The Knowledge-Productive Organisation

INTRODUCTION

In this chapter we expand on the concept of knowledge productivity to which we have referred frequently in earlier chapters. Knowledge productivity concerns the way in which individuals, teams and units across an organisation achieve knowledge-based improvements and innovations. It entails developing new knowledge in the workplace that can generate the capability for continuous improvement and also for radical innovation in operating procedures, processes, products and services.

Our purpose in this chapter is to relate the knowledge productivity concept to notions of knowledge explored in Chapter 7, and to propose a practical framework whereby to promote and sustain a knowledge-productive environment in an organisation. We call this framework the 'corporate curriculum', and in Chapter 9 we discuss research being carried out to test the construct.

As we have seen in Chapter 7, different notions of knowledge carry differing implications for knowledge creation. Viewing knowledge as control or as commodity often leads to centrally managed knowledge systems, with a strong emphasis on data collection and systems of information processing. With these perspectives, knowledge is made explicit, encoded and stored in electronic databases where it is held to represent an important asset, and serves as the basis for knowledge management. On the other hand, viewing knowledge as a web of relationships and as a capability to adapt and to transform requires an approach where knowledge is nurtured in a conducive learning environment. The emphasis is on shared knowledge development through learning situated in communities of practice.

In the context of organisations operating in an emerging knowledge economy, research offers evidence that the traditional 'knowledge as stock' (commodity) approach, focused on controlling, storing and reusing knowledge, is not likely to contribute sufficiently to the necessary regular improvement and innovation in work processes, products and services (see Tushman and Nadler, 1996). A 'flow', or processual approach to knowledge, where relationships form the focal point, offers more relevance. The development of human resources (HRD) lies at the very heart of a 'knowledge-productive' organisation, where people in the workplace embody knowledge that is critical for survival in a knowledge economy (Kessels, 1995, 1996).

In the first part of the chapter we discuss characteristics of a 'knowledge-productive' organisation and the questions it raises about traditional management roles and tasks. We then explore how such an organisation might be developed and sustained, introducing the 'corporate curriculum' framework to aid analysis of the human and organisational issues that are involved here. We identify issues that this framework raises for HRD practitioners, and the new HRD tasks that it suggests. The chapter concludes with an integrative case study.

KNOWLEDGE-PRODUCTIVE ORGANISATIONS

'Knowledge management' or 'knowledge development'?

Employees' participation in developing the knowledge of an organisation is becoming a significant theme in HRD theory. The importance of 'being smart' at all levels rather than only at the top is manifested in often desperate efforts to manage knowledge in organisations. At the same time, as we saw in Chapter 7, an increasing focus on knowledge management introduces many social tensions, raising problematic issues of ownership and utilisation of knowledge. As commentators such as Drucker (1993) and Jacobs (1996) make clear, it is knowledge development rather than knowledge management that should characterise the post-capitalist society. And in a knowledge economy it is not only specialist knowledge workers that need attention, as Case example 8.1 demonstrates.

Clearly there are issues in all such cases, whether at macro or micro level, about how to 'manage' knowledge. The danger then becomes one of a false specialisation that diverts attention from the processual nature of knowledge, converting it into simply another management function. When the importance of the production process was discovered at the dawn of the production era, we appointed production managers. When finance came to be seen as a special area of expertise, we recruited financial managers. When employees needed increasing attention, we turned to personnel managers. With the growing awareness of the importance of quality, we sought out quality managers. When we discovered the client, we created account managers. Our present focus on knowledge has given birth to knowledge managers.

Throughout, 'management' has been the key function. But might not the current interest in knowledge, its complex underlying dynamics and its economic significance, suggest an alternative possibility now? Might it not herald the end of the 'management' era? Functional management was born in a period of economic activity when there was an obsession to plan, direct, manage, measure, verify, monitor and evaluate everything considered to be important. The dominant notions of knowledge were of control and of commodity. But that was in the last century. Is it not time to question now whether we should view the concept of 'knowledge management' as the final anachronism, the watershed between two quite different eras?

In a knowledge-based economy, the capacity to develop and apply the uniquely valuable organisational process of knowledge rests equally with everyone. As we have seen in Chapter 3, in many organisations the stereotype of the authoritarian and controlling manager is now being replaced (at least in title) by the coaching, guiding, facilitating and entrepreneurial manager. We observed in Chapters 5 and 6 that similar roles are being proposed for HRD/training managers operating in a knowledge economy (Stewart and Tansley, 2002; Tjepkema et al., 2002). Such roles seem more

Case example 8.1

Agro-food complex, the Netherlands

The knowledge economy is not restricted to well-educated 'knowledge workers' in organisations that are clearly knowledge intensive. It has implications for all workers, whatever their type of workplace. For example, in the Netherlands young farmers have to deal with questions such as:

- How can farming be economically profitable in an agricultural area with landscape value?
- Should we raise free-range chickens, and what are the important issues here?
- With the growing concern for food safety, can we allow free-range chickens to roam about in their excrement, or should we invest in sophisticated technology for battery cages that keep eggs separate from excrement?
- Which combination of clover and grass should we plant to get the soil to retain nitrogen?
- Is it wise to shift to a greater emphasis on goats' milk production?
- But what then should we do with the inevitable large surplus of male kids that cannot be used for milk or meat production purposes?

In the Netherlands, such young entrepreneurs establish informal networks to share their experiences and to analyse new information. In his policy memorandum Groen Onderwijs [Green Education] the Minister of Agriculture, Nature Management and Fisheries advocated transforming traditional agriculture and livestock breeding into a knowledge-intensive agro-food complex dedicated to quality education about food, green areas, nature and landscape.

