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Effectiveness, Efficiency and Impact



of Indonesia's Apprenticeship Programme



Job Opportunities for Youth (JOY) Project

**EFFECTIVENESS,
EFFICIENCY AND IMPACT**
OF INDONESIA'S
APPRENTICESHIP PROGRAMME

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Foreword

With a youth unemployment rate of 22.4 percent, the Government of Indonesia has made putting young people to work a matter of priority in the mid-term development plan (RPJM) for 2010-2014. A key question is to find a way to reverse the trend of the labour force increase not benefitting youth employment sufficiently. While there is no single solution to the problem, apprenticeship is a promising avenue to help reduce the gap between the supply and demand for young labourers, especially those between the ages of 15 and 24.

The Ministry of Manpower and Transmigration encourages apprenticeships through its dedicated Directorate. For one, apprenticeships present the ability to provide young people with quality training and certification in a variety of sectors. Secondly, they can target employers of different sizes, from small and medium enterprises to large companies. However, they also face challenges, including a lack of coordination at the policy level and the need for more flexibility among existing programmes.

This study by Dr. Endang Sulistyarningsih depicts the apprenticeship situation in Indonesia and provides recommendations for improvement. It can serve as a tool for policy makers involved in labor market planning with several ministries. It could also prove very useful to the coordinators of the Indonesia Youth Employment Network (IYEN), which focuses strongly on apprenticeships and which was recently inaugurated with the support of the International Labour Organization (ILO) through its Job Opportunities for Youth (JOY) project.

In Indonesia, the ILO brings together Government, employers and workers to promote decent work. It addresses unemployment and underemployment, including through technical cooperation projects that aim to contribute to the Global Jobs Pact that was launched in the wake of the economic crisis of 2008. It is in this context that the JOY project initiated this study. For three years, JOY has supported youth employment policies as well as local economic development initiatives in the province of East Java and repeatedly, the necessity for more and better apprenticeship programmes has been highlighted.

At stake is a better understanding of what can be done to improve apprenticeships in Indonesia, in the spirit of knowledge sharing and for the sake of finding more and better working opportunities for young Indonesian women and men. The recommendations of

the study, including increasing the options for apprenticeships, supporting enterprises to endorse such schemes more systematically, improving the quality of the training provided and facilitating the transition to permanent jobs, will hopefully serve as a foundation for reforms and improvements. They may also serve governments and development practitioners of other middle income and G20 countries.

I wish you pleasant reading.

Peter Van Rooij
Office in Charge
ILO Jakarta Office

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I would like to thank the companies, apprentices and training centres that made time to participate in this study, not least because they were requested at short notice. The research team is grateful for the patience and insights of respondents without whose cooperation this study would not have been possible.

Bagus Marijanto (then but now former Director of Apprenticeship) requested this study and provided substantial advice and support before, during and after the study was conducted. His input was invaluable. In addition, the National Apprenticeship Network – which has members from the ranks of APINDO and KADIN and officials from the provincial and municipal Manpower Offices (Dinas Tenaga Kerja) provided a wealth of operational knowledge which helped to inform analyses about the program in practice.

I would also like to thank Elfrida Herawati Siregar and Servulus Boboriti, who went beyond their duties as research assistants by helping to gather the information needed to write this report. Dr. Diah Widarti was also of indispensable assistance offering useful advice about how to best structure the report.

Finally, I would like to thank the ILO Jakarta Office for its financial support.

Jakarta, March 2010.

Endang Sulistyaningsih

Glossary

API	Association of Indonesian Welders (Asosiasi Pengelasan Indonesia)
APINDO	Employers Association of Indonesia (Asosiasi Pengusaha Indonesia)
Bappenas	National Board for Planning and Development (Badan Perencanaan dan Pembangunan Nasional)
BLK	Vocational Training Center (Balai Latihan Kerja)
BNSP	National Professional Certification Agency (Badan Nasional Sertifikasi Profesi)
DLKN	Vocational Training Coordination Institution (Dewan Latihan Kerja Nasional)
GTZ	Gesellschaft für Technische Zusammenarbeit
KADIN	Indonesian Chamber of Commerce and Industry (Kamar Dagang dan Industri Indonesia)
LSP	Professional Certification Institute (Lembaga Sertifikasi Profesi)
Kemenakertrans	Ministry of Manpower and Transmigration (Kementerian Tenaga Kerja dan Transmigrasi)
Kemendiknas	Ministry of National Education (Kementerian Pendidikan Nasional)
MPKN	Council for Vocational Education (Majelis Pendidikan Kejuruan)
RPJM	Medium Term National Development Plan (Rencana Pembangunan Jangka Menengah)
SMK	Technical/Vocational Senior High School (Sekolah Menengah Kejuruan)
SISDIKNAS	National Education System (Sistem Pendidikan Nasional)
SISLATERNAS	National Vocational Training System (Sistem Pelatihan Kerja Nasional)
SKKNI	National Skills Certification System (Standar Kompetensi Kerja Nasional Indonesia)
SPSI	All-Indonesia Workers Union (Serikat Pekerja Seluruh Indonesia)
TAS	Training Advisory Services
TVET	Technical and Vocational Education and Training

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Executive Summary

The study

Apprenticeships are the Government's preferred route for reducing unemployment, increasing the quality of the workforce and eliminating poverty. They are designed to provide work-based learning opportunities for people aged 15-24. Apprenticeships provide structured programs of training that lead to recognized qualifications, and are available across a wide range of occupations and sectors. However, the links between apprenticeship programs and enterprise in Indonesia are still poorly understood among policy makers.

In order to persuade employers to engage in apprenticeship training, they need to be convinced of the benefits of doing so. At the request of the Directorate of Apprenticeship of the Ministry of Manpower and Transmigration, and supported by the ILO Jakarta Office, the author has conducted research into how employers, apprentices and training centres understand the apprenticeship system and what role it plays in facilitating transitions into the workforce.

The study found that Indonesia's apprenticeship system has a dual character. First, apprenticeships are considered to be a form of full time employment. Second, they are seen as a process of education and training. In this respect, apprenticeship is unlike most other forms of education since the person who is learning is also earning. The apprentice is at the same time a student learning a trade or profession and an employee who seeks rewards and satisfaction from his job as well as to satisfy the demands and requirements of his employer. Because of this dual character of apprenticeship, the training and education of apprentices must be arranged in such a way as to help apprentices meet these objectives.

This study used a grounded theory approach, asking employers, apprentices and training centres to comment on experiences and trends in the system. This study takes into account the accounts of employers, who compare the productivity of apprentices to that of externally recruited workers; the challenges experienced by training providers; and last but not least the views of apprentices who are in the middle of making the transition into the workforce. In so doing, the study was able to identify some common themes independent of the literature on apprenticeship programs, which are recognized as being responsible for policy failure at

the national level. There is evidence to suggest that some policy decisions are based on the experiences of other countries rather than on the hard facts of the Indonesian labour market.

The apprenticeship program in Indonesia

At present, the national apprenticeship system is not coordinated by a single policy. Indonesian ministries run apprenticeship and training programs independently, refusing to recognize the legitimacy of each others' certification. Their programs are industry-specific. Efforts at sector planning have been underway for a number of years, but the national policy on apprenticeship has not yet emerged as one unified umbrella.

The result is that the present program model is not flexible enough to meet industry training needs or the demands of the economy and labour market generally. The government recognizes the potential of the program to generate employment and help unskilled labour to make the transition into the workforce. Therefore, an evaluation of the program is needed to help the government introduce reforming regulation and other initiatives to help the program meet these aims. We need to increase flexibility without discarding what works now while building on the system's strong partnerships in order to adapt to changes in the labour market and in the workplace.

The results of the field survey

Key findings from the research show that apprenticeships:

- i. Are cost-effective ways to train workers for employers;
- ii. Help employers overcome structural problems with recruitment;
- iii. Offset skill shortages;
- iv. Help improve retention rates among employees;
- v. Provide training to meet business needs;
- vi. Contribute to the pool of skilled people;
- vii. Instil company values in young people;
- viii. Increase the productivity of workers;
- ix. Are linked to structured career development; and
- x. Contribute to the quality of skills in the labour market.

Current characteristics of apprenticeships

- ♦ Apprenticeship programs provide the basis for the further career development of employees as apprentices develop a full set of skills, ranging from administrative and technical skills to more managerial ones.
- ♦ Apprenticeship programs enable companies to recruit labour more easily and at a lower cost, and increase their retention rates by instilling company values in their workers while they skill up.
- ♦ Apprenticeship programs are a risky investment because apprentices are mobile and may choose to take their skills to another employer. However, the discounted wage apprentices earn while training and the contribution they make to productivity within the company offset the cost of training.

