**Training and development**

*Web version of the chapter included in the 5th edition*

Training and development is a human resource intervention. Organizational change is typically associated with some degree of individual change, which is often the outcome of an informal and natural process of learning and development. However, there may be occasions when those responsible for managing an organizational change decide that some form of deliberate training intervention is required in order to help individuals to develop new knowledge, skills, attitudes and behaviours. Such interventions can be highly structured and very focused on the achievement of closely specified outcomes, or they can be designed to help organizational members learn how to learn and encourage them to actively involve themselves in a self-directed process of professional development.

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Training interventions tend to be targeted at two main types of organizational member. On the one hand, there are those who are required to perform new roles associated with managing the change. They may require training in order to lead a task force charged with diagnosing organizational problems and identifying what needs to be changed, or to facilitate activities that are part of the diagnostic, planning or implementing phases of the change. For example, in Example 21.4, the facilitators of the ‘discovery’ workshops at Hammersmith Hospital were all members of staff (not consultants) who received training to lead the workshops, and Change tool 21.3 was used to prepare staff to facilitate workshops that were part of a survey feedback intervention in a large telecommunications company. On the other hand, there are organizational members who, as a result of the change, will be required to behave differently and may require training in order to achieve new standards of performance. For example, Banker et al. (1996) found that training is a key determinant of the success of teams. Team working often changes the role of the supervisor or involves people being appointed to a new role of team leader. This calls for training to help leaders facilitate their teams. Team members may also receive training in group process skills and training to cover jobs other than their own and/or to take on greater responsibility for their work.

This chapter briefly considers how training can help to maintain or re-establish alignment between the competences of organizational members and other elements of the system such as task and structure. Attention will also be given to the main aspects of a systematic approach to the development of effective training interventions. The final section reviews some Australian studies that have investigated recent trends in the provision of training.

**Achieving a match between organizational members and changing task demands**

When change calls for new behaviours on the part of organizational members, a number of factors will determine whether or not these new behaviours will be forthcoming. These include the quality of the match between competences and task demands, the effect of reward systems on the motivation to deliver revised performance outcomes, and the availability of feedback to enable individuals and their managers to assess whether the new performance standards are being achieved. This chapter is concerned with the first of these.

Sometimes, organizational members will already possess all the competences they require in order to achieve the new performance standards. All that such people will need, in terms of their ability to perform in new ways, is information about the revised performance outcomes they will have to achieve. At other times, the people affected by the change may not possess the competences they will need. Here, a number of options may be available to those managing the change. They may explore ways of redesigning the task to match the existing competences of organizational members, replace existing staff with others who already have the required competences, or help existing staff acquire the required new competences. The latter is considered in more detail below.

**A systematic approach to training**

Goldstein (1993) and others argue that effective training involves three main steps: the analysis of training needs, the design and delivery of training, and the evaluation of training effectiveness, which are now discussed.

**Training needs analysis**

A training needs analysis also involves three steps: systems-level review, task analysis, and person analysis.

**Systems-level review**

A systems-level review determines how the proposed change will affect organizational goals, objectives and task demands. This overview provides the information necessary to identify where more specific task and person analyses are required. For example, the move from an optical to a digital scanning technology in the reprographics equipment sector changed the nature of the tasks performed by many organizational units. In this case, a system-level review might have pointed to a need for a more detailed analysis in departments such as product design, assembly, technical support, sales and so on. However, in other departments, such as finance, the system-level review might have identified few implications for the nature of the task performed and the competences required.

**Task analysis**

A task analysis focuses on specific jobs or roles and examines how modifications to the task of a unit will affect the nature of the performance that will be demanded from members of that unit. It also points to the competences – knowledge, skills, attitudes or behaviour – that people performing these new or modified roles will require in order to perform to the new standard. Elaborating the example of the reprographics equipment manufacturer, a task analysis of, for example, the selling function might have revealed how the introduction of digital scanning technology changed the nature of the performance required by salespeople to sell digital as opposed to optical reprographics equipment.

**Person analysis**

A person analysis seeks to identify discrepancies between the required competences, as determined by the task analysis, and the existing competences of the organizational members available to perform these revised tasks. This analysis provides the information necessary to identify which individuals or groups will require training and specify training objectives in terms of what trainees need to know and how they will be required to behave.

The most useful way of expressing training objectives is in terms of behavioural objectivesthat specify what trainees will be able to do after training. For example, some of the training objectives for the reprographics equipment sales representatives might include being able to:

*  accurately describe how the new technology affects the performance of the new range of copiers produced by the company
*  demonstrate to customers how to maintain the equipment to keep it operating at peak efficiency.