Here, a sector that we would not immediately identify as a knowledge producer is now increasingly being regarded as such. The Minister argued that important themes such as sustainability, food safety, agro biodiversity, biotechnology and integral water management should not be considered exclusively from an agricultural perspective. He believed that education about natural resources should cover the entire chain from consumers to producers, and must therefore involve relevant knowledge and expertise from adjacent disciplines, such as social sciences, medicine and ICT-related fields.

Source: Minister van Landbouw, 2000

appropriate in the context of knowledge development, but they beg the critical question: how far should someone who is essentially there to help, support, guide and collaborate still carry the title of manager?

It is not so much the title that matters here, but the focus that it produces. As we reported in our discussion of 'knowledge as commodity' in Chapter 7, Huysman and De Wit (2000) carried out a survey of 11 organisations involved in knowledge management. They found scant regard there for sharing knowledge. They criticised the use of a knowledge management concept that, in this case, disguised what was in reality a unilateral management perspective. They also criticised what emerged from their survey as a one-sided individual learning perspective that demonstrated little regard for collective organisational learning, and a one-sided information and communications technology perspective that reflected little concern for social interaction. Von Krogh et al. (2000) reached similar conclusions about the practice of knowledge management. They see it more relevant to develop knowledge using a 'steering' perspective. Malhotra (2000), who dealt extensively with such issues, concluded that a management perspective cannot be reconciled with the concept of

knowledge development. He did not deny the need to find ways of managing knowledge, but he too looked to the idea of self-steering 'knowledge intrapreneurs' to achieve that.

Reflection

- Is knowledge development as distinct from knowledge management given specific attention in your work environment? Do you know of any special resources that are available for knowledge development in your organisation?
- If knowledge development is prioritised in your organisation, then who is seen to be responsible for that activity? How far do they seem to be 'managers' in the traditional sense, or to carry some other role?

Knowledge and personal 'skilfulness'

Our notion of knowledge productivity is based on two beliefs:

- that where knowledge is a dominant concern not just at corporate level but throughout the organisation – it follows that daily operations should be designed to support knowledge productivity (Kessels, 1996; Harrison, 2000)
- that knowledge is both a relational process and a type of individual attribute or quality. That quality is to do with individual cognition as well as with the ability to learn in communities of practice, but it goes beyond both. It involves a personal 'skilfulness' and sensitivity that is inextricably linked with the individual concerned.

We first began to consider a concept of knowledge as a type of learnt skilfulness in our studies of successful educational programmes (Kessels, 1995; Kessels and Harrison, 1998; Kessels and Plomp, 1999). Malhotra has expressed a similar view:

Even procedural knowledge, when translated into symbols that are later processed by another human, does not ensure that the outcome of his knowledge will rival that of the original *carrier*. Knowledge needs to be understood as the *potential for action* that doesn't only depend upon the stored information but also on the individual interacting with it. (Malhotra, 2000: 249, italics in original)

The knowledge process does not only require individuals to become involved in applying rules and procedures when dealing with standard problems. It also enables them to improve the rules, analyse new situations, devise new concepts and enhance their understanding of their own and others' learning processes. This involves the exercise of adaptive, investigative and reflexive learning, illustrated in Table 5.1, Chapter 5. It casts a new light on the distinction usually drawn between explicit and implicit knowledge (Polanyi, 1958, 1966; Nonaka and Takeuchi, 1995; Baumard, 1999; Von Krogh et al., 2000).

Explicit knowledge is not just codified, established, described, documented knowledge. It is also the expression of someone else's personal skill in codifying knowledge. When we gain access to that explicit knowledge – for example through reading a book or a Lotus Notes entry – we are also gaining access to someone else's competence in producing knowledge. But that does not make us competent too. In Chapter 7, in our

discussion of 'knowledge as relationships', we explained knowledge as a self-productive process involving a continuous interaction of cognitive, emotional and relational processes for the individual. So we still have to interpret and utilise that other person's body of codified knowledge. It remains no more than information until we have processed it to form our own unique knowledge, or worked with others to do so.

We also saw in Chapter 7 that if the individuals involved in learning situated in the workplace are to become knowledgeable in ways that will benefit the organisation – in other words, if they are to become knowledge-productive – then they need help and steering of some kind. Knowledge productivity can only flourish in a conducive context. As the Case examples of Multicorp (7.1) and of Buckman Laboratories (7.2) in Chapter 7 make clear, organisational members need a shared reference point and the necessary encouragement and facilitation to develop their personal skilfulness in the knowledge process – for example by being helped to form personal networks that encourage and support the knowledge process. Information technology has a role to play here too, although mainly in a support role related to the establishment and maintenance of electronic communication networks (Hansen et al., 1999). We elaborate on this role in Chapter 10.

Huysman and De Wit (2000) draw attention to this factor of personal skilfulness when, conceptualising the sharing of knowledge as a type of organisational learning, they identified three important areas of skill:

- supporting the gathering together of individually produced knowledge of whatever form or mix of forms
- supporting knowledge exchange a component to do with collective learning and knowledge connectivity, because it is about bringing knowledge carriers together quickly to reflect on and discuss what they have gathered
- supporting knowledge development by creating situations where people combine their new insights to bridge gaps in existing knowledge and to produce out of it new knowledge.

