Chapter 4
Individual-Level Learning

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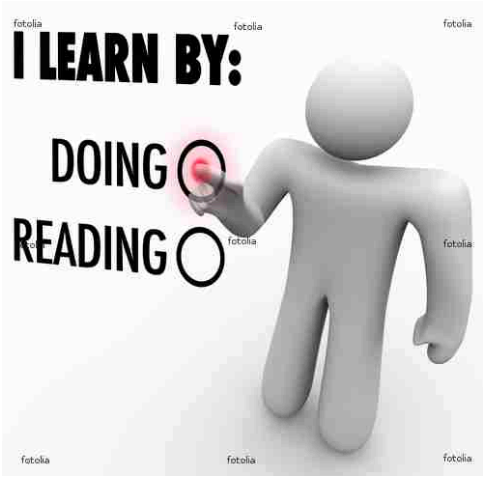

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Caption: How do you learn?

[A] Learning Outcomes

By the end of this chapter you should be able to:

- Explain learning and the different types of learning
- Recognise how learning is affected by human and dispositional factors and identify the barriers to effective learning
- Demonstrate an understanding of learning theories and how adults learn
- Describe the steps in the learning process and explain what is meant by experiential learning
- Outline the various types of learning styles
- Appreciate the growing importance of e-learning and how individuals engaging in e-learning might be supported

[A] Introduction

Have you ever wondered how you gained some new piece of knowledge or how you learned a new skill? This chapter provides an introduction to the complex topic of how individuals learn. The chapter begins with an explanation of what we mean by 'learning' and explains

the different types of learning, formal and informal. An overview of the **human and dispositional factors** influencing learning is provided, along with the main barriers to learning that individuals sometimes encounter [**KEY TERM:** individual traits or attributes, e.g. personality]. A range of learning theories are introduced, including adult learning. The chapter also introduces you to the important concept of experiential learning. An explanation of the different steps in the learning process is provided, along with an overview of the learning styles that learners may display. The chapter concludes with a discussion on e-learning, its benefits and the kinds of support individuals need while engaging in this kind of learning.

[A] Learning – what is it and how does it occur?

To facilitate effective HRD, it is essential to understand learning and how it occurs. Learning is a voluntary, natural and lifelong process engaged in by all individuals. Hoekstra *et al*. (2007: 190) define learning as 'being consciously or unconsciously involved in activities that lead to a change in behaviour and/or cognition'. It involves the acquisition and development of behaviours and memories, including skills, knowledge and understanding [**MAKING LINKS:** See Chapter 1]. Learning could be considered the overall aim of education. In the 70/20/10 model developed by Lombardo and Eichinger (1996), it is suggested that 70 percent of what we learn comes from experience, 20 percent comes from social learning and 10 percent comes from reading and taking courses. Learning is a relatively abstract concept, it is complex and cannot be observed directly. In determining whether learning has taken place, we can observe changes in an individual's behaviour and we can infer that learning has taken place where such changes are evident. For example, after a training session, a hotel receptionist is able to accurately and efficiently check-in a guest for an overnight stay and has, therefore, demonstrated that he/she has learned the hotel's check-in procedure. Honey and Mumford (1992) suggest that learning has taken place when an individual has gained knowledge that they did not previously have and is able to demonstrate this, and where an individual is able to do something they were unable to do previously.

Learning is an active process. It would be a mistake for HRD practitioners and trainers to assume that an individual learned something just because they sat in a classroom when a

trainer presented information or 'content' and when they participated in a learning situation in some way. Equally, HRD practitioners and trainers cannot assume that individuals know how to apply what they have learned in a work setting. For individuals to learn effectively, they must be actively involved during the learning process itself, for example, by engaging in discussions and class activities. After the learning activity, the individual applies that learning to a task or set of tasks that will ultimately change their behavior and improve their performance at work. Therefore, learning must be an active process, emotionally and intellectually, and the design and delivery of learning activities should reflect this important principle (see Prince, 2004) [**MAKING LINKS:** See Chapter 7 and Chapter 8]. As suggested by Payne and Whittaker (2006: 11):

> Learning to learn requires an ability and willingness on your part to assume responsibility for directing and controlling the learning process. Active involvement in the learning process is empowering and engenders curiosity, enthusiasm and a thirst or desire for knowledge.

