

WORKSHOP ON HRM FOR CHINA AUSTRALIA DIALOGUE ON PUBLIC ADMINISTRATION

8-9 November 2013
Sun YatSen University, Guangzhou

ABSTRACT SUBMISSIONS

Individual, Team and Organizational Development in the Victorian Public Service Dr Geraldine Kennett, The Institute of Public Administration Australia

This paper explores the determinants of training and development models adopted in the Victorian Public Service. The results suggest that training and development models are influenced by organisation and employment characteristics as well as workforce issues and human resource management arrangements. It is these influences that then determine the combination of training elements, such as the purpose of training, the format for training, how training is determined and the type of commitment to learning that form the various training and development models. These models are labeled Individual Development, Team Development and Organisational Development.

1. Introduction

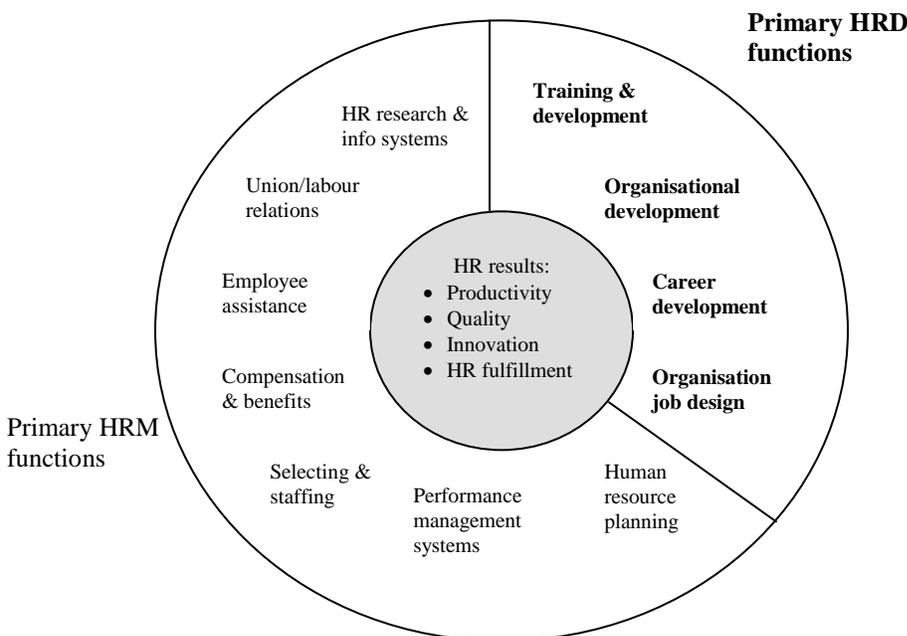
Public Sector Employers expect their investment in training to raise the capacity of the organisation's collective skills and thereby improve its productivity. The standard belief is that investment in certain forms of training and development has costs and economic benefits for the individual and the organisation (Becker, 1993; Elliot, 1991). Investment in training and development benefits individuals by equipping them with skills that improve their productivity, thereby increasing their likelihood of promotion, and making them more attractive to employers (Altonji and Spletzer, 1991; Barron, Black and Lowenstein, 1989; Brown, 1989; Blundell, Dearden, Meghir and Sianesi, 1999; Duncan and Hoffman, 1979; Lynch, 1991; Mincer, 1988). Many studies have suggested that organisations benefit from training by being more productive, more competitive and consequently more profitable in the future (Becker, 1993; Blundell et al., 1999; Lynch, 1992). Research suggests that an increase in the amount of training per employee of 10 hours per year leads to an increase in productivity of 0.6 per cent (Pischke, 2004; Leuven, 2005; Almeida and Carneiro, 2005).

This paper discusses how an examination of a study on training and development practices in the Victorian Public Service revealed that the model of training adopted by the organisation is influenced by organisation and employment characteristics, as well as workforce issues and human resource management arrangements.

2. The theory and practice of training and development

‘Training and development’ is the term used to describe the process of acquiring skills and knowledge. In most organisations, training and development is a part of a larger human resource management (HRM) function. The specific activities associated with HRM are encapsulated in McLagan’s (1989) wheel of HRM. The wheel includes training and development as a subset of human resource development (HRD), together with organisational development and career planning (McLagan, 1989). This is illustrated in Figure 1.

Figure 1: The human resource wheel and the primary HRM and HRD functions
Source: McLagan (1989).



There are alternative terms used to describe the activities of training and development such as ‘learning and development’, ‘education’, ‘employee development’ and ‘human resource development’ (Smith, 1998). Although these terms are used interchangeably; each one has a unique focus on workplace learning. For the purpose of this paper training and development is defined as planned and ad hoc skill and knowledge acquisition relevant to the individual and the organisation.