- ♦ Apprenticeship programs vary in length. For example, engineering companies' apprenticeship programs can take up to two years whereas a retailer's program may only take nine months. The government has firm regulations about the length of apprenticeships to make sure that companies only use the period of time needed to transfer skills and do not attempt to exploit the apprenticeship system as a mechanism that provides cheap labour.

Introduction

A case for a national apprenticeship system in Indonesia

Unemployment and underemployment, particularly among youth, are serious concerns for the Government of Indonesia. In part, the 2004-2009 Medium Term National Development Plan (Rencana Pembangunan Jangka Menengah, RPJM) was a response to the large proportion of the labour force without work, especially unemployed primary and secondary school leavers. The national economy has been unable to generate sufficient formal employment and income opportunities for this group. As a result, the majority of school leavers are forced to enter the informal and micro-enterprise economy where they seek informal training opportunities through traditional apprenticeships.

A core aim of the 2004-2009 RPJM under 'manpower development and employment creation' was to reduce unemployment and enhance the quality of the labour force. In an attempt to achieve this aim, the government promoted vocational training institutions and monitored the quality of the education and training they provided. After assessing the impact, it became clear that the programs of vocational training institutions were not meeting the demand by the labour market for qualified and competent workers. Apprenticeship offers a solution to this problem. It has the potential to bridge the gap between theory and practice.

Apprenticeship is the de facto means for entry into skilled trades in Indonesia at present, regardless of the model used. However, there is growing awareness of the fact that the traditional apprenticeship model is failing to provide the type and quality of training required for skilled work in labour market. In Indonesia, apprenticeship has never been simply a means to teach young people a trade. Traditional apprenticeship models are complex because they are regulated in the same way as other employment. Trainees enter into employment contracts with their employers. Moreover, it is also common practice for parents to enter into a contractual agreement with the employers of their children as a form of guarantee to offset the risk employers take in investing in training. These traditional apprenticeship models are problematic not just for these reasons but also because even though they have become outdated in terms of the techniques they impart, they persist. The Ministry of Manpower and Transmigration (Kementerian Tenaga Kerja dan Transmigrasi, Kemenakertrans) is searching for an apprenticeship model that represents and safeguards the interests of both trainees and their employers.

Why the national apprenticeship system needs to be evaluated

Apprenticeship programs have the potential to make a positive contribution at both micro and macro levels of the economy. They:

- ♦ Offer apprentices opportunities to improve their employability. Apprentices acquire the skills they need to gain and remain in employment as well as improve their mobility in the labour market;
- ♦ Supply employers with the types of skilled workers they demand. Employers benefit from lower training costs and increased productivity rates;
- ♦ Contribute more generally to Gross Domestic Product growth by addressing structural issues that cause disequilibrium in the labour market.

Indonesia requires an evaluation of its apprenticeship system in order to assess its effectiveness against these benefits. Many of those involved in apprenticeship – including business, labour, and training deliverers – have called for an evaluation of the system to see whether it is meeting its primary aims and objectives. An examination of apprenticeship more generally will provide government with input on the specific requirements of industries. The present system lacks the flexibility to adjust to the ever-changing demands of the private sector, which demands tailored models for apprenticeship. The government needs to design a system that is flexible enough to keep the elements that work now while adapting to changes in the workplace.

Further impetus for a study of the system stems from the government's decision to reallocate state budget funding to support the development of a national apprenticeship program. The government withdrew funding from the Ministry of National Education's in-school training program, allocating it to the Ministry of Manpower and Transmigration's apprenticeship program. Indonesia has thus committed substantial resources to the development of an apprenticeship system that requires minimal regulation and is flexible but can deliver the training needed to supply the labour market with skilled tradespersons who are competent and certified.

The Ministry of Manpower and Transmigration has implemented policies to enhance market-oriented skill development through apprenticeship programs that prioritize the manufacturing and services sectors. However, the links between these apprenticeship programs and enterprise are not sufficiently understood by policy makers. Input about this relationship is crucial to the policymaking process. Therefore, this study investigates how young people navigate the transition from apprenticeship to the formal sector and/or self-employment with a particular focus on how they use formal as well as informal networks. The results of the study will provide policy makers with the knowledge they need to develop, maintain and promote pathways to formal employment.

Two approaches to the apprenticeship system

Policy makers have used a double-pronged approach in the formulation of Indonesia's apprenticeship system, namely the school-to-work transition approach and the skills deficit approach. The school-to-work transition approach is defined in Law No. 20/2003 on the National Education System (Sistem Pendidikan Nasional, or Sisdiknas). The Ministry of National Education (Kementerian Pendidikan Nasional, or Kemendiknas) has jurisdiction over

the National Education System. Presidential Decree No. 102/2007 on the Ratification of the UNESCO Convention on Technical and Vocational Education also gave the Ministry of National Education authority over the technical and vocational education training system. As a result, the National Education System includes technical/vocational senior high schools (Sekolah Menengah Kejuruan, or SMK) and polytechnic colleges. These institutions and the possible pathways to formal sector employment are at the core of the school-to-work transition approach.

The Directorate-General of Basic and Intermediate and Vocational Education Management (Direktorat Jenderal Manajemen Pendidikan Dasar dan Menengah) within the Ministry of National Education holds regulatory authority over technical and vocational education in schools. The directorate is responsible for planning and development while the Education Offices at the district level are responsible for day-to-day administration. The Ministry of National Education is generally responsible for technical and vocational education; however, sector-specific ministries such as the Ministries for Agriculture, Industry, Mining and Energy, Communications and Health are also involved. The National Council for Vocational Education (Majelis Pendidikan Kejuruan Nasional, or MPKN) coordinates these ministries' interests in this area. The MPKN is a joint initiative of the Ministry of National Education and the Chamber of Commerce.¹

The skills deficit approach aims to provide a practical solution by bridging skills gaps and up-skilling the labour market. The basis for this approach is outlined in Law No. 13/2003 on Manpower, which comes under the jurisdiction of the Ministry of Manpower and Transmigration. A broad aim of this legislation is to establish three pillars for a national vocational training policy, i.e. a Vocational Training Coordination Institution (Dewan Latihan Kerja Nasional, or DLKN), a National Vocational Training System (Sistem Latihan Kerja Nasional, or SISLATERNAS) and a National Skills Certification System (Standar Kompetensi Kerja Nasional Indonesia, or SKKNI). In order to achieve this aim, the government issued Government Regulation No. 31/2006 on the National Vocational Training System, which comes under the authority of the Ministry of Manpower and Transmigration.

The national government no longer has exclusive regulatory authority over the National Vocational Training System. Since the implementation of decentralization legislation in 1999, the central government has been transferring program assets to district and municipal governments. As a result, local government now provides the majority of vocational training through the program. The national government leads efforts to establish rules and guidelines for vocational training by coordinating with local government. The national government also provides practical assistance such as the provision of instructors to districts and municipalities in need.

National skills certification system

The government has been working to redevelop the National Skills Certification System since 2003. The new system aims to evaluate the skills of the labour force and provide competent workers with the certification they need to find jobs at home and abroad. professional certification institutes (Lembaga Sertifikasi Profesi, or LSP) is a government-accredited organization that issues certification on an occupation-by-occupation basis. There are presently 35 LSPs.² The National Professional Certification Agency (Badan Nasional Sertifikasi

1 See Kepmen-0267 A/U/1994 (Ministry of Education) and Kepmen-84/KU (Chamber of Commerce).

2 This is accurate as at 8 April 2009.

Profesional, or BNSP) and its infrastructure were established in 2004 by Presidential Decree No. 23/2004. BNSP became operational at the beginning of 2005. The main function of BNSP is to design a Technical and Vocational Education and Training (TVET) policy and endorse the National Qualification Framework and competency standards. All concerned parties, including the Ministries of National Education, Manpower and Industry and the Chamber of Commerce agreed on these aims and functions.