Learning is based on experience. It is an individual process and, while the instructor or trainer can help to facilitate and support learning through careful HRD design, learning can only be undertaken by the individual themselves. An individual's knowledge and skills are based on experience. Previous experience conditions an individual to respond to some things and to ignore others. Even when engaging in the same learning activity, individuals react differently to that activity and may learn different things depending on their own individual needs. Learning is complex in that individuals approach learning activities and tasks with preconceived ideas and feelings. Yet, for many individuals, these ideas may change as a result of experience. For example, you might begin preparation for your first year university examinations by reading your class notes and textbook. However, over time, you have gained some experience of sitting examinations in first year and have obtained some average grades. Based on this experience, you have come to realise that your examination preparation needs to include reflection on the application of the course concepts to real-life organisational situations so that you are in a better position to demonstrate your learning.

Learning situations may focus on the achievement of a particular learning objective or outcome, for example, the acquisition of verbal information, intellectual skills, motor skills, attitudes and cognitive strategies [**MAKING LINKS:** See Chapter 7]. However, while a learner is focused on achieving a particular learning outcome, for example, how to respond effectively to customer complaints, he/she may very well learn other things, such as how to improve customer service levels. Also, learners may develop particular attitudes (good or bad) as a result of a learning situation depending on what they experience during the learning situation itself. This is often referred to as incidental learning, yet it may have a significant impact on the entire development of the learner (see Conlon, 2004; Marsick *et al*., 2006).

In the past, the focus has tended to be on 'training' and '**training interventions'** [**KEY TERM:** any event that is undertaken specifically to promote learning]. However, in recent years, the focus of attention has been increasingly moving away from 'training' and training 'courses', towards a much greater focus on the development of learning capabillities and assisting individuals in learning how to learn. While this change in focus places different demands on the HRD function, it also creates the possibility for improved outcomes for individuals. It involves a more shared responsibility for learning on the part of employees and the organisation and requires individuals to take greater responsibility for their own learning [**MAKING LINKS:** See Chapter 1].

[A] Types of Learning – Formal and Informal

Before considering the characteristics of learning situations and 'how' individuals learn in practice, it is important to be familiar with the distinction between formal and informal learning (see Ainsworth and Eaton, 2010). **Formal learning** is what those of you undertaking a diploma, degree or master's programme may be most familiar with [**KEY TERM:** occurs in universities, colleges and training institutions and leads to formal, recognised qualifications]. Such learning is planned and gained in a structured learning environment, for example, in a classroom setting. Formal learning and training activities tend to be used to prepare individuals for a particular role or set of tasks, for example, studying to become an accountant. Despite the considerable focus sometimes placed on formal learning, Boustedt *et al.* (2011) note that most workplace learning occurs outside of formal HRD situations. Indeed, much of the learning that occurs in the workplace is considered **informal learning**

(see Livingstone, 2006) [**KEY TERM: '**informal learning is the unofficial, unscheduled, impromptu way people learn to do their jobs' (Cross, 2007: 15)]. Informal learning occurs regularly in the course of everyday life and at work (Ellström, 2011) and is an integral part of many of our everyday activities (Merriam *et al*., 2012). The development of knowledge and skills through informal learning occurs in a much more natural setting compared to formal learning and Zhang *et al.* (2010: 84) acknowledge that individuals:

> learn throughout their lives but much of this learning is hardly recognised because it happens informally without conscious awareness.

The growing importance of informal learning and the business world's increasing interest in this type of learning has been noted by Atwell (2007). However, as individuals, we rarely acknowledge that learning occurs in such a manner, yet, it is useful to recognise that informal learning is important for individuals and it is of considerable value for organisations when captured and disseminated in a systematic way [**MAKING LINKS:** See Chapter 5]. The benefits of informal learning include: retention of learning gained in informal settings is often better; it can facilitate formal learning; it involves greater flexibility in terms of when and where the learning is undertaken; and it can enhance the individual's motivation and sense of satisfaction (Boustedt *et al.,* 2011). Interest in informal learning has become even more apparent with the development of social media and collaborative learning type tools.

