

A new paradigm for evaluating TAFE graduate outcomes

Chris van der Linde

Abstract

There is a gap in the current research literature regarding evaluation of TAFE outcomes and it stems from a predominant human capital focus. The existing paradigm of human capital, which values the acquisition of knowledge and skills for their economic value, has been of primary interest and significance, particularly in terms of government policy in relation to vocational education and training. The concept of personal capital is distinct from human capital in that it considers the intrinsic reasons, impetus and values that individuals ascribe to their motivation to undertake and complete a course of study. Personal capital is not quantifiable within the present human capital outcomes paradigm, however the personal capital paradigm allows for a deeper exploration of a range of further tangible and valid outcomes not addressed in the human capital approach.

Introduction

Historically both Federal and State Governments have seen the predominant role of vocational education and training, and in particular Technical and Further Education (TAFE), as being a vehicle for developing skilled workers in order to meet existing workforce requirements and to maintain economic competitiveness in the marketplace (Goozee, 1995). A discussion paper by the Employment and Skills Formation Council (ESFC) of the National Board of Employment Education and Training (1991) cites a report received by the Victorian Minister for Public Instruction in 1906 which identified the importance of education and skills development in relation to economic growth by claiming, “we must follow the track of other colonies or lose ground. The competition for the future will be between efficient people who add scientific training to their industry and knowledge to their ambition...Education has now

become an industrial question" (ESFC, 1991, p 6). This report exemplifies the early recognition by governments of a link between skills training, education and economic competitiveness.

The need to be economically viable on a national scale has long been a driving factor behind successive federal government policy initiatives regarding vocational education and training and TAFE regardless of the political persuasion of the government of the time. Haynes (1997) believes that the national landscape of economic recession, widespread unemployment and a shift towards conservative politics led to a fundamental change in educational theory and associated policy directions by succeeding Federal Governments since the 1970's. During the late 1970's and early 1980's, which was a period of economic stagnancy and high unemployment, the conservative Frazer federal government increased real funding for TAFE. This investment was seen as not only essential for increasing labour force skills and assisting in economic recovery, but was also seen as a means of reoccupying the unemployed and the victims of federal government social welfare cutbacks (Goozee, 1995).

The Labor Minister for the Department of Employment, Education and Training, John Dawkins, stated in 1987 that the Department's principal goal was to assist young people to gain employment, as this was seen as an important national economic objective (Haynes, 1997). Dawkins' paper, *Skills for Australia* set the agenda for vocational education and training and claimed that it should play an active role in responding to the major economic challenges that were facing Australia (Dawkins, 1987). In a National Press Club address in 1990 Dawkins reiterated the federal government's view of the economic importance of vocational education and training by stating that, "policies in education and training must be subordinate to the national economic imperative of achieving the optimal employment of our people" (Dawkins cited in Goozee, 1995).

During the 1990's, national training reforms were implemented which were designed to increase the adequacy and standard of vocational education and training by introducing uniformity of training and assessment between the states and territories. As part of this federally driven process the federal government established the Australian National Training Authority (ANTA) which was designed to provide strategic direction for the development, implementation and funding of a clearly articulated national system of vocational education and training (Simons & Harris, 2002). In its report, *A bridge to the future: Australia's national strategy for vocational education and training 1998-2003*, ANTA stated that it perceived the role of vocational education and training was to ensure that the skills of the Australian labour force were sufficient to support internationally competitive commerce and industry (ANTA, 1998).

After some period of negotiation, the states, territories and federal government agreed to jointly fund national vocational training through ANTA with the federal government agreeing to provide additional funding to the states and territories (Goozee, 1995). As a result of the ANTA Agreement the federal government provides substantial funding for the vocational education and training sector and TAFE in particular and, as a result, the states generally have to align their policy directions with that of the Commonwealth to retain funding. The states generally do not have vocational education and training policies that are contrary to federal mandates as their economic development is seen as closely linked with industry and skills development. Given the nature of the ANTA funding arrangements TAFE has been, if not compelled, at least strongly urged, to meet the federal/state economic policy.

The development of economy-centred vocational education and training (Stromquist & Monkman, 2000) at both the federal and state level can be seen to some degree as a response globalisation. Stromquist and Monkman (2000) have described globalisation as a progression of events by which the world is rapidly being integrated into one economic entity through increased international trade and the internationalisation of production, financial markets and a commodity culture. Lubbers (2005) sees the concept of globalisation as a trend towards the internationalisation of production, a new international division of labour and a new competitive environment that generates these processes on a global scale. Walsham (2000) contends that a precise definition of Globalisation is difficult to state, but he argues that it is widely accepted that the world is becoming increasingly interconnected in terms of its economic, political and cultural life.

