Learning to Work in a Global Economy: How Countries Use Apprenticeship Systems to Assist School-Leavers

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ABSTRACT

The paper draws evidence from a recent research project that analysed ten national apprenticeship systems to suggest options for the development of the Indian apprenticeship system.

Apprenticeship systems are often viewed as pivotal to the development of a skilled workforce. The combination of on and off the job learning, together with a period of extended practice overseen by expert workers, provided by apprenticeships, is believed to be ideal for the development of skilled workers. The impact of the Global Financial Crisis raised the profile of apprenticeships as a way of combating youth unemployment (e.g. ILO, 2013).

Apprenticeships vary considerably between countries and many aspects are culturally, socially, politically and economically specific. Thus one cannot transplant a system from one country to another and expect it to operate as it did in the relevant homeland. However, key features of countries’ systems can be identified, sensitively adapted, and developed in other countries. This paper describes our project’s findings, with particular reference to countries where the ‘school-to-work transition’ is a primary concern. The paper also provides insights from the English apprenticeship system which treats young and older workers differently, and from a detailed study examining challenges faced by young people commencing apprenticeships.

INTRODUCTION

The paper draws evidence from a recent research project that analysed eleven national apprenticeship systems to suggest options for the development of the Indian apprenticeship system. These countries were India, Turkey, Indonesia, Egypt, South Africa, Australia, Canada, USA, England, Germany and France. The international perspectives provided by these case studies give insights into the ways in which these countries are addressing the issue of the transition from school to work in the ‘global TVET community’ and how they are using the apprenticeship system to assist young people to make this transition.

The paper also draws on evidence from a research project carried out in Australia that investigated the nature of the ‘psychological contract’ between apprentices/trainees and their employers and the challenges faced by young people as they make the transition between school and work. Importantly in this way the ‘global’ is juxtaposed beside the ‘personal’. Insights from the rapidly growing English apprenticeship system also inform the findings presented in this paper.

The results from these pieces of research provide recommendations for possible improvements in our current apprenticeship system with the aim of making the transition for young people from school to work more effective and sustainable.

BACKGROUND AND LITERATURE

Apprenticeship systems are often viewed as pivotal to the development of a skilled workforce. According to Smith (2010, p. 314), the essential components of an apprenticeship are generally understood to be:

- a training regime set up by, or with the approval of, governments;
- a combination of off and on the job training;
- the assumption of responsibility by the employer for the development of the apprentice;
- The award of a qualification and/or licence and/or some other recognition that enables an occupation to be practised independently once the apprenticeship is successfully completed.

It should be emphasised, however, that some systems do not possess all of these features.

The impact of the Global Financial Crisis has raised the profile of apprenticeships as a way of combating youth unemployment (e.g. ILO, 2013). There is renewed political interest in apprenticeships since they can serve the dual purpose of contributing to the pool of skilled workers whilst simultaneously addressing high rates of youth under-employment and unemployment.

These matters are exemplified in the following quote:

The OECD, an intergovernmental think-tank, counts 26m young people in the rich world as ‘NEETS’: not in employment, education or training. A World Bank database compiled from households shows more than 260m young people in developing economies are similarly ‘inactive’. The Economist calculates that, all told, almost 290m are neither working nor studying: almost a quarter of the planet’s youth. (Economist, April 27th, 2013).
The Global Financial Crisis has resulted in youth unemployment rates of around 25% in many EU countries (up to nearly 50% in some such as Spain). This is recognised as a major policy problem for countries. The EU has recently announced a Youth Guarantee, with a budget of EUR 6 billion, to get every young person under the age of 25 into a job, an apprenticeship or a traineeship within four months of leaving school or becoming unemployed. In developing countries, some also suffering from the GFC, the matter is complicated by the fact that much of the economy is often informal (in the case of India, estimates vary from 80% to 90%). Even in prosperous Australia, in September 2012 there were 67,300 young people actively looking for full-time work. 16% of 15 to 19 year olds were unemployed (ABS 2013, in Karmel, 2013, p. 10) and this figure is rising. Over the 12 months to September 2012, the number of young people who were unemployed increased by 4,600.