Systemic issues explored in this study

- ♦ A large number of training initiatives are poorly executed because of a dualism of functions between the Ministry of National Education and the Ministry of Manpower and Transmigration in the training system.
- ♦ Little is known about skills training arrangements with a particular focus on the apprenticeship system, which attempts to reorient students towards readiness to enter the job market or self-employment by introducing them to the necessary skills.
- ♦ Even less is known about alternative apprenticeship opportunities and the outcomes for graduates in labour market.

section II

Study Aims, Objectives and Methodology

Definition of apprenticeship used in this study

For the purpose of the study, apprenticeship is defined as a method of training by which young people are attached to an employer for a certain period (3 to 6 months), as an exclusive means of entry into a particular trade. Apprenticeships take their character from the attitudes, intentions and actions of all stakeholders, including the apprentices themselves, employers and training providers. Employers must see apprenticeships as being in their interest before they make the decision to engage an apprentice and young people must see apprenticeships as being consistent with their own career objectives. An objective of this study is to uncover what the objectives, goals and attitudes of apprentices and employers are in order to better understand the apprenticeship program in practice. In turn, this study will help to inform the development of programs in the training centres.

Apprenticeship programs have two major components. The first component is on-the-job-training and education and the second, employment. Apprenticeships are unlike most other education forms since the person who is learning is also earning. While the apprentice is learning the practical and beneficial aspects of his trade, the employee is seeking rewards and satisfaction from his work as well as to satisfy his employer. As this suggests, the training and education of apprentices must be arranged in such a way as to allow for the needs and objectives of not just apprentices but also employers. Considerations include the length of apprenticeships and the breadth of skills training.

Objectives

The aim of this study is to evaluate the strengths and weaknesses of the present apprenticeship system. The objectives are to:

- ♦ Ascertain the goals and objectives of apprentices;
- ♦ Document their attitudes to employment, training and education;
- ♦ Examine the attitudes and perspectives of others involved in the process;

- ♦ Assess how apprenticeships operate in different trades and industries; and
- ♦ Identify significant issues concerning the program.

This study answers the following questions:

1. Is apprenticeship needed to bridge the gap between the school system and the world of work?
2. What do apprentices think about the apprenticeship system?
3. What roles do various stakeholders play in the apprenticeship system?
4. How does the system make sure that stakeholders are performing their roles effectively?
5. What administrative infrastructure is needed to ensure accountability, quality control and accessibility?
6. What administrative infrastructure is needed to accommodate the expansion of the apprenticeship system?
7. What is the most cost-effective and sustainable way to use apprenticeship funding?
8. How can the apprenticeship system be made more attractive to youth?
9. How can the apprenticeship program be incorporated into other education and training initiatives already running in Indonesia?

Methodology

This study explores how systems and mechanisms of the present apprenticeship system are employed in Indonesia. To illustrate how they work, this study gathered quantitative and qualitative data in Indonesia's two most populous cities: Jakarta and Surabaya.

Literature review

In order to inform the field research process, a comprehensive study of the literature was undertaken on:

- ♦ The history of existing apprenticeship program;
- ♦ Issues in the development of the system;
- ♦ Institution-specific concerns; and
- ♦ The legal framework.

Field research

Field research was conducted in Jakarta and Surabaya in order to:

1. Collect qualitative data about how apprenticeship is understood by:
 - ♦ Employees who undertook an apprenticeship;
 - ♦ Employees who did not undertake an apprenticeship;
 - ♦ Apprentices; and
 - ♦ Employers.
2. Gather quantitative and qualitative data about the effectiveness of apprenticeship using the following indicators:

- ◆ Cost-effectiveness
 - ◆ General benefits to business
 - ◆ Recruitment
 - ◆ Training to meet business needs
 - ◆ Skills shortages
 - ◆ Retention
 - ◆ Career development.
- 3 Compile site-specific data from the relevant provincial or municipal Ministry of Manpower and Transmigration and Ministry of National Education Offices, the National Board for Professional Certification and companies that have links with the apprentice system.

Instruments used to collect data

The study used a combination of structured and semi-structured questionnaires and interviews. They were organized as follows:

- ◆ Apprentices (Q7)
- ◆ Apprenticeship networking (Q5)
- ◆ Employers (Q2+Q3)
- ◆ Employees who graduated from the apprenticeship program (Q1)
- ◆ Employees who graduated from college and did not do an apprenticeship (Q6)
- ◆ Semi-structured interviews with all stakeholders (Q4)

Case studies

The focus of the study was limited to groups of apprentices in selected industries. The reason for this decision is because apprenticeship programs vary depending on the industry. Moreover, this study uses Indonesia's two biggest cities as the sites for field research. Jakarta and Surabaya have dense concentrations of industry in which apprenticeship is entrenched.

The purpose of the case study is to explore the apprenticeship process rather than test hypotheses or evaluate it against a concrete set of criteria. By exploring the apprenticeship program on its own terms, this study will uncover both the program's strengths and weaknesses without first making assumptions about how the program should function.

Apprenticeship Issues in Selected Countries

This section presents a selective discussion of other countries' apprenticeship arrangements. It refers to the questions and issues this study aims to explore in the Indonesian context.

Developing countries

As in Indonesia, many young people in the informal economies of developing countries find themselves trapped in a situation where they cannot get access to skills that will increase their productivity and raise their income. The absence of opportunities and resources for training prevents young workers from enhancing their employability to work their way out of poverty, and it hinders the economy's ability to enhance technologies, productivity and development. In this context, the challenge is to provide learning opportunities that improve youth's employability.

Benin: The informal apprenticeship

Informal apprenticeships are a recognized path to skills development in many developing countries. Such apprenticeships are relatively unregulated by the government but can result in a well-organized transfer of skills. Informal apprenticeships are found in families and societal groups. It is the parents or legal guardians who regulate the arrangement with craftsmen. Informal apprenticeship training is common in the more 'modern' informal activities such as car repair, welding, hairdressing. Estimations suggest that 80 per cent of the skills imparted in the informal economy in West Africa are transferred through informal apprenticeships. Moreover, approximately 200,000 young apprentices were trained in 2005 in Benin, representing ten times as many apprentices than students in vocational and technical education.

Informal apprenticeship training has advantages and disadvantages. It allows for easy access to training, especially for the poor, and the skills taught by the master craftsmen are usually relevant to the real 'world of work'. In addition, the training allows the apprentice to

gradually build up a business network with suppliers and clients. Overall, the approach is seen as more effective than pre-employment training in classrooms. Its main limitations are the lack of a training plan, the passive nature of learning, the limited entry possibilities for new technologies, incomplete training content and differences in the quality of skills acquired due to the absence of trade testing and certification. Also, the often long training periods and the risk of exploitation of apprentices as 'cheap labour' are criticized, as well as the lack of post-training follow up and support for apprentices to start up their own business.

India: Modern apprenticeship

India is one of a small number of developing countries that regulates apprenticeship outside medium and large enterprises and the state. India enacted an Apprenticeship Act in 1961 with the explicit aim of regulating the length of the training period, the training format, the number of working/training hours and remuneration. The legislation gives a mandate to the Central Apprenticeship Council and the State Apprenticeship Advisers to make sure that industry demands inform the apprenticeship program but also that the industry conforms to apprenticeship program demands such as the syllabus.

Pakistan: Industry-g geared modern apprenticeship

The Government of Pakistan has created an ad hoc apprenticeship to train youth in the skills they will need to meet the demands of the growing IT industry. The Pakistan Software Export Board has launched an attractive apprenticeship program for young IT graduates. Known as the IT Industry Apprenticeship Program, it offers financial subsidies to companies that recruit graduates possessing basic skills and knowledge in Information Technology or any other related disciplines. These apprentices are hired by companies as full-time employees and put through a 12-month program, consisting of in-company and on-the-job training as well as mentoring. Since its launch, the IT Industry Apprenticeship Program has been awarded to seven companies, which are expected to help create over 700 employment and training opportunities.

Developed countries

The highly developed models of apprenticeship in developed countries serve as examples to show how Indonesia might shape its national apprenticeship program. The models cannot be directly translated into the Indonesian setting. Indonesia, like India and Pakistan, is at a different stage of economic development. The country has, on average, a higher level of unemployment and other structural issues in the labour market. In spite of these conditions, however, a study of these countries' regulatory frameworks is essential to help inform the decisions that Indonesian government officials make regarding Indonesia's apprenticeship program.

Australia: Training or employment

One characteristic of Australian apprenticeship that appears to have changed in recent years is that the 'training' role of apprenticeship has become more dominant than the 'employment' role. This is reflected by the fact that, generally, State and Territory Ministers for Education now administer apprenticeship, whereas it used to be administered by Ministers for Industrial Relations or industrial tribunals.

A fundamental feature of apprenticeship as a system of employment and training in Australia is that it is designed to directly benefit both parties – apprentices and employers. Apprentices benefit from having guaranteed paid employment for some years (nominally four years for trade apprenticeships in Australia) and an opportunity to learn skills from qualified trades persons. In spite of the heavy education and training component, employers benefit from having an employee who becomes more productive as time passes.

