

Emerging models of employment based training: Untangling the drivers and identifying key features of effective models

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Abstract

This paper discusses a recent review of literature on employment based training (EBT) models in Australia, to identify those that might best address emerging needs. Examples of models currently being discussed and/or trialed are analysed in this review, including those being used in higher levels of the VET skills spectrum (i.e. diploma and above). The consideration of new EBT models is addressed in terms of the conference theme: *Are emerging models of EBT evolutionary, revolutionary, status quo or “back to the future” approaches?*

Research suggests that traditional approaches to employment based training, such as apprenticeships and traineeships, are limited in meeting current and emerging skill formation contexts. New contemporary EBT models are held to be required for contemporary and emerging economic and work environments which are characterised by skills shortages, higher level skills needs, and global competition that demand quality skills and productivity.

Introduction

In Australia, EBTs such as apprenticeships and traineeships have long traditions. However, the effectiveness of existing models in meeting the needs of Australian enterprises and skilled workers are currently being challenged due to several emerging factors. In this paper, the main factors that impact on the effectiveness of current EBT models and the key drivers of change to EBT models are derived from a review of literature and discussions with selected stakeholders. The paper represents background work towards a current research project that will:

- examine and critically analyse existing and emerging EBT models
- appraise emerging models and validate them with focus groups of employers and apprentices from selected occupations in two industries (case studies) where demand is high for new EBT models
- assess the utility of the ‘best-fit’ new EBT model(s) for the case study occupations and industries and propose recommendations for other occupations and industries.

Firstly, the concept of an EBT model is outlined in this paper. Then a list of key drivers is provided. Examples of current and emerging EBT models are then described. Following this, the main issues associated with contemporary models are identified. The literature section concludes with comments on whether the current and emerging models of EBT are evolutionary, revolutionary, status quo or ‘back to the future’ approaches. The final section of the paper provides a list of core features of effective EBT models which will inform the basis for focus groups. The next phase of engaging with focus groups of stakeholders and apprentices in two industries to establish ‘best-fit’ models and validating these is outlined.

Literature Review

Concept of EBT

Australian EBT arrangements commonly are those which comprise apprenticeships and traineeships. As well as regulated EBT, Australia offers non-regulated training such as Labour market programs involving training and work experience; secondary school 'work experience' placements; and co-operative education and service learning programs for students in educational institutions. Employment based training involves a partnership between the employer and employee who agree to a contract of training, a VET institute (provider) that designs and facilitates a training plan, and government playing a role in the associated responsibilities, and sharing of costs and benefits.

The strong point of EBT, in pedagogic and curriculum terms, lies in the provision of authentic experiential learning in real workplaces and off the job learning with a VET provider. Experiential learning engages learners with contemporary and situated practice which constitutes the enactment of the occupation that they are learning. The workplace provides a context for learners to access and develop the kinds of knowledge (i.e. conceptual, procedural and dispositional) that is available in settings where occupational practice occurs (Brown, 1998; Billett & Boud, 2001), and cannot be easily replicated in educational institutions. It is the duration and potential diversity of experiences which develops robust understandings. Moreover, and ideally, a key possibility for EBT models for initial skill development is the rich integration between the experiences in workplace settings and the educational context, for example, for learning of theoretical components (Billett, 2002).

In the last twenty years, in particular, we have witnessed a significant shift in arrangements for EBTs in Australia (see Robinson, 2001), driven by a combination of sometimes competing factors. The key drivers of change to EBT models, which have resulted in evolutionary and revolutionary models, are summarised below.

Key drivers of change to EBT models

The traditional model of EBT is an apprenticeship, in the trades area, comprising a four-year indenture with an employer, and an average of one day per week of off the job training. The resultant outcomes are a fully skilled trades person with a Certificate III qualification within the Australian Qualification Framework. Apprenticeships are typically undertaken by young people who have recently left school. The original EBT models have evolved in response to a range of social, economic, industrial and technological changes that have shaped the world of work in Australia.