In this climate governments are searching for policy fixes and apprenticeship is currently seen as a major solution. However, apprenticeship varies considerably among countries and many aspects are culturally, socially, politically and economically specific. Thus one cannot transplant, for example, the German or Australian system to another country and expect it to operate as it did in the relevant homeland. Moreover, apprenticeships are not just about young people; older people also need access to apprentice training, and in most countries they do.

Apprenticeships are also not always positive experiences. Although there has been an increase in the number of people involved in training in Australia the latest figures indicate that trade commencements in apprenticeships and traineeships remained relatively stable with 21,500 commencements reported in the March 2013 quarter (NCVER, 2013). However, the stability of these recruitment figures masks a problem with attrition rates. The statistics released in 2011 show that for apprentices and trainees commencing between 2003 and 2009, attrition rates within the first 12 months remained steady, between 30.5% and 32.9%. Attrition rates for apprentices and trainees commencing in trade occupations between 2004 and 2006 have remained steady, between 49.4% and 49.5%. (NCVER, 2011) These statistics show that less than half of apprentices and trainees who begin an apprenticeship or traineeship, ever actually finish and around a third of ‘traditional apprentices’ leave during their first year (Dickie, McDonald & Pedic, 2011). Studies by Cully & Curtain (2001) and Misko, Nguyen & Saunders (2007), for example, identify some major factors to explain why apprentices do not complete. Reasons are usually identified as being job-related, rather than training-related. Smith (2001) showed that it is not uncommon for apprentices to be employed with organisations that have poorly developed training systems and training understandings. Any country seeking an apprenticeship system solution to youth unemployment must face the fact that one risk of an expansion of apprenticeship systems is the possibility of a high attrition rate, with consequent damage to employers, apprentices and their families, and the reputation of the apprenticeship system.

In this context it is possible, and necessary, to identify the results from national and international research that could point to a more effective use of apprenticeships to assist school leavers to make the transition from school to work and into work that has training associated with it. We need to interrogate the current systemic arrangements that exist for apprenticeships to produce improvements, and we need to respond both systemically and within workplaces and training providers if apprenticeships are going to be used more effectively.

The proposed model apprenticeship framework presented in this paper draws together identified good practices from the eleven case study countries. The framework consists of:

- A set of principles under nine major headings;
- A listing of possible measures of success under four major headings (engagement, quality, outcomes and public policy), and associated challenges; and
- Factors to be considered when expanding a country’s apprenticeship system.

We also produce some evidence from a recent Australian research project to show how the transition to an apprenticeship can be made easier and how attrition can be avoided or reduced.

AN INTRODUCTION TO THE RESEARCH PROJECTS

International Project

This paper is based on the first of two stages of the research project ‘Possible Futures for the Indian Apprenticeship System.’ The project was funded by the International Labor Organization and the World Bank in India to compare and contrast apprenticeship systems in 11 countries, for the purpose of drawing out some principles of good practice. The project was undertaken to provide suggestions for the process of reform and expansion of the Indian apprenticeship system. The findings from this comparison are the subject of two reports to be published on-line by the International Labour Organization (Smith & Brennan Kemmis, forthcoming, 2013a and 2013b). Whilst it is acknowledged that apprenticeship systems cannot be transplanted among countries we argued that it was possible to identify the key features of countries’ systems which could be sensitively developed in other countries. These key features form a ‘good practice lens’ that can be applied to any apprenticeship system to interrogate its effectiveness, and to identify areas for reform.

The report contains case studies on eleven countries’ apprenticeship systems, a cross-case analysis and the development of a framework for a model apprenticeship system. The second stage of the project involved more detailed analysis of the Indian system and the preparation of an options paper for India, which was then presented to stakeholders at a technical consultation in New Delhi.