**The design and delivery of training**

Smith (1991) suggests that the choice of training method should, at least in part, be determined by the kinds of competences the training is designed to impart. For example, where the aim is to impart knowledge and information, some of the most effective training methods might include lectures and reading books and manuals. Where the focus is attitudes, the most effective methods might include role play or informal discussion groups. Where the aim is to develop cognitive strategies, case studies, simulations, projects or mentoring might be used. Where the focus is perceptual and motor skills, a variety of methods might be considered. These could include the discrimination method, which is designed to help trainees detect differences between similar items, and the progressive parts method, a schedule for organizing the practice of complex motor skills.

Reid and Barrington (1999) classify training methods under five main headings: on-the-job training, planned organization experience, in-house courses, planned experience outside the organization, and external courses. They recommend four criteria to determine which of these strategies will be most appropriate:

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**1** compatibility with training objectives

**2** estimated likelihood of transfer of learning to the work situation

**3** availability of resources, such as time, money and skilled staff

**4** trainee-related factors.

These criteria can be used, for example, to help identify an effective way of training members of a new change project team. Each is now discussed in turn.

**Compatibility with training objectives**

The training objectives for the members of the new project team might include:

*  *imparting knowledge:* so that trainees will understand, be able to describe to others and recognize actions that will help the new project team achieve the aims of the change programme
*  *developing positive attitudes:* so that trainees will be committed to the aims of the programme and to working constructively with other members of the team to achieve these aims
*  *developing group process skills:* so that trainees will be able to diagnose what is going on in the group and act in ways that will contribute to group effectiveness.

The change manager might quickly reject some methods because they are incompatible with the training objectives and may recognize that others may only be used after adaptation.

On-the-job training might be rejected because there may be no project teams currently operating in the company that could provide relevant on-the-job work experience.

External courses, such as outward bound-type team training, might offer a good way of developing positive attitudes towards colleagues and developing group process skills. However, in order to satisfy some of the other training needs, the change agent or somebody else from the company would have to be involved and the course would have to be adapted to provide some sessions that deal with the aims of the change programme. This would also require the external course to be restricted to managers from the one company and to those managers who will have to work together in the new project team.

A specially designed in-company course might be an attractive option. It could include a mix of formal inputs on the aims of the change programme, informal discussion sessions to explore trainees’ reactions to these aims, and group activities that could be used as a vehicle for developing group process skills.

**Transfer of learning**

In terms of the transfer of learning, the external course, if it were restricted to prospective members of the project team, and the in-house course could facilitate the transfer of group process skills and positive attitudes towards other trainees to the work situation. The in-house course could also score high on the transfer of learning if the group activities involved working on real issues that the team would have to deal with once it ‘went live’.

**Availability of resources**

In terms of the availability of resources, time might be a factor that would preclude the use of internal or external planned work experience. Also cost, in terms of money in the budget rather than the opportunity cost of the change agent’s time, might be a factor that would work against an expensive external course. The in-house course might cost less but the change agent would have to find the time to develop the training materials and the work-related group activities. The change agent may be confident they have the necessary skills to design and deliver the in-house programme. They might also be aware of an external consultant who could be employed to help at a fee that would be considerably less than the cost of the external course.

**Trainee-related factors**

In terms of trainee-related factors, from a business perspective, it may be impossible to release all the managers at the same time to participate in a week-long external course. Also, for domestic reasons, some members of the proposed project team may find it difficult to be away from home for a whole week.

Taking into account all these factors, the change agent may opt for the in-house course, which could, if necessary, be scheduled as a series of short modules to fit in with the availability of trainees.

**The evaluation of training effectiveness**

Training effectiveness can be assessed in many ways, but Aguinis and Kraiger (2009) note that Kirkpatrick’s (1983) four-level approach to training evaluation continues to be the most widely used training evaluation model among practitioners:

**1** At level one, the criterion is how trainees *reacted* to the training. Did they feel it was relevant, interesting, demanding and so on?

**2** At level two, the criterion is *what they learned.* It is not unknown for trainees to react favourably to the training but to learn relatively little, or only achieve acceptable standards of learning in respect of some, but not all, of the learning goals. This kind of feedback has obvious implications for those responsible for selecting and designing the details of the learning activity.

