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Dr Cheryl Livock
Director
Integrity Education and Research
Queensland, Australia

PAPER TITLE
Re-humanising the Educational Sphere in Australia – a critical history of workplace and vocational education in Australia from 1828

ABSTRACT
In the Australian sphere of schooling and vocational education and training (VET) 1990 was a watershed year. This was the international year of literacy which prompted a slew of educational research and resultant educational reform programs, programs based on concepts of social responsibility. However, at the same time, there was an emerging political impetus to reframe education, both schooling and VET, in terms of cost/benefit, with students reframed as customers, education as product purchased, and educational outcomes tied to benefit to the national economy. Australian researchers have termed this the marketized approach, that is the financialisation of education. The result has been at first a slide and then a free fall towards the dehumanisation and mechanisation of education. This paper employs Bhaskar’s Transformational Model of Social Activity and an explanatory critique to uncover the restricting mechanisms of financialisation in the Australian educational sphere (schooling and VET) in academic, social and administrative domains. To show how elements of individuality (including face-to-face relations of individuals), compassion, and civility as necessary to re-humanise the educational sphere of social life can be activated by individuals, in spite of a dehumanising technicist, functional and bureaucratic approach to educational excellence proffered by political exigencies.

INTRODUCTION
Following Danermark, Ekstrom, Jakobsen and Karlsson’s 6 Stages of Critical Realist Explanatory Research (2002) and Bhaskar’s Transformational Model of Social Activity (1979) this paper will offer an explanatory analysis of how the underlying societal and individual structures and mechanisms have brought about the financialisation of education with resultant dehumanising, technicist and bureaucratic approaches. The particular focus is on the role financialisation has played in the Australian Vocational Education and Training (VET) sphere of education. By uncovering these complex underlying relationships the paper will then proffer an emancipatory explanation of how individuals can activate their own inner and external networks to re-humanise VET education in Australia. The term “VET” although not in common usage until the 1990s will be used for technical and vocational education throughout, while “higher education” is used to refer to all forms of post school education.
METHODOLOGY

To uncover the layered and interacting reality of this aspect of social life, technical and vocational education in Australia, this paper has been structured according to Danermark et al.’s (2002) following six stages:

Stage 1: Description
Stage 2: Analytical Resolution
Stage 3: Abduction/ Theoretical Redescription
Stage 4: Retroduction
Stage 5: Comparison between different Theories and Abstractions
Stage 6: Concretization and Contextualization

Following the precepts of Bhaskar’s Transformational Model of Social Activity (1979) this paper conceives of the social world of Australian technical and vocational education as a dualism: a connected and transformative dualism of society and the individual, both of which are irreducible (Cruickshank, 2011). Society has always pre-dated the individual. This is where society is composed of structures and their emergent properties which include both social structures (herein conceived as the objective social world of buildings, organizations, policy papers, and political processes), and cultural structures (herein conceived as the realm of ideas, concepts and theories) (Zeuner, 1999). Structures of society can constrict or empower the individual, but the individual always has the potential to transform the social structures. Consequently, apart from reviewing emerging societal structures, I have named influential individuals whose agency, afforded by personal dispositional, educational, political characteristics as well as social networks, have enabled them to change or maintain societal structures of VET in Australia.

An explanatory critique will be provided based on Marxist or transcendental critical questions, which aim to uncover the essential, contingent or non essential factors [relational structures]. A transcendental question asks “what is the necessary condition for X to be possible?” The main transcendental question for this paper is:

What are the necessary conditions for re-humanising Vocational Education and Training in Australia?

This is where definitions of humanism are derived first from the Humanist Manifesto III:

Humanism is a progressive philosophy of life that ... affirms our ability and responsibility to lead ethical lives of personal fulfilment that aspire to the greater good of humanity (American Humanist Association, 2003, p.2).

And also from a critical realist view that humanism includes but does not prioritize human flourishing over non human beings (Hartwig, 2007b), and where “the free flourishing of each as a condition of the free flourishing of all, which is the good society for human being” (Hartwig, 2007a, p.187).

BACKGROUND – Stage 1: Description & Stage 2: Analytical Resolution

This section presents an uncritiqued factual description of the social phenomenon of Australian vocational education. The description is divided into two components: historical development in the formative years of Australian technical and vocational education (1828-1996), and the present format.
As Danermark et al. (2002) suggest this analytical resolution into component parts represents the initial “imaginable causal components” of the social phenomenon under investigation. The information in this section has been gained from government documentation and research papers.

**Historical Development**

Vocational education or as it was first called, technical education (Goozee, 2001) in Australia could be divided into five eras, five historical components:

- *The colonial period* from the first apprenticeship laws of 1828 to 1900;
- *Federation in 1901* when Australia became an independent nation to 1945;
- *Post World War II*, years 1946-1970;
- *TAFE-National Technical Education System*, years 1970 to 1987;
- *From TAFE to VET*, years 1987 to 1996.

**In the colonial period (1828-1900)**

Australia was established as separate British colonies of New South Wales (NSW), Victoria (Vic.), Tasmania (Tas.), Queensland (Qld.), South Australia (SA) and Western Australia (WA); all governed separately by governors, lieutenant governors and then additionally by elected Legislative Councils and House/ Legislative Assemblies established between 1823 and 1870. These early Australian colonies followed British models for technical education with the colonies of NSW and Tasmania passing the first apprenticeship laws between 1828 and 1844. At this time Australia provided adult technical education through mechanics institutes and schools of arts. In each Australian colony technical education developed slightly differently. Then in 1865 the NSW colonial government was approached by various individuals and community groups such as the Engineering Association of NSW to establish a working men’s college similar to those in Britain. These colleges taught not only technical subjects but included a broader range including classical and artistic subjects (Goozee, 2001). A college was established in Sydney in 1879 overseen first by the Sydney Mechanics School of Arts; later in 1882 by the Board of Technical Education; and finally by 1889 the college was administered by the Department of Public Instruction. At this time in NSW technical education was a centralised system based in Sydney, with twelve colleges in city and rural areas. In the colony of Victoria a Technological Commission oversaw technical education in schools of arts between 1869 and 1890, and in this colony schools of mines were the main focus of technical education. These took the form of working men’s colleges. Unlike in NSW these technical colleges were independent of government control and based in regional areas.

The colony of Queensland established the Brisbane Technical College in 1882. Queensland colony also had regionalised independent technical education which was based in schools of arts. These remained independent until the 1900s. Like NSW, Queensland’s technical education was derived from the mechanics institutes, as was the South Australian Institute established by an act of parliament in 1856. However, in 1889 South Australia like Victoria focused on mining, with the inauguration of the School of Mines and Industries in Adelaide and with schools of mines in regional areas. Differently in WA and Tasmania technical education became part of schooling, with technical subjects included in the Tasmanian school curriculum in 1883, and in WA curriculums in 1893. Additionally separate technical colleges were established in their capitals/main cities: in 1888 Hobart and Launceston technical college and in 1900 the Perth Technical college.
Goozee reports:

The year 1889 can be considered to be a significant time-line in the development of technical education, as by this date most of the structures and the frameworks for future development had been established (2001, p.13).

Causal components in the colonial period (1828-1900): were STRUCTURAL: structural-Post School education bodies [post school education bodies: the mechanics institutes & working men’s colleges (UK and Australia); schools of mines, schools of arts], structural-education governing bodies [industry bodies, boards, governing structures, government legislation and departments, centralized or regionalized provision, government or independent oversight] and structural-education programs and resources [subjects taught, curriculums], structural-national/global inquiries and reports [London’s International Conference of Technical Education in 1897] and structural-national/global inquiries and reports [London’s International Conference of Technical Education in 1897]

**Federation to World War II (1901-1945)**

Australia became an independent nation in January 1901 when the six self governing British colonies became States of one federated nation brought into being by a British Act of Parliament, the *Commonwealth of Australia Constitution Act 1900*. This Act established Australia as a constitutional monarchy, with the British monarch as head of State. More importantly for this paper as part of this Act was a legal document, the Australian Constitution, which framed the activities of Australia, particularly the distinct roles and powers of the federal and State governments. Among legislative powers conferred on the federal “Commonwealth” government was taxation, while one of the powers given to the States was legislative power over education (Parliamentary Education Office & Australian Government Solicitor, 2010).

Perceptions and interpretations of these two powers, the Commonwealth’s power to tax and the States’ power over education, solidified between 1901 and 1945.