Three types of non-formal learning have been put forward by Eraut (2004) who prefers the term 'non-formal' rather than 'informal' learning. Table 4.1 provides an explanation of each type of non-formal learning and includes an example of each.

Table 4.1: Types of Non-Formal Learning

Implicit Learning	**Reactive Learning**	**Deliberative Learning**
Meaning: the unintentional learning that occurs,	*Meaning:* occurs in response to some event or activity	*Meaning:* occurs where time is purposefully set aside for

becomes a part of the learner's experience and is used sub-consciously over time. *Example:* Learning how to ride a bicycle.	(often during the event), but there is little time for reflection on this learning. *Example:* Richard works in a busy restaurant in Sydney. During Friday evening service, a customer complains that he has received the wrong order. Richard immediately correct the order, take a mental note to take more care in avoiding such errors, but does not have sufficient time to reflect on how this error occured.	reflection on events or actions. *Example:* The launch of a new product in the U.S. marketplace has failed. Michelle, as Marketing Manager for the company, takes some time to reflect on why this has occurred and how a similar failure could be avoided in the future.

[Beginning of boxed feature: Consider This....]

Think about the learning activities you have engaged in over the past few years. Describe the formal learning activities you have participated in. What kinds of informal learning have you engaged in? How might you continue to engage in informal learning activities after graduation? How might your employer encourage you to engage in informal learning?

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[A] Human and Dispositional Factors Influencing Learning

All learners are unique and the purpose of a particular learning situation may vary from one learner to another. The past learning experiences and backgrounds of individuals influence their readiness to learn and learners often see a learning situation from different perspectives. Learning is influenced by many factors, including those related specifically to the individual learner themselves (Buckley and Caple, 2009; Garavan *et al.*, 2003). These factors include: an individual's *age* – some of our abilities, physical and mental, deteriorate

with age along with our short-term memory and ability to process information; and the individual's *intelligence and ability* level – learners with lower ability levels often prefer to move from "concrete examples to general principles" (Buckley and Caple, 2009: 171), whereas individuals with higher ability prefer to work in the reverse. Indeed, the rate at which individuals learn varies from one person to the next. You may be familiar with the term, the 'learning curve', which is often used to illustrate the rate of learning. Furthermore, the individual's *background and emotional disposition* are also important factors that can help or hinder their learning. For example, their earlier experiences in school and their general anxieties around the learning process itself play a role. Individuals' *motivation* to learn and their *learning styles* are also important factors in enhancing the likelihood of a positive outcome from learning. An individual's *trainability* and their general *attitudes* and *personality* are also influencing factors on whether learning occurs or not (Werner and DeSimone, 2009). Trainability relates to an individual's 'readiness to learn' along with their motivation to learn and their general ability (Werner and DeSimone, 2009: 69).

[A] Barriers to Learning

We have already noted that learning is a natural process. Yet, despite this, individual learners can encounter a range of barriers that prevent learning in the workplace or that hinder its effectiveness (see Collin, 2010). Some of the factors that can act as barriers to learning have already been touched upon in the above section on the human and dispositional factors influencing learning. In general, the many barriers that relate to the individual learner might include: poor learning capabilities; lack of personal confidence; over-reliance on a particular type of learning style; a lack of inherent motivation or interest in learning; general anxiety and insecurity, perhaps, as a result of a previous learning and education experience; and the absence of clear or valued rewards for engaging in learning activities. In research conducted among HRM practitioners, Crouse *et al.* (2011) found a range of facilitators and inhibitors of workplace learning and these are summarised in Table 4.2 below. Should you have a particular interest in this area, the Crouse *et al*. reading provides a very useful summary of the body of literature available on the barriers and facilitators of workplace learning (see Table 2 and Table 3 in that reading). While many of the barriers to effective learning may stem from the individual learner themselves, others

relate to the organisation and it is, therefore, important that both types of barriers are adequately addressed and that ways of overcoming them are found [**MAKING LINKS:** See Chapter 5].