The review of research by Ray (2001), Robinson (2001), Cully (2006) and Karmel (2006) highlights five key drivers of change to EBT models:

- Need for skilled labour to be competitive in a global market, prompted by technological change and industrial restructuring. This has resulted in apprenticeships diversification from mainly regulated trades to other industry areas. The need for skilled labour peaked mainly during economic booms following recessions after World War I and II. Similar booms in the mid 1980s and around 2006 experienced further diversification in EBT. During these times new incentives were introduced to boost numbers in EBT.

- Need for stepping stones at lower level qualifications for unemployed and disadvantaged youth, as well as existing workers without qualifications.
- Need to up-skill or re-skill all of the workforce, in part to do with the ageing workforce, and also the above mentioned factors driving competition, and diversity in the demographic profiles of people entering EBTs. In 1992 age restrictions were lifted to include the young and old and EBT was extended to existing workers.
- Need to keep pace with changes in how work is organised through outsourcing, casualisation and an emphasis on specialisation. Extension to part-time apprenticeship and traineeship, for example through School Based New Apprenticeship and Traineeships and the administration of EBT through Group Training Organisations accommodated some changes to work practice.
- Need for higher level VET qualifications (only recently widely acknowledged) to meet changing technologies, increase productivity and competitiveness. The demand for higher level VET qualification became most apparent since 2005.

Furthermore, changing policy directions have contributed to interest and growth in the uptake of EBTs in Australia, including competitive training market initiatives such as User Choice and other employer and employee EBT incentive schemes. The evolution of models was a result of environmental changes such as community expectations, economic cycles and government objectives (Ray, 2001). An examination of various EBT models since the early 1980s shows that during the re-emergence of familiar cyclic challenges, older models were reapplied. Some EBT models maintained the status quo and others represent extensions of original ones that are evolutionary, yet others that are truly transformational or revolutionary. Examples are included in the next section on current models of EBT.

The impact of the above drivers and other elements of change continue to shape current and emerging EBT models. Employment based training is now available across all occupations, in all industry sectors, and for all VET qualification levels. They are available to everyone - all social and age groups. Overall, a complicated relationship between the term apprenticeships and traineeships has emerged, in addition to their related AQF levels, durations and end point occupational or employment outcomes (see Bowman, Stanwick & Blythe, 2005; Cully 2006; and Karmel, 2006). A diverse set of EBT models is replacing the 'one size fits all' approach that remained entrenched in Australia until the early 1980s.

A major challenge now is to refine existing EBT models or develop new ones that meet current and emerging skill formation needs and contexts. Interest in new EBT models has been accelerated by the Council of Australian Governments' (COAG) recent agreement on a package of measures to underpin a new national approach to apprenticeships, traineeships and skills recognition in VET (see COAG Communiqué, 11 Feb 2006). The package includes several initiatives and investments that require research to ensure the effectiveness and efficiency of emerging models, especially since EBT is a large part of Australia's training effort (over 20%, much greater in dollar terms).

Current and emerging models of EBT

The main EBT model variations being considered today can be usefully grouped as:

- fast tracking options
- higher level VET qualifications
- new skill sets/qualifications
- alternative provisions for young people

The general nature of types listed above is summarised below, together with the views on each of employers, employees, governments and providers, as reported in literature. There is particular focus on the first two models.

Fast tracking options: This EBT model focuses on efficiencies in delivery strategies and recognition of skills or current competencies, and aims to address immediate skill shortages. They are not (meant to be) about a reduction of skills and the number or quality of competencies that must be demonstrated. There are two types of fast tracking options. The first, an accelerated progression model that is linked to a truly competency based delivery and assessment approach and includes recognition of prior learning. The second type involves intensive up-front training in a VET institute followed by workbased learning and aims to ensure more immediate productivity of the learner in the workplace. Although fast tracking options are still in their infancy, the Western Australian Department of Education and Training (2005) proposed the following possible benefits:

- a reduction of time away from the workplace for off-the-job training
- an update of current staff technology knowledge and skills
- an increase in the number of tradespersons available at a workplace in a shorter time frame, which aides business expansion
- compliance where licensing regulations apply
- a boost in staff morale and confidence by providing valued existing staff with the opportunity to have their skills recognised and to acquire a trade qualification (Minerals Council of Australia, 2006, p.12).