Originally the concept of “tax” referred to customs and excise duties. Income tax started to be imposed by the colonies from 1880s. At federation this right passed to the Commonwealth government; nevertheless, the States were still allowed to gather income tax. Historians Smith and Warren (2007, ¶ 17) commented that “income taxes were only something you did in an emergency, like in wars” so that the Commonwealth government only imposed income tax fourteen years after federation in 1915 at the beginning of World War I and continuing into the 1920s to pay for war debts. In these early years the Commonwealth funded the old aged pension, while the States funded the dole, so they continued to collect a tax on wages, which increased during the Depression years. At the beginning of World War II in 1942 the Commonwealth government passed the *Uniform Income Tax Act*, which allowed the Commonwealth to impose on individuals “a rate equal to the previous total of State and Commonwealth income taxes combined” (Department of Premier and Cabinet WA, 2016, ¶2), and also agreed to repay each State by means of a grant, the same amount they would have gathered in income or wage tax. However if the States continued to levy a wage or income tax, they would not receive the grant (Smith & Warren, 2007). The States contested this in the courts but lost.

This law has been instrumental, right up to the present time, in funding education, which according to the Australian Constitution is the responsibility of and to be delivered by the Australian States. Apart from taxes the Commonwealth and State governments raised funding by borrowing money. In 1927 they established the Loan Council as a Commonwealth statutory body to regulate State and
Commonwealth borrowings, debt issues, and rates of interest on securities. The Financial Agreement Act 1928, which existed until 1985, ratified the Commonwealth/State agreement. In the 1950s when the States were unable to raise funds through the issues of securities, the Commonwealth government through the Loan Council underwrote State borrowings, thus gaining further control over the States (Department of the Parliamentary Library, 2002).

In parallel with the development of fiscal arrangements were firstly a series of government inquiries into technical education and apprenticeships taking place in the States between 1899 and 1918. These were prompted by London’s International Conference of Technical Education in 1897. They were then followed by State legislations or departmental interventions:

- **Victoria** – the Education Act of 1910 created a system of junior technical high schools.
- **NSW** – in 1913 establishment of course advisory committee including employer and employee representatives to make technical courses better meet the needs of industry;
  - in 1914 the Director of Education and the Superintendent of Technical Education initiated changes to the system of technical education: cancelling of short daytime trade courses; introduction of five new 3 year trade certificate courses (engineering, iron trades, science, applied art, and manufacturing trades) plus a higher certificate of trade competency awarded after a further two years training. All training metropolitan and rural colleges became trade schools, except two Sydney and Newcastle technical colleges. Lastly the development of correspondent courses for rural areas.
- **SA** – in 1915 legislation implementing recommendations from Royal Commission into Education tabled 1913. These were: Education Department should take over the School of Mines, apprentices should be compelled to attend technical schools during working hours for half a day each week and technical education should be available by correspondence.
- **Queensland** – 1900 to 1914: a Board of Technical Education created; the Technical Instruction Act 1908; independent technical schools gradually taken over by the Department of Public Instruction (up to 1918).
- **Tasmania** – 1918 technical education branch created within the Department of Education; 1919 three technical high schools created linked to the two present technical colleges.
- **WA** – three technical schools and one school of mines already existed alone without any high schools in the state until 1910, when formal technical education was established at Perth Technical College, the Arbitration Court ruling apprentices should attend and employers pay their fees. (Goozee, 2001, pp.14-16; Creighton, p.80)

These technical education structures remained almost unchanged until the 1970s. In 1936 the NSW education minister called a conference of State education ministers to discuss Commonwealth funding for technical education. Although proposed funding was not forthcoming, this meeting represented the inaugural meeting of the Australian Education Council (AEC) which was to continue until 1994 (Department of Prime Minister and Cabinet, 2014).

Between 1920 and 1944 the process of putting all technical education under control of the government school system progressed. However, although inquiries almost unanimously recommended increasing technical education funding, until the beginning of World War II funding percentages remained consistently low. Grants were made around 1941 to train workers to assist with wartime manufacturing; and in 1944 the Commonwealth Reconstruction Training Scheme (CRTS) was extended to fund retraining of ex-service men and women (Goozee, 2001).
External influences during this post federation period were developments in technical education in Europe, where by 1912 apprentices were given a full day leave from employment to attend technical education classes. This did not occur consistently across Australia until 1943.

**Federation to World War II (1901-1945): Causal components were STRUCTURAL: structural-political process [Australian government structures: federating system (division of powers, taxation); commissions; reports; legislation: Commonwealth of Australia Constitution Act 1900; Financial Agreement Act 1928, Uniform Tax Act 1942 ]; structural-global socio-political phenomenon [World Wars I and II; the Great Depression; emergency measures: Commonwealth income tax], structural-education bodies [State education departments: Department of Public Instruction; Boards of Technical Education], structural-education programs and resources [Practices: apprentice study leave days], structural-national / global inquiries and reports [international developments in technical education; conferences; State government inquiries into technical education and apprenticeships].**

**Post World War II (1946-1970)**

In 1946 a referendum to alter the Australian Constitution allowed the Commonwealth government to extend “benefits” [funding of] to various social groups including “students” (Commonwealth of Australia Constitution Act (The Constitution), 2003, s51.xxiiiA). Originally used to fund university students (1951), later this funding was extended to some technical college students (1965). With dramatically increasing high school attendance, Commonwealth funding was also used as a means to help finance the building of more high schools, with technical schools often occupying the same buildings (Hothouse, 1975). An example of the increased demand for high schooling is how Queensland high school enrolments increased from 5,130 in 1950 to 22,681 in 1959 (ibid., p.156).

In the 1950s technical schools were part of this differentiated form of high schooling, that is there were many forms of high schooling: industrial, commercial, technical, agricultural, central, domestic science, academic, agricultural, selective, composite and special, mainly junior secondary schools. At this time intelligence testing was commonly used to stream primary children into technical or academic primary [elementary] and high schools. Campbell reports about Victorian schooling:

> Government post-primary schools belonged either to the ‘technical’ system or the separate ‘secondary’. The boys junior technical and girls domestic arts and other junior technical schools catered for apparently ‘not-so-bright’ children, where the secondaries, designated high, higher elementary and central schools, were for the ‘more intelligent’ children (Campbell 2014, p.6).

In many States children also had to sit a university devised examination to gain a bursary to attend high school, without which most parents could not afford high schooling, including technical schooling, for their children. Competitive entrance exams were also for students wanting to attend the academic selective high schools which were often the only way to gain entry to university.

Because of these issues government departments in each state commissioned inquiries into education throughout the 1950s. States came to the same decision to change the structure from differentiated high schooling to a comprehensive system of high schooling, eliminating selective schools. This change took place at different rates across the states in the 1960s. Often one report would influence the decision in adjoining states. For example in NSW the Wyndham report influenced the implementation of comprehensive schooling in Queensland (Campbell, 2014). As a result intelligence testing and public examinations to enter high school were abolished across Australia by the end of the
1960s. The result for technical education was that apart from Victoria which had “a strong system of technical high schools”, most states had subsumed their technical high schools into the comprehensive schooling system (Goozee, 2001, p.21).

Two reports initiated by the Commonwealth government were also influential for technical education. They were the 1957 Murray report reviewing university education, that recommended that all professional education should be the universities’ responsibility, while non professional training was to be the responsibility of technical colleges. The second report on the Future of Tertiary Education, the Martin report (1964) responded to Prime Minister Menzies desire how to best fund technical colleges and teachers colleges. The report recommended three structures for higher education: universities, institutes of colleges and boards of teacher education; where the institutes would be affiliated groups of technical colleges and teachers colleges, while the boards were to oversee the higher education teaching activities in that State (Goozee, 2001). Some States had separate boards for universities, technical colleges and advanced education colleges, other states also established a coordinating board. The Commonwealth Advisory Committee on Advanced Education was subsequently appointed in 1965 (Abbott & Doucouliagos, 2003). The outcome was that by 1967 a new form of college was established across Australia, the College of Advanced Education (CAE), which took back from the universities diploma courses but which also taught lower certificate courses. With the expansion of white collar positions, CAE courses included more vocationally based training as well as technical education. Nevertheless in some States technical colleges still remained intact but just affiliated within the overall CAE institute structure, as was the case in Victoria. At this same time in 1964 technical teachers formed their own association: the Technical and Further Education Teachers’ Association of Australia (TAFETAA).

Additionally at the very end of this period as a result of many migrant workers coming to Australia between 1950s to 1960s, a Tripartite mission to Europe investigated technical training so as to be able to credential migrant workers. Its report, the Tregellis report in 1969 emphasised the importance of establishing a nationally based training system in Australia with uniform standards, training methods, and qualifications. It stated that Australia should not rely on immigrant workers but train its own population (Goozee, 2001). This report was one of the determining factors in changes in technical education occurring in the 1970s.