Table 4.2: Workplace Learning – Facilitators and Barriers

Facilitators	**Barriers**
• Collaboration and interaction: learning with and from others	• Resource limitations (e.g. lack of time, financial resources)
• Support from management and the organisation	• Accessibility constraints (e.g. geographic location of the learner)
• Resources (e.g. technology)	• Individual's high workload
• Personal atributes (e.g. individual learner's use of initiative, prioritisation, reflection, motivation, recognition of learning need)	• Personal barriers (e.g. lack of interest in learning)
• Job-related issues	• Insufficient technological infrastructure

Adapted from: Crouse *et al.* (2011)

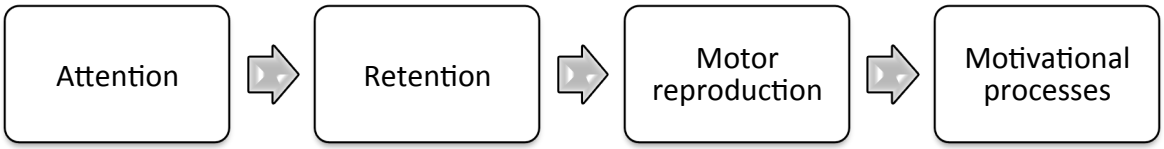
[A] Learning Theories

Learning theories have received much attention over the years [**KEY TERM:** explain how individuals learn]. These theories help us understand the complex process involved in learning. There are a wide range of learning theories and each relates to a different aspect of learning. Some learning theories consider *why* individuals learn, whereas others consider *how* individuals learn (Rogers and Horrocks, 2010). Indeed, many learning theories relate specifically to an individual's **motivation to learn** [**KEY TERM:** the reasons individuals engage in learning]. Two theories of learning are presented in this chapter – social learning theory and adult learning theory – along with four motivation theories that impact on motivation

to learn – reinforcement theory; goal theory; need theory and expectancy theory (see Noe, 2010).

Social learning theory: Based on the work of Andrew Bandura, social learning theory suggests that individuals learn by observing the behaviour of others, i.e. models, who are considered 'credible and knowledgeable' (Noe, 2010: 143). This theory recognises that individuals learn from, and with, others (Rogers and Horrocks, 2010). The theory acknowledges that behaviour that is rewarded by organisations will tend to be replicated by individuals observing this behaviour. The theory would suggest that learning involves four processes (see Figure 4.1):

Figure 4.1: Social Learning Theory Processes



Source: Adapted from Noe (2010)

Attention: The first step in the process calls for individuals to be attentive to the aspects of the model's behaviour that are considered important and those behaviours that the individual is expected to observe. This step also requires the individual to know who the model is and the individual must have the physical ability to observe the model.

Retention: To be effective, the learner must retain the knowledge and skills gained through observing the model and must find some means of coding and organising the skills and behaviours observed into memory.

Motor reproduction: This stage of the social learning process calls for the individual to put into practice the behaviours and skills learned by observing the model in an effort to see if he/she will receive the same reinforcement as that obtained by the model.

Motivational processes: If the observed behaviour is copied or applied by the individual and this leads to positive reinforcement and feedback from the organisation, then this behaviour is likely to be repeated.

Let's consider an example of social learning theory. Lucy has just starting working for a coffee house in her hometown of Barcelona. Her first few days are spent engaged in on-the-job training where she learns how to use the coffee machines and cash register and how to make the large range of specialist coffees available. During the training, her supervisor, i.e. the model in this instance, demonstrates how each task is performed. Lucy carefully observes and takes note of the diffferent steps involved in each task and then replicates the tasks herself under the watchful eye of her supervisor.