A variety of formats for training and development are used by organisations. These formats are a combination of structures, such as formal versus informal, accredited versus unaccredited, and internal versus external, and methods such as workshops, lectures, audio and video (Cully, 2005). Formal training is often planned in advance and has a defined curriculum. Examples of formal training include seminars, lectures, workshops, audio-visual presentations, apprenticeships and traineeships (Lynch & Black, 1995). In contrast, informal training is usually unplanned and easily adapted to situations and individuals (Australian Bureau of Statistics, 2007; Cully, 2005; Lynch & Black 1995). In

this type of training, employees learn by observing others, doing the job or one-on-one with co-workers.

Training may be either accredited or unaccredited. Training in Australia is considered accredited if it is delivered by an accredited training institution and leads to a recognised certificate or qualification (Cully, 2005). Accredited training often uses a variety of methods, such as lectures, on-the-job projects, online computer-aided learning materials and video presentations (Commonwealth of Australia, 2008).

Most empirical data measures formal training activities in organisations and little is available on investment in or types of informal training undertaken by organisations (Australian Industry Group, 2006; Keep, 2002, 2009; Osterman, 1995). Keep (2002) argues that since informal training may make up the bulk of workplace learning, this is a major problem. Qualifications and days spent on off-the-job courses are relatively easily quantified and counted; informal and uncertified learning are not (Keep, 2009).

Common formats for training and development used by employers in Europe

One of the most extensive surveys comparing training in Europe, the Continuing Vocational Training Survey (CVTS2; European Commission, 2000), found that 54% of European organisations provide internal and external courses and seminars, while the number of organisations offering more innovative formats for training, such as job rotation, learning circles and self-directed learning, is notably lower, at 29%. The variability between countries is evidenced by examples such as self-directed learning being used in 75% of organisations in Denmark but by only 6% of organisations in Italy. The use of learning circles ranged from 33% in Spain to 4% in Poland. The European Commission's CVTS2 (2000) indicates that in 10 countries, including the United Kingdom, more than 50% of organisations conducted internal courses.

Common formats for training and development used by employers in United States

The *US Survey of Employer-Provided Training* SEPT (1995) found that formal training, described in the survey as activities such as classroom work, seminars, lectures, workshops, and audio-visual presentations, accounted for 67% of total hours of training. The NLSY reports that the most frequent type of training is formal company training (37.5% of all training activities); non-company seminars or training programs are also frequently used, with 34.2% of all training sessions being run by someone other than the employer (Frazis & Spletzer, 2005).

Common formats for training and development used by employers in Australia

In contrast to the European and United States data, a high proportion of Australian employers prefer informal learning (Australian Industry Group, 2006; Ridoutt, Dutnell, Hummel, & Selby Smith, 2002). Ridoutt et al. (2002), using ABS data over a number of surveys, reported that 98.8% of training occurs on the job and is likely to be unstructured. Cully (2005) also reported that the proportion of employers providing unstructured informal training is around double that of those providing structured training. His analysis of the 2005 *Survey of Education and Training* revealed that about four in five employers provided unstructured informal training, ranging from around half of all

employers in transport and storage, and communication services, to almost all employers in government administration, and personal and other services.

It can be concluded that most organisations adopt a range of traditional training formats such as formal in-house participative courses and informal self-directed and on-the-job coaching. Employer-provided training data are yet to reveal the use of new technology such as 'social media' as mechanisms for workplace learning.

Why investment in training and development

A review of the literature indicated that the drivers of employer-provided training and development were divided into two categories: those that develop the organisation and those that develop the individual (Australian Industry Group, 2006; Bartel, 1995; Cully, 2005; Green, 1993; Smith & Hayton, 1999)

Firstly, organisations invested in training to meet organisational goals, such as the organisation's business strategy; to gain a competitive advantage; to improve organisational capability; and to compete in the labour market (Australian Industry Group, 2006; Bartel, 1995; Cully, 2005; Smith & Hayton, 1999). Secondly, organisations invested in training to meet the needs of individual workers, for example, meeting occupational standards, fulfilling job requirements, enhancing employee productivity and achieving career progression (Australian Industry Group, 2006; Bartel, 1995; Bishop, 1990; Ichniowski et al., 1997; Smith & Hayton, 1999).

The earlier studies indicated that organisations placed emphasis on training for individual improvements in productivity and job performance and organisational improvements in efficiency and cost reduction (Bartel, 1995; Bishop, 1990; Smith & Hayton, 1999). More recent studies however suggest that vocational regulation, integration with other human resource management strategies and being an 'Employer of Choice' are becoming strong drivers of training (Keep, 2002; Smith, Oczkowski, & Selby Smith, 2008b).

The shift in emphasis was influenced by economic conditions, global competition and labour market trends. Global competition was driving the need for organisations to foster a culture of identification with and commitment to the business (Australian Industry Group, 2006; Felstead et al., 1999). The Australian Industry Group (2006) survey of employers indicated that labour market trends were driving the need for training to overcome skills shortages. Smith, Oczkowski, & Selby Smith. (2011) also reported that in a tight labour market, employers were attempting to ensure the supply of skills and labour by attracting and retaining the best employees. In this case training was viewed as a part of a broader human resource management strategy to develop the profile of the organisation in a competitive labour market.