To review this period 1946-1970: the imaginable causal components were INDIVIDUAL: [prominent individuals who affected change such as Mr Murray and Mr Martin leaders of two pivotal investigations; Mr Menzies the Liberal Prime Minister of Australia who initiated the Martin investigation and then enacted legislation to create a binary higher education system of CAEs and universities] and STRUCTURAL: structural-political process [change in the Australian constitution loosely allowing Commonwealth government to fund State education, government; union commissioned reports], structural-global socio-political phenomenon [increased immigration, the post War baby boom; subsequent much increased high school attendance], structural-education bodies [differentiated high schooling; establishment of new educational bodies: Australian Education Commission (AEC), Universities Commission, the Commission of Advanced Education (CAE), Technical and Further Education Teachers’ Association of Australia (TFETAA)], structural-funding education [needed funding for buildings and teacher training; increased Commonwealth funding].
TAFE-National Technical Education System (1970 to 1987)

These years were characterised by initiating, implementing and maintaining a mostly uniform, government funded technical education system with the name TAFE (Technical and Further Education). Throughout the 1950s and 1960s many of the above reports and education bodies had requested increased funding for technical education. But this had not occurred. During this earlier time the Commonwealth government was in the hands of the Australian Liberal party. In 1972 with the slogan “It’s time” the Australian Labor party won government having part of its policy platform increased federal spending on education (Whitlam, 1972) and a focus on making education freely available to all. Leader of the Labor party, Mr Whitlam justified such an increase in funding when he stated:

This must be done, not just because the basic resource of this nation is the skills of its people, but because education is the key to equality of opportunity (Whitlam, 1972, ¶ 16).

We will abolish fees at universities and colleges of advanced education. We believe that a student’s merit rather than a parent’s wealth should decide who should benefit from the community’s vast financial commitment to tertiary education. And more, it’s time to strike a blow for the ideal that education should be free. Under the Liberals this basic principle has been massively eroded (ibid., ¶ 17).

In 1973 the National Training Council (NTC) was established, which then went on to instigate tripartite industry training committees that included government, employer, and union representatives with a goal of developing training that connected to their industry requirements. In the same year, following a TAFETAA meeting with Commonwealth Education Minister Kim Beazley and strongly supported by Minister for Labour and Immigration, Clyde Cameron, a national inquiry into technical education finally eventuated, chaired by Myer Kangan, the then deputy secretary for federal department of Labour and Immigration. Kangan also became chair of the newly established Australian Committee for Technical and Further Education (ACOTAFE) which also included ten members “from business, the Australian Council of Trade Unions, State technical education systems and higher education” (Goozee, 2001, p.24). When the Kangan report was presented to Minister Beazley the following year, 1974, it included a detailed definition for technical education in Australia:

... technical and further education should be regarded as describing all organised and sustained programs designed to communicate vocationally oriented knowledge and to develop the individual’s understanding and skills. It should include all programs of education with a vocational purpose, other than those financially supported by other Commissions, whether the individual is using the program with employment as a primary aim or with the aim of gaining specialised knowledge or skills for personal enrichment or job improvement. It includes what is usually known as ‘adult education’. It does not include activities which have no direct educational purpose and which are not planned as a systematic sequence. (ACOTAFE cited in Goozee, 2001, p25)

Thus technical and further education (TAFE) was conceived as not only purely for the trades but also for vocational education; with not only an employment emphasis, but also one of personal development. TAFE became an official term for government funded technical and further education colleges across Australia.

Funding for TAFE students improved under the Student Assistance Act of 1973, implemented largely through two grants schemes: the Tertiary Education Assistance Scheme (TEAS) and in 1975 the Adult Secondary Education Allowance Scheme (ASEAS). A second piece of legislation further improved the status of technical education. This was the States Grants (Technical and Further
Education) Act 1974 which provided funding for a national 12 member body, the Technical and Further Education Commission (TAFEC) to advise the minister on matters concerning development of TAFE in Australia, including infrastructure and teaching standards (National Archives of Australia, 2016; Technical and Further Education Commission Act 1975 (Cth) s.6.l(a-f)).

This marked improvement in funding and status during the Whitlam years is what Goozee believed contributed to “the increase in TAFE enrolments from 400,700 in 1973 to 671,013 in 1975, a fifty-nine per cent increase” and how “[b]etween 1973 and the end of 1975, departmental staff had increased from 1795 to 7957 positions (including those in State offices), which gives an indication of the expanding role of the Commonwealth in Australian education” (2001, p.28).

However, on November 11, 1975 under much controversy the Whitlam government was dismissed and failed to be re-elected. Nevertheless, the succeeding Liberal government led by Prime Minister Fraser, described as a small “l” Liberal, although making some minor alterations to newly developed technical education bodies, basically maintained the reforms put in place by the Whitlam government. So despite efforts to reign in the budget with schools, CAEs and universities only receiving 2% annual increase in funding, TAFE on the other hand was to receive a 10% annual increase in funding (Goozee, 2001). At this time the focus for the advisory TAFE Commission (TAFEC) was to have TAFE provide a pathway for school leavers and develop a spectrum of necessary skills training for the workforce. TAFEC also began allocating funds to TAFE institutes for specific purposes. In this way the Commonwealth was taking more control of technical education with the explanation that it was in the national interest to fulfil productivity goals.

To streamline oversight of higher education the three commissions were disbanded in 1977. These were the Australian Universities Commission (enacted 1959), the Advanced Education Commission (enacted 1971) and the TAFE Commission (enacted 1975). They were replaced in 1977 by a new body the Commonwealth Tertiary Education Commission (CTEC) with eight members. Overall there was a decrease in membership from the two preceding national bodies from eleven for ACOTAFe, twelve for TAFEC to eight for CTEC. This body included three advisory councils: the Universities Council, the Advanced Education Council and the TAFE Council. The TAFE Council assisted States in implementing the many changes recommended in the Kangan and then the later Williams (1979) reports via a collaborative approach. The council had a diverse membership which included a State TAFE director, and a TAFE teachers’ representative, who were conduits for State concerns and Commonwealth perspectives.

It has to be remembered that technical education was a State responsibility. All the Commonwealth government could do was have advisory bodies and issue grants to the States. These were done in the form of triennial recurring grants that reimbursed the States for Whitlam’s abolition of State charged course fees, for TAFE running costs, and grants directed for special purposes such as pre-vocational programs for unemployed/equity groups, curriculum/resource development and TAFE teacher training programs. Grants were funded by Commonwealth government gathered income tax, some customs and excise duties, and by borrowings regulated by the Loans Council. The Fraser government continued these programs and funding practices until it left office in 1983 (Noonan, 2016).

The States through their own legislative processes and initiating their own inquiries variously implemented recommendations by the Kangan and Williams reports and national advisory bodies. For example:
• NSW – State government built TAFE community colleges in regional areas and decentralized administrative structures to allow for greater community and industry involvement. This meant community colleges were located in smaller country towns administered by a TAFE regional centre; thus setting up TAFE regions across the state, with six regional directors appointed by the Department of TAFE separate from the Education Department.

• Victoria – technical education in early 1970s comprised self governing technical colleges/CAEs, and technical colleges and schools under the Education Department. In 1980 an independent TAFE Board was created and in 1981 statewide administration of TAFE was separated from the Education Department with the establishment of regional boards; with the creation of 29 colleges of TAFE, with two TAFE/CAE colleges.

• SA – In spite of two State based inquiries there was little change to the provision of technical education in South Australia. A TAFE Advisory council was established but only lasted three years, and the Department of Further Education had a name change to Department of TAFE which continued to administer 29 colleges.

• WA – Although its own internal review, in 1976, recommended separating TAFE from the Department of Education and establishing a TAFE statutory authority, this did not take place until the late 1980s. In Western Australia there was little change apart from the establishment of a consultative body, Western Australian Post-secondary Education Commission (WAPSEC).

• Queensland – In 1977 the adult and technical sectors were combined within the Education Department, with the new title TAFE. As a result of increased Commonwealth funding under CTEC with required guidelines, a TAFE Operations section was also established with responsibility for student support services and to liaise with TAFE colleges.

• Tasmania – A State inquiry found Tasmania had a lower participation in technical education than other states. Changes implemented in 1978 were to establish a Tertiary Education Commission recognising TAFE as part of tertiary education. Administration of TAFE would come under a Director of Further Education located within the Department of Education.

(Goozee, 2001, pp.39-48)

Thus by the end of the Fraser era in 1983 all Australian states acknowledged the term Technical and Further Education (TAFE) as referring to technical and vocational colleges, separate from technical schools and separate from Colleges of Advanced Education. Additionally a TAFE system of colleges was established in all States. However the administration of TAFE differed, with some States setting up separate TAFE Departments and/or Boards, and there being a mixture of centralized or decentralized administrations.

The third government era within this period was the first part of the Hawke/Keating era (1983-1987). Prime Minister Hawke’s Labor government was elected in 1983 on a platform of consensus, improving unemployment and fiscal responsibility. Paul Keating was the Treasurer throughout this time. Hawke had two education ministers with two very different approaches. Senator Susan Ryan was Minister for Education and Youth Affairs between 1983 and 1987. John Dawkins was Minister for Employment, Education and Training between 1987 and 1991 (National Archives of Australia, 2016d).