India’s apprenticeship system will be a major contributor to its future growth but in comparison to, for example, Australia or Germany, its apprenticeship system is small (Ministry of Labour and Employment, 2011), with only about 0.1% of the formal labour force involved in apprenticeships compared with up to 4% in some countries. The Indian labour force is the world’s second largest (Economist, 2011) with 487.6
million workers and the country is aiming at developing 500 million skilled workers within the next ten years. India has over 1.2 billion people and its population grew at 1.76% per annum during 2001-2011, down from 2.13% per annum in the previous decade (1991-2001). About 227 million students are enrolled in the school education sector, while the enrolment in Vocational Training and Higher Education is about 15.3 million. There are approximately 1.3 million schools in India, at which 227 million pupils are registered. 12 million to 13 million school leavers and drop-out pupils move to the education and job market yearly (ICRA, 2010, in a report produced for Federation of Indian Chambers of Commerce & Industry).

Some of the obvious challenges that have been stated to confront the Indian government in its attempts to reform the apprenticeship system include the small size of the current apprenticeship system, lack of alignment of expectations of employers and apprentices, uneven quality of curriculum, uneven participation in the apprenticeship system among socio-economic groups and other groupings, lack of confidence in the skills of graduates of the system and the difficulties associated with a predominantly informal economy (Planning Commission Sub Committee, 2009). There is also concern about an over-complexity of regulation, the under-representation of women and minority groups in apprenticeships, and the availability and quality of sufficient trainers (ILO and OECD, 2011).

**Australian Project**

The second piece of research reported on is based on a recent Australia study funded by the National Centre for Vocational Education Research (Smith, Brennan Kemmis, & Walker, 2011). This study highlighted the importance of the promises and expectations between apprentices and trainees, and their employers in Australia, and how the fulfilment (or breach) of these expectations and promises can affect retention rates in Australia. Again whilst it is true that results cannot be read directly across to other countries it is also possible to extract significant themes that have global applicability.

The findings in this project complement the findings from the international study by providing in depth insights into the particular employment relationships that exist between employers and trainees or apprentices and how these contribute, to or detract from, successful completion of an apprenticeship. The employment relationships were analysed in terms of the promises made by all the parties and the expectations that each party had of the other.

**RESEARCH METHODOLOGY**

**International Project**

A number of international country case studies were written specifically for the first project, which were then analysed by the authors. The aim of the cross-case analysis was to develop good practice principles and features of a ‘model apprenticeship system’ that were then utilised, following an analysis of the Indian system, to suggest possible options for the Indian system. The country case studies were written by a team of international country experts. Some of the experts were members of the International Network on Innovative Apprenticeship (INAP) and others were recommended by senior figures in international organisations. The experts were asked to validate their case studies with at least one academic from another institution and at least one senior government official. In their case studies they were asked to identify policy development in their countries that they considered helpful and those considered to be unhelpful; and to list current issues.

The eleven countries, in alphabetical order, are: Australia, Canada, Egypt, England, France, Germany, Indonesia, India, South Africa, Turkey and the United States. The case studies were written in mid-2012. Each country expert was provided with a tightly defined structure with a number of headings and sub-headings, to ensure that major identified issues were addressed and that comparison among countries was made easier. This method - use of country experts rather than a desktop process, together with the quality and accuracy checks - was designed to avoid superficial judgements or judgments by a foreign person with limited in-country contacts, which are sometimes a feature of international comparisons.

The purpose of the country case studies was firstly to obtain accurate and current information about countries’ apprenticeship systems written by people who were embedded within those countries and therefore had a deep understanding of the culture, politics and economics of the countries as well as the apprenticeship systems. It is well recognised that apprenticeship systems need to grow from countries’ national economic and cultural contexts and cannot be transplanted from one country to another as complete entities. The second purpose was to obtain targeted information about key features and trends that could be used to develop a model apprenticeship system. The choice of countries was partly guided by the preference of the funding body and partly proposed as a purposive sampling that would include representatives both of countries with more developed economics and those with less developed economies.