Factors influencing the provision of employer-provided training

Empirical evidence suggested that the provision of employer-provided training and development is influenced by the organisational and employment characteristics of employers. Firstly, in the context of organisational characteristics, a number of research studies demonstrated that the size of an organisation and the industry sector of the workforce influence the amount and format of training provided. Studies by Booth (1991), Green (1993), Lynch and Black (1995) and Tan and Lopez-Acevedo (2003) revealed that larger organisations provided more work-related training than smaller organisations. Smith et al., (2008a) and UK Commission for Employment and Skills (2010), confirmed that this is because larger organisations have the advantage of economies of scale and were more likely to have access to internal training facilities. However, smaller employers often spent more than larger employers on training on a per capita basis (Smith, Burke, Long & Dumbrell, 2008a).

Industry type was also a factor influencing the amount of investment in training (Booth, 1991; Lynch & Black, 1995). Booth (1991) found that the incidence of training was greater in the public sector and Lynch and Black (1995) report that there are fewer formal training programs in the manufacturing sector. Other studies consistently support these findings. Blunch and Castro (2005, cited in Zheng, Hyland & Soosay, 2007) report that in OECD countries, employees in the service sector such as finance, insurance and business have a higher probability of being trained compared with those in the manufacturing industry. Zheng et al. (2007) found that 43% of service sector multinational companies in Asia indicated that they spend over US\$500 on training each employee compared with 23% of manufacturing.

Other organisational characteristics that influenced the amount of employer-provided training and development were employment status and gender. Workforces with a higher proportion of casuals and part-time employment gain fewer training opportunities (Booth, 1991; Felstead et al., 2010; Stanwick, 2009). In Australia, the 2009 Survey of Education and Training found that persons employed full-time were more likely to participate in work-related training than those employed part-time (79% compared with 62%; Australian Bureau of Statistics, 2009). The literature on gender was inconsistent. Some studies find that women, particularly those with children, are less likely to receive training than men (Blundell et al., 1996; Green, 1991); others indicate a rising trend for women participating in workplace training (Felstead et al., 2010; UK Commission for Employment and Skills, 2010). This reflects women's increasing access to professional and managerial jobs (Stern, Song, & O'Brien, 2004).

Employment practices also provided an important context in which training operated and any effect of training was likely to be mediated by those practices (Ridoutt et al., 2002). Using the international Granet Survey 1999, Hanson (2007) found that companies supporting employee development policies such as a written training policy and schemes to analyse training provided more training to employees. The Australian Industry Group (2006) reports that organisations with workforce development plans were more likely to invest in training. Devins, Johnson and Sutherland (2004) and the UK Commission for Employment and Skills (2010) also found a positive impact where formalised training plans and practices exist.

Other employment practices that appeared to affect the likelihood of training were group involvement and the importance of innovation to the organisation. Workers with ‘high group involvement’ and in situations in which they were involved in decision-making were three times more likely to receive training compared with ‘low involvement’ environments (Felstead et al., 2010). Osterman (1995) found strong evidence that organisations with high performance work practices (HPWP) provide more training than other organisations. And Hanson (2007) found a positive relationship between a recognition of the significance of innovation and the amount of training.

Figure 2: Overview of employer-provided training and development practices

| | |
|---|--|
| 1. The format for training and development | |
| How training and development is structured | Training and development methods |
| <p>Formal vs informal Formal training is often planned in advance and has a structured format and a defined curriculum Informal training is unstructured, unplanned and easily adapted to situations and individuals</p> <p>Internal vs external Whether the training method is provided by the employer in the workplace or external to the workplace</p> <p>Accredited vs unaccredited Training is accredited if it is delivered by an authorised training institution and leads towards a recognised certificate or qualification</p> <p>(Cully, 2005; Smith, 1998)</p> | <p>Courses and workshops Lectures and seminars Self-paced manuals Training videos Job rotation Learning and quality circles Coaching and shadowing On-the-job training</p> <p>(Australian Industry Group, 2006; European Commission, 2000; UK Commission for Employment Skills, 2010)</p> |
| <hr/> | |
| 2. The purpose and drivers of training and development | |
| Organisational development | Individual development |
| <p>Connect training to the business strategy, gain a competitive advantage, improve organisational capability, Improve efficiency, quality and reduce costs, comply with external regulation and licensing, workplace change (including organisation of work, technology and product change) and to be an Employer of Choice</p> <p>(Australian Industry Group, 2006; Bartel, 1995; Bishop,1990; Cully, 2005; Felstead et al., 1999; Smith, 1998)</p> | <p>Maintain vocational regulations and professional standards, improve job performance and productivity, career progression and build commitment to the organisation</p> |
| <hr/> | |
| 3. Factors influencing the provision of training and development | |
| Organisational characteristics | Employment practices |
| <p>The size and industry may influence the amount and type of training and development</p> <p>Gender and employment status influence the provision of training and development</p> <p>(Blundell et al., 1996; Booth, 1991;Green, 1993; Lynch & Black, 1995)</p> | <p>Employment practices may influence the amount and type of training, including training policies and plans, group involvement & innovation</p> <p>(Felstead et al., 2010; Hansen, 2007; Osterman, 1995; Ridoutt et al., 2002)</p> |

3. Research design

The training and development practices were explored using a case study approach. The study aimed to uncover detailed information about training and development arrangements in the Victorian Public Service (VPS) from the point of view of those who developed, managed, and participated in training and development. With over 36,000 employees across 28 public sector departments and authorities, the VPS was typical of many large organisations with differing workforce characteristics across a large number of functionally aligned divisions.