Senator Ryan was a member of the left faction in the Labor party and was a humanities graduate. As Education minister she successfully opposed the introduction of tertiary education fees. Under her oversight, because of historically high levels of youth unemployment and a significant downturn in
apprenticeship numbers, a multitude of vocational educational programs for young people aged 15-19 that linked to employment were implemented. These consisted of:

- Education Program for Unemployed Youth (EPUY),
- The Transition From School-to-Work Program, the Community Youth Support Scheme (CYSS) and
- the Youth Training Program (YTP)
- Trade-Based Pre-Employment (TBPE)
- the Participation and Equity Program (PEP)
- the Australian Traineeship System (ATS)

They were managed by the Department of Employment and Industrial Relations (DEIR), Department of Education or both. Additionally there were a growing number of Commonwealth funding agencies involved, approximately eight by 1984 (Robinson, cited in Goozee, 2001). Other difficulties were these programs often were underfunded by the Commonwealth. This applied especially to the TBPE, which as a full time trade course conducted at TAFE, cost TAFE the equivalent of four apprentice places, that is 4:1. The PEP program was an equity program for schools, TAFE and universities, with a particular focus on improving schools/TAFE collaboration in developing programs. PEP was originally allocated $74 million funding in 1984. A year later this funding was cut in half. This was when the Kirby report on Labour Market Programs was released, which called for a rationalizing of labour market programs, but which also recommended creating traineeships. The ATS was introduced in 1985 where TAFE was to provide a minimum of 13 weeks off the job training in the form of day release two days a week. TAFE received $1700 per trainee with extra funds for curriculum and staff development; however, again this funding did not cover TAFE costs, with an additional problem of being unable to attract sufficient enrolments in regional areas.

Funding complexities came under review by two reports auspiced by CTEC. These were Review of TAFE funding (May 1986) and the Review of efficiency and effectiveness in higher education (September 1986). Submissions from TAFE institutes indicated their frustrations with the number of short lived programs they had to develop, conduct, and resource and the complexities of funding bodies who had to sign off before they received their funding. Report recommendations regarding TAFE and supported by CTEC and TAFE Council were for increased funding for rising TAFE enrolments, programs for equity groups, and infrastructure, and also development of joint schools/TAFE courses. Before these could be implemented the Commonwealth commission (CTEC) auspicing these reports was disbanded in. This body had lasted ten years.

**TAFE-National Technical Education System (1970 to 1987):** Causal components during this period were: **INDIVIDUAL** [Australian Prime Ministers Whitlam, Fraser & Hawke; federal government ministers: Keating, Dawkins, Ryan; chairs of government inquiries], **STRUCTURAL:** structural-political process [election process & change of government; political parties and party factions; close alliance of Labor Party with ACTU; Acts of parliament], structural-global socio/political phenomenon [economic boom and recessions; oil crises; spread of technology; globalisation] structural-education bodies [establishment of new educational bodies: TAFE Commission (TAFEC); disbanding of educational bodies & replacement: TAFEC/ Australian Universities Commission/Advanced Education Commission by Commonwealth Tertiary Education Commission (CTEC)], structural-education programs and resources [Pre-Vocational Programs for unemployed/ equity groups, curriculum/ resource development; TAFE teacher training programs; Employment related Vocational programs for youth 15-19], structural-labelling
From TAFE to VET (1987 to 1996)

After the 1987 federal election with the return of the Hawke government, there was extensive amalgamation and restructuring of federal government departments. John Dawkins, part of the Labor right faction and an economic graduate, became minister for a restructured department which combined education and employment, the new Department of Employment, Education and Training (DEET). This department took over many of the funding mechanisms of CTEC, so that by 1988 CTEC which also had built up some expertise in administered VET education programs, was replaced by the National Board of Employment Education and Training (NBEET) which was a purely advisory body, and lacked power or expertise to administer programs. This board had thirteen members, none of which came from TAFE. None of its four subsidiary councils had the title TAFE. There was no TAFE representative on the Higher Education Council and only one representative on the technical council, titled the Employment and Skills Formation Council. So unlike with CTEC, TAFE had lost representation and thereby any significant input into national higher or technical education policies.

Immediately prior to the establishment of NBEET, Dawkins commissioned three reports. The first report resulted from a fact finding mission to Europe by the combined Australian Council of Trade Unions and the Trade Development Council. It emphasised the importance of developing presently lacking technological skills for Australia to be internationally competitive, and of increasing post school enrolments to combat youth unemployment. Literacy and numeracy proficiency especially of young unemployed people were another concern. The second report by Dawkins himself, *Skills for Australia* (1987) was purely a platform to announce upcoming changes for TAFE: that several grants schemes would, in January 1988, be combined into one infrastructure grant; that funds would be allocated on the basis of competitive bidding; that fees reimbursement and recurrent grants would be changed to one recurrent grant. This new one recurrent grant would be dependent on the States agreeing to certain conditions, such as improved productivity, agreed target growth rates in high priority courses, and ability to retain funds from entrepreneurial efforts (Goozee, 2001, p.64). These announced changes were made without any consultation with TAFEs or the States. The final report by DEET’s task force on needed structures to support the newly formed Commonwealth education and employment department recommended the establishment of NBEET as described above (ibid.).

These reports were followed up in 1988/89 when Dawkins released a series of papers proffering his vision for education, training and employment. In these he outlined the idea of changing the “time served” view of vocational and apprenticeship training to become one of “competency based” training where learners would receive certificates for discrete skills acquisitions assessed against industry standards. Another idea was that TAFEs should share their facilities with other higher education providers. The latter idea was not accepted at this time by TAFEs but the former became the present basis for VET in Australia, Competency Based Training (CBT). Regarding the university component
of higher education, unlike his predecessor, Senator Ryan, Dawkins supported charging fees for university students and the Higher Education Contribution scheme (HECs) was propounded and then introduced in 1989. Dawkins’ other higher education proposal was to abolish the CAEs. These had already reduced in numbers from approximately eighty to forty, under the Fraser government. Under the Hawke government CAEs ceased to exist. So that by 1991 most either became universities or were taken over by existent universities. This was the end of the binary system of higher education begun in the 1960s. TAFEs benefitted in this respect by taking over diploma and advanced diploma courses. Dawkins’ third paper, titled *A changing workforce* (Goozee, 2001, p.67) criticized the Australian wage award employment structure as being too segmented with a large number of job classifications and demarcations. This he felt made training too fragmented, as training was tied to this system. He suggested a much reduced job classification system which as a corollary would reduce training courses, streamlining the training system.

Between 1989 and 1991 a succession of measures were taken to implement proposals from the commissioned three reports and Dawkins own papers. At this time technical education changed from a TAFE system to a VET system (Vocational Education and Training); from public system to a mixed public/private system, albeit a small private provision. Means to effect this change were:

- April 1989 – Dawkins met with all State ministers responsible for technical education to gain acceptance of the competency based system;
- April 1990 – National Training Board established to be responsible for competency based standards and for Registered Industry Training Agents who in turn advised employers on eligible training activities;
- July 1990 – the Training Guarantee Scheme legislation requiring employers to spend 1% in the first year and then 1.5% of payroll on training from 1992 onwards with shortfalls collected by the Australian Taxation Office. (Goozee, 2001, pp.67-68)

These measures were then followed up by four substantial reports:

1. Oct 1990 – *Daveson report* on training costs recommended: on the job training related to award restructuring should be increased; on the job training should be provided by private and public trainers; TAFE should increase its level of industry delivery on full cost basis; level of TAFE funding for public delivery should be increased by 5%; there was still a case for charging TAFE students fees even though income remuneration as a result of course completion was not the same as university students, however, as a result of equity and practical issues fees should not be immediately introduced and HECs for TAFE students was rejected (Deveson & Australia Training Costs Review Committee, 1990).

2. July 1991 – *Finn report* on post compulsory education and training recommended: increasing completion rate for year 12/equivalent post secondary qualification to 95%; schools and TAFE changing their approach to “become more concerned with issues of employability and the provision of broad vocational education”; prior to employment all students develop six key competencies (language and communication, mathematics, scientific and technological understanding, cultural understanding, problem solving, personal and interpersonal competencies); and defined school and TAFE students as “clients” (Finn & Australian Education Council Review Committee, 1991, pp. ix-x).

3. March 1992 – *Carmichael report* on vocational qualifications recommended: establishing a competency based Australian Vocational Certificate System (AVTS); merging apprenticeships and traineeships; replacing award rates for young people with a trainee wage based on competencies rather than industrial job classifications; training to be provided by
TAFE, senior colleges, private and community colleges; TAFE to mainly concentrate on vocational courses, certificates II to diploma (Carmichael, ANBE & ESFC, 1992).