Striking the right balance between the benefits to employers and the benefits to apprentices has never been easy. Typically, differences arise because employers desire to profit from employing apprentices, while apprentices (encouraged by their friends and family) are adamant about not being exploited as cheap labour. Such differences have provided the basis for a large amount of industrial law relating to apprenticeship in Australia. For example, legislation has enabled State supervision over employment and training contracts, including processes for resolving disputes between employers and apprentices. Australia also sets apprentices' wages on an industry and level basis.

Britain: A shift from informal to modern apprenticeships

Britain has only relatively recently adopted the Modern Apprenticeship system. Previously, traditional craft and trade apprenticeships had formed the basis for vocational competence for hundreds of years. However, support for a modern program grew in response to low rates of learning and qualifications among 16-19 year olds and a nationwide demand for skilled workers. In 1993, the government introduced the Modern Apprenticeship program, which marked a turning point for education as it shifted the emphasis to vocational training.

The government established the Apprenticeship Task Force in 2003 to increase apprenticeship opportunities for young people and help make the transition into the workforce as smooth as possible. A core aim of the task force is to identify how apprenticeship programs should respond to the changing needs of employers and young people. The task force has also been a useful tool to help the government identify the difficulties youth face when deciding what their post-school choices are. It has found that a primary issue is lack of access to good information and guidance about the work-based route to a career.

France: Increasing the number of apprentices

The French government has implemented a number of policies to increase the number of apprentices in the labour market. The government's interest increasing the number of apprentices started seriously in 2005 at the same time as a law on programs for social cohesion was enacted. Employment and equal opportunities were central principles around the way this law was organized. From 365,000 apprentices in 2005, the government announced a target for 2009 of 500,000. To achieve this, the government granted tax relief for companies and lowered the age for entry to apprenticeships in some professions.

Germany: Highly regulated dual system model for apprenticeship

The precise skills and theory taught on German apprenticeships are strictly regulated. There are 342 types of apprenticeship, which include occupations as diverse as doctor's assistants, bankers, dispensing opticians, plumbers and builders. Law requires apprentices to spend most of their time on-the-job and to undertake formal education at a vocational school. Usually, apprentices spend one or two days a week at the vocational school. The government refers to this system as a dual education system, which incorporates education and training into people's working lives.

The employer is responsible for the cost of the entire education program. Apprentices obtain a special apprenticeship contract which guarantees them employment and training until the end of the education program. Apprentices are protected from dismissal until the program ends and employers are forbidden to assign apprentices to regular work. The government understands regular work assignments to impede the acquisition of diverse skill sets.

United States: School to work

In the United States, education officials and nonprofit organizations have launched education reforms that help to facilitate the transition from school to work. This initiative seeks to link academia to concrete career paths. In order to give students ideas, it creates opportunities for them to observe workplaces through programs such as job shadowing, which entails observing a real worker in his workplace for a short period of time or spending a significant time on the job with reduced or no pay. However, some legislators raised the issue of child labour laws for unpaid labour and hazardous work.

There has also been a movement in the United States to revive vocational education more generally. For example, the International Union of Painters and Allied Trades has opened a Finishing Trades Institute with which it plans to integrate academia with an apprenticeship program. The shift toward this integrated approach was motivated by a study titled 'America's Choice: High Skills or Low Wages' which found that the States needed to ensure that even apprentices needed to continue a level of academic studies. Unlike Japan, Denmark, Singapore and Germany, the States waived the academic educational requirement for apprentices.

section IV

Apprenticeship in Indonesia

History of apprenticeship

Apprenticeship training was developed in Indonesia to overcome high unemployment and to meet the demand for skilled workers. Apprenticeship training is a partnership among many stakeholders. Stakeholders include employers, who provide on-the-job training; apprentices, who make a commitment to train in a specific occupation; business and labour representatives such as professional certification institutes (LSP), who work with the provincial government to develop training standards and examinations; vocational high schools (SMK) and other training institutions that deliver 'in-school' theoretical training; and the provincial Manpower Offices (Dinas Tenaga Kerja Propinsi), which administer the system through a limited network of apprenticeship activities. The Ministry of Manpower and Transmigration has a limited budget to provide financial support to apprentices.

Reform of the apprenticeship program began in 1992. The Minister of Manpower announced a national apprenticeship program in August 1994, with the first apprenticeship program contract agreement established in Samarinda, East Kalimantan. The purpose of the 1994 apprenticeship program was to provide skilled workers to industry and the services sector in an attempt to create career opportunities for school-leavers as an alternative to academia. The target group of the 1994 apprenticeship program was SMK students who participated in the Ministry of Education and Culture's Dual System known as Link and Match. The program was also known as the 'three-year apprentice program'. This apprenticeship offered SMK students additional certification.

Three-year apprenticeship program (1994-2000)

By January 2005 the apprenticeship program had expanded to 31 locations covering 18 provinces and nine trades (Metal, Automotive, Welding, Electricity, Agricultural Product Processing, Agricultural Machinery, Construction, Hospitality and Business Administration). There were 5,000 students who participated in the program, which involved 500 companies. The first group sat the National Exam for Vocational High Schools in 1997.

In 1997, a study of the 1994 national apprenticeship program was conducted by an independent body. The results showed that the program was designed appropriately to help meet the government's aims. The government planned to expand the apprenticeship program by increasing the number of apprenticeship trades based on the needs of rural areas.

The 1994 apprenticeship program was supported by several institutions under a Co-operation Agreement between the Ministry of Manpower and Transmigration, the Ministry of Education and Culture, the Chamber of Commerce and Industry, the Employers Association of Indonesia (Asosiasi Pengusaha Indonesia, or APINDO) and the All-Indonesia Workers Union (Serikat Pekerja Seluruh Indonesia, or SPSI) that was signed in November 1996. This activity was supervised by the National Planning and Development Board (Badan Perencanaan dan Pembangunan Nasional, or Bappenas) with help from Gesellschaft für Technische Zusammenarbeit (GTZ). In addition, the agreement between the Association of German Welders and the Indonesian Welding Association (Asosiasi Pengelasan Indonesia, API) created opportunities for cooperation in the field of education and training to bring qualifications into line with international standards.

In implementation, the three-year apprenticeship program encountered difficulties as a result of the fact that the government was unable to adequately identify training needs to help apprentices obtain the skills they needed to pass competence testing. The Training Advisory Services (TAS), companies and participants all experienced this problem. Evaluations show that partner companies did not employ sufficient personnel to ensure that skills were transferred to apprentices. Moreover, there was unwillingness on behalf of the staff to perform this function because they saw apprentices as a threat to their job security. In part, this view was due to a lack of information and support from government institutions involved in managing the program. The core problems of the apprenticeship program were as follows:

- ♦ Lack of information about apprenticeships in companies;
- ♦ Lack of the involvement of the private sector;
- ♦ Lack of coordination between vocational training institutions and enterprises in identifying the skills needed by the industries.;
- ♦ Lack of involvement of companies in developing the training program and software;
- ♦ Lack of involvement of companies in the selection of apprentices;
- ♦ Poor management of training centres;
- ♦ No written contracts or agreements for apprentices;
- ♦ No workshop laboratories available to apprentices;
- ♦ Lack of competency testing;
- ♦ No national accreditation system in place.

Funding was a major problem. In order to work effectively, funding was needed to support apprentices with their daily needs such as food and transportation. Funding was also needed to offset the investment made by companies. Companies were expected to provide instructors and raw materials to train apprentices. However, there was no clear standard for these funding arrangements and the government offered no incentive to companies to encourage them to raise the standards. As a result, apprentices received inadequate financial support and training.

From the apprentices' point of view, the three-year apprenticeship program was not an attractive option due to the duration of the program. Apprentices need to wait until they finish the apprenticeship program before taking up employment with their employers. Furthermore, apprentices sometimes had to wait a long time before receiving their certificates, which made it difficult for them to start looking for work once finished.

The Asian Financial Crisis of 1998 drastically changed the economic conditions in Indonesia, posing new challenges to the apprenticeship program. The apprenticeship program came to a halt as companies partnered with the program closed. GTZ decided to discontinue funding in 2000, sealing the fate of the program. The apprenticeship program was inactive until 2005, when the Minister for Manpower issued Ministerial Regulation No.21/MEN/X/2005 on the implementation of the apprenticeship program. In 2007, the government issued Government Regulation No.31/2006 in an attempt to renew the program by laying the groundwork for the National Apprenticeship System (SISLATERNAS)

Enterprise-based apprenticeship program (2005-present)

Enterprise-based apprenticeship programs are part of the National Apprenticeship System. The program aims to ensure the availability of qualified skilled workers based on industry requirements. Only companies which are registered with the Directorate of Apprenticeship at the Ministry of Manpower and Transmigration can hire apprentices. A core objective of this program is to ensure basic standards for apprentices. The apprentice-employer relationship is regulated by industry-specific engagement contracts and the period of apprenticeship has a three-month minimum and a six-month maximum.