The case studies (departments) and the embedded units of analysis (divisions) were selected based on, varying numbers of employees, and diverse business functions (policy, project management, and service delivery). The intention was to compare the differences and similarities between the training and development models adopted in the divisions. Two divisions were chosen from three departments, thus providing six embedded units of analysis.

The study used multiple sources of evidence including collecting documents, conducting in-depth interviews, and applying a small-scale survey of employees to collect identification and characteristics data. Data collection was conducted systematically commencing with interviews with the head of human resources and those responsible for training and development in the selected departments and divisions. This was followed by interviews with senior managers and employees in the divisions. These interviews explored perceptions of the purpose of training, the organisation's commitment to learning, and specific training activities in their divisions.

Included in this research were three main questions considered during the course of the study. These were:

- What are the models of training and development in the VPS?
- How do organisation and employment characteristics influence the models of training and development adopted?
- How is commitment to learning described in the VPS?

4. Analysis

Within and cross-case analyses were used to explore the data collected from six divisions in three VPS departments. The analyses examined each division for convergence of views and information by a formal categorisation of the aggregated data. The results were analysed and described using a data map with the following category headings:

- Organisation and employment characteristics
- Workforce issues
- The purpose of employer-provided training and development
- The formats for training and development
- How training and development needs are determined
- Commitment to learning

The data map identified patterns and emerging themes across the information collected and presented in each embedded case study (division). The analyses considered how organisation and employment characteristics—as well as the purpose of employer-provided training and development—determined the various training and development models adopted for the embedded case studies. The organisation and employment characteristics were investigated to enable the training and development arrangements of each of the case study units to be contrasted within the context or setting in which the training and development models were adopted. The context in which the embedded cases were studied is central to explaining the reasons why cases are similar or different (Yin, 2003; Stake, 1995).

5. Findings

The case studies revealed that the organisation and employment characteristics, together with workforce issues and human resource management arrangements influenced the purpose and format of employer-provided training and development. The literature suggested that there were two main purposes for employer-provided training and development—individual development and organisational development. When the purpose of training and development was individual development, the drivers of training include maintaining vocational regulation, improving job performance, succession planning, and building commitment to the organisation (Bishop 1990; Felstead et al. 1999; Ichniowski, Shaw and Prennushi 1997). When the purpose of training was organisational development, the drivers of training include connecting training to the business strategy, improving organisational capability, complying with regulations, facilitating workforce change, being an employer of choice, and competing in the labour market (Cully 2005). The study found similar drivers influenced the purpose of training and development in the embedded case studies.

For example divisions chose individual development when they largely recruited young graduates; and up-skilling current workers in a labour market of skill shortages was a workforce issue. Organisational development was chosen when the context of training was a setting of organisational change or a highly regulated environment. Finally, an additional purpose was uncovered. This was team development which was influenced by a work environment that required groups of workers to meet team-project outcomes; keeping abreast of industry trends was vital to meeting team goals.

In turn, the case studies revealed that the purpose of employer-provided training and development determined the format for the training used in the embedded case studies. Training formats include external courses, vocational qualifications, self-directed learning, learning circles, in-house workplace training, formal internal training, informal coaching, informal instruction, and job rotation (Cully 2005; European Commission 2000; Ridoutt et al. 2002). When the purpose of training was individual development; training was undertaken as an individual; the content was general, the format was formal, and the method was often external accredited short courses or qualifications. When the purpose of training was team development; training was undertaken as a team; the content was specific to the team, the format was both formal and informal, and the method was a mix of internal and external unaccredited short courses and on-the-job

knowledge-sharing. Finally, when the purpose of training and development was organisational development; training was undertaken as an organisation; the content was organisation-specific, the format was both formal and informal, and the method was generally internal unaccredited short courses.

The training and development model adopted for the case studies was also influenced by how training and development needs were determined and the nature of the commitment to learning. When the purpose of training and development was individual development, training decisions and commitment to learning were self-directed and driven by individual employees. When the purpose of training and development was team development, managers and their teams together determined the skill gaps and developed specific training to meet those identified needs. In this case, the commitment to learning was shared and valued by the team. When the purpose was organisational development, training and development was created and implemented to meet the specific needs of the organisation and this was often determined by the central human resource management function, and thereby the commitment was to an organisation-wide approach to learning.