Classifying knowledge

Up to this point in the book we have focused only on one way of classifying knowledge: as *explicit* and *tacit*. However, there are other classification systems that we now need to identify in order to take forward our discussion of the knowledge-productive organisation.

Gibbons et al. (1994) and Gibbons (1998) classified knowledge into that which they termed *Mode I* knowledge, exemplified by scientific knowledge structured in disciplines that regulate its elaboration, and *Mode II* knowledge, which is applicationoriented and derives its significance from its specific situation or context. Mode I knowledge is the kind traditionally developed at universities and other institutions of 'learning'. In a knowledge economy there is likely to be equal concern with Mode II knowledge that is produced and shaped in an organisational context (Gibbons, 1998; Gray, 1999; Robertson, 1999). In Chapters 4 to 6 we saw how this concern, triggered usually by the introduction of new high performance practices and new technology, is leading to innovation in workplace learning processes across Europe and more widely. We saw also that it is being expressed in educational systems by a search to achieve greater collaboration between educational providers and employers in integrating Modes I and II types of knowledge in various educational programmes and curricula.

Billett (1997) made similar distinctions when he classified knowledge as propositional, procedural and dispositional. Propositional includes Mode I and other bodies of theoretical or codified knowledge. Procedural includes 'what we use to think and act with' (ibid) in our daily activity: in other words, Mode II knowledge. Dispositional is our learnt values, attitudes and interests that predispose us to acquire certain kinds of knowledge and to treat and use it in particular ways. Billett argues that all knowledge structures have propositional, procedural and dispositional dimensions and that in different organisational settings knowledge has different propositional, procedural and dispositional characteristics.

Such approaches to classifying knowledge demonstrate an awareness of 'the sheer complexity and diversity of factors that directly (and indirectly) shape one's learning including what counts in the workplace (Garrick, 1999: 226, his italics). For Garrick, 'what counts' is increasingly becoming a personal skilfulness in producing new knowledge through learning that is situated in workplace communities of practice. Therefore 'the varying characteristics of workplaces as learning environments ... become very important' (Garrick, 1999: 228). A workplace is not likely to be knowledge-productive in our meaning of that term if it is dominated by a belief in knowledge merely as a commodity consisting of objective facts or scientific theories. Individuals in such a workplace are regarded essentially as elements to control, as bins to be filled, as repositories from which knowledge is to be extracted (Swan, 1999). They are not treated as having minds capable of interpreting information in unique ways in order to produce insights and skills that can continuously improve and radically innovate in operations, products and services.

Reflection

- Consider a situation that was either a major learning experience for you in your organisation, or in which you felt frustrated in your attempts to become more knowledgeable. What type of knowledge was mainly at issue in that situation: theoretical (Mode I, propositional knowledge) or practical (Mode II, procedural and/or dispositional knowledge)?
- What kind of learning environment were you in, and how far did it help or hinder you in becoming more knowledgeable, or in developing new knowledge in others?

We have one further, crucial dimension to personal skilfulness in the knowledge process to consider, before suggesting a framework for building and sustaining a knowledge-productive learning environment in the workplace. It is the dimension of what we call *practical judgement*.

The importance of practical judgement

NOTE: Throughout this section we draw primarily on an original account of the relationship between practical judgement and knowledge productivity by Harrison and Smith (2001: 195–213)]

Ancient Greek philosophers made distinctions between episteme, techne and phronesis. Our concept of knowledge productivity revolves around the relationship between these three aspects of knowledge, which we therefore expand on here.

In Aristotle's *Nicomachean Ethics* the three terms carry the following meanings:

- *episteme* represents scientific, explicit, universal knowledge
- *techne*, roughly translated, refers to the skilled competence to perform a certain task by combining the well-practised exercise of the propositional and procedural knowledge that we discussed earlier
- *phronesis* can be variously translated as practical reasoning, practical judgement or practical wisdom. It reflects personal experiences and the ability to sense and anticipate situations. It can be further explained as prudence, approximating to a practical overview of what is socially appropriate or inappropriate.

Phronesis is characterised by flexibility and attentiveness to the details of the particular, and perhaps unique, case. It therefore has distinctive emotional and ethical aspects. Questions of character, of what kind of person is performing the activity in question, are at issue here. It is not simply a matter of the competence he or she is exercising. It is about the manner of applying knowledge in the particular situation, and the human sensitivity and sense of appropriateness demonstrated. Thus for a judge, 'laws are best thought of as summaries of previous wise decisions, to be corrected where necessary by new wise decisions to meet the exigencies of unique circumstances' (Smith, 1995). The 'good judge', in other words, applies the wisdom born of experience in ways appropriate to the particular situation. This goes to the heart of the concept of 'practical judgement' and of its importance in the knowledge process.

Applying the reasoning behind *phronesis* to today's organisational context suggests a need not only for visionary leadership and facilitative management, but for 'good' leadership and management that goes about its business in a manner respectful of certain values. This has special resonance in today's business world where public confidence in corporate governance has been dramatically eroded by 'the corruption and failure of influential parts of corporate America' and by the spreading effects of that failure across the capitalist world (Marr, 2002). The reasoning has a crucial meaning for the knowledge-productive organisation where a sense of community and an inclusive approach to learning is vital.