**3** At level three, the criterion is *behaviour*. Trainees may have reacted positively to the training and learned what it was intended they should learn. However, back on the job, their behaviour may have changed little, if at all. In other words, what was learned on the course may not have been transferred to the work situation. It is relatively easy to apply the relevant principles of learning to design a training activity that will encourage learning, but much more difficult to design one that will ensure that the learning is transferred and used in the work situation. This issue is addressed by Paul Simpson in his video (see Managing change in Practice 19.1) A common problem that inhibits transfer is the social pressure trainees are subjected to on their return from training. While they may have learned best practice when on the course, back on the job, colleagues often pressure them to revert to the traditional ways of working.

**4** At level four, the criterion is *results*. It is possible for the training to produce the intended changes in behaviour, but this behaviour change may not produce the intended results. Sales representatives may have started to call more regularly on customers but this may not produce the anticipated increase in sales. This kind of feedback indicates a need for a fundamental rethink of the training strategy.

**Training for change: the Australian experience**

Studies in several countries have found that organizational change is closely associated with the level of training activity in organizations (Cappelli and Rogovsky, 1994; Osterman, 1995). Smith (2005) reviewed two major studies of training at the level of the whole enterprise in Australia that confirm this relationship (Research reports 22.1 and 22.2).

One new management practice that was not always associated with an increase in training activity was the introduction of lean production. Smith et al. (2003) found that lean production was consistently associated with cost cutting and this included measures to cut the cost of training. Typically, the levels of formal training and training infrastructure (training facilities and dedicated training staff) were reduced. Most of the training that was undertaken tended to be on the job and skewed in favour of managers.

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| ***Research report* 22.1*Enterprise-level training in Australia***  Smith, A. and Hayton, G. (1999) What drives enterprise training? Evidence from Australia, *International Journal of Human Resource Management*, 10(2): 251–72.  Smith and Hayton investigated the drivers of enterprise-level training. Their research involved 42 case studies in five industry sectors – construction, electronic manufacturing, food processing, retail and financial services – and a national survey of 1,760 organizations across all sectors.  In terms of the systematic approach to training outlined in this chapter, they found evidence that organizations did adopt some form of training needs analysis and in many cases this was based on a system of performance appraisal. However, the evaluation of training was relatively underdeveloped. None of the case study organizations went much beyond the use of traditional end-of-course evaluation forms.  Senior managers in some organizations adopted a proactive strategic approach to training and viewed it as a vehicle for building skill sets that could provide the basis for sustainable competitive advantage, but attitudes towards training were often fragmented, and middle and junior managers tended to be more reactive and viewed training as a short, sharp, focused response to immediate operational problems. These included workplace change, quality improvement and new technology.  Workplace change was the most important driver for training. New technology was less important than anticipated because the introduction of new products frequently required only minimum changes to existing production processes and could be introduced with little additional training. New production processes, on the other hand, often involved fundamental changes to the way work was carried out and therefore triggered a more extensive need for training. However, the required training was often short and simple and was frequently outsourced to the vendors of the new process technology.  New forms of work organization and structural change accounted for most of the increase in training activity and emphasized behavioural rather than traditional technical skills. Smith and Hayton suggest that this shift towards behavioural skills training reflects a growing concern in Australian enterprises to develop adaptability to changes in work organization. |

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| ***Research report* 22.2*Relationship between enterprise-level training and organizational change***  Smith, A., Oczkowski, E., Noble, C. and Macklin, R. (2003) New management practices and enterprise training in Australia, *International Journal of Manpower*, 24(1): 31–47.  The study involved a survey of 3,415 HR managers and follow-up interviews with 78 of them.  While training activity was clearly associated with the introduction of new management practices, such as total quality management (TQM), team working and business process re-engineering, few of the managers surveyed felt that training had played a major role in the implementation of change. Typically, training played a ‘catch-up role’, dealing with the consequences of change rather than playing a major role in its planning or implementation.  Findings relating to the kind of training associated with the introduction of new management practices confirm the move away from technical skills to a new training paradigm that emphasizes the development of broad sets of generic behavioural skills. For example, the introduction of TQM involves the implementation of team working, the development of interpersonal and problem-solving skills and, especially in service industries, customer service skills. There is also a requirement to train large numbers of staff in specific TQM skills such as data collection and analysis. Team working had been introduced by about two-thirds of the organizations included in the survey and was clearly linked to an increase in training activity. Training was focused on team-working skills for team members and management training for more senior staff. |

The studies undertaken by Smith and Hayton (1999) and Smith et al. (2003) provide an overview of enterprise-level training in Australia from 1994 to 2003. This was a period of rapid change, because from the early 1980s, companies operating in Australia have been exposed to increasing levels of international and domestic competition. A number of trends in the development of enterprise-level training emerged from these studies.