Table 1: SUMMARY OF THE ENTERPRISE-BASED APPRENTICESHIP PROGRAM 2007-2009

Year	Location (provinces)	Number of apprenticeship packages	Number of apprentices (persons)
2007	6	12	192
2008	10	28	448
2009	17	500	10,000

Structure of apprenticeship

Under Government Regulation No.31/2006, apprentices must be at least 15 years old and have had some formal education. Apprenticeships must be six to nine months in duration. Apprenticeship training starts with the signing of an apprenticeship contract by the employer, the apprentice and the district or municipal Manpower Office. The contract sets out the rights and responsibilities of both employer and apprentice within the apprenticeship framework, ensuring that both parties understand what they can expect of each other.

Certification system

Through the National Professional Certification Agency (BNSP), the national government accredits professional certification institutes (LSP) to test the skills of apprentices and issue competence certificates.

The certification system used to put emphasis on how many hours had been spent in training. However, this emphasis has shifted toward using competency testing. This shift came about in response to the demands of Law No.13/2003 on Labour, which demanded that the system be aligned with international standards. Currently, there are skill assessment standards for professions related to automobiles, mechanical engineering and many others.

Funding

The Directorate of Apprenticeship (Binapemagangan) provides limited funding to companies to help defray the costs of training apprentices. In this way, the government, employers and apprentices share the cost of apprenticeship. Under this system, employers cover the cost of raw materials for the training of apprentices. They also pay for the cost of additional instruction and training as well as overtime. Employers contribute further through the payment of apprentices' wages in the form of an allowance. Apprentices' allowances reflect their skills, experience and ability. Apprentices on work placement are paid wages in some cases.

Apprenticeship network

The Apprenticeship Network is an independent group sponsored by the Ministry of Manpower and Transmigration, which brings together senior executives from blue chip companies, small and medium sized enterprises and representatives from key associations and other stakeholders who have a stake in the state apprenticeship program. The idea behind the network is to create a space for all stakeholders to discuss developments in the labour market that affect the apprenticeship program. The network covers 11 provinces, namely North Sumatra, Lampung, Banten, Jakarta, West Java, Central Java, Yogyakarta, East Java, Bali, East Kalimantan and South Sulawesi.

section V

Analysis of the Findings from Jakarta and Surabaya

From the employer's perspective

The purpose of this study was to find out what the benefits of providing apprenticeships are from the company's standpoint. The study included employers who ran apprenticeships as well and those who did not. In so doing, this approach allowed for a comparison of the logic that informs employers' choices to engage or not engage apprentices. In particular, this study explored the following questions:

- ♦ What are the benefits and costs of engaging apprentices?
- ♦ What are employers' attitudes toward the provision of training?
- ♦ What are the employers' experiences as stakeholders in the apprenticeship?

Summary of the study sample

Questionnaires were distributed to 35 companies. Seventeen companies that engaged apprentices and five companies that did not engage apprentices agreed to participate. For details of the participants, see Table 2.

Table 2: DETAILS OF COMPANIES PARTICIPATING IN THE FIELD RESEARCH

No.	Company	Approx. Number of Employees	Approx. Number of Apprentices	Group
COMPANIES THAT ENGAGED APPRENTICES				
1	Dyana Pura Hotel, Bali	More than 100	Between 11 and 20	Hospitality
2	IHEC Fransisco, Bali	Between 11 and 100	Between 11 and 20	Hospitality
3	Sari Pan Pacific Hotel, Jakarta	More than 100	Less than 10	Hospitality
4	Century Athlete Hotel, Jakarta	More than 100	Between 21 and 30	Hospitality
5	Trakindo, Jakarta	More than 100	Between 11 and 20	Engineering
6	PT Makro Indonesia, Jakarta	More than 100	Between 11 and 20	Retail
7	Carrefour, Jakarta	More than 100	Between 21 and 30	Retail
8	Panasonic, Jakarta	More than 100	Between 31 and 40	Engineering
9	PT MPM (dealer Honda Motor), Surabaya	More than 100	Less than 10	Automotive
10	PT UMC – United Motor Center (Suzuki), Surabaya	More than 100	Between 11 and 20	Automotive
11	PT PAL, Surabaya	More than 100	More than 40	Engineering
12	PT DOK, Surabaya	More than 100	More than 40	Engineering
13	PT Auto 2000 – Toyota Astra, Surabaya	More than 100	Less than 10	Automotive
14	PT Fuboru (spare parts), Surabaya	More than 100	Less than 10	Automotive
15	BCA (in-depth interview only)	More than 100	Between 31 and 40	Financial Services
16	PT Honda motor (in-depth interview only)	More than 100	More than 100	Automotive
17	FUKMI	Less than 100	More than 100	Retail
COMPANIES THAT ENGAGED APPRENTICES				
1	IHEC Fransisco – VET, Bali	Between 11 and 100	None	Hospitality
2	Dyana Pura – VET, Bali	Between 11 and 100	None	Hospitality
3	Jayakarta – VET, Bali	Between 11 and 100	None	Hospitality
4	Bank Mandiri, Jakarta	More than 100	None	Financial Services
5	PT Safari Megah, Surabaya	More than 100	None	Automotive

Benefits for business

Six key findings were derived from the results of interviews with the 22 company respondents, as follows. Apprenticeships:

- ♦ Are cost-effective because it is less costly to recruit apprentices than adult, experienced workers;
- ♦ Aid recruitment, helping employers to overcome structural barriers in the labour market to obtain labour without having to offer incentives for people to work for them;
- ♦ Provide training to meet business needs, which makes sure that the labour demand is met;
- ♦ Contribute to the pool of skilled people in target areas by helping companies draw workers from the communities in which they are based, which lowers costs for both companies and workers;
- ♦ Help improve retention, as people who have trained with a company are more likely to stay with that company; and
- ♦ Instil company values and best work practices in workers, thereby helping to improve companies' productivity.

Cost of training as an investment

For employers, training is an investment. Like any investment there are risks attached to it. The principal risks are twofold for employers. First, there is no guarantee that an employee will meet the required standard; and second, graduated apprentices may not stay with the company, but instead might take their skills to an industry competitor. The benefits that flow from completing an apprenticeship flow directly to the apprentice in the form of job mobility and higher wages.

The risk of investment varies between groups. Research by the University of Warwick Institute for Employment Research (September 2005) supports the findings of this study, which show that the cost of training for apprentices in the automotive/engineering group is higher than in the hospitality or retail groups. In part, this difference in cost is a function of the length of time apprentices must be trained before they contribute to productivity. Furthermore, the hospitality and retail groups do much of their training on-the-job, unlike the automotive/engineering groups, which do more training off-the-job, including formal instruction. As a result, hospitality and retail apprentices usually become productive within a short period of time, whereas automotive/engineering apprentices can take up to three years.

In spite of this difference in cost, the automotive/engineering group of employers generally viewed the cost as an investment. They recognized the shortage of competent labour in their sectors and held the belief that they were making a contribution to the collective pool of skills in the labour market, which would in the future benefit them.

Case Study 1: Cost-effectiveness of the investment

The upfront costs of the apprenticeship program, such as the delivery of training and assessment, are typically covered by external funding. Small companies are particularly appreciative of this funding mechanism because while they desire the benefits an apprentice has to offer, they lack the resources to finance an apprenticeship without assistance.

Employers claimed that because apprentices make a material contribution, albeit limited because of their developing skills, they tend to break even with the investment. Carrefour provides an example of a company that recorded high gross costs for the training of its apprentices. However, due to the high productivity of its apprentices, the cost of their salaries was offset, showing a positive return on apprenticeship (see case study).

Carrefour

The cost of apprenticeship was compensated for by the high productivity of apprentices and, to a lesser extent, government funding. It costs Carrefour Rp. 4- 5,000,000 per apprentice each six- to nine-month period. Apprentices start their careers with Carrefour on 50 per cent of an experienced worker's salary. This rises to 80 per cent as they complete their apprenticeship. However, because the training provided is on-the-job, apprentices make an immediate contribution to the company's productivity. As a result, Carrefour makes a positive return out of the investment in training apprentices.