The unique combination of how organisation and employment characteristics, workforce issues, and human resource management arrangements influenced the combination of the purpose of employer-provided training and development, the formats used by organisations to deliver training, how training needs were determined, and the case study type of commitment to learning. It was how these elements were combined that formed the various models of training and development. These three models are illustrated in Figure 3 and are labelled Individual Development, Team Development, and Organisational Development.

Figure 3 Relationship between the context, the purpose and format for training and development, how training and development is determined and type of commitment to learning in the embedded case studies

| | | Embedded Units of Analysis | | | | | |
|---|--|--|--|---|---|--|--|
| | | Division 1 | Division 2 | Division 4 | Division 6 | Division 3 | Division 5 |
| Context for training and development | Organisation characteristics | <ul style="list-style-type: none"> • Medium-sized • Central agency • Internal service | <ul style="list-style-type: none"> • Medium-sized • Central agency • Internal service | <ul style="list-style-type: none"> • Small-sized • Line agency • External service | <ul style="list-style-type: none"> • Small-sized • Line agency • External service | <ul style="list-style-type: none"> • Medium-sized • Line agency • Internal service | <ul style="list-style-type: none"> • Large-sized • Line agency • External service |
| | Employment characteristics | <ul style="list-style-type: none"> • Young • Professional • Educated • Part-time • Flexible | <ul style="list-style-type: none"> • Young • Professional • Educated • Part-time • Flexible | <ul style="list-style-type: none"> • Mature aged • Technical specialists • Full-time | <ul style="list-style-type: none"> • Mature-aged • Technical specialists • Full-time | <ul style="list-style-type: none"> • Mixed demographic • Professionals • Full-time & Part-time | <ul style="list-style-type: none"> • Limited experience • Semi-professional • Full-time |
| | Workforce issues | <ul style="list-style-type: none"> • Attracting and retaining skilled workers • Part-time workforce structure | <ul style="list-style-type: none"> • Skills shortages • Part-time workforce structure | <ul style="list-style-type: none"> • Rapid business growth • Employment linked to project funding | <ul style="list-style-type: none"> • Long-term aging workforce • Recruiting younger workers • Limited career options | <ul style="list-style-type: none"> • Organisational change • Labour market competition | <ul style="list-style-type: none"> • High workloads • Inefficient operating system • High employee turnover |
| | Human resource management | <ul style="list-style-type: none"> • Consultative • Decentralised | <ul style="list-style-type: none"> • Consultative • Decentralised | <ul style="list-style-type: none"> • Operational • Centralised | <ul style="list-style-type: none"> • Strategic • Decentralised | <ul style="list-style-type: none"> • Operational • Centralised | <ul style="list-style-type: none"> • Strategic • Decentralised |
| Training and development model | The purpose of employer-provided training and development | Individual development | | Team development | | Organisational development | |
| | Training and development formats | <ul style="list-style-type: none"> • General • Formal • External • Accredited • Short course • Qualification | | <ul style="list-style-type: none"> • Specific • Informal & formal • Internal & external • Unaccredited • Short courses • On-the-job knowledge sharing | | <ul style="list-style-type: none"> • Specific • Informal & formal • Internal • Unaccredited • Short courses • On-the-job program | |
| | How training and development is determined | <ul style="list-style-type: none"> • Individual • Self-help • Performance review-driven | | <ul style="list-style-type: none"> • Team • Self-managed team • Collective team analysis | | <ul style="list-style-type: none"> • Organisation • Management-directed • Regulatory compliance | |
| | Type of commitment to learning | <ul style="list-style-type: none"> • Individual commitment to learning • Self-directed • Training is voluntary | | <ul style="list-style-type: none"> • Team-commitment to learning • Team-directed • Training is accepted | | <ul style="list-style-type: none"> • Organisational commitment to learning • Organisation-directed • Training is mandatory | |

6. Conclusion and discussion

Knowing which training and development model to adopt and when and how to use it is not a straightforward or linear decision. The study did not suggest that any one model was superior to the others; instead, the findings of the study indicated that there may be a fit-for-purpose model or a combination of models that supported different VPS organisational environments and objectives. The study suggested a number of ways by which training and development models may be adopted in the VPS. Below are some examples of how the training and development models may support various organisational settings.

New and growing organisations

If the organisation is just commencing operations or is growing rapidly, then recruiting and retaining new employees is of significant concern. In these circumstances, adopting a team-based model of training and development may be advantageous. The purpose of training and development at the commencement of a business or during a growth phase is to improve the capability of the work units. When employees are given the opportunity to participate in a process to determine and coordinate training and development for the organisation, this is likely to encourage their commitment to the organisation and build rapport with co-workers, thereby reducing employee turnover. When adopting this model of training and development, it is suggested that training is delivered internally using informal group methods such as learning circles or on-the-job knowledge sharing. If training external to the organisation is required, then allowing employees to participate in groups upholds the Team Development model.