However, these benefits are offset by a number of concerns by employers. With regard to the accelerated type, employers point out that they offset the cost of the apprenticeship against a time frame of completion (planned in terms of 48 months). If apprentices complete their apprenticeships in a shorter time and are on higher levels of remuneration more quickly, but may not necessarily in terms of expected workplace performance, this could potentially investment recovery for businesses.

In relation to the upfront, intensive institute (provider) based training, followed by employment based training, employers insist that the traditional concept of combining concurrent training and employment should be maintained to ensure that apprentices acquire the theoretical knowledge concurrently with the employment based practical skills. Employers warn of careful selection of fast track participants who will need to have well developed literacy and numeracy skills, and self managed study skills to self manage the off the job component of the program. Employers also make an implied assumption that apprentices will carry out their studies after working hours (Minerals Council of Australia, 2006). Some fear that they may not get a return on investment if their employee leaves after up skilling through the fast track provisions.

Both unions and employer groups are in favour of fast tracking models, particularly for existing workers with relevant industry and occupational expertise and experience, to aide in workforce retention. They advocate the implementation of fast tracking models evenly across jurisdictions in order to maintain a minimum level of parity across industries (Mineral Council of Australia, 2006).

Higher level VET qualifications: Employment based training qualifications are already available at the diploma and advanced diploma levels. Despite this, relatively few people undertake this option (accounting for 7.6% of current enrolments in 2006), although numbers have grown quickly from a low base of 6,700 enrolments in 1999 to 30,300 commencements in 2006 (NCVER, 2006). Current enrolments are highest in the field of aged care. In 2005, enrolments at the diplomas and advanced diploma were highest in Management and Commerce, accounting for 30% of total enrolments. Research by Stanwick and Saunders (2004) suggest that the lack of correlation between diploma level qualifications and employment outcomes for associate professionals may be a reason for the low numbers in other occupations. They explain that the training needs of apprentices and trainees for the diploma and advanced diploma level are likely to be different from those for Certificate III and IV qualifications. For example, training at the diploma level can be more academic (that is, involve a greater emphasis on theoretical knowledge as opposed to practical skills and responsibilities). Following interviews with employers in six industry areas Stanwick and Saunders (2004, p.7) offer four possible options for EBT at the diploma level. These are:

- a traditional single-stage apprenticeship in which the apprentice is indentured with an employer to undertake training capable of taking the individual from scratch to a fully qualified associate professional. However, estimates of the time required to complete such an apprenticeship vary from three years to seven years.
- a two-stage apprenticeship in which the individual first completes a lower-level apprenticeship to Certificate III, followed by a second higher-level apprenticeship which extends to a diploma or advanced diploma.
- a two-stage apprenticeship in which the individual first completes a one-year theoretical course as a private student, and upon successful completion of this study, commences an apprenticeship with an employer to undertake the remainder of the training.
- a second version of the preceding two-stage apprenticeship in which the individual is conditionally indentured to an employer during the first year of full time study towards a diploma and, contingent upon successful completion of this initial study, automatically continues the apprenticeship with the employer, to undertake the remainder of the training.
- a fully work-based apprenticeship in which all training is done in the workplace, most of it on the job.

However, there are issues with the cost of training and wages that warrant consideration for promoting and fully implementing EBT models for associate professionals (for details see Stanwick and Saunders, 2004, p. 7-8).