In contrast, PT PAL made a significant investment in on-the-job-training but the productivity of apprentices did not offset the investment. However, PT PAL Surabaya gave evidence to show that the apprenticeship program helps them to reduce the cost of recruitment involved in finding competent workers (see case study).

PT PAL Surabaya

PT PAL Surabaya recruits more than 80 apprentices per year. PT PAL Surabaya reported that the net cost of engaging the apprentices was relatively high because of the high cost of engineering/welder instruction and training. The company could not provide evidence of the cost per apprentice; however, the human resources department explained that the main benefit for the company is the reduction of recruitment costs. It is difficult to recruit competent workers directly from the labour market.

Case Study 2: Training to meet business needs

Employers reported that the content of training is relevant to the job the apprentice will eventually fill. Apprentices make a productive contribution to the sections in which they are currently being trained. Employers explained that the training component of the apprenticeship programs is customized in order to help apprentices undertake tasks as independently as possible. Evaluations have shown that such an approach makes sure that apprentices are competent at their jobs and that the apprenticeship program meets business needs (see panel).

Hotel Athlete Century Park – Jakarta

Hotel Athlete Century Park requires apprentices to perform like other staff. In their view, training and work go hand-in-hand at the hotel. As apprentices appreciate being paid while they train, the hotel values having real work completed by the apprentices it trains.

Case Study 3: Recruitment

A large number of respondents claimed that it was difficult to recruit young people so they offered apprenticeships to make the positions more attractive. Employers explained that they desired high school graduates because of the higher level of formal education and maturity. However, it is common for high school graduates to continue their education at tertiary institutions rather than enter the workforce. Therefore, some employers marketed apprenticeships as an opportunity to continue education while they learn new skills on-the-job, get work experience and receive a wage.

PT DOK dan Perkapalan Surabaya has a long-established apprenticeship program. The program offers an alternative to recruitment from the external labour market, which saves time and money. Furthermore, the program helps the company to recruit young people with the right level of formal education. PT DOK dan Perkapalan markets apprenticeships as opportunities to receive skills training and as an avenue to career development (see panel).

PT DOK dan Perkapalan Surabaya

PT DOK dan Perkapalan Surabaya has a strong commitment to apprenticeship and training. They appreciate apprentices and trainees because they are aware of how they help to solve recruitment difficulties. A respondent commented: “Can you imagine what would happen if we stopped recruiting apprentices and trainees?” in response to a question about their value to the company. PT DOK dan Perkapalan has 140 apprentices.

In contrast, apprenticeship training at PT Makro Indonesia is a relatively new program. They needed a greater supply of young people to meet the business’ demand for labour spurred by the company’s rapid growth. Apprenticeship is used as a means to attract young people and then to help retain them by linking rewards to the completion of key training milestones, such as achieving a company certificate. The company is also able to offer career progression beyond the end of the apprenticeship program.

PT Makro Indonesia (now known as PT Lotte Shopping Indonesia)

PT Makro Indonesia's first self-service trade store opened in 1991 and it now has 22 stores and factory outlets throughout Indonesia. A high percentage of current employees are apprentices. Apprentices are typically recruited when they are 16-18 years old. The apprenticeship program can be completed within 6-9 months depending on the positions for which they are being trained. They benefit the company by providing a trained and stable workforce. The company plans to reduce further recruitment costs by putting mechanisms in place to encourage apprentices to stay on after they finish the program.

Case Study 4: Retention

Respondents explained that apprenticeship programs offer a solution to retention issues. In particular, apprenticeship programs help to stabilize the workforce in high turnover sectors. Employers gave examples of young people willing to stay with companies at least until they finish their training. They explained that the promise of professional certification was a crucial factor. Like PT Makro Indonesia, other companies also used incentives to encourage apprentices to stay on after they had finished their apprenticeship programs.

Linking apprenticeships to structured career progression is an influential factor in the apprentices' decision to stay on or explore other employment options. Employers explained that they could retain apprentices if they mapped out and made clear a career path within the company. Many companies promoted career progression within the company as a means of retaining the workers in whose training they invested (see panel).

PT Auto 2000 (Toyota Astra)

PT Auto 2000 is major automotive repair and maintenance service for Toyota Astra automotive products. Major clients include many government departments and agencies as well as large private companies. The annual intake of apprentices is between 100 and 400. The dropout rate is around 9-15 per cent. The reason for this dropout rate is that other companies offer PT Auto 2000 apprentices permanent employment. PT Auto 2000 is renowned for the quality of its training. In an attempt to curb the recruitment of its apprentices, the company publicizes continuing support, opportunities for career development and progressive salaries among participants in the apprenticeship program. As evidence, PT Auto 2000 explained that 2,000 graduated apprentices now manage their own teams of employees within the company.

PT Fuboru

PT Fuboru puts a clear emphasis on career progression in the training program of its apprentices. The company points to company staff who have been promoted within the company after they finished their apprenticeships highlighting the diversity of opportunities that await apprentice graduates in the company. They are reminded

that the breadth and depth of knowledge and skills that they acquire during the apprenticeship program will prepare them for senior positions in the future. Respondents at the company explained that this strategy gives apprentices the motivation they need to master the content of the apprenticeship program and picture future positions for themselves.

Case Study 5: Company values

Respondents found apprenticeship programs to be an effective means through which to instil company values and good practices in their workers. Employers claimed that they could build a sense of loyalty to the company, pride in their work and increase productivity. As this suggests, companies stand to benefit substantially from workers who are not just focused on their work but also committed to the success of the company more generally (see below panel).

Honda

Honda reported that its apprenticeship program was steeped in the following company values:

- ◆ Honda staff are provided with highly specialized training in order to help them maintain and repair vehicles to the best of their ability;
- ◆ Honda staff are provided with high quality training to raise the quality of their skills so that they can make a substantial contribution to success of the company; and
- ◆ Honda values and rewards workers who are committed to the company's values.

Similarly, Panasonic reported that instilling company values helped to bring about a culture of good work practices in the workplace (see panel).

Panasonic

Panasonic argued that it was of the utmost importance to instil company values in apprentices so that they take pride in their work. Apprentices and apprentice graduates demonstrate higher performance than other, externally trained workers as a result. Panasonic has also found that there is evidence that instilling company values at an early stage in apprentices' training translates to savings in production costs. They explained how there is less wastage of high value materials on a per capita basis for apprentices. Company quality systems and inspection procedures show that apprentices complete tasks correctly at a rate of 75 per cent on their first attempt compared to external recruits, who at their first attempt have a 50 per cent success rate. Panasonic explained that, once qualified, apprentices still make fewer mistakes and they feel that this is in part because of their commitment to the company's values.

Case Study 6: Contributing to the pool of skilled people

In contrast to employers who sought to retrain apprentices, other employers were much more altruistic about their investment in training. These employers explained that some industries draw on the same pool of apprentice-trained workers and they saw their contribution to training as an effort to expand this pool. They did not feel the need to aggressively retain apprentice-trained workers because they could easily recruit and replace them with workers trained by other companies and organizations (see panel).

The Sari Pan Pacific Hotel

The Sari Pan Pacific is a five star hotel with 400 guest rooms. The hotel consciously sets out to provide high quality service. Training at all levels is seen as the key to achieving this level of quality. The owner of the hotel noted that a lot of employers tended not to invest in training because they were afraid of losing the investment when workers resigned. However, he argues that if you train people they became committed to the job. He accepted that he would lose some workers in whom he had invested but he has also had experience of workers who have been trained by other employers in the hospitality industry applying for work at the Sari Pan Pacific Hotel.

From the apprentice's perspective

The study addressed the following research questions generally:

- ◆ What are the goals and objectives of apprentices and how are they being achieved under the apprenticeship program?
- ◆ Do apprentices feel that the education and training they receive under the program are appropriate?
- ◆ Do work arrangements meet both the apprentice's and employer's expectations?
- ◆ Do apprenticeships operate in the same or different ways across establishments and industries?
- ◆ Do the goals and objectives of apprentices and employers help to explain why apprenticeship continues in Indonesia?

Sample of the study

The sample of apprentices was decided based on various considerations. It was decided that the study should concentrate on apprentices in three different groups of trades that can be classified together. The broad groupings chosen were Automotive and Engineering, Hospitality and Retail. This approach allows for cross-industry comparisons of apprenticeship arrangements. The trade groupings were chosen based on the number of apprentices they engage.