Declining productivity and lack of innovation

If the organisation has declining productivity and lacks innovation then facilitating a move for long-term employees to seek alternative work options and recruiting employees with fresh ideas are essential actions. In this situation adopting an individual-focused training and development model may assist with encouraging workforce changes and, hence, revitalisation. The adoption of this model signals that the purpose of training and development has changed: the focus on the development of individual employees encourages their transition into new internal job roles or to seek alternative employment outside the organisation. This model suggests the application of a performance-management system which is linked to the identification of individual training needs. To take full advantage of this model's potential, the formats for training and development should focus on external accredited tertiary training or external short courses which enable employees to gain a qualification that is transferable to other employers. The study found that while employees may stay during training periods, in the long term they sought alternative jobs. In the short term, employees may bring new knowledge to the stagnating organisation.

Change management

If the organisation is embarking on a change process such as restructuring or merging with other businesses, then ensuring that employees' behaviour and capabilities are consistent with the changes is crucial. For the change process to occur expeditiously, there is often a need for an increase in employee turnover, as workers who no longer fit the organisation either leave or are terminated. In instances such as these, an organisation-wide approach to training and development is suggested. The purpose of training and development during the business cycle is to encourage the organisational culture to implement the changes. Determining the knowledge, skills, and attitudes required for the organisational change requires a whole-of-organisation capability and training-needs analysis. The format for delivering training to fill the knowledge, skills, and attitudes gaps through the Organisational Development model should ideally consist of internal formal workshops coupled with on-the-job training. All employees are expected to participate in the organisation-wide training and development which will promote role clarity across the organisation. This means that employees either commit to the organisation's changes or seek alternative employment.

Highly compliant and regulated organisations

Highly compliant and regulated organisations require certified employees who meet the organisation's legal obligations; training becomes a priority for such organisations. While the natural tendency in these organisations is to adopt an organisation-focused training and development model, given the findings in this study a more balanced combination of various models is suggested. A combined approach means that training and development is likely to enhance the capacity of the organisation to meet statutory requirements through developing teams and preparing employees for growth opportunities. In the organisation-focused training and development model, most training funds were used for organisation-wide learning activities leaving few additional funds for either team or individual employer-provided training and development. Using a combination of formats from the three training and development models could solve this problem to some extent. For example rather than training employees in regulatory requirements using what is traditionally resource-intensive formal classroom-style workshops, adopting a more informal approach involving team learning circles and on-the-job training is more cost-effective and would enable some resources to be quarantined for developing individual employees for future (promotional) opportunities.