Harrison and Smith's concept of practical judgement has four features, although they warn that no prescriptions are possible here: it is much easier to say what practical judgement *is not* than what it is. The four features are shown in Table 8.1. These features make clear the ethical nature of practical judgement, with its roots in feelings, in learning from experience, and in openness to further experience and to the continual shifts in the individual's frames of reference that this involves. The concept connects strongly with a body of strategic management literature that focuses on qualities such as trust (Dodgson, 1993; Ghoshal and Bartlett, 1994: 92; Hedlund, 1994: 84; Boisot et al., 1995), judgement (Ginsberg, 1994: 154–5), friendship and family networks (Ito and Rose, 1994; Hines and Thorpe, 1995: 679–80), and the kind of heedful interrelating to which the following writers refer:

When we say that a collective mind 'comprehends' ... we mean that heedful interrelating connects sufficient individual know-how to meet situational demands. (Weick and Roberts, 1993: 366)

McGrath and colleagues (1995: 265) use similar concepts of 'comprehension' and 'deftness' in order to explain how some groups seem to work efficiently and effectively with a 'developed collective mind'. It is this kind of skilfulness in the learning and knowledge processes that demonstrates (they claim) that the management of

Table 8.1 Features of practical judgement

Features of practical judgement

- Experience is a necessary but not sufficient condition of practical judgement. We often need to be helped, sometimes be directly shown, how to interpret what we see in a particular situation and what to consider when formulating a response to it. If we are not helped in this way, we may import ways of understanding and coping into the workplace that prove to be barriers to learning in a community of practice where the goal is to develop collective knowledge (Levinthal and March, 1993).
- Character is another feature of practical judgement. By this we mean that practical judgement is bound up with the kind of person one is. It is not so much that practical judgement *requires* certain qualities, even 'virtues', to be in place before it can develop on the basis of them, as that it partly *consists* of those qualities. These qualities have a cognitive element but they, and so practical judgement itself, have a strongly affective side. Knowledge and feelings are part of the same process.
- Alertness in practical judgement is to do with how far we have a sympathetic understanding of things in their own terms, of what they mean to the agents involved. Harrison and Smith relate this to the example of the 'alert' manager who responds to the myriad complex pressures of the workplace by experiencing them accurately, distinguishing what is meant as a threat, what is a clumsy overture of co-operation, what is a response to stress, and so on.
- Flexibility is closely connected with alertness. Both involve 'sensitivity or attunement', especially to others in a shared situation.

Source: Based on Harrison and Smith, 2001

learning is one of the essential determinants of long-term organisational survival: 'organisations which are fast learners are able to rapidly mobilize themselves to overcome new challenges' (ibid: 266).

Hosmer (1994: 21), discussing the agency theory approach that we outlined in Chapter 2, stresses the relevance of the Aristotelian concept of personal virtue to management's tasks in building a climate of trust in the organisation. He explains trust in managerial terms as 'confidence that the self-interests of the principal will not necessarily take total precedence over the self-interests of the agent' (ibid: 28). He argues that it is only by recognising the ethical dimensions of their decisions and actions that managers will be able to generate the trust needed to ensure shared commitment and effort across the organisation, and to build up a valued reputation in the competitive environment. They must demonstrate a concern for external as well as internal goods, the latter including the integrity of the personal well-being of employees. They must show good practical judgement in all their dealings.

The tradition in which ideas about practical judgement are rooted thus embodies values to do with citizenship and community of interest (Hosmer, 1994: 32; see also Badaracco, 1991; Dodgson, 1993; Batchelor et al., 1995). Our concept of the knowledge-productive organisation is firmly lodged in a pluralist perspective described towards the conclusion of Chapter 2. It is one in which all value systems matter, and should be treated with respect and sensitivity. We regard the exercise of such wisdom as an essential feature, not only to foster trust among stakeholders, but to ensure an inclusive approach to learning that will achieve beneficial outcomes for individuals, for the business, and for wider society.

Emotional and spiritual intelligence

Some may think that 'practical judgement' is merely another term for 'emotional intelligence' – a concept in which there is much interest currently. The two concepts are in fact quite distinct, although there are points of commonality. To explain this distinctness, it is worth at this point outlining not only the concept of emotional intelligence (EI) but also of 'spiritual intelligence' (SI) that also has relevance here.

Emotional intelligence

EI is essentially to do with the way in which emotions and cognition interact to improve thinking. EI has been explained in basic terms as:

the understanding of emotion. The ability to perceive, to integrate, to understand and reflectively manage one's own and other people's feelings. (Jack Mayer, quoted by Pickard, 1999: 49–50)

Although EI involves the operation of social intelligence – social skills or 'knowing how to behave' – it is not to be confused with it. The emotionally adept are those who know and manage their own feelings well and who read and deal effectively with other people's feelings (Goleman, 1998). In other words, they have the capacity to think intuitively about emotion. Goleman has identified from his research five domains of EI and related sets of abilities:

- Knowing one's emotions
- Managing these emotions
- Motivating oneself
- Recognising emotions in others
- Handling relationships.

Dulewicz and Higgs (1999) have developed an EI competency framework based on these domains. It has three main components and seven dimensions:

- The drivers motivation and decisiveness. These energise and drive people on to achieve their goals and tend to be inborn. They can therefore be exploited or managed through coping strategies.
- The constrainers conscientiousness and integrity, and emotional resilience. These act as controls and curb excesses of drivers. They too tend to be inborn and therefore can also be exploited or managed through coping strategies.
- The enablers sensitivity, influence and self-awareness. These facilitate performance and help individuals to succeed. They can be developed, using a trusted mentor/guide.

Some are scathing about EI's claims, which they find to be nothing but old wine in new bottles (Woodruffe (2001). Goleman (2001), however, argues that EI abilities have a unique significance and have been consistently undervalued compared with cognitive abilities.