**Table 1: Development levels of countries studied**

<table>
<thead>
<tr>
<th>Development Levels</th>
<th>Countries</th>
</tr>
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<tbody>
<tr>
<td>More Developed</td>
<td>Australia, Canada, England, France, Germany, United States</td>
</tr>
<tr>
<td>Less Developed</td>
<td>Egypt, Indonesia, India, South Africa, Turkey</td>
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For the cross-case analysis the following guidelines and information sources were used to develop the structures and headings:

- The format of the case study guidelines, which was itself developed partly from the project terms of reference but also informed by the following two documents;
- The INAP memorandum on apprenticeship architecture;
- Analysis of apprenticeships in the International Encyclopaedia of Education (Smith, 2010);
- The cross-country analysis in the European Commission report on apprenticeship supply (European Commission, 2012); and
An apprenticeship life-cycle model developed in an Australian study (Smith, Comyn, Brennan Kemmis & Smith, 2009) to describe the progression through an apprenticeship for the individual apprentices.

The authors of the cross-case analysis worked with the country case studies to draw out types and trends on the range of different system features, and examples of good practice. A matrix was developed from the authors’ responses to a section on issue, strengths, weaknesses and learning from policy developments. The authors worked with the data to produce further analysis to develop a model apprenticeship framework. This framework consisted of the following features:

- A set of principles under nine major headings;
- A listing of possible measures of success under four major headings (engagement, quality, outcomes and public policy), and associated challenges; and
- Factors to be considered when expanding a country’s apprenticeship system.

**Australian Project**

Both quantitative and qualitative research methods were used to provide the perspectives of employers, trainees and apprentices at a national and/or high-level policy and practice level. Data were collected in six different ways. These methods of data collection were: interviews with twelve stakeholders in the national Australian apprenticeship and traineeship system; four surveys that included random samples from apprentices, trainees and employers from State Training Authority databases, apprentices and trainees employed by Group Training Organisations, and GTOs as employers from three if Australia’s eight States and Territories; and nine case studies in workplaces that were conducted in Western Australia, Victoria, the Australian Capital Territory, Queensland and New South Wales. There were 665 responses from the surveys. In Australia, ‘traineeships’; is the name given to a type of apprenticeship that was introduced in the late-1980s. Traineeships were designed to extend the benefits of apprenticeships to a broader range of occupations (e.g. retail, business) than the traditional trades and craft occupations and to allow women access to apprentice-like arrangements. The separate name has persisted to the present day, although they are now managed under the same system.

**FINDINGS**

**International project**

There have been varying degrees of change in the eleven countries’ apprenticeship systems over the past few decades. In Germany, Turkey and the US, for example, the systems have remained relatively unchanged with some alterations at the margins. On the other hand in Australia and England there have been significant changes that have involved adding new ‘variants’ to the system. For example, Australia in the late-1980s introduced ‘traineeships’ which enabled access to apprentice-like arrangements for a much broader range of occupations and qualification levels; about two-thirds of Australian apprentices are ‘trainees’. South Africa has also added a new type- ‘learnerships’ - although this is a non-employment based variant. Egypt has also introduced training-provider-based variants. Most of the policy thrusts across countries can be summarised in the following list:

- Increasing participation of employers
- Increasing participation of individuals, including targeting specific learner groups e.g. women, ethnic minorities
- Aligning with national and/or international qualifications frameworks
- Addressing youth unemployment with specifically youth-targeted initiatives under the umbrella of apprenticeships
- Increasing the range of apprenticeable occupations
- Harmonisation across State or Provincial boundaries

In addition there have been other developments, such as (in countries with patchwork economies) targeting of specific occupations and/or geographical areas; attempts to increase the reach of apprenticeships into the informal economy (e.g. Egypt), and attempts to improve movement to higher education programs.