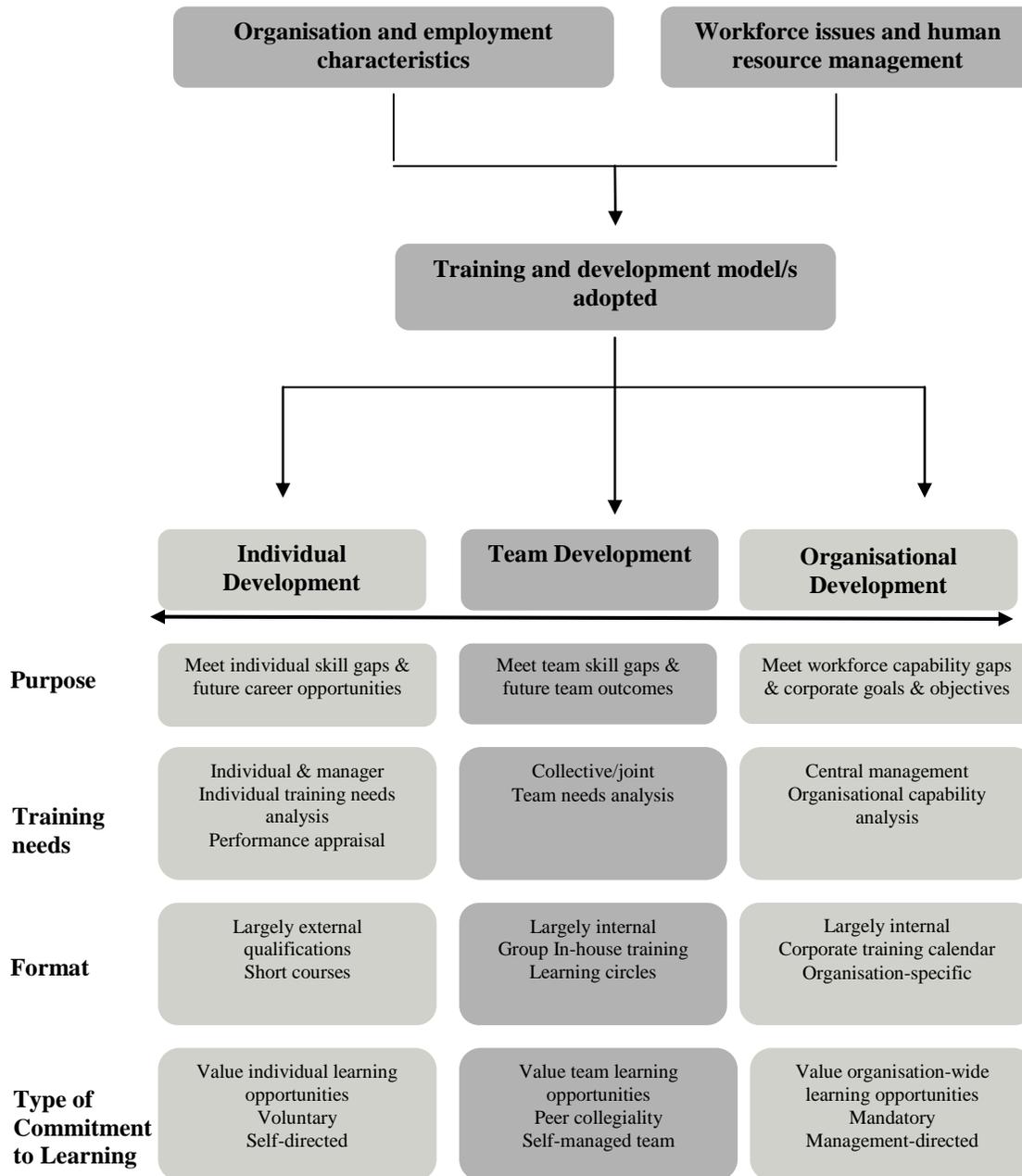
Labour market challenges

If the organisation is experiencing skill shortages and operates in a competitive labour market, then the Team Development model may assist with retaining employees. The purpose of training and development in these circumstances is to provide exclusive organisation-specific training that gives the business a competitive advantage. This model is best served when team members determine and coordinate the specific training either to create a competitive advantage, or to meet specific team projects. As highlighted earlier, employee participation also encourages organisational commitment and job satisfaction which, in turn, leads to better retention.

The findings of this project have the potential to assist organisations to understand which model best suits their organisational environment and business objectives at a particular

point in their business cycle. In Figure 4, the training and development models are represented as a framework for management application; in the framework.

Figure 4: Training and development models framework



References

- Altonji, J. and Spletzer, J. (1991), 'Worker Characteristics, Job Characteristics and the Receipt of On-the-job Training', *Industrial and Labour Relations Review*, vol. 45, pp. 58-79.
- Almeida, R. and Carneiro, P. (2005), *The Return to Firm Investment in Human Capital*, The Institute for Fiscal Studies, Department of Economics, Working Paper, CWP21/05.
- Australian Bureau of Statistics (ABS), *Labour Force, Australia*, 2007, cat. 6202.0.
- Australian Bureau of Statistics. (2009). *Survey of Education and Training*, cat. 6278.0
- Australian Industry Group. (2006), *World Class Skills for World Class Industries: Employers Perspective on Skilling Australia* (Report of the Allen Consulting Group), Australian Industry Group, Sydney.
- Barron, J., Black, D. and Lowenstein, M. (1989), 'Job Matching and On-the-job Training', *Journal of Labour Economics*, vol. 7, pp.1-19.
- Bartel, A. (1995), 'Training, wage and job performance: Evidence from a company database', *Journal of Labor Economics*, vol.13, pp. 401-425.
- Becker, G. (1993), *Human Capital*, Chicago University Press, Chicago.
- Bishop, J. (1990), 'Job Performance, Turnover and Wage Growth', *Journal of Labour Economics*, vol. 8, pp. 363-86.
- Blundell, R., Dearden, L., Meghir, C. and Sianesi, B. (1999), 'The Determinants and Effects of Work-related Training in Britain', *Fiscal Studies*, vol. 20, pp. 1-23.
- Booth, A.L. (1991), 'Job-related formal training: who received it and what is it worth?', *Oxford Bulletin of Economics and Statistics*, vol. 53, pp. 284-294.
- Brown, J. (1989), 'Why do Wages Increase with Tenure?', *American Economic Review*, vol. 79, pp. 971-991.
- Commonwealth of Australia (2008), *AQTF 2007: Users guide to the standards for accredited courses*, Australia.
- Cully, M. (2005), *Employer-provided Training: Findings from Case Studies*, National Centre for Education and Vocational Research, Adelaide.
- Devins, D., Johnson, S., & Sutherland, J. (2004), 'Employer characteristics and employee training outcomes in UK SMEs: A multivariate analysis', *Journal of Small Business and Enterprise Development*, vol.11, pp. 449-457.

Duncan, G. and Hoffman, S. (1979), 'On-the-job Training and Earnings Differences by Race and Sex', *Review of Economics and Statistics*, vol. 61, pp. 594-603.

Elliot, R. (1991), *Labor Economics—A Comparative Text*, McGraw-Hill, London.

European Commission (eds), (2000), '*Continuing Vocational Training Survey (CVTS2)*', Eurostat Working Papers. European Union Manual. London

Felstead, A., Green, F., Mayhew, K. and Pack, A. (1999), *The Impact of Training on Labour Mobility*, Department of Economics, Keynes College, University of Kent at Canterbury, Kent.

Frazis, J., & Spletzer, J. (2005), 'Worker training: what we've learned from the NLSY79', *Monthly Labor Review*, vol.125, pp. 48-58.