New skill sets/qualification: With skills shortages in selected industries, there is COAG (i.e. government support) for new “Skill Sets” qualifications where sub sets of competencies from a full apprenticeship are bundled to create a recognised skill set

(Schofield & McDonald, 2004). The Commerce Industry Training Board for instance supports this concept at only the Certificate II level (one below the Master Trade) and suggests a push for the current Master Trade at Certificate III to a Certificate IV. This demonstrates an evolutionary example of EBT. The 'Skill Sets' model has particular implications for the nature of trade related jobs and supports the COAG's human capital reform agenda (COAG Communiqué, 11 Feb 2006). It could be viewed as another approach to fast tracking through accelerated EBTs especially in the trade areas experiencing skills shortages. However, the 'Skill Sets' model is yet to attract the interests of industries other than trades.

Alternative provisions for young people: School Based New Apprenticeships (SBNAs) which also contribute to senior secondary studies are being further developed to allow greater flexibility with options to take up part-time or full-time training totally on the job; totally off the job; or combined on and off the job, in one workplace or more as per the requirements of the training plan.

It is anticipated that the newly established Australian Technical Colleges will offer SBNAs and also provide different approaches to skills development. Arrangements through the Colleges are expected to overcome issues such as inflexible timetables in schools and negotiated time releases from employment to enhance employers' needs.

Current and emerging models of EBT operate within a complex set of intervening factors that raise issues about their effectiveness. The main issues are discussed below.

Issues with EBT models

The main issues with EBT models are summarised under four headings: contextual; regulatory environment; education and training delivery; and workplace/ employment relations.

Contextual: Within a globally competitive environment that requires high productivity Australian workplaces face skills shortages. A growing demand for knowledge workers illustrates changes in employer expectations for not only technical, but also cognitive and behavioural skills. The demand for application of cognitive skills and knowledge is largely in the new industries, and increasingly in existing industries that are focusing on innovation and creativity. Economic pressures on employers, particularly of small businesses, appear to limit their capacity to act as a master passing on skills, with greater emphasis on treating the apprentices as a 'labourer' and not a learner, even when State and Commonwealth governments provide teachers and incentives (Schofield, 2000). Employers are looking for more time on the job training, thereby marginalising the off the job component of training.

The regulatory environment: States and Territories continue to maintain their regulatory frameworks which are multi-layered, with cases of incompatible licensing arrangements across jurisdictions. Anomalies across jurisdictions question a nationally consistent training system and interstate recognition of skills that were aspired through the implementation of Training Packages and New Apprenticeships. Insufficient policy and administrative cooperation, variations in registration and audit standards within the recognition framework (Schofield, 2000) reflect weakness in

Commonwealth and State governments' objectives on skilling the Australian workforce.

Schofield's (2000) research shows that governance that does not promote collaboration, quality delivery and ethical practices impacts on the efficiencies and effectiveness of EBT. Administrative inefficiencies add to costs. Incidences of non-compliance by employers and RTOs regarding legal and moral obligations to apprentices and trainees raise concerns. Audit processes that are insufficiently rigorous, inconsistent and loosely linked to industry perspectives have implications for quality.

Education and training delivery: There is tension between a competency based model (CBT) and the four year contract which reflects an indenture. The traditional four year apprenticeship which is time-based, as opposed to competency based, can limit several competent learners to complete their learning contract and join the workforce as qualified workers. The use of a genuine CBT approach for the skilling process is appealing, but does not have wide support from employers. Not all are willing to start paying the full award prior to the end of a four year contract period with the apprentice (Mineral Council of Australia, 2006).

Although Training Packages underpin EBT and assumes national consistency, inconsistencies in training and assessment across occupations and jurisdictions raise questions about the quality of skilling within a national system. Training, assessment, trade sign-off and license testing are fragmented activities, with jurisdictional variations disallowing portability within a supposedly national training system using the Training Packages. Some regions experience the absence of timely training in the preferred locations, mismatch of content that is not relevant, lack of qualified trainers, and use of equipment for training that is out of date (Australian Industry Group, 2005).