Adult learning theory: **Pedagogy** places great emphasis on the teacher having primary responsibility for, and control over, the learning content and classroom delivery [**KEY TERM:** the art of teaching children]. Children are generally seen as passive recipients of knowledge and they bring little experience to the classroom situation. Adult learning theory was developed in response to a need to understand how adults learn. **Andragogy** has been very much influenced by Malcolm Knowles (Smith, 2002) [**KEY TERM:** the art of helping adults to learn] (see Knowles *et al*. (2011) for a comprehensive overview of andragogy and adult learning theory). What we can be certain about is that "adults can be ordered into a classroom and prodded into seats, but they can't be forced to learn" (Zemke and Zemke, 1995: 41). The learning and motivation theories outlined in this chapter provide us with a basic set of learning principles that can be used to guide the design of HRD activities to meet the needs of adult learners. Table 4.3 below provides an overview of three important dimensions of adult learning: basic assumptions of adult learning; motivation to learn as a prerequisite for effective engagement in learning; and the implications of adult learning theory for the design of HRD interventions. While the table addresses some basic assumptions around adult learning, we should also appreciate that not every adult learns in exactly the same way. As highlighted by Newstrom and Lengnick-Hall (1991: 46):

…adult learners are a heterogeneous group requiring different approaches to training and development depending on individual differences across important characteristics.

Table 4.3: Adult Learning – Assumptions, Prerequisites and Guidelines

Basic Assumptions of Adult Learning
• *Objective:* Adults need to know why they are learning particular knowledge/skills. Learning is often sought out in response to a life-changing incident, e.g. promotion. • *Control:* Adults are self-directed. • *Background:* Adults bring past life, education and work experiences into the learning situation and these represent rich resources for learning. Past educational experiences may help or hinder future learning. • *Approach:* Adults adopt a problem-centred approach to learning and learn through experience, observation and interaction with others. • *Motivation:* Adults are motivated by intrinsic factors, e.g. self-esteem, personal satisfaction, and extrinsic factors, e.g. increased pay, promotion. • *Application:* The opportunity to apply knowledge and skills gained is important for learning retention purposes.
↓
Prerequisites – Motivated Learners
• *Basic Necessity:* For learning to take place, adults must be motivated to learn. We need to understand what motivates individuals to learn. Adults can be motivated to learn by appealing to their personal development or gain. • *Openness:* There is a window of opportunity for learning, beyond which adults will be less receptive to learning, e.g. on appointment to a new position. • *Increase Learner Involvement and Improve Motivation:* Learning should be viewed as an active process and motivation to learn can be increased, e.g. through involvement in the design of, and participation in, the learning activity.
↓
Guidelines for Adult Learning Design
• *Needs and Focus:* Learning activities should be problem-centred and be relevant to the

learners' needs and goals. HRD activities should be designed to facilitate adult learners' continued growth and changing values.

- *Level of Knowledge/Skill:* Pre-learning activity assessment of learners' knowledge/skill level is essential. The learning activity should be designed around the learners' entry-level knowledge/skills.
- *Information Integration:* Learners relate all new learning content to their existing knowledge and experience. Learning content should be designed to promote the integration of information presented during the HRD activity. There should be some overlap between the presentation of new information and information already known by learners. Such overlap promotes the integration and retention of knowledge and information.
- *Learning Activities:* Activities should be realistic, meaningful, interesting, challenging and allow for reflection on the part of learners.
- *Learning Styles:* The design of HRD activities should account for adults' differing learning styles (we will return to this later in the chapter).
- *Application of Learning:* As learning is engaged in for a specific purpose, it is necessary to give consideration to the design of transfer of learning strategies and the provision of opportunities to put the learning gained into practice [**MAKING LINKS:** See Chapter 9]. Individuals need to commit the content of what they have learned to memory.
- *Feedback, Support and Learning Climate:* These are important elements for effective learning to occur. Learners need to be aware of what learning outcomes they should be striving to achieve, how well they are doing on achieving these outcomes and be supported along the way in a conducive learning culture and climate.

Source: Based on ideas presented by Brookfield (1986), Knowles *et al*. (2011), Rogers and Horrocks (2010) and Zemke and Zemke (1995)

Having outlined two learning theories, we now turn our attention to the four theories of motivation outlined by Noe (2010) that impact on motivation to learn.