4. Sept 1992 – Mayer report to advise AEC and MOVEET on employment-related Key Competencies for post compulsory education and training recommended: seven key competencies (collecting, analysing and organising information/communicating ideas and information/ planning and organising activities/ working with others and in teams; using mathematical ideas and techniques/ solving problems/ using technology), designating three levels of Performance; stipulating that assessment criteria should encompass six principles: common reference point for assessment, validity, fairness, reliability, the relationship between assessment and learning, the place of assessment in program delivery; and this should be implemented in a four staged approach between October 1992 and 1995 (Mayer, 1992).

The outcome of these reports in 1993 was for the State education ministers to endorse the Australian Qualifications Framework (AQF) (Appendix A) which detailed all Australian credentials from Certificate I to PhDs. But before this happened there was a public stoush between the States and Prime Minister Keating. Keating as Treasurer in 1991 had initially supported Dawkins proposal for the Commonwealth to fully fund TAFE and other VET providers, but with the States keeping administrative responsibilities for VET and for funding TAFE year 12 equivalent courses. This proposal plus naming $720 million TAFE funding (1993-95) was next included in Keating’s One Nation economic statement in February 1992, that he delivered as Prime Minister. The States continued to be resistant, so in May 1992 on national television Keating threatened to set up the Commonwealth’s own separate vocational training system (totally contrary to the Australian Constitution). Although he later withdrew this threat there was still conflict at the State Premiers conference.

Labor Premier for Victoria then mediated suggesting a tripartite body to oversee the national TAFE system. This would include representatives from States, Commonwealth and industry. The National Training Board (NTB) established in 1990 was to lead a consultative process with the states. According to Smith this entailed: “Development of units of competency ‘packaged’ into qualifications by the NTB; Qualifications endorsed as ‘national curriculum’ by the National Standards and Curriculum Council representing national, state and industry interests; and Qualifications forwarded to each of the states/territories for translation into eight curriculum documents and accreditation as state training curricula” (Smith, 2013, p.113). Smith further described how “The NTB’s informal use of the term ‘training package’ to describe the groupings of industry standards” was how the term Training Package came into common usage (ibid.).

However, the consultative process where States maintained their power to accredit Training Packages slowly disintegrated, and there was a gradual Commonwealth takeover of the States’ rights. So that between 1992 and 1996 as part of the move to make VET a national vocational system gradually States lost course accrediting powers by a series of Commonwealth legislation and State and Commonwealth ministerial meetings.

The Australian National Training Act 1992 as well as the Vocational Education and Training (VET) Act 1992 were the first to be passed. The former brought into being the Australian National Training Authority (ANTA) a Commonwealth statutory authority with a board of five industry representatives; no educators were present. This first legislation also embodied an agreement between the States and the Commonwealth, that the States would acknowledge ANTA as the appropriate funding body that
could allocate recurrent, growth and capital funds through State/Territory State Training Profiles. These profiles contained information on each State’s government funded training activity, along with fee for service activities of both public and private VET providers. States agreed to abide by ANTA’s funding guidelines. Under the second Act, the VET Act, oversight of DEET’s many recurrent and capital funding programs was transferred to ANTA. For their agreement the States were to receive $70million growth funding for three years and the $720million TAFE funding as promised in Keating’s One Nation statement. Additionally as part of the agreement all States had to pass legislation that contained their acknowledgement of ANTA’s national role as well as naming/establishing a State training authority. By 1995 the requisite legislation and training authorities had been instituted in each State. And in this same year, as per the Mayer report’s four stages of implementation, the previously agreed AQF was launched (Goozee, 2001).

In 1995 with a considerable backlog in the States accrediting national training packages and as part of the ANTA 1992 legislation, Prime Minister Keating commissioned a review of the ANTA agreement by Mr Rae Taylor. In February 1996 the review recommended training providers, not State authorities, become responsible for curriculum development, course accreditation and assessment, while industry competency standards linked to AQF certificate levels would be the responsibility of national authorities. These industry competency standards included specifications for qualifications, for each individual unit of competency, and guidelines for their assessment. Each qualification’s set of competency standards (or outcomes) was called a national Training Package (Smith, 2013). The Taylor review also noted that there was considerable resistance to the VET reform process and a market based training system by TAFE and as a remedy the training market should be “widened”, that is more private providers should enter the market. The year of the review, State ministers implemented its main recommendations by agreeing to establish the National Training Framework whose main components were National Training Packages and the Australian Recognition Framework. The recognition framework’s aim was to support the implementation of the Training Packages which were to be developed by ANTA’s Industry Training Advisory Bodies and endorsed by ANTA’s National Training Framework Committee. In other words the States became by-standers with Commonwealth Authorities taking control of the development and accreditation process for vocational and apprenticeship training (Goozee 2001). By developing guidelines for Training Package implementation and tying that implementation to funding, the States without the power to tax became increasingly subservient to Commonwealth directives regarding VET training in Australia. The first national training packages were endorsed in 1997 (Hunter, 2001).

When the next federal Liberal/Country Party government of Prime Minister Howard took office later in 1996 the basic format for technical and vocational education in Australia had been established. This format along with the tendency to continue to reduce community and State control has persisted to the present.

imagined causal components of this vocational system could be said to be STRUCTURAL: structural-political process: the regulatory system [regulatory bodies both governmental and industry based, laws, policies, standards, education frameworks], structural-education bodies: RTOs, [registered schools, TAFEs as public colleges and private colleges], other supports provided to students [library, counselling, academic and LLN support teachers, online support programs],

Present Format

The present situation in Australia is that VET takes place both in schools and in VET colleges. Both can be publicly or privately owned. Schools however, can only deliver Certificate I to III vocational courses; whereas, VET colleges can deliver Certificate I, II, III, IV as well as Diploma, Associate Diploma and some Bachelor courses. VET colleges are therefore classified as higher educational institutes, and their “teachers” [called “trainers” with only a 9 week Certificate IV teaching qualification] are expected to be industry experts having worked and been certified in the vocational area they are teaching. Schools on the other hand have generally used three year university qualified teaching staff, but not industry experts to deliver the lowest level certificate courses. The schooling situation however is currently in a state of flux with requirements for those delivering vocational qualifications to have some industry experience.

Whether school based or VET college based, all VET curriculums have to follow industry council developed Training Packages available at https://training.gov.au. These Training Packages have been described not as a curriculum but as a regulatory framework (Smith, 2013), which as such outline content knowledge, skills and assessment requirements for each unit; with on average 12 competency units to be completed for each vocational qualification. VET teachers who are industry experts then develop their teaching materials based on the training packages’ requirements. Colleges or schools also have the option to purchase teaching materials for each competency unit from external developers; however, the college or school delivering the vocational training [called a Registered Training Organisation (RTO)] is ultimately responsible that their teaching materials comply with national standards. They are audited at various junctures by the national body, the Australian Skills Quality Authority (ASQA) (Australian Government, ASQA, 2015).
structural-education bodies, inclusion/exclusion members: teachers and students, structural-education programs and resources: national Training Packages, formal certificate and diploma courses, informal courses, teacher developed curriculum materials

INITIAL ANALYSIS - Stage 3: Underpinning Theoretical Frameworks & Philosophies

Education Theories, Concepts and Models

When mass education began in the 19th century Britain, the models for schooling were the basics and the classics models (Luke & Freebody, 1999). School for the general population employed the basics model of rote learning of reading, writing and arithmetic, often done with groups of younger students surrounding an older student tutor chanting lessons to be remembered. The purpose was to provide workers for the Industrial era. This contrasted with the private grammar school system that taught the Roman and Greek classics, and encouraged discussion and debate. This model of education was a pathway to university and to provide leaders for the industrialised British empire. A third apprenticeship model which had existed since the time of the Guilds was described by Brentano (1870) as a holistic model and one of shared responsibilities:

- the responsibility of the “masters” was in modern parlance “delivery”
  - to take the apprentice into his family and workshop;
  - to mentor the apprentice to become an accomplished craftsman;
  - to mentor the apprentice to learn to behave in a socially acceptable way.
- the responsibility of the apprentice was a commitment to learning,
  - to become part of the master’s family and craft brothers;
  - to follow all master’s instructions to become a master craftsman;
  - to remain in training till completed.
- responsibility of the community was for citizen and judicial oversight of guild members’ behaviour and products.

The apprenticeship model was one of oral instruction, demonstration and physical application to develop skills and knowledge relating to a specific trade. However, in 19th century Britain many workers and tradesmen desired more education similar to that available at grammar schools or universities, or to improve their present skills. This was provided after work hours at mechanics institutes, working men’s colleges and schools of arts.