The study classified respondents into three groups: apprentices, apprenticeship-graduated employees and employees who did not undergo an apprenticeship. Respondents all performed the same craft within their companies. The breakdown of respondents is as follows:

Table 3: QUESTIONNAIRE RESPONDENTS

	Automotive & Engineering	Hospitality	Retail	Total
Q1. Graduate with apprenticeship	40	40	40	120
Q6. Graduate without apprenticeship	40	40	40	120
Q7. Apprentices	40	40	40	120
Total	120	120	120	360
Employer that hires apprentices	10	10	10	30
Employers that does not hire apprentices	10	10	10	30
Total	20	20	20	60

A total of 360 questionnaires were distributed and 227 responses were received. These responses provided the data later used for analysis. The breakdown of responses is tabulated below.

Table 4: RETURNED QUESTIONNAIRES

	Automotive & Engineering	Hospitality	Retail	Total
Q1. Graduate with apprenticeship	27	29	26	82
Q6. Graduate without apprenticeship	18	16	14	48
Q7. Apprentices	30	32	35	97
Total	75	77	75	227
Employer that hires apprentices	9	4	3	16
Employers that does not hire apprentices	1	0	0	1
Total	10	4	3	17

80 questionnaire respondents were then chosen to partake in semi-structured interviews about their experiences with and attitudes toward apprenticeship. The breakdown is itemized below.

Table 5: SAMPLE OF THE INTERVIEWS

	Automotive & Engineering	Hospitality	Retail	Total
Q1. Graduate with apprenticeship	10	10	10	30
Q6. Graduate without apprenticeship	5	5	10	20
Q7. Apprentices	5	10	15	30
Total	20	25	35	80

Apprentice attitudes toward apprenticeship

This section analyses data provided by apprentices about their attitudes toward and intentions regarding their apprenticeships. Apprentices' attitudes are a function of the aims and objectives that informed their choice to take an apprenticeship. In other words, youth see the apprenticeship as a means through which to achieve a greater goal. A study of these attitudes is crucial to understand how – if at all – the present apprenticeship system helps apprentices achieve their goals. The following analysis sets out the mechanisms in the program that are suitable and those in need of reform.

External influences on choice of trade

Apprentices the three target groups had different reasons for starting an apprenticeship. More than half of both the automotive and engineering participants (60 per cent) and the hospitality (56 per cent) participants said they left school with the clear intention to enter a trade that was at least similar to the one they had learned in college (See Table 6). In addition, the automotive and engineer apprentices came into their apprenticeship with a more personal interest in working with cars or engines. From the above figures, it is clear that the automotive/engineering and hospitality apprentices were committed at an earlier stage to their trade because of study-related experiences at school.

Yet almost three-quarters of apprentices in the retail group (71 per cent) claimed that their choice of trade was decided by another person (See Table 6). The influence of other people, including parents, community members and teachers, was also acknowledged by a quarter of the participants from hospitality sector. This factor played a large role in determining what trade youth enter, whereas the desire to get work experience more generally played a relatively small influential role. In each group, less than 15 per cent of respondents claimed that they started their apprenticeships to get practical work experience.

Table 6: PERCEIVED INFLUENCES ON CHOICE OF TRADE

	Automotive & Engineering		Hospitality		Retail		Total	
	N	%	N	%	N	%	N	%
Practical Engineer	10	13.33	10	12.99	10	13.33	30	13.22
Student at School/college	56	60.00	43	55.84	0	0.00	88	38.77
Other People	8	10.67	20	25.97	53	70.67	81	35.68
No Remembered Influence	12	16.00	4	5.19	12	16.00	28	12.33
Total	75	100.0	77	100.0	75	100.0	227	100.0

Personal considerations that influenced the choice of trade

Almost half of respondents in the automotive/engineering group (47 per cent) believed that the choice of trade was important for reasons of trade security. In the hospitality group, over half (58 per cent) believed that the choice of trade was important for career development, whereas over half in the retail group (55 per cent) believed that the choice of trade was important for more immediate concerns such as money. In all three groups, however, there were respondents who thought that the choice of trade was important because it would lead to better pay in the long run (See Table 7).

Table 7: REASONS FOR REGARDING THE CHOICE OF TRADE AS IMPORTANT

	Automotive & Engineering		Hospitality		Retail		Total	
	N	%	N	%	N	%	N	%
Trade Security	35	46.67	5	6.49	3	4.00	43	18.94
Money	12	16.00	5	6.49	41	54.67	58	25.55
Skill, Type of Work, Knowledge	11	14.67	10	12.99	5	6.67	26	11.45
Job Security	10	13.33	12	15.58	2	2.67	24	10.57
Prospect	7	9.33	45	58.44	14	18.67	66	29.07
No real advantage					10	13.33	10	4.41
Total	75	100.0	77	100.0	75	100.0	227	100.0

Money matters

The apprentices' attitude to money was complex. Apprentices in the retail group prioritized money over trade security. Respondents in the hospitality group prioritized money and trade security at the same level whereas the automotive/engineering group viewed trade security to be a high priority and money to be much less important in the short term. However, all groups held the belief that a trade would lead to better wages in the long run. Yet based on the data, the automotive/engineering group was most prepared to forego financial gain in the short term for long-term benefits.

Changing jobs and transferability of skills

Apprentices generally assumed that it would be possible for them to move around or change jobs once they had finished their apprenticeships. It was clear from the discussions that most of them anticipated no great difficulty in being able to change jobs in the future.

However, the views of apprentices across groups were slightly different. Respondents in the automotive/engineering group were in favour of some degree of mobility. In contrast, respondents in the hospitality group preferred staying in one job for a long time. This gives ground for thinking that the idea of changing jobs in the future may be connected with dissatisfaction with some aspects of their work situation. Furthermore, some respondents explained that they were afraid that so long as they stayed with the employer who trained them they would still be thought of as apprentices. They added that once they made the first change, they were likely to settle.

Promotion

Almost all respondents talked about promotion as an opportunity that may arise from their apprenticeship. This applied in all of the three groups of apprentices. Most of those who desired a promotion felt they had a chance. Achieving promotion was believed by most to depend on a combination of ability, hard work and experience.

The retail group also expressed an aspiration to own their own small businesses, explaining that promotion is not as important to them as the acquisition of skills. The automotive/engineering group also expressed this desire but to a much lesser extent. They envisioned that one day they would own their own mechanical repair shop. This desire was expressed by apprentices in their first week of apprenticeship, which suggests that they entered the apprenticeship with this career path in mind.

Attitude to work

The apprenticeship program has a heavy focus on workplace-based training, so apprentices' attitudes to work are as important as attitudes toward education and training in assessments of the program. Three main attitudes came to light during the interview process. First, a large number of apprentices indicated that they enjoyed the apprenticeship program because they liked the kind of work it involved. This view of the apprenticeship program demonstrates that for apprentices, the apprenticeship experience is as much about work as it is about education and skills training.

Second, apprentices in the early stage of the program expressed enthusiasm about their apprenticeship, which contrasted with long-time employees who complained about the vocation and work conditions. Later stage apprentices also expressed a degree of disillusionment. The combination of these two facts suggests that conditions in the workplace rather than apprenticeship program per se are responsible for negative attitudes toward work.

Thirdly, it is worth noting that apprentices did not complain about the quantity or nature of their work. They explained that their aim for participating in an apprenticeship was to acquire the skills they needed in order to pursue desired career paths. It can be assumed that apprentices are prepared to ignore some of the negative aspects of the workplace in favour of acquiring vocational skills.

Learning the trade: on-the-job training

The views apprentices expressed about on-the-job training were grouped into two broad themes: the work experience and instructional aspects of the training.

Work experience

Work experience is the opportunity to practice vocational skills in a real-life situation; however, apprentices expressed frustration regarding that lack of a clear, structured work experience program in their workplaces. The automotive/engineering group explained that there was no work experience plan in their workplaces. As a result, they felt they were only getting a glimpse of the trade, being left to work in one section throughout their placement. In their view, there should have been a rotation program that gave them comprehensive exposure to their trades.

Instruction

Apprentices explained that their workplaces did not have clear structures for determining who their mentors were. In traditional apprenticeship arrangements, workplaces nominate senior workers to double as mentors or instructors. They are expected to explain and demonstrate the jobs to apprentices. However, this traditional arrangement only applied to a limited number of apprentices. In practice, the arrangements were much more heterogeneous. For example, only a small proportion of apprentices in the automotive group were assigned to senior workers and only for a short period of time, after which they were expected to perform the work on their own. But 70 per cent of apprentices explained that they had no mentor and were expected work independently. In some cases, later stage apprentices had one or two more junior apprentices working under their supervision. Yet despite these non-traditional arrangements, more than half of the apprentices explained that they were satisfied with the level of guidance provided in the workplace.

