directors Australia's Strategic Plan 2010-2012, “Australia's TAFE institute network is the largest and most diverse education sector in Australia with more than 1300 campuses located across Central Business Districts, suburban, regional and remote locations, with many institutes offering further services through the Asia-Pacific and other offshore regions” (TAFE Directors Australia, 2010).(<http://myarklamiss.com/fulltext/?nxid=80066>).

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