So although the psychological theory of behaviourism as applied to education was beginning to emerge during the late 19th and start of 20th centuries, it could only be said to be applied in a purist form to the basics model of school education. For workers and tradesmen involved in technical employment, their education went further than behaviourist education principles of direct teacher instruction to a passive learner with multiple forms of practices, stimulus-response learning. For early technical education also included a great deal of discussion, incidental and informal learning on the job and off the job at the night schools. This form of technical education additionally had a social/community aspect by teaching acceptable social behaviours to young apprentices (Brentano, 1870).

However as technical education became more formalised as the 20th century progressed, the social responsibility of the apprenticeship model dissipated, with formal training taking place in schools. As this system of formalised school based training became established, so the more purist forms of behaviourist education became prevalent in technical education (Doolittle & Camp, 1999).
After World War II cognitive education theories came to the fore for both technical and schooling education. This was where the learner was seen “as a psychological entity with a set of mental capacities” (Luke & Freebody, 1999, p.189). The development of individual cognitive skills was the optimum form of learning to produce a citizen with transportable cognitive skills necessary for the scientific industrialised economy. This theory was the premise in the 1950s and ’60s for administering intelligence tests, and differentiated high schooling where students with deemed higher cognitive skills were put into an academic stream and those with lesser cognitive skills into a technical stream. It also cemented a concept of individuals involved in technical education as being “not so bright”, “not so clever”, “good with their hands” whereas those involved in academic education were “bright”, “clever”, “good with their brains”. As a corollary a concept has attached to the Australian higher education sphere where technical education is less valued in Australia than a university education, with further outcomes of less funding for technical education compared to not only university but also school education (Noonan, Burke, Wade & Pilcher, 2014), as well as poorer quality teacher training compared to training for school teachers (Livock, 2016).

Towards the end of the 1960s and into the 1970s constructivist and humanist theories became influential in Australian education. Constructivism (that is cognitive constructivism or weak constructivism) as developed by cognitive and developmental theorists such as Dewey, Piaget and Bruner envisioned knowledge of external reality being apprehended and internally constructed by individuals (WNET Education, 2004; Doolittle & Camp, 1999). Related teaching approaches were for teachers to help facilitate and guide students to construct their own knowledge and understandings through experiential learning. Somewhat similarly humanist theories instead of trying to control the learner and the learning environment with prescriptive methods and strategies, sought to free the learner to become a ‘self-actualizing’ individual. Such an individual according to Maslow had a hierarchy of bio-physical needs, not socially learned but innate and common to every human being (Collins, 1984). This kind of learner required a student centred approach rather than a knowledge based strategy.

The next theoretical development in the 1970s, ‘80s and ‘90s was a socio-cultural and critical approach to delivering education, where the social and cultural backgrounds of the learners and the learning context needed to be taken into account when developing and delivering educational programs in both schooling and vocational education (Luke & Freebody, 1999; Ford, 1994). The critical element was derived from Freire’s critical pedagogy which sought to empower disadvantaged learners, transform discriminatory structures and was often seen as part of a social constructivist agenda (Cummins, 1994). This was an agenda where the teacher not only discursively co-constructed meaning with students but also by making them critically aware of social and cultural dominant discourses, empowering them to be better able to act in their own interests (Crebbin, 1992; Doolittle & Camp, 1999).

A common element to constructivist, humanist, and critical theories was the centrality of the learner, as opposed to the subject to be learnt as in behaviourist learning theories. Also integrating well with humanist, constructivist and critical theories throughout the 1970s, ‘80s and ‘90s, was the concept of a needs based teaching approach which was prevalent in adult education at this time. The impact on vocational, technical and adult education was development of programs to promote social justice and equity for all learners (Smith, 2013). For example in the 1970s and ‘80s there was an expansion of community outreach government funded programs such as basic computer skills for stay at home mothers; literacy and numeracy volunteer tutoring programs for immigrants with English as a second language; life skills and literacy programs for people with intellectual disabilities. These programs came under the direction of TAFE’s, CAE’s and community centres.
However, in 1989 Australian adult educator and researcher Rosie Wickert published a seminal paper “No Single Measure”. This paper showed that 10% of adults in Australia lacked basic literacy and numeracy education to function in society. At this time there were widespread media and community concerns that education was not “performing” well, that there was a literacy crisis; that is education had not provided Australian citizens with the very basics, functional literacy, to operate in society. Back to basics became a theme in public discourse. This concern about falling educational standards persisted throughout the 1990s and into the new century, even though researchers such as Luke and Freebody (1997) Kamler (cited in Kitson, 1999) Sawyer and Watson (1997) provided statistical evidence that generational literacy and education attainment had markedly improved since World War II. The concept that Australian public education is in crisis has nevertheless persisted to the present time.

From the late 1980s this deficit concept of public education has extended to the delivery of technical and vocational education by TAFE: that TAFE provided VET education was not meeting community and industry needs; that it should be more responsive; and that it will be made so by being in a competitive education market (Goozee, 2001; Barilaro, 2016). This concern combined with the public discourse about a return to more prescriptive behaviourist teaching methods then drew on monetary based theories and applied them to technical and vocational education.

**Social, Industrial & Monetary Theories, Concepts and Models**

When in 1988 Dawkins introduced the idea of competency based training which then in the early 1990s was incorporated into the national Training Packages, the theory that was drawn upon was *Taylor’s scientific management theory* and an earlier theory put forward by Adam Smith in the 18th century, that of division of labour (Hunter, 2001). Both these theories were tied to increasing productivity where if labour is broken down to its simplest components, all each worker needs to do is master the skill of that component and then along Fordist principles manufacture that component, with a resultant exponential increase in output of the whole product. This was the production line view of optimal industry performance.

The concept of competency based training in VET replicated basic elements of scientific management theory with learners mastering discrete skills as taught in individual “units” within the national Training Packages. Training tied to award wages meant VET learners would be monetarily rewarded for competence in discrete skills acquisition rather than a holistic mastery of a trade as in earlier VET curriculum models. Some have criticised this approach as having a negative impact on critical and creative thinking needed in the new world of work. Turner went so far as to say the final outcome could be a “workforce of automatons who are proficient in narrow, specific fields but unable to ‘think for themselves’” (cited in Smith, 2002, p.69). Others, however, have expressed the view that competencies as contained in Australian national Training Packages are merely needed national standardized industry outcomes; that the original intention to have VET teachers construct teaching and assessment curriculum documents gave opportunity to flexibly develop teaching materials suited for regional and local communities and workplaces. Nevertheless ability of VET teachers to develop a responsive and well designed curriculum has been restricted by limited and erratic VET teacher training, which between 1980s and 2016 has varied between two year teacher training courses, masters degrees [without previous bachelors degrees] and presently nine weeks to three days Certificate IV in Training and Assessment (Smith, 2002; Smith, 2013).
Influential in the change to a marketized approach which underpinned competency based standardized vocational education was *rational choice theory*. Rational choice theory aligned with neo-liberal and new right discourses which externally to Australia underpinned Thatcherism, the New Right movement in the US and then Tony Blair’s New Labour policies. These movements and policy directions began to affect the direction of vocational education in Australia beginning in 1987. These are theoretical positions which have been described as supplanting “traditional ideals of personal freedoms and natural rights by a doctrine of freedom of the marketplace, a freedom which is unfettered by social or community responsibility” (Livock, 2009, p. 32) with emphasis on individualism, on the “‘entrepreneurial self … the rise of enterprise culture and enterprise education” (Peters, 2001, p. 58) that in a de-regulated market “people will make an informed choice that will be in their best interests” (Leahy, 2014, p. 2). American educator Apple went so far as to say that the New Right’s approach to education was based on "naked self-interest", and "a hypocritical conception of democracy" (2001, pp. 16, 229). While Australian VET educator and academic, Leesa Wheelahan set forth the results of turning to market place education:

[T]he problem that since the 1980s we’ve had the transformation of society from a society in which the market supported the broader society, to a market society where the point of society is to be a market (Wheelahan, cited in Forward, 2014, para.13).

A monetary theory that could have a positive effect of encouraging government funding of vocational education is *human capital theory* which postulates that “investment in education encourages an increase in the productivity of the workforce as well as an increase in returns not just to individuals but also to society as a whole” (Abbott & Doucouliagos, 2003, pp.9-10). This theory informed the Martin report of 1965 which advocated increased tertiary funding, but instead of funding purely technical education, was influential in establishing a third form of tertiary education the CAEs which as described above existed between 1965 and 1991. A negative feature of human capital theory is that it has a dehumanising aspect by commodifying human beings as purely a means of production.

All of these theories, monetary and educational have as emergent cultural structures influenced individuals within the VET structural sphere. The following explanatory stages will seek to uncover the essential elements needed in these theories for humanising VET in Australia.