From the country data, underlying good practice principles were drawn out, grouped into four categories: occupational coverage, participation, national government structures and stakeholders. These principles should underpin a model apprenticeship system:

**Occupational Coverage**

- Apprenticeships available in all industries
- Apprenticeships available in a range of occupations, particularly those that are typically undertaken by women as well as men

**Participation**

- Apprenticeships open to people of either gender and all ages
- Apprenticeships available in rural and regional as well as urban areas
- Clear pathways for school-leavers
- Pathways for disadvantaged people and for people without necessary entry qualifications
- Availability of off-the-job programs to facilitate entry to an apprenticeship
- Pathways into apprenticeship (and beyond) are clear and well-publicised in ways that reach all potential candidates

**National Government Structures**

- National policy emphasis is both on training aspects and on employment aspects of apprenticeship
- Good liaison between government agencies responsible for different aspects of the apprenticeship system
- Where responsibilities lie with states and provinces as well as national governments, the relative responsibilities are well-defined and publicised
- Rigorous qualifications that are regularly updated
- Collection of appropriate data about apprenticeships
Systems make provision for apprenticeships in different geographical areas (e.g. rural as well as urban).

**Stakeholders**
- All major stakeholder groups (employers, training providers, employer groups and employee associations/trade unions) are involved in the development and maintenance of apprenticeship regulation and structures
- A commitment to collaboration among the various stakeholders
- System for adding new occupations to the apprenticeship system according to specified criteria, with specific stakeholder bodies having responsibilities to notify new occupations

**A Model Apprenticeship System**
The findings from this research have global applicability since the principles that were derived from the analysis can be used to benchmark current systems and further provide directions and strategies for improvement. The project provides a transferable framework for examining apprenticeship systems. In particular it provides a focus on training that is (oddly) often neglected in other studies.

Apprenticeship systems involve many components: employment, training in the workplace, training at training providers, and administrative systems at different levels of government. A model apprenticeship system is one where the roles and responsibilities of all those parties involved in offering, supporting and taking up apprenticeships are clear and understood. It is a complex web of relationships and partnerships that intersects at various points with legislative and reporting requirements all of which operate inside a policy framework. The achievement of a more effective apprenticeship system is contingent on the embedding the following factors into the operation of that system:

**Training Providers**
- Training providers that are subject to quality regimes including audits
- Content of qualifications is viewable on the internet
- Requirements for qualifications/training for teachers in training providers
- Trade testing at the end of the apprenticeship that is managed externally to the enterprise and the training provider (e.g. national ‘Red Seal’ system in Canada and local examination board in Germany)

**Employers**
- A registration scheme for enterprises/employing organisations offering apprenticeships, with requisite criteria; proportionate criteria (i.e. less stringent) developed for SMEs, especially micro-businesses
- Supervision ratios in companies, which are communicated and enforced as part of maintenance of registration
- Requirements for qualifications/training for in-company trainers
- On-the-job training subject to some form of overseeing
- Continuing up skilling programs for company trainers and teachers
- Involvement of employer associations or groups and employee associations or trade unions at national and local level in apprentice systems
- Employers should be able to apply for registration as a training provider for off-the-job component of apprenticeships

**Simplification**
- Harmonisation across jurisdictions to enhance mobility and improve understanding of systems
- Consistency of contract periods
- Clear delineation of responsibilities of the employer, the training provider and the apprentice
- Removal of parallel systems with the same country where feasible; or if not, clear communication processes

**Incentives**
- Financial incentives for enterprises to participate, subject to monitoring of satisfactory performance including audits
- Additional incentives for employers to employ disabled or disadvantaged people as apprentices
- Public funding for training providers – wholly or partly funded for apprenticeship training - but could arguably be financed by student loans system
- Discounted wages for apprentices (either a lower overall rate or non-payment while at off-the-job training), but within the discounted range, higher wages for mature aged people
- Payment of social contributions for apprentices by the State
- Financial incentives to apprentices to complete their contracts and to employers who continue to employ their apprentices on completion