Spiritual intelligence

Danah Zohar and Jacquie Drake (2000), researchers in the developing field of 'spiritual intelligence', see SI as the 'ultimate intelligence', because it represents our 'deep, intuitive sense of meaning' – our 'guide at the edge'. They observe that when the immediate environment is uncertain, people need a deep sense of inner security in order to be 'flexible, adaptable, imaginative, spontaneous, innovative, inspirational'. Access to and engagement with SI engenders a more holistic approach than traditional skills and knowledge, which are 'insufficiently robust to deal with adversity or innovation' (ibid). These claims have a particular interest when related to our observations in Chapter 7 about human behaviour in 'disorderly' environments, and the relationship between turbulence and the generation of radically new knowledge.

In Table 8.2 we outline key features of the three concepts: emotional intelligence, spiritual intelligence and practical judgement.

Features of emotional intelligence	Features of spiritual intelligence	Features of practical judgement
(Knowing and understanding one's own emotions and being able to read, understand and deal effectively with those of others)	(A deep intuitive sense of meaning, enabling a holistic approach to adversity and innovation)	(Wisdom born of experience, expressed in a sensitive and ethical approach to applying knowledge in the particular situation)
Self-motivation – able to motivate oneself and persist in the face of frustrations	<i>Flexibility</i> – open to suggestion, surprise and change, able to cope with ambiguity	<i>Experience</i> – that shapes the individual's interpretation of unfamiliar situations and influences how he or she responds to and learns from them
<i>Self-control</i> – able to control impulse and delay gratification	Self-awareness – both reflective and self-confronting	<i>Character</i> – the personal, cognitive and affective qualities that the individual possesses and can bring to bear on situations
<i>Self-regulation</i> – able to regulate one's moods and keep them from swamping the ability to think	<i>Led by own vision</i> , values and sense of purpose	Alertness – the awareness possessed by the individual of the nature and significance of new pressures, challenges and scenarios. The degree of insight they have into the ways in which they are understood by and affect others
<i>Sensitivity</i> – able to empathise and to hope	Able to learn from adversity and turn bad experience into wisdom	<i>Flexibility</i> – sensitivity or attunement of behaviour, especially to others in a shared situation
Social skilfulness – able to recognise emotions in others and to handle relationships	Independence and willingness to take a stand on issues	
	Questioning – especially 'why'	
	Ability to reframe situations – new perspectives, creative alternatives	
	<i>Spontaneity</i> – aliveness to the moment	
	Holistic approach and welcoming of diversity	

Table 8.2 Emotional intelligence, spiritual intelligence and practical judgement

Source: Based on Goleman, 1998; Zohar and Drake, 2000; Harrison and Smith, 2001

As Table 8.2 implies, the concept of practical judgement differs in much of its detail and in its fundamental thrust from both emotional and spiritual intelligence. Whereas EI and SI are essentially inwardly focused, concerned with how the individual uses emotional and spiritual intelligence to deal effectively with their environment in order that they can make progress within it, practical judgement is about what the individual contributes to their community in order that they can help members to move forward together. It involves a unique ethical dimension and a concern with the personal well-being of others. We return in Chapter 11 to the kinds of ethical issues that can emerge in organisations that aspire to be knowledge-productive.

Reflection

- What do you see to be the main issues that have been raised in this section about knowledge productivity? Which can you relate to your own organisational experience, and what insights can you develop from doing so?
- Why is practical judgement so essential a part of the individual's personal skilfulness in learning and knowledge processes? How do you think people can be helped to acquire this 'wisdom' in the workplace?

THE CORPORATE CURRICULUM FRAMEWORK

The concept of the corporate curriculum

The 'corporate curriculum' is a construct that refers to an organisational plan for learning (Kessels, 1996). It is not a formal educational or training curriculum. Rather, it involves transforming the daily workplace into an environment where learning and working can be effectively integrated. It facilitates the creation of a rich and diverse landscape that encourages and supports employees in the learning they need to do in order to continuously adapt and to innovate. It draws on the by no means new idea that the learning going on at and around the workplace every day is more consistently powerful in its influence on the learners and in its end products than the learning that occurs in formal courses, sessions and programmes.

Of course, there are limitations to workplaces as learning environments. Some cultures informally encourage the kinds of learning, especially dispositional, that do not support the overall purpose of the organisation. In some, there is not the necessary coaching, mentoring, counselling and expert help that may be needed to aid entry into, and integration within, a workplace community of practice (Wenger and Snyder, 2000). Some knowledge may be particularly difficult for some groups or individuals to understand, absorb, develop or utilise. The learning environment may also raise divisive cultural, philosophical, political, gender and ethical issues (Garrick: 1999: 228–9) – a dimension that we explore in Chapter 11. Some communities may use the very strength of their unique identities to hoard rather than share or build knowledge. The Multicorp case in Chapter 7 gave examples of such behaviour.

As we also saw in the Multicorp case, other negative aspects may be embedded in the management actions or performance management process of an organisation. Increased pressure to perform to demanding targets of time and cost, especially when allied to incentive payments, can lead people to cut corners and bend regulations. A hierarchy of managers who take credit for successes and blame failures on others does not promote a creative and co-operative learning culture. It teaches quite different

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lessons, so that employees learn to excel in mediocrity, to withdraw when the tension rises and to cover themselves in order to avoid blame. These lessons achieve an impact that cannot be reversed by a two- or three-day training course, or even by a much longer 'culture change' programme. They draw attention to the significance of that concept of practical judgement that we discussed in the previous section.