The first relates to the link between training and business strategy. Notwithstanding the finding reported by Smith et al. (2003) that training did not play a major role in the planning and implementation of change, Smith (2005) reports that there has been an increase in the number of organizations that are conscious of the need to link training to business strategy if they are to capitalize more effectively on their investment in training. He notes that where enterprises have made this link, the result has been a substantial increase in all forms of training and a greater embedding of training into the management of the enterprise. The second trend relates to the individualization of training. There has been a shift away from delivery methods that impose uniform training programmes on large groups of employees towards a more focused training provision linked to individual performance management. This trend has been associated with the demise of large centralized training departments and the devolution of responsibility for training to line managers. Finally, much of the growth in training activity has involved the development of broad sets of generic behavioural skills rather than technical skills and has been linked to the introduction of new management practices.

***Exercise* 22.1*Assessing the way training is used in the change process***

Reflect on an organization-wide change or a change targeted at a particular department or unit in your organization or another organization you have read about. Consider the following points and then make a brief assessment of the way training was used to help achieve change:

*  Was there any evidence indicating that the organization and/or particular change managers were prepared to invest in training to support change?
*  Was the attention given to training inadequate, about right or ‘over the top’?
*  Was the training targeted at the individuals and groups most in need of training?
*  Was the training that was provided compatible with training requirements and delivered in a way that maximized the transfer of learning to the work situation?

**Using training to help change the culture of a special metals business.**

You might want to review Paul Simpson’s video (see Managing change in practice 19.**1**) with these questions in mind. Paul engaged a firm of training consultants to work with the business to design and deliver a five-module training programme for the top 50 managers and directors over an 18-month period. His role was to support the top 50 and help them transfer what they learned on the training programme and embed it as a natural part of their everyday management style. He did this through coaching, one-to-one support and group facilitation.

Many lessons were learned from this experience. First, providing trainees (in this case the top 50 managers and directors) with one-to-one coaching support in the gaps between modules, when they were back at work, increased their awareness of the value of what they had learned and helped them to adopt new ways of working. Second, people responded differently. Overall, the response to the training was positive, but while some worked hard to translate theory into practice, others found this was easier said than done. There were also a few who were not persuaded that they should change their management style, but as the programme unfolded they began to recognize that they did not fit in. Third, encouraging trainees to share their success stories encouraged others to embrace the new culture. Fourth, and rather unexpectedly, as some managers adopted the new ways of working and began to appreciate how this improved the climate in their section of the organization, they became less tolerant of those senior managers who were clinging on to the old top-down adversarial culture, and this began to create a bottom-up push for change.

**Summary**

Organizational change is typically associated with some degree of individual change. Often this individual change is the outcome of an informal and natural process of learning and development. However, there may be occasions when those responsible for managing the change decide that some form of deliberate training intervention is required in order to help individuals to develop new knowledge, skills, attitudes and behaviours.

This chapter considered how training can help to re-establish alignment between the competences of organizational members and other elements of the system such as task and structure. Attention was directed towards the main elements of an effective approach to training: a training needs analysis, design and delivery of the training intervention, and the evaluation of the training.

**1** The training needs analysis involves three steps:

*  *Systems-level review:* This investigates how the proposed change will affect organizational goals, objectives and task demands. This overview provides the information necessary to identify where more specific task and person analyses are required.
*  *Task analysis:* This focuses on specific jobs or roles and examines how modifications to the task of a unit will affect the nature of the performance that will be demanded from members of that unit. It also points to the competences (knowledge, skills, attitudes or behaviour) that people performing these new or modified roles will require in order to perform to the new standard.
*  *Person analysis:* This seeks to identify discrepancies between the required competences, as determined by the task analysis, and the existing competences of the organizational members available to perform these revised tasks.

The most useful way of expressing training objectives is in terms of behavioural objectives that specify what trainees will be able to do after training.

**2** The design and delivery of training

The choice of training strategies, for example on-the-job training, private study, internal and external placements, in-house and external courses, will depend on:

*  compatibility with training objectives – knowledge, skills, attitudes
*  likelihood that learning will be transferred to job – individual or work group focus and relevance of training content
*  available resources
*  trainee-related factors – availability, domestic considerations.

**3** The evaluation of the training

The effectiveness of training can be evaluated at four levels:

*  how trainees reacted to the training
*  what they learned
*  whether the training changed their behaviour as intended
*  the impact of new behaviours on performance.

The final section reviewed the development of training practice in Australia over a 10-year period and highlighted a number of trends in training provision.

In terms of the typology presented in Figure 16.3, training and development is a human resource intervention.

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