The growth of economic globalisation, which involves the increasing interaction and integration of national economic systems through the growth of international trade and investment (Anonymous, 2005), has left many workers unprepared for the new labour markets that have developed (Spring, 1998). Hobart (1999) believes that if vocational education and training is going to successfully fulfil its role of developing relevant competencies in people to enable them to effectively and efficiently perform in the workplace, it must accommodate the global context within which it now has to operate. A similar sentiment was expressed in a 1997 Queensland Department of Training and Industrial Relations position paper on vocational education and training in Queensland which claimed that the training industry had been redefined by the globalisation of markets and that TAFE needed to respond to national and world competition in the way that it prepared people for work (DTIR, 1997).

The intertwining of education policy with economic policy by successive federal and state governments is not unique to the Australian context, nor is it a new or recent phenomenon of the industrialised world. Welsh (1990) cites the Chinese philosopher Confucius, who lived in the 5th century BC, as having claimed that no nation goes bankrupt educating its people, and so it would appear that the

two concepts of education and the economics of the state have been recognised as being interrelated throughout the world for many centuries. However, the emergence of globalisation has brought new exigencies for governments in terms of education and economic policies in order to be and remain competitive in the global marketplace.

The economic importance of education in the context of global competitiveness and the subsequent policy agendas of the federal and state governments can be seen as sitting within the human resource concept of 'Human Capital'. Human capital has many different definitions (Stewart, 1997; Widener, 2005; Abeysekera 2005; Heckman 2005) however it is generally assumed that it refers to a combination of assets possessed by individuals in, and by the combined workforce of, a company or organization (Abeysekera 2005).

The combination of assets, comprising an accumulation of knowledge that includes explicit and implicit knowledge, are seen by Dimov and Shepherd (2005) as underpinning the concept of human capital. Widener (2005) claims that in its broadest sense human capital can be defined as the knowledge and/or skills possessed by an organization's workforce that assist that organization to maintain its competitive advantage. Carmeli (2004) contends that human capital theory focuses on the educational level of employees as a source of labour productivity and economic growth and Heckman (2005) maintains that human capital, which he defines as the skills of the population, plays a major role in explaining economic growth and the differences in productivity among countries.

In his research paper for the Australian Bureau of Statistics (ABS), *Measuring the Stock of Human Capital for Australia*, Wei (2004) states that human capital is one of the most important assets of a country and that education is one of the most important forms of investment in human capital. Wei (2004) claims that in determining statistics relevant to human capital formation in Australia, the ABS uses statistics on education and training activities, the labour force, and expenditures on education by governments. Human capital theory views the allocation of resources by governments to education as an investment that will produce future returns in the form of economic growth or productivity (Welsh, 1990). Consequently, human capital theory asserts that the economic value of education is assessed by the increase in the earning capacity or productive capability of individuals (Quiggin, 1999) and that human capital can only be measured indirectly, that is, through what is produced (Codd, 1999). Federal and State Government vocational education and training policy exists within the context of human capital theory, as historically it has emphasised skills development as a charter for vocational education and training and TAFE in order to meet present and future industry and economic demands. Human capital theory deems that the more skilled and productive individuals are, the more valuable those individuals are to industry and commerce and, by inference, the national economy.

The Existing Paradigm

Mechanics Institutes were initially established in the 1800's to meet the localised demands of skilling labour and also for developing skills training to enable the country to meet the challenges of industrialisation (Ryan, 2002). These Institutes evolved into Technical Colleges, which were seen to be a crucial link between trade, commerce and industry through the preparation of participants for various occupations and professions (Clarke, 1992) and as a result of Australia's involvement in two World Wars, these Colleges were called upon by the federal government to develop a skilled workforce for the war effort (Pickersgill, 2004).

After languishing for some time during the post-war boom period, in 1973 the Australian Committee on Technical and Further Education (ACTFE) was formed to report on technical and further education. The chairman of the committee was Myer Kangan (ACTFE, 1974), and the Kangan Report stated that the function of TAFE was not simply to provide industry and commerce with a supply of skilled workers, but that it also had a more altruistic role of providing for individual growth and development (Fleming in Kearns & Hall, 1994). The Report claimed that technical and further education should recognise the needs of individuals as people and their development as a member of society, including the development of social skills that affect personality (ACTFE, 1974). Within a few years, economic expedience would overtake the altruism of the Kangan Era as record inflation, high unemployment and a lack of global competitiveness led to a refocusing by the Federal Government on the role of education in relation to the national economy.