**Provisions for the Apprentice**
- Assistance in meeting entry requirements and/or learning support once employed
- Employed status within an enterprise
- An increase in pay over the period of an apprenticeship and a higher rate of pay on completion
- A combination of on and off the job learning with around 20% of time at a training provider
- A chance to mix with apprentices from other enterprises
- Attainment of a recognised qualification
- A training plan within the company
- Opportunities to experience different workplaces if in a limited environment
- A ‘case manager’ to oversee progress in off and on the job training (e.g. ‘pedagogical referent tutor’ in France)
- Opportunities to switch employers for good reason
- A chance to progress further to higher level employment or self-employment
Support for Employers and Apprentices

- Provision to enterprises of suggested workplace curriculum
- Cohort management systems within or across enterprises
- Support for small and medium enterprises, through structured arrangements, by specified bodies
- Support for employers rather than punitive measures for non-compliance
- Easily-available information about the system for would-be apprentices and employers (e.g. Ellis chart in Canada)
- Fall-back system for apprentices whose employer can no longer afford to employ them (e.g. GTOs in Australia or interim ‘out of trade’ arrangements)

Emphasis on Young People

The systems’ emphasis on young people varied among countries. In Germany, for example, apprentices were almost always expected to be school-leavers; although mature people were allowed they were very rare. In France, mature people could only enter an apprenticeship if they had a disability. In Australia and England, by contrast, apprentices were frequently mature people. In Canada and the US apprentices were rarely young people.

Moreover, the age of the ‘young people’ also varied. In Germany, where apprentice schools are an alternative to senior secondary education, apprentices commence at age 16 or so. In Australia, by contrast, apprenticeships commence after secondary school finishes, and while some young people leave school early, most complete the full years of secondary school before commencing an apprenticeship or traineeship at the age of 18 (Although to complicate the picture, some do commence apprenticeships while at school as part of their secondary schooling).

Table 2: Typology of availability of apprenticeships to adults and/or young people adults

<table>
<thead>
<tr>
<th>Predominantly for young people</th>
<th>Egypt, France, Germany, India, Turkey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routinely includes both young people and adults</td>
<td>Australia, England, Indonesia, South Africa</td>
</tr>
<tr>
<td>Predominantly for adults</td>
<td>Canada, United States</td>
</tr>
</tbody>
</table>

Arrangements were quite complex across countries. One interesting feature of the Turkish system, for example, was that apprenticeships varied in length according to whether the apprentice has completed secondary schooling or not. This seems a productive arrangement, as the length takes into account the expected maturity of the young person.

Although not reported in the study, an interesting feature of the English system is that although apprenticeship is open equally to young people and to adults, financial incentives to employers are greater when they take on a young person aged 16-24 than a mature person. The National Apprenticeship Service currently provides £1,500 per apprentice ‘Apprenticeship Grants for Employers’ (AGE) to eligible employers with up to 1000 employees, for recruiting 16 to 24 year old apprentices. This is said ‘to encourage employers to develop their business and take on new apprentices’ (http://www.apprenticeships.org.uk/Employers/Steps-to-make-it-happen/Incentive.aspx). This measure was seen to help meet a target proportion of young people in the system in view of the increased rate of youth unemployment following the GFC, and partly to answer criticisms from some quarters that employers were using apprenticeship to train existing workers. The English government also covers the off-the-job training costs completely for young people and at 50% for people aged over 25.

Australian Project

The overall findings suggested that there were three dimensions to the psychological contract (Rousseau, 1990) between the parties involved. These dimensions were related to teaching and learning, employment conditions and the emotional and interpersonal aspects of work. Across the nine sites there was the same understanding of the reciprocal obligations and promises that had to be fulfilled if the psychological contract was to be kept intact. The following were the factors that influenced the fulfilment of the psychological contract and were crucial to the completion of the apprenticeship or traineeship:

- Regular and timely performance management.
- The availability of clear, explicit and current information for all the parties to the psychological contract contributed to the fulfilment of the psychological contract. When this was supported by parallel information and training for workplace supervisors the chances of success and completion increased.
- The past experiences of apprentices or trainees helped them to fulfil their side of the psychological contract. The age of commencement of the traineeship or apprenticeship varied across the sites and there was no clear consensus across the sites about what the ‘ideal’ age should be.
- The level of encouragement provided to the apprentices and trainees and the extent to which mistakes could be productively tolerated had an effect on the fulfillment or not of the psychological contract. Apprentices and trainees appreciated the opportunity to openly communicate with managers or supervisors, even if mistakes had been made.
- Many participants acknowledged the influence of wage rates on the fulfilment of the psychological contract. In some cases the pay rates were the ‘cement’ that bedded down the psychological contract. The low level of the training wage rates for apprentices and trainees were regarded as a disincentive to the fulfilment of the psychological contract.
- If the terms of the psychological contract were made explicit, reiterated and reinforced through rewards (either tangible or emotional), the psychological contract was more likely to be fulfilled. Reward and recognition of hard work and the value of talented apprentices and trainees...
on the part of the company was reciprocated with increased motivation and performance on the part of the apprentice or trainee. (Smith, Brennan Kemmis & Walker, 2011, p. 43).

While these points apply to apprentices of any age, it is not difficult to understand that for young people inexperienced in work, these matters are particularly important. For example, clear expectations and tolerance of mistakes are important for people learning to function in a new workplace who do not have much experience to draw on.

**THE APPRENTICESHIP LIFECYCLE**

It is clear from both studies reported on in this paper that developing and maintaining successful apprenticeships as a means of facilitating a smooth transition from school to work is a complex systemic activity and one that impinges on individuals in workplaces too. One way of organising the description of apprenticeship arrangements and identifying areas for improvements is to analyse the various stages in the ‘apprenticeship life cycle’ using the diagram below as a guide to this description. The lifecycle concept was developed in an Australian research project on traineeships (Smith, Comyn, Brennan Kemmis & Smith, 2009) and is designed to represent the processes that relate to individual apprentices entering, undertaking and completing their apprenticeships, incorporating all the people and bodies that engage with those apprentices. It is practice-based and is not about apprenticeship policy. It does not address the arrangements that sit outside these interactions.

**The Four Phases (Figure 1) are:**

1. Recruitment / sign-up / induction;
2. Training delivery & assessment;
3. Support during the traineeship; and
4. Completion and beyond.

![Figure 1: The apprenticeship life cycle](image)

Attention and diligence is needed at each of the stages in the life cycle and commitment is required from employers, apprentices and training providers. In some countries, there are third parties involved who provide support and mentoring on the one hand to apprentices and/or employers, and monitoring and ‘rescue’ (e.g. Ombudsman-type) services on the other hand. The international project showed that France has an excellent system of ‘pedagogical referent tutors’ assigned by the training provider, who have a caseload of apprentices and try to ensure that on-the-job training as well as off-the-job training is appropriate. The Australian project showed that Group Training Organisations, whose function is to act as the formal employer of apprentices, ‘leasing’ them to employers, also provide good case management services. Group Training Organisations employ about 15% of Australian apprentices. The Australian project also showed that most people involved in apprenticeships are aware that young people entering full-time work for the first time need assistance adapting to working life, even if they have had already had part-time work while at school. However employers new to apprenticeships, especially in industries that have not traditionally employed apprentices but are beginning to do so because of country system expansion, may not be so familiar with the needs of young people.

**CONCLUSION**

The studies reported on in this paper provide some insights into the ways in which the transition from school to work can be made more effective for young people. Given the high rates of youth unemployment apprenticeships can be seen as a way to address these problems whilst simultaneously contributing to the development of a more skilled workforce. If this goal is to be achieved then it is necessary to examine and analyse the current situation given the high rates of attrition documented in this paper.

The principles that emerged from the international study of apprenticeships gave rise to the development of a model apprenticeship system. The features of this system can be used to benchmark current practices in relationship to apprenticeships with the aim of improving them. Systemic considerations also need to be juxtaposed beside the results of the second research project reported that provides some clear guidance on the kinds of conditions and relationships that support young people to complete their apprenticeships and thus make successful and sustainable transitions between school and work.

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**REFERENCES**