**MARXIST QUESTIONING - Stage 4: Retroduction**

This is where we return to review this paper’s central transcendental question:

*What are the necessary conditions for re-humanising Vocational Education and Training in Australia?*

To answer this question several sub-questions will be posed concerning the underlying elements of the social world; that is regarding the emergent cultural structures, the realm of theoretical constructs, as well as the emergent social structures and individuals involved in the historical construction of Australian VET to emerge in its present format. This will be done in the following stages 5 and 6 of this explanatory analysis.
FINAL ANALYSIS - Stage 5 & 6: Comparing Theories and Abstractions & Concretization and Contextualization

The first sub-question is:

What educational and monetary theories and allied concepts make possible the necessary conditions for re-humanising VET in Australia?

Referring to Appendix B, aspects of educational theories, concepts and models that are necessary to make possible a humanistic society are those where “the free flourishing of each as a condition of the free flourishing of all, which is the good society for human being” (Hartwig, 2007a, p.187). These aspects are not bound in one theory alone but can be abduced based on condition that they are in alignment with the following two premises: that individuals are relational beings and need positive productive truly collaborative relationships to flourish; and that there is mutual societal benefit in work when the outcomes of that work will “minimize the inequities of circumstance and ability” of some, so “as many as possible can enjoy a good life” (American Humanist Association, 2003, p.2).

- From behaviourist and cognitive education theories: direct explicit teaching of VET practical skills as well as thinking skills are essential to be competent in the workplace.

- From cognitive constructivism and social constructivism: learners need to have opportunity to internalise through experiential real life tasks, the knowledge they have learnt in a cooperative co-constructivist learning environment, where teachers provide all needed scaffolded supports.

- From humanistic, social-cultural and critical education theories: necessary components to humanise VET are learner centred [albeit this does not mean neglecting direct teaching of subject content] in that teachers are not churning out content while neglecting students’ understandings; they include taking into consideration all learners’ social and cultural backgrounds and prior learning, and enabling all learners to become aware of powerful social-cultural discourses of the workplace, thus empowering them in a sometimes alien social and cultural environment.

- From human capital theory: an impetus is provided for governments to fund technical and vocational education for the benefit of individuals and society as a whole.

- From competency based training emerging from scientific management theory: development of national industry standards to enable workers’ qualifications to be nationally recognized, with emergent national training packages which allow teachers to develop flexible curriculums to suit local and regional needs.

In other words from an education perspective, teaching that omits explicitly teaching skills needed in the workplace, or teaching that treats learners as passive receptacles of object like knowledge and skills; these two approaches firstly fail to enable learners to operate successfully in the workplace and gain satisfaction from work, and secondly fail to enable learners as cooperative social beings to think creatively and critically as needed in the present day complex technological world of work and social life (Mikulecky, 2004). These are non necessary components of the discussed education theories which do not contribute to re-humanising VET.
From the perspective of monetary theories discussed, *rational choice theory* which reconceptualises education as a deregulated market place, wrongly assumes learners will make beneficial informed choices, and like *human capital theory* commodifies learners. The model of *competency based training* encapsulated in *national training packages* and based on the theories of *scientific management, division of labour and Fordist production* results in mastery of discrete skills rather than an integrated holistic mastery of a trade; fails to transmit underpinning knowledge needed for further academic study; and limits critical and creative thinking (Smith, 2002). These components dehumanise VET making it a mechanistic and technicist training system, devaluing human being (Lingard, Hayes, & Mills, 2003).

To re-contextualise these theories in the emergent present and historical social structures a second sub-question is posed:

*What necessary components from the historical past and the emergent present VET sphere align with necessary education components to re-humanise VET in Australia?*

- **Historical and present VET components that align with necessary behaviourist and cognitive direct instruction in practical and thinking skills** were found in the technical schools extent from 1800s and in existence under the post World War II differentiated high school system. It included introduction of a standardised national VET system under Dawkins from the late 1980s to the present whereby vocational and technical skills are delineated in minute detail in national training packages, featuring “a uniform approach” across states and “portability of skills” (Australian Government Department of Industry, 2014, pp.19, 9).

However, what has presently *dehumanised* positive behaviourist/cognitive education principles is lack of teacher training to adequately and effectively weave discrete competency based units of knowledge from national training packages into curriculum materials, which is a constant theme in research papers regarding woeful lack of VET teacher training in curriculum design (Smith, 2002; Simons & Smith, 2008; Dempsey, 2013; Smith, 2013). Another factor is the dismissal between 2012 and 2015 of over ten thousand long term, experienced VET teachers from the TAFE system across Australia. This was done under the guise of offering generous redundancy packages to those who felt they would not be in alignment with the new philosophy [unstated but meaning the marketized approach to VET]. With this dismissal has come the casualisation of the workforce, an inexperienced workforce that now has even more time constraints in developing an effective curriculum (Massey & Nivison-Smith, 2013; Norton, 2014). These issues have been swept under the carpet by governmental structures such as regulatory bodies and reports, for example in the 2014 federal government sponsored *Review of Training Packages and Accredited Courses – Discussion Paper* (Australian Government Department of Industry, 2014) not one word was said about this issue of poor VET curriculum design resulting from a casualised, time pressed, poorly trained VET teaching workforce; a factor which is highly detrimental to delivery of training packages and the entire competency based system.

- **Historical and present VET components that align with necessary cognitive constructivist and social constructivist principles:** The co-construction of technical and academic knowledge had loosely taken place in the 1800s and early 1900s in the night classes of the mechanics institutes, working men’s colleges and schools of arts. Specific implementation of constructivist principles, where VET learners become involved in the construction of their own understandings, individually and with guidance of teachers occurred in the 1970s Whitlam era when a plethora of community based vocational programs began. This decade was one where schooling education in Australia sought to implement progressive student
centred teaching methods which began to be adopted in TAFE. These were continued by the Fraser government. In the 1980s the early Hawke government itself pursued a consensus approach where representatives from TAFE, industry, unions and government were equally and collaboratively consulted for input into TAFE development.

- **Historical and present VET components that align with necessary humanistic, social-cultural and critical education principles:** These principles were implemented during the Whitlam, Fraser and the early Hawke years. This was true particularly under the ministerial oversight of Senator Ryan between 1983 and 1987 when there was a plethora of youth centred VET programs specifically tailored to the socio-cultural needs of this group of learners; learner centred programs. These youth programs also reflected Rogers and Maslow’s humanistic theories of enabling personal growth and self-actualization, theories that also were influential in the previous decade as exemplified by the TAFE community outreach programs. Regarding critical theory, although beginning from the late 1970s through to the present both schooling and vocational education have given some acknowledgement of the need for making students aware of discourses of power, as exemplified in the critical component inserted into the 2008 national adult literacy framework, the Australian Core Skills Framework, and for schooling, Education Queensland’s 2010 New Basics project [since defunct]; nevertheless over this time period explicit teaching of critical discourses has had little impact on day to day VET teaching. Recurrent criticisms in the research literature points to a dearth of critical skills being taught in VET (Smith, 2013; Ryan et al., 2015; Livock, 2016).

**Necessary components of constructivist, humanist, socio-cultural and critical theories not implemented:** firstly, was that the multiplicity of youth employment programs described above, were short-lived with changing oversight and financing models which caused a great deal of frustration for VET administrators and teachers. So although the underlying theoretical pedagogical constructs aligned with humanist goals, the administrative structures created barriers to effective implementation. However, instead of improving the administrative structures and maintaining the necessary pedagogic practices for human development, the Review of TAFE funding (May, 1986) and Review of efficiency and effectiveness in higher education (Sept. 1986) were used by the Labor government in 1987 to ditch a humanistic approach to VET and implement market based reforms. This was also in the context of a federal election in July 1987 and Black Monday, crash of the New York stock exchange on 19 October 1987 – structurally contingent external/global political phenomena.

Other missing necessary components of constructivist, humanist, socio-cultural and critical elements which have dehumanised VET occurred first after World War I with the move from the more informal work based apprenticeship model to a model of work release and prescriptive behaviourist formal teaching at technical schools. Although the work release model still persisted through the 1970s and 1980s when humanist approaches were evident, in 1987 the underlying learner centred approaches came to an end and were replaced, as described above, not just by a content based approach, but by a philosophy that prioritized making money over human well being and development.

This monetary philosophies and movements based on rational choice theory have continued to influence all aspects of the Structure of VET education, with a ferocious determination beginning in 2008 to allow even more private providers into the VET “market”. In 2008 the OECD and Bradley reviews emphasised the importance of various structural changes linked to a marketized approach to funding VET in Australia. As a result Noonan reports that:
Non-TAFE providers have been increasing their market share of public VET funding. Between 2008 and 2012, payments to these providers increased by A$950 million, an increase of more than 200%. (Noonan, 2014 Aug., ¶ 2) ... [and] ...