Kangan's concept of the 'educated person' did not conflict with the concept of human capital. It simply was not a consideration within the context of the paradigm as economic recession and widespread unemployment led to a change in emphasis by governments from Kangan's student-centred approach to economy driven vocational education and training (Stromquist & Monkman, 2000). Since the demise of Kangan's 'educated person' concept for TAFE, the Federal and State Government's perceptions that TAFE should be primarily focused on vocational education and training has not altered. A noteworthy change that has cemented this opinion of TAFE has been the implementation of Training Packages, which are nationally delivered products developed in consultation with industry to meet the identified training needs of specific industries or industry sectors. (DEST, 2006). The introduction of national Training Packages has highlighted the federal government's vocation and skills expectation of TAFE and reinforced the Dawkins philosophy of education and training as being vital to economic and global competitiveness. The emphasis on the human capital value of the individual is borne out by the prominence given by governments to the National Centre for Vocational Education Research (NCVER). NCVER is a vocational education and training research and

development centre owned by vocational education and training ministers and is responsible for the collection of national vocational education and training statistics (NCVER, 2000). NCVER conducts quantitative Student Outcomes Surveys in which employment and wage outcomes of vocational education and training participants are deemed to be key indicators of successful outcomes.

The NCVER Student Outcomes Surveys are an annual survey of graduates of TAFE programs on a national basis, with the surveys being deemed by NCVER to be useful in that they provide yearly information to TAFE organizations, employers and to governments, both Federal and State, about the performance of TAFE institutions throughout Australia. NCVER uses four primary questions as measures of outcomes and success when attempting to determine whether TAFE graduates achieved their intended purpose for undertaking their TAFE program. The survey questions graduates as to whether they achieved their main reason for their studies, whether they gained employment once they completed their studies, whether they changed their vocation as a result of their studies and whether they went on to further study (NCVER, 2004). These questions can be seen as quantifiable measures of human capital outcomes as they relate to the human capital concepts of increased education as a source of labour productivity and economic growth (Carmeli, 2004) and the development of skills, which play a significant role in economic growth and productivity (Heckman, 2005).

A Search for an Alternate Paradigm

As discussed, the human capital paradigm is an outcomes orientated process that has historically been driven by the economic and political requirements of federal and state governments. While this approach may go some way to supporting government assumptions that there is a correlation between employment, wages and skills acquirement and global economic viability, which, according to Tomlinson (2001) is arguable as research has proven such links to be difficult to establish, by focusing on an endpoint, human capital theory fails to consider the reasons why individuals initiated their TAFE studies.

One of the possible explanations as to why individuals choose to undertake post-compulsory education is the concept of 'lifelong learning'. Stewart (1987) claims that lifelong learning is a term that had been sparingly used in America since 1919 but found popular usage in the early 1970's, by which time it was defined as learning of any type by persons of any age, but usually confined to the process of learning during the adult years. In 1976 the United Nations Educational, Scientific, and Cultural Organization (UNESCO) General Assembly officially defined lifelong learning as including the development of the entire educational potential of the individual outside the education system

and as enabling individuals to be the agents of their own education (Stewart, 1987).

The UNESCO report was primarily concerned with concept of lifelong learning as emanating from the humanistic values and objectives of education (Kearns et al, 1999), and in reflecting UNESCO's sentiments, the National Board of Employment, Education and Training (NBEET) considered lifelong learning to be "those forms of learning throughout life that are called for by social and cultural change" (NBEET, 1994, p17). The noble attitude of governments towards the notion of lifelong learning as expressed through the UNESCO report soon became a victim of political and economic expedience as the Organization for Economic Co-operation and Development (OECD) signalled a major departure from the UNESCO defined concept of lifelong learning to include "all purposeful learning activity undertaken with the aim of improving knowledge, skill and competence" (OECD, 1998, p 8).

Where earlier conceptions of lifelong learning were defined in terms of cultural and social objectives, the main impetuses behind the new advocacy of lifelong learning are economic imperatives and the need to operate in a competitive global market system (Kearns et al., 1999). The OECD (1998) policy analysis recognised that there still remains a social dimension to the new definition of lifelong learning; however it also acknowledged that Australia places more of an emphasis on skills training for improving employability and competitiveness within its policy documents on lifelong learning than some other nations. Consequently, it can be seen that Australian government policy, although espousing a commitment to lifelong learning, has linked the concept with human capital and economic policy. Kearns et al. (1999) acknowledged the possible subsuming of the more humane aspects of lifelong learning by government economic imperatives when they stated that, "there is a danger that lifelong learning would be interpreted so narrowly as to imply the mere mastery of specific bits of knowledge or skills. This danger is reinforced by the economic/ technological impetus behind the concept - reflected in the emphasis upon policies for lifelong learning place as training (sic) – as well as by the current trend to base judgements of educational achievement on those aspects that are amenable to quantitative measurement" (p 4).