The eight pillars of learning

On the basis of the notions of knowledge and learning in a knowledge economy that we have developed in this and the previous two chapters, we conclude that the learning environment of the truly knowledge-productive organisation embodies eight inter-related learning functions, forming the 'pillars' of that organisation's corporate curriculum. They are described in Table 8.3.

Table 8.3The eight learning pillars of the corporate curriculum

- 1. *acquiring subject matter expertise* and professional knowledge directly related to the organisation's core competencies; e.g. a bank's financial services or the care provided by a hospital.
- 2. *learning to identify and deal with new problems* on the basis of the acquired subject matter expertise; e.g. switching to a new tax system or introducing customer-oriented patient care.
- 3. *cultivating reflective skills and meta-cognitions* to find ways to locate, acquire and apply new knowledge. How do we learn from our experiences? How can we improve our ability to develop, share and utilise knowledge in the workplace, and help others to do so?
- 4. *acquiring communicative and social skills* that help us access the knowledge network of others, participate in communities of practice and make learning situated in the workplace more attractive and socially inclusive.
- 5. acquiring skills to regulate motivation, affinities, emotions and affections concerning working and learning. People are only smart if they want to be. You cannot be made smart against your will. It is important for knowledge-productive employees to identify personal skills that they need to develop when learning in the workplace and to have confidence and encouragement to develop them.
- 6. *promoting calm and stability* to enable exploration, coherence, synergy and integration, and continuous improvement of products, services and processes. Employees should receive the opportunity to master and elaborate a plan, idea or operating procedure. Of course there must be balance here. Too much calm and stability might bring about overly one-sided specialisation and an excessive internal focus, complacency or laziness.
- 7. stimulating and steering creative turmoil, which can lead to radical innovation. Creative turmoil also results from a powerful drive to resolve a tricky question. The cause is often an existential threat: a matter of winning or losing, surviving or going under, being in or out of the game. Again a warning note: not all turmoil is creative. Disturbance alone, without the drive to innovate, can be counterproductive. Turmoil may become so creative that it yields a thousand new ideas but leaves little opportunity to elaborate any of them. There is clearly a potential conflict between the learning functions of *calm and stability* and *creative turmoil*, and much thought at the practical level is needed to achieve the necessary balance between the two.
- 8. *developing and applying practical judgement* in order to ensure sensitivity, flexibility and attunement to the needs of the situation, and of those involved in it. Practical judgement, or wisdom, can only be developed through a continuous interplay between experience, feelings and cognitions, reflected on as they relate to a specific context. It is an individual quality, used for the benefit of the learning community and as such is one of the most difficult aspects of the corporate curriculum to describe or to achieve. Perversely, we can most easily understand it when we look at those situations in which it has clearly been absent.

Reflection

- Consider your own work environment, or that in any organisation in which you have a special interest.
- How far does it support, or hinder, the eight pillars of learning described in Table 8.3?

Integrating 'calm' and 'turmoil'

Two pillars of the corporate curriculum stand out as in apparent opposition to one another: promoting calm and stability, and stimulating and steering creative turmoil. In Chapter 3, in our discussion of 'organising for knowledge creation', we observed the ways in which current learning can inhibit the development of new knowledge. In Chapter 7 we suggested that a degree of 'disorder' can, in certain scenarios, act as the catalyst for new knowledge to emerge. Von Krogh et al. (1994) distinguished between an organisation's need to survive (maintain its position in its current environment) and its need to advance (forge ahead in an emerging new environment). As an organisation has to contend with increasingly turbulent conditions that involve radical change in its environment, its need to advance instead of 'sticking to the knitting' also increases, and with it the need to generate quite new knowledge.

Many writers have identified the different learning processes that are at issue here (Argyris and Schon, 1978; Hedberg, 1981; Ansoff and Sullivan, 1993; Argyris, 1996). In Chapter 5 (Table 5.1) we introduced a typology produced by Guile and Young (1999), building on that of Engestrom (1995). Walz and Bertels (1995) observed that gradual improvement (involving adaptive learning) elaborates on what is already present and leads to additional refinement and specialisation. Radical innovation (involving investigative and reflexive learning) involves breaking with the past and creating new opportunities by deviating from tradition. Gradual improvement benefits from conditions of relative stability and the time to reflect on what is needed in order to improve current operations and processes. Radical innovation is more likely to flow from the creative turmoil that is one of the corporate curriculum's eight pillars of learning (Table 8.3).

A need for radical innovation can raise major organising and human resource problems. Some employees thrive on *creative turmoil* but in others it can induce high stress levels. In order to decide how best to reconcile the learning functions of *calm and* stability and creative turmoil in the corporate curriculum construct, there must therefore be an analysis of organisational environment and context, of the balance of needs that these suggest for adaptive and reflexive learning, and of the dispositions and competence of employees related to those learning needs.

There are critical implications here for the organising process discussed in Chapter 3, and for human resource policies to do with selection, deployment, development and rewards. There are no easy answers to the question of how to balance the need for stability with the need for 'disorder' in organisations for which regular and often radical innovation in goods, products, services and processes is a vital task. However, as the case studies and research outlined in the concluding part of Chapter 7 demonstrate, in an organisation seeking to be knowledge-productive the thrust should not be to manipulate and condition employees. That would be a return to the notions of the organisation as machine and of knowledge as control. Rather it should be to build and sustain an organisational community that values the potential offered by diversity, encouraging people in their communities of practice to apply the knowledge that they

Case example 8.2

The Corporate Curriculum of Rabobank

Rabobank, one of the largest banks in the Netherlands, has adopted the term 'Corporate Curriculum' and used it to describe 'the documents containing the principles on learning and development in Rabobank and the available learning interventions and career opportunities for specific groups of employees' (Reumkens and Snijders, 2002: 30–1).