Since 2008 in Victoria TAFE market share of government funded student load has fallen from almost 70% to 45% and in South Australia, it fell from 71% in 2011 to 51% in 2012. (ibid., ¶ 5).

Then in 2012 in spite of the Rudd-Gillard Labor governments’ previous non endorsement of a student entitlement model for the VET sector as recommended by OECD and Bradley reviews, this entitlement model for VET was endorsed by the Council of Australian Governments (COAG) as part of the 2012-2016 National Agreement for Skills and Workforce Development. “Entitlement” like “user choice” has positive connotations, however, its meaning is less positive in that it is purely an entitlement (i) to obtain one Certificate III with fees that are subsidised, and (ii) to borrow money under the VET Fee Help model for Diploma, Advanced Diploma and a limited number of Certificate IV courses. Under VET Fee Help, the Commonwealth government pays VET students’ fees upfront in the context of a “demand-based approach to funding higher education” (Bradley et al., cited in Noonan & Pilcher, 2014, p.18). Unfortunately a result of the demand based approach, government direct funding for publicly provided TAFE courses has been drastically cut with exponential rises in course costs; for example, in 2012 diplomas and advanced diplomas cost a few thousand dollars. In 2016 they cost tens of thousands of dollars. At the moment it is being recommended to extend the VET Fee “Help” “entitlement” down to certificate levels where such lower levels often result in the VET student either obtaining low paid jobs, or retaining their present low paid position to comply with workplace regulatory practices; thus being without the ability to repay a large debt. It seems the “entitlement” model now entitles VET students to become laden with debts many will be unable to repay.

Additionally the notion that the marketplace is benefitting society as a whole is a joke, and not a very funny one. Presently the Australian citizen is bearing the cost of $A5.5 billion of VET Fee Help debt, risen from $A25 million in 2008 (Forward, 2016; Forward, 2015). This is in the deregulated marketplace where private providers do not have the social responsibility built into their administrative frameworks, unlike TAFEs which are statutory bodies; in the deregulated marketplace training providers can charge whatever fees the market will bear. Thus a private training provider, like Careers Australia can and has charged $23,250 for a Double Diploma of Business and Management, whereas a TAFE, TAFE Queensland South West has only charged $6,800 (Brody & Temple, 2015). Yet in spite of this discrepancy the open deregulated door to private providers means they are collecting 80% of monies from the VET Fee Help scheme, with a significant number of these providers shutting their doors in bankruptcy before students can complete their courses (Forward, 2016; Mitchell, 2016). Further, the deregulated market has moved the cost burden of education from government responsibility to the students’ shoulders; a high percentage of whom come from disadvantaged and equity backgrounds who now are being dubbed as “doubtful debtors”. This is because it is expected a significant percentage of VET Fee Help students will never repay that growing $A5.5 billion debt burden (Norton, 2014 April).

1 COAG is the peak intergovernmental forum in Australia, chaired by the prime minister and including all state premiers, territory chief ministers and Australian local government association representative.
CONCLUSION

So to answer the main transcendental question for this paper:

*What are the necessary conditions for re-humanising Vocational Education and Training in Australia?*

The deregulated market place based on rational choice theory is definitely NOT a necessary condition for re-humanising VET in Australia. The U-turn made in 1987 largely initiated by two individuals with large amounts of personal agency, Paul Keating first as Treasurer and then as Prime Minister, and John Dawkins, minister for Finance, Trade and finally Employment Education and Training; these two individuals' agency has had a momentous impact on dehumanising the structure of VET in Australia. Previously those individuals who impacted technical and vocational education to uphold more humanistic learner centred approaches were Prime Ministers Whitlam whose personal influence brought about the introduction of a program of social justice in all spheres of public life including VET; and Fraser and Hawke (in his early years) who generally maintained the humanist approach. Additionally, Prime Minister Menzies who held office between 1949 and 1966 also had a mostly positive impact on the formative development of both schooling and higher education in post war Australia, and although not explicitly following humanist principles, nevertheless did value building individual human capacities. All these political individuals were able to use their own personal philosophically based view-points to influence writing of reports and reviews, for when historically analysed it is evident that such reports to a greater degree aligned with the political/philosophical view point of the reigning prime minister/education minister/treasurer. This was more so after 1970, previously while education was in its formative years report writers had greater agency, informing each other across State boarders as well as influencing political policies and structural developments.

Of the emergent VET Structures, cultural structures in the form of education theories and social structures, there are many positive components as delineated above which constitute necessary conditions for re-humanising VET in present day Australia. However, the most necessary condition is the theoretical or philosophical undergirding mechanism that gives the impetus for the structure above. Consequently there now needs to be another U-turn in VET’s undergirding theoretical approach, to one which values the human beings involved: the teachers’ experience, the value of the student / teacher relationship, the administrative staff input, and the value of collaboration of all stakeholders. This has not happened since 1987. Instead those individuals involved in VET education, whether State ministers, regulatory body representatives or VET teachers and directors, have been railroaded into accepting the marketized approach to VET education in Australia based on a funding model which is in significant disjuncture with the Australian Constitution, a dehumanising approach and economically wasteful.

It is evident that in spite of the many independent research projects which promote this U-turn, despite pleas and submission from VET teachers, despite community protests; nevertheless those individuals with the most agency, the key politicians in both Australian Labor and Liberal parties have greater agency and have used this agency to not only maintain the marketized approach since 1987 but have increased the intensity of its implementation, contrary to all human common sense. It is therefore beholden on those individuals and their associates to facilitate the U-turn to the humanistic approach utilizing the necessary components from the several education theories and positive past structural examples as named herein to re-humanise VET in Australia.
REFERENCES


Department of Premier and Cabinet WA. (2016). The Uniform Tax Case 1942. The Constitutional Centre of Western Australia. Perth: the Government of Western Australia


*Technical and Further Education Commission Act 1975 (Cth) s.6.1(a-f) (Austl.)*.


APPENDIX A: Australian Qualifications Framework (AQF)

Overlap between VET and higher education qualifications

<table>
<thead>
<tr>
<th>AQF level</th>
<th>Name of qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Certificate I</td>
</tr>
<tr>
<td>2</td>
<td>Certificate II</td>
</tr>
<tr>
<td>3</td>
<td>Certificate III</td>
</tr>
<tr>
<td>4</td>
<td>Certificate IV</td>
</tr>
<tr>
<td>5</td>
<td>Diploma</td>
</tr>
<tr>
<td>6</td>
<td>Advanced Diploma</td>
</tr>
<tr>
<td>6</td>
<td>Associate Degree</td>
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<tr>
<td>7</td>
<td>Bachelor Degree</td>
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<tr>
<td>8</td>
<td>Bachelor Honours Degree</td>
</tr>
<tr>
<td>8</td>
<td>Graduate Certificate; Graduate Diploma</td>
</tr>
<tr>
<td>9</td>
<td>Masters Degree</td>
</tr>
<tr>
<td>10</td>
<td>Doctoral Degree</td>
</tr>
</tbody>
</table>

(Department of Prime Minister and Cabinet, 2014, p.46)
APPENDIX B: Education & Monetary theories, concepts and models

EDUCATION THEORIES, CONCEPTS & MODELS

Basics & Classics models
- Rote learning
- Discursive debate
- Social skills

Apprenticeship model
- Formal learning - skills practice
- Informal learning - discussion on the job
- Social skills

Behaviourist Learning Theory
- Passive learner
- Stimulus response learning
- Multiple forms of practice
- Prescriptive curriculum
- Adherence to standards

Discrete skills
Direct teaching

Direct teaching

Discursive
Social skills

Cognitive skills
Direct teaching

Cognitive Constructivism
- External knowledge apprehended and internally constructed
- Teachers facilitate & guide learning
- Experiential learning

Cognitive Education Theories
- Person's set of mental capacities
- Cognitive skills development
- Citizen with transportable skills
- Intelligence testing

Internally constructed knowledge
Experiential learning

Teacher scaffolding

Humanist, Social Cognitive, Social-Cultural & Critical Theories
- Learner & Needs centred
- H-selfactualizing learner
- S Cog-discursively co-constructed meaning
- S Cult-teacher aware of students' socio-cultural backgrounds & learning context
- Critical-students made aware of discourses of power

Learner centred
NOT subject centred
Teacher scaffolding

Social cultural – of learning context; of learner

Critical – student empowerment

MONETARY THEORIES & CONCEPTS

Rational Choice Theory

- Neo liberal & New right DISCOURSES
- Thatcherism
- Tony Blair's New Labour

Taylor's Scientific Management Theory & Fordism

- Division of labour /simplest components
- Competency Based Training
- National Training Packages

Human Capital Theory

- Investment in technical & vocational education
- Improve productivity to benefit individuals & society
- Commodify human beings