From the training centre's perspective

Apprenticeship programs need the support of a flexible and responsive system for providing vocational training. Indonesia has made moves to reform and strengthen the current system so that it best meets the needs of employers and apprentices. While the previous sections underscored the need for input from both industrial parties for quality vocational training, the following section highlights some structural considerations from the training provider's point of view. An understanding of this perspective is essential for a complete understanding of the current state and challenges of Indonesia's national apprenticeship program.

Methodology

Eleven vocational training centres (Balai Latihan Kerja, BLK) were contacted about participating in this study. Two of them agreed to discuss challenges in the transition from school to work as they see them. The following analysis is based on the views of BLKLN – CEVEST Bekasi and BLKI Surabaya. For details about these training centres, see Table 8.

Table 8: DETAILS OF BLK PARTICIPATING IN THE FIELD RESEARCH

Company	Approx. Number of Employees	Group
VOCATIONAL TRAINING CENTRES		
1. BLKLN – CEVEST Bekasi	Between 11 and 100	Manufacturing
2. BLKI Surabaya	Between 11 and 100	Manufacturing

Complaints from employers

Training centres receive feedback about the length and content of their courses; however, they were unable to systematically assess the curriculum because of limited resources. Yet complaints about ineffective and irrelevant training are common. An ineffective system fails to achieve program aims and objectives, which in this case are competent and knowledgeable workers with relevant skills. The centres receive complaints from employers about the:

- ◆ Quality of training outputs;
- ◆ Time taken for the system to respond to developments in the labour market;
- ◆ Limited portability of skills;
- ◆ Having to pay for training which they see as irrelevant; and
- ◆ High truancy and dropout rates.

Training providers claimed that the system in its current state did not make best use of the resources already at its disposal. They explained that their facilities and staff were underutilized by the national apprenticeship program. Heads of these training centres argued that the program was over-bureaucratized, which resulted in the centres' limited resources being used to meet the administrative demands of the state. Respondents in the centres explained that the resources would be best used to evaluate and redevelop courses to better meet the needs of apprentices and employers.

Budgetary constraints

Government funding for the training centres has either decreased or has not increased for a long period of time. Government, donors and other sponsors no longer prioritize funding these centres because of competing demands from other quarters in their budgets. As a result, the centres are underfunded, which means that:

- ◆ They are unable to achieve institutional aims and objectives;
- ◆ Their staff are not employed in a meaningful way and so become demoralized;
- ◆ Their facilities and equipment are not maintained or are unsuited the training of skills demanded by the labour market;
- ◆ The quality of training has diminished over time; and
- ◆ Enrolments have decreased.

Policy-level failure

Respondents claimed that there was a tendency for training centres to focus on providing training to the formal sector. They explained that this is surprising because the agricultural and informal sectors are responsible for absorbing the majority of labour. The staff at the training centres suggested that this condition is the result of policy failure at the national level. Policies at this level are frequently based on foreign models for training provision and motivated by wishful thinking that is often not grounded in the realities of the Indonesian labour market.

Reorienting the training system

Government Regulation No. 31/2006 on the National Vocational Training System is at the heart of reformed initiatives aimed at revitalizing the national apprenticeship system. A key priority of this regulation is to gear the system toward responding to the demands of employers and apprentices and the demands of the economy and the labour market more generally. Respondents explained that in practice, these aims mean that training centres have to lead the way in the development and provision of new products such as core skills, competencies and qualifications for new occupations. Although a national system, it will be implemented in the provinces, districts and municipalities, taking into account the benefits of decentralization. Each region has unique socioeconomic conditions and requires a region-specific package for the up-skilling of local labour.

Conclusion

This evaluation of employers', apprentices' and training providers' experiences within the national apprenticeship system underscores the need for an effective system that helps apprentices and employers achieve their objectives by responding to the demands of the national economy and the labour market. In its current condition, the system is inadequately addressing these demands. Training centres often provide obsolete training, which discourages apprentices and makes employers reluctant to use their services. Apprentices also reported the lack of clarity about what precisely their responsibilities are and who was immediately responsible for their guidance and instruction on-the-job. Yet all stakeholders were in agreement on the current length of apprenticeships, arguing that they gave apprentices the time they need to mature, especially since they are recruited at a young age, while they are being educated and trained and acquiring skills.

Stakeholders all expressed the view that an effective national system for apprenticeship would greatly benefit Indonesia's youth, the group that experiences one of the highest levels of unemployment in the country. Apprenticeships open opportunities for youth to transition into the workforce by giving them the time and resources to acquire technical, administrative and managerial skills not taught at high school but which are crucial for success in the workforce. However, mechanisms and structures are needed to help the state and society monitor apprenticeship arrangements in order that employers do not simply use apprenticeships as a means to obtain discounted labour. A clear contractual agreement is a potential solution to this dilemma.

It is striking that almost all companies noted that apprenticeship programs make significant contributions to their success and continuity. Employers cited numerous qualitative and quantitative benefits that apprenticeship programs accrue, such as lower costs for recruitment, higher retention rates, high productivity and lower production costs. They also recognised the benefit of setting out a clear career path within the company for apprentices nearing the completion of their apprenticeships. In doing so, companies ensured that that they not only retained workers in whom they have invested training but also retain workers who have a commitment to the company and are personally invested in its success.

section VI

Policy Recommendations

1. Increase target numbers for apprenticeship

We recommend that the government sets two targets. First, the government should aim to double the current number of apprenticeships within five years; and second, to increase again the number within the next ten years. The government should use the mechanisms of the National Professional Certification Agency (BNSP) to break down the target, allocating quotas based on sector-by-sector basis.

Such an expansion would make a substantial contribution to society and the economy. Our initial target (for Jakarta and Surabaya) of apprenticeships for some 100,000 young people would result in a sustained reduction of youth unemployment. In ten years, such a target, if realized, could result in the entrance of around one million new workers into employment.

2. Create new pathways that lead to apprenticeship

National Apprenticeship Networking could perform an important role in helping youth to gain access to apprenticeships in their desired professions. Because the decision to take on an apprentice rests with employers, not all youth who seek apprenticeships are able to obtain one in their desired industry. Therefore, an alternative pathway is needed in order to help youth train in the skills of the industry they prefer and enter that industry at a later stage.

3. Use the Apprenticeship Network to provide support to stakeholders

The Director of Apprenticeship has the authority to perform regulatory and some administrative functions of the program, such as the accreditation of training programs and delivery agents. However, there is no clear system to support the stakeholders in the apprenticeship program. The newly created Apprenticeship Networks can serve this function. These networks should provide the following services to stakeholders:

- ◆ Employer-centred services such as helping to assess employers' training needs, recommending training programs, developing training plans and providing assistance in the implementation stage of new programs;

- ◆ Administrative services such as registering apprentice contracts, managing examinations, monitoring the in-school component of the program, providing assessments of qualifications and processing the renewal of apprentices' applications for certification; and
- ◆ Program enhancement services such as promoting apprenticeship programs, monitoring on-the-job training and acting as a third party advocate for clients, which may include providing individual counselling.

Some of the funding for the Network could come from the government but its membership must contribute in the form of dues.

4. Encourage employers to help guarantee product standards for the consumer

Business and industry will only appreciate the need for higher skill standards if standards of quality and service in the sector are raised. There is a role for government in setting higher safety standards and encouraging employers to agree to quality standards. These standards could be guaranteed through collective agreements and liability insurance. Such action will not just raise the demand for apprenticeship programs but also benefit the consumer in the form of better products and services.

5. Increase government financial support to raise training standards

The expansion of the apprenticeship system can only take place with the necessary financial support. The government must be willing to inject more funding into the training centres. By raising the standards of training, this will encourage employers to seriously rethink the extent to which they incorporate apprenticeships into their business plans. Financing is also needed to subsidize the training of apprentices in the workplace, especially in sectors where the cost of apprenticeships is higher, such as the Engineering sector.

6. Improve training content and assessment

The content of the apprenticeship program should be reviewed and assessed according to national and international standards. Evaluations should assess the appropriateness of the skills training provided. Skills testing should be carried out by an external body such as the Building and Construction Authority (BCA) which certifies construction tradesmen in Singapore.

7. Provide job matching services post-apprenticeship

The government should provide job placement services or offer other support to help apprentices find alternative employment after they finish their apprenticeships. Although many apprentices stay on with the company that invested in their training, there is evidence that they do so because of a lack of information about other options that are available to them post-apprenticeship.

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