The Rabobank Corporate Curriculum also incorporates the central values of the bank in terms of integrity, respect, professionalism and sustainability.

The need for developing a corporate curriculum is based on internal and external developments that impact on the work in the bank:

- the importance of creative capabilities and entrepreneurship of employees
- the replacement of the dominance of hierarchical modes of interaction by alliances, partnerships and network relationships
- network activities that require the capabilities of connecting, collaboration and sharing of information
- managers who adopt coaching, mentoring and facilitation approaches
- increasingly results-oriented management, performance appraisal, feedback and coaching.

The foundations of knowledge productivity and the elements of the corporate curriculum have been adopted to support these developments. Rabobank has chosen four main organising principles for their corporate curriculum:

- combining subject matter expertise and problem solving
- developing reflective and social-communicative skills
- building personal motivation
- building an effective balance between 'creative turmoil' and 'peace and stability'.

These organising principles are leading to the development of new learning services, products, activities and events to build the capacity for improvement and innovation. The learning interventions take place in classes of the Rabobank Academy as well as in the day to day work environment.

The content of the corporate curriculum comprises a clear vision on learning and development within the Rabobank, an overview of collective and individual learning interventions for about 4,000 senior staff members, diagnostic instruments, and instruments to help evaluation and transfer of learning investments.

Source: Adapted with permission from Reumkens, R. and Snijders, I. (2002) 'Het Rabobank Corporate Curriculum' [The Rabobank Corporate Curriculum]. *Opleiding en Ontwikkeling*, Vol. 15, 4: 30–3

possess to shared tasks of continuous improvement and of innovation. Case example 8.2 shows what one organisation in the Netherlands is starting to do in order to achieve this.

At this point we have provided an assignment in Appendix 1 that you might like to tackle.

ISSUES FOR HRD PRACTITIONERS

Applying the corporate curriculum construct

The corporate curriculum construct suggests a number of important principles to guide HRD professionals and others engaged in the task of creating and sustaining knowledge-productive organisations:

In the knowledge-productive organisation it is essential to develop every individual's skilfulness in learning and knowledge processes.

The knowledge that is increasingly important for an organisation comes from the exercise of individual and team competence to introduce gradual improvements and radical innovations, both in technological areas and in the ways work is organised and people participate in collaborative arrangements as well as in work-place communities of practice. Because all employees work in such communities, all directly influence the knowledge process, with either positive or negative outcomes for the organisation.

- Learning environments should respond positively to diversity in individuals' involvement in learning and knowledge development. Because knowledge emerges significantly from the exercise of personal qualities that relate to learning and knowledge processes, every individual has to develop knowledge in their own way. The individual knowledge process cannot be imparted by others, but it can be helped, encouraged and stimulated by a conducive workplace environment. That process cannot be imposed by management, nor can it be scientifically planned or evaluated. Some find the pleasure they experience from working together and being part of a community are important reasons to pursue a collective ambition. For them, the social context is one of the main attractions to getting involved in workplace learning. Others derive their zeal for learning from a specific personal interest - perhaps their drive to solve a problem, their passion for a discipline, their identification and pursuit of a personal life theme, expression of a special talent and enjoyment of an exceptional achievement. In such cases, it is the content of the particular learning situation that is the driving force.
- A reduction in emphasis on knowledge as a type of commodity should lead to a reduced preoccupation with designing and distributing uniform instructional content. Content that is irrelevant to the social context in which employees interact, or that fails to provide the opportunity for them to discuss and find solutions to substantive questions, produces negative pressures and spoils the desire to learn. Even imaginatively designed and delivered instructional material relating to the acquisition of national qualifications, or tailored to suit the organisation's vision, mission and strategy, may not achieve the active involvement of its intended audience. Concentration and the retention of learning will suffer unless the process of learning is appealing and involving for the individual learner.
- HRD activity should place a major focus on the effective combination of learning and working.

Rather than a preoccupation with prescribing instructional content and a heavy reliance on planning and delivering formalised learning events, HRD practitioners should seek ways of promoting organisationally valuable learning within workplace communities of practice. They should also help and encourage various communities to come together regularly in order to strengthen horizontal linkages – sharing existing knowledge and generating new knowledge (Poell, 1998; Sprenger, 2000). New learning technology has an obvious facilitating function here.

HRD practitioners should identify ways in which practical judgement can be developed and supported in the workplace.

In the knowledge-productive workplace the exercise of practical judgement is a vital pillar of learning, manifesting itself in the personal skilfulness, sensitivity and wisdom that individuals apply to learning and knowledge processes. This

kind of wisdom is hard to define, and its roots cannot be fully known. However, by its nature it is likely to be aided by varied experience, and to be tested especially in situations that expose individuals and groups to new challenges and that encourage investigative and reflexive learning (Chapter 5, Table 5.1). The mentoring process is particularly helpful in the development in mentees of personal mastery. It is very relevant for organisations where inter-organisational collaboration is crucial, since it is a form of reflexive learning that emphasises trust, shared values and community of interest.