There are issues with high rates of non-completion of apprenticeships and traineeships through EBT. About a third of the apprentices leave in the first six months (Australian Industry Group, 2005). Employers and the general industry believe that young people are not attracted to apprenticeships because of the duration and the perception of lower status, and being non-university based.

Research by Schofield (2000) showed that some apprentices and trainees were not sufficiently challenged by their training activities and sensed 'dumbing down'. This led to non-completion. Her research showed that some employers and providers were unclear about their responsibilities for on the job and off the job training, implicating the links between training at the two sites. Then, there are issues with access to User Choice for EBT (see Schofield, 2000).

Workplace/ employment relations: Employer incentives above an award rate, to a market rate of pay, gravitates more skilled workers to workplaces that can afford to pay at the high end of the competitive rates. There is evidence of leakages and skills wastage as skilled workers whose skills are portable across industry areas transfer into new occupations where work arrangements are more attractive in terms of wages and life style. While the market condition dictates the rate of pay, determination of pay above the award rate is influenced by an individual's age, education level, ability and

experience, and quality of work (Australian Chamber of Commerce and Industry, 2005).

There exist significant gaps in training wage arrangements where there are no award provisions or limited and inflexible award provisions for the employment of New Apprentices in Training Packages for electro-technology, construction, plumbing and service, automotive, metal and engineering, hospitality, hairdressing, aero-skills and furnishing. These same Training Packages are the key ones for identified areas of skill shortages in the traditional trades. Although decisions about approval and implementation of Training Packages are made at the State/Territory level, not all have an enabling legislation or the ability to ensure award provisions for training wages. Usually State/Territory authorities will not approve a New Apprenticeship pathway in the absence of workplace relations arrangements, the responsibility for which lies with the industry parties. This becomes an issue for employers developing contracts for registration.

Core features of effective EBT models

The core features of Australian EBT models include:

- Efficient training with many exit entry points/across the AQF spectrum with inbuilt strategies to encourage high completion rates.
- Quality educational and employment experiences with a balance of on and off the job learning and pedagogies to suit diverse learners, as well as variations by occupations, industries and qualifications.
- Catering for various social groups with variations to suit the different age cohorts in equity groups.
- Sufficient and consistent regulation - not over regulation.
- Sharing of responsibilities, costs and in ways they can agree on ie wages/ incentives etc.

The various models and their features will be worked through with focus groups to establish 'best-fit' models that take into account pertinent issues/concerns.

Conclusion

Are emerging models of EBT evolutionary, revolutionary, status quo or 'back to the future'?

The review and analysis of current and emerging EBT models in Australia show examples of traditional models (maintaining the status quo in some areas) and those that have been adapted for emerging circumstances. The modified versions include those that are evolutionary as well as examples that are revolutionary. Some models apply "back to the future" approaches, confirming the utility currency of certain traditional EBT models that meet cyclic challenges in skilling workers.

There is compelling demand for a genuinely competency based apprenticeship that allows flexible entry and exit points, pathways and opportunities for further learning at higher qualification levels and customised training to meet enterprise needs. Contemporary models need to cater for the needs of existing workers, young people entering the workforce, people who are disadvantaged, long term unemployed and those with disability support pensions as well as migrants with overseas

qualifications. The models must offer flexibility for employers and apprentices, have quality outcomes, be nationally consistent and yet remain sufficiently regulated.

Our project will use the core features of EBT to appraise current models in the manufacturing and community services & health industries. A set of 'best-fit' models for the two industries will be developed with focus groups of employers and apprentices from the two industries. Focus groups will be held in Melbourne for the manufacturing industry and in Brisbane for the community services and health industry. The findings from the focus groups will be shared for comments and further validation with industry networks, providers and government representatives. Implementation steps in relation to the two industries under study will be explored as will the utility of the 'best-fit' new EBT model(s) for other occupations.

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