A New Paradigm

While a broader definition of lifelong learning exists which includes learning from pre-school age to post-retirement and includes the broad spectrum of formal and informal learning throughout life (Council of the European Union, 2002), it would appear that in the current context of lifelong learning being an adjunct to global and national economic policy and human capital theory, it may not be the most appropriate paradigm for the exploration of the reasons

and motivations which cause individuals to undertake TAFE programs. Where motivation to learn was a consideration in the context of the original definition of lifelong learning (Stewart, 1987), it is now seen in terms of commitment by individuals to a training culture within the milieu of human capital (Robinson & Arthy, 1999). There is a gap in the current literature regarding evaluation of TAFE outcomes and it stems from the human capital endpoint focus of government policy. The concept of personal capital, as distinct from human capital, has not been explored in relation to TAFE graduate outcomes and, to date, this notion appears to be under-researched in the wider academic community, although there is some reference to the term in a few criminology studies and economics papers.

In their paper, *When Crime Pays: Capital, Competence, and Criminal Success*, McCarthy & Hagan (2001) see personal capital as the attitudes, preferences, desire to improve material conditions and personal characteristics that are potential resources for use in securing desired outcomes. In *Personal Capital and Social Control*, Nater and Paternoster (1994) see personal capital as the individual's investments in social bonds, which comprise personal and social relationships as well as conventional 'lines of action' such as education or future occupation. Other authors (Harkins & Fiala, 2002; Cope, 2005) see personal capital as the acquisition and development of knowledge as a personal commodity that is tradeable as a financial asset. Tomer (2001) believes that personal capital relates not only to an individual's psychological, physical and spiritual functioning but also relates to the more specific capacities that the individual invests in, in order to be qualified for particular work tasks or enjoy consumer goods.

These publications have provided some indications as to what personal capital may mean within a particular context however, unlike human capital, there appears to be no generally established and accepted definitive statement as to the nature of personal capital in the available literature. An operational definition of personal capital for exploring TAFE outcomes might incorporate the inherent impetus and values that individuals ascribe to their motivation to undertake a course of study. This may well include such aspects as attitudes and desire to improve material conditions (McCarthy & Hagan, 2001), investments in social bonds and 'lines of action' (Nater & Paternoster, 1994), development of knowledge as a tradeable asset (Cope, 2005) and development of an individual's psychological, physical and spiritual functioning (Tomer, 2001).

However, the intrinsic reasons, motivations and personal capital rewards for study are not quantifiable through the present human capital outcomes assessment processes, as individual motivation to study or acquire a skill set are not considered in the present research paradigm. The acquisition of knowledge and skills and their value to the development of human capital are of primary interest and significance. While they may appear to be the antithesis of each other, the paradigms of human capital and personal capital do have some

correlation. While Mechanics Institutes may not have achieved their intended goal of providing comprehensive scientific and technological education to meet industry demands, Morris (2003) argues that Mechanics Institutes succeeded in providing important educational, social, civic and recreational services to their local communities. TAFE was created in an era of economic downturn and widespread unemployment and, from a human capital perspective, it was seen as essential for building workforce skills and assisting in national economic recovery.

Although Kangan believed that TAFE should allow individuals the freedom to choose courses that they considered best suit their needs, not what industry though best suited its demands (Schofield in Kearns & Hall, 1994). Kangan's underlying educational philosophy was the 'educated person' concept and his view of TAFE was that it should move away from the historically restrictive model of technical education and deliver more broadly based education (Kirby in Kearns & Hall, 1994). The paradigms of human capital and personal capital have similar measurable outcomes such as wages, employment and further study, however, human capital outcomes measurement only allows for predominantly quantitative research methodology and analysis. The NCVER Student Outcomes Surveys assess the acquisition of skills, the obtaining of employment, increases in wages and continuing on to further study by participants of TAFE programs. The survey is restricted in the scope and nature of its research by limiting itself to four outcomes based questions and its failure to undertake meaningful qualitative assessment of the reasons behind students' motivations for the educational and vocational choices they made.

The personal capital paradigm is seen as offering a more in-depth and qualitative investigation and explanation of outcomes as it allows for the exploration of a range of further outcomes not addressed in the human capital approach, such as job promotion and/or transfer, personal achievement, self-development and family-work mix. These further outcomes are valid within the construct of personal capital as they are tangible outcomes of the fundamental reasons, motivations, impetus and values that individuals ascribe to their reasons for undertaking a TAFE study program.

Chris Van Der Linde is Leading Vocational Teacher, Community and Human Services at Brisbane North Institute of TAFE, Australia.

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