Practical judgement, and mentoring as a learning process, are both so intricately embedded in the socio-cognitive fabric of the particular organisation that they offer the potential to produce a uniquely 'thought-full' organisation. (Harrison and Smith, 2001)

Reflection

- How far, if at all, do HRD practices in your organisation build on people's diverse talents and interests to share and create knowledge in the workplace?
- What more might HRD practitioners do to encourage and support knowledge sharing and the creation of knowledge in that workplace?

The principles we have just outlined suggest that the tentative conclusions reached towards the end of Chapter 6 about new tasks for HRD practitioners now need to be expanded to encompass also:

- ensuring that the provision of formal training is not prioritised at the expense of the task of creating favourable conditions for knowledge-productive learning in the workplace
- producing and promoting HRD processes and initiatives to build the eight pillars of the corporate curriculum
- ensuring an inclusive learning and development system that builds on diversity in the workplace
- finding practical ways of developing a self-managing approach to knowledge sharing and to knowledge creation, utilising the support and involvement of a variety of social, occupational and professional networks to achieve this
- incorporating in training, learning and developmental processes opportunities for individuals to explore and invest in their personal domains of interest and in activity that they find personally meaningful while also having organisational relevance.

In the following three chapters we explore various issues that cast more light on these tasks. As the conclusion to this chapter, we summarise some of the work being done at Shell (Case example 8.3), one of the major companies that is promoting an inclusive development strategy to achieve collective learning, leadership capability and building commitment through respect for diversity.

Case example 8.3

The Shell Learning Initiative

The aim of the Royal Dutch/Shell Group is to meet the energy needs of society, in ways that are economically, socially and environmentally viable, now and in the future. The Group does this in a wide variety of ways. It is a supplier of fuel and lubrication products, and also explores on land and sea to find and produce oil. It has operations world-wide exploring for and producing gas and it markets gas and power internationally, to consumers and businesses alike. Its chemical products find their way into all sorts of commercial and domestic use, from mobile phones to furniture, and it has rapidly growing businesses in several of the 'new energy' sectors including hydrogen, solar, geothermal and wind energy.

Shell operates in over 135 countries, employing more than 90,000 people. All of its companies are judged on how they act, by reference to Shell's universal core values of honesty, integrity and respect for people. They strive to promote trust, openness, teamwork and professionalism.

One of the Group's major initiatives to achieve and to improve professionalism, collective learning, leadership capability and commitment is Shell Learning, launched on 1 July, 2002. After many years of a decentralised HRD policy, this constitutes a new global strategy on learning whose purpose is: 'building for tomorrow by developing the people of today'. The founding principles of Shell Learning are to:

- create an environment conducive to learning, where learning activities are accepted as a stimulating and integral part of working life
- seek to identify and action systemic issues in Shell which impact learning
- look for and utilise Group-wide synergies where possible while giving equal weight to the benefits of local solutions and delivery

seek to bring in external learning practices as challenges to Shell thinking and be at the forefront of learning developments where that leads to competitive business advantage.

Shell Learning is a discrete unit within the global Shell People Services organisation, utilising the infrastructure and support it provides. It comprises four practices:

- The Leadership Development Practice is responsible for the global delivery of a range of products and services which support the assessment and development of leaders at key leadership transition levels, based on the Shell Leadership Competency Framework.
- The Personal and Business Skills Practice provides a portfolio of products, consultancy and event management services to assure development of personal adaptability and transferable business skills.
- The Business Improvement Practice contributes towards enhanced operational performance and growth of the Group by helping to drive its strategic change agenda. This is aligned with the development of people within the Group to ensure that the gains made are sustainable. BIP operates through strategic interventions, applying a portfolio of products and tools in conjunction with the businesses, and working on issues that are on the agenda of their senior leadership.
- The Organisation Development Practice focuses on delivering long-term solutions to align the 'whole system': strategy, work, organisation, systems, people and leadership. This unit specialises in developing relationships with senior level management to influence thinking and decision-making.

The authors and publishers thank Shell for permission to use this case

At this point we have produced a second assignment related to this chapter (see Appendix 1), which you may wish to tackle. Before you do so, you may find the following reflection helpful.

Reflection

- How do the eight learning features of the corporate curriculum construct help to ensure a knowledge-productive workplace?
- What issues, themes or observations in this chapter do you see to be of particular relevance to your own organisation, and why?

CONCLUSION

In this chapter we have sought to relate the knowledge productivity concept to notions of knowledge explored in Chapter 7, and have proposed a practical framework - the corporate curriculum - whereby to promote and sustain a knowledge-productive organisation. The construct rests on eight pillars or features of learning. It relates positively to the relational notion of knowledge described in Chapter 7, and negatively to the notion of knowledge as control. It is focused on building and sustaining collaborative communities of practice, and relies significantly on the exercise of practical judgement, or wisdom, to ensure respect for all value systems and to build trust that will promote knowledge productivity across the organisational community.

These requirements call into question the traditional command-control paradigm of management, and with it some widely accepted notions of knowledge management. A growing body of analysis and of empirical research suggests that knowledgeproductive organisations thrive on 'emancipated' learners who participate in relatively self-controlled workplace communities of practice. In Chapters 8 and 9 we examine how that may be possible to achieve, and its implications for management and leadership in the organisation.

It has by now become clear that in addition to challenges for the HRD function that we identified in Chapter 6, there are demanding roles and tasks for HRD practitioners who are involved in promoting a corporate curriculum to stimulate knowledge productivity. We explore these in the following three chapters before reaching our conclusions on them in Chapter 12.