Green, F. (1991), 'Sex discriminations in job-related training', *British Journal of Industrial Relations*, vol. 29, pp. 295-304.

Green, F. (1993), 'The determinants of training of male and female employees in Britain', *Oxford Bulletin of Economics and Statistics*, vol.55, pp.103-122.

Hanson, B. (2007), 'Company-based determinants of training and the impact of training on company performance: Results from an international HRM survey', *Personal Review*, vol. 36, pp. 311-331.

Ichniowski, C., Shaw, K. and Prennushi, G. (1997), 'The Effect of Human Resource Management Practices on Productivity: A Study of Steel Finishing Lines', *The American Economic Review*, vol. 87, pp. 291-313.

Keep, E. (2002), 'The English vocational education and training policy debate – fragile 'technologies' or opening the 'black box': two competing visions of where we go next', *Journal of Education and Work*, vol. 15, pp. 457-479.

Keep, E. (2009), '*Internal and external incentives to engage in education and training – a framework for analysing the forces acting on individuals?*', SKOPE Publications, ESRC Centre on Skills, Knowledge and Organisational Performance, Cardiff University.

Leuven, E. (2005), 'The Economics of Private Sector Training: A Survey of the Literature', *Journal of Economic Surveys*, vol. 19, pp. 91-111.

Lynch, L. (1991), *The Impact of Private-sector Training on Race and Gender Wage Differentials and the Career Patterns of Young Workers*, Department of Labor, United States.

Lynch, L.M. (1992), 'Private Sector Training and the Earnings of Younger Workers', *American Economic Review*, vol. 82, pp. 299-312.

Lynch, S. and Black, S. (1995), *Beyond the Incidence of Training: Evidence from a National Employers Survey* (Working Paper 5231). National Bureau of Economic Research, Cambridge, MA.

McLagan, P. (1989), *Models for HRD practice*. United States: American Society for Training and Development, ASTD Press.

Mincer, J. (1988), *Job Training, Wage Growth and Labor Turnover* (Working paper No. 2690). National Bureau of Economic Research, Cambridge, MA.

Osterman, P. (1995), 'Skill, training and work organization in American establishments', *Industrial Relations*, vol. 34, pp. 125-146.

Pischke, J. (2004), *Labor Market Institutions, Wages and Investment (CEPDP, 652)*. Centre for Economic Performance, London School of Economics and Political Science, London.

Ridoutt, L., Dutnell, R., Hummel, K. and Selby Smith, C. (2002), *Factors Influencing the Implementation of Training and Learning in the Workplace*, National Centre for Vocational Education Research, Adelaide.

Smith, A. (1998), *Training and Development in Australia*, (2nd edn), LexisNexis, Butterworth, New South Wales, Australia.

Smith, A., Burke., G., Long, M., & Dumbrell, T. (2008a), *Approaches to measuring and understanding employer training expenditure*, National Centre for Vocational Education, Adelaide.

Smith, A., & Hayton, G. (1999), 'What drives enterprise training? Evidence from Australia', *International Journal of Human Resources Management*, vol. 10, pp. 251-272.

Smith, A., Oczkowski, E. and Selby Smith, C. (2008b), *To Have and to Hold: Retaining and Utilising Skilled People*, National Centre for Vocational Education, Adelaide.

Smith, A., Oczkowski, E. and Selby Smith, C. (2011), 'To Have and to Hold: Modeling the Drivers of Employee Turnover and Skill in Australian Organisations', *International Journal of Human Resource Management*, vol. 22, pp. 395-416.

Stanwick, J. (2009), *Employer engagement with the vocational education and training system in Australia* (Occasional Paper), National Centre for Vocational Education, Adelaide.

Stern, D., Song, Y., & O'Brien, B. (2004), 'Company training in the United States 1970-2000: what have been the trends over time?', *International Journal of Training and Development*, vol. 8(3), pp. 191-209.

Stake, R. (2005). Qualitative Case Studies, in Denizen, N.K. and Lincoln, Y.S. (eds), *Handbook of Qualitative Research*, Sage Publications, Thousand Oaks, CA, pp. 433-466.

Tan, H., & Lopez-Acevedo, G. (2003), '*Mexico: in-firm training for the knowledge economy. World Bank Policy*', Research Working Paper No. 2957. Worldbank, Washington DC: World Bank,

UK Commission for Employment Skills. (2010), *National Employers Skills Survey for England 2009: Key findings report (NESS 2009)*. United Kingdom: UK Commission for Employment and Skills.

Yin, R. (2003), *Case Study Research: Design and Methods*, Sage Publications, London.
Youndt, M., Snell, J. and Lepak, D. (1996), 'Human Resource Management, Manufacturing Strategy, and Firm Performance', *Academy of Management Journal*, vol. 39, pp. 836-866.

Zheng, C., Hyland, P., & Soosay, C. (2007), 'Training practices of multinational companies in Asia', *Journal of European Industrial Training*, vol. 31, pp. 472-494.