Reinforcement theory: This theory suggests that the past behaviours of individuals and the outcomes of these behaviours will serve to motivate individuals to either adopt or avoid

certain types of behaviours. A pleasant or satisfying outcome resulting from past behaviour is referred to as *positive reinforcement.* For example, an organisation receives positive feedback from a client about a customer service agent's level of efficiency and customer orientation which is acknowledged during the agent's performance appraisal. The removal of an unpleasant behaviour outcome is referred to as negative reinforcement. For example, an organisation receives feedback from a client in relation to the failure of a particular customer service agent to meet the 24-hour response time for dealing with sales queries. This feedback should be raised during the individual's performance appraisal review and while it may initially result in a poor review, the performance of the individual should improve as soon as the negative feedback is addressed. HRD practitioners need to understand the kinds of behaviours that individuals consider positive and negative and ensure a clear link between the acquisition of knowledge, skills and behaviour change and these particular outcomes.

Goal theory: Goal setting theory recognises that an individual's conscious goals influence their behaviour by focusing his/her efforts and attention over a period of time and by encouraging the individual to develop appropriate strategies to support the attainment of those goals. In attempting to achieve these goals, the theory recognises the importance of setting realistic and achievable goals. The commitment of the individual to the achievement of the goals is essential. Goal orientation influences the degree of effort individuals may exert during a learning situation or HRD activity. When we consider the goal orientation of individual learners, i.e. the goals learners hold in a HRD situation, two dimensions are important: learning orientation and performance orientation (see Noe, 2010). *Learning orientation* refers to the individual's attempts to improve their competence when performing a particular task. Individuals who possess such an orientation consider the success of a HRD activity in terms of how they have improved in their learning and the progress they have made regarding this learning, i.e. the focus tends to be on their learning, rather than on their performance as a result of the learning. Learning orientated individuals see mistakes as part of the process of learning. *Performance orientation* refers to individuals engaged in learning who focus on the performance of a task or activity and how their performance might compare to others. Individuals demonstrating this latter orientation define success in terms of their performance relative to others and they see

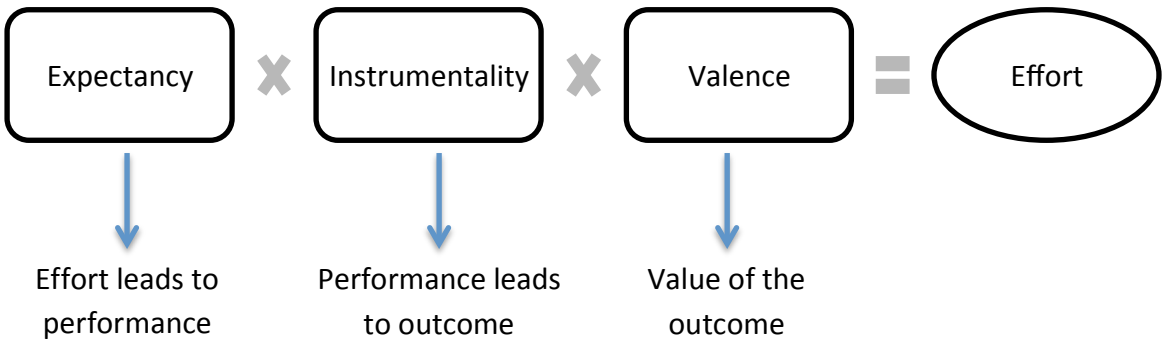
mistakes as a source of worry, rather than a possible source of learning. For example, university students will often judge their own performance in their studies and learning activities relative to their friends and how their overall Diploma/Degree honours grade compares to their classmates.

Need theory: Readers of this textbook may already be familiar with the various needs theories from other modules undertaken in the field of organisational behaviour, e.g. Maslow and Alderfer's needs theories. Both Maslow and Alderfer argue that individuals will attempt to satisfy their lower-order needs first, e.g. physiological and safety needs, before they begin to focus on the achievement of higher-order needs, e.g. esteem and self-actualisation. These theories suggest that individuals are unlikely to learn where lower-order needs have not been fulfilled. In the context of HRD, need theories suggest that to motivate learning, HRD practitioners should identify the learning needs of individuals and ensure they are aware of how the content of the HRD or learning activity will assist them in meeting these needs. For example, a newly appointed team leader who is attending a management and supervisory skills training programme should be made aware of how this training will facilitate them in developing the various people management skills needed to successfully manage the sales team he/she is responsible for. As we will see later in this chapter, individuals learn in different ways and may seek out particular types of learning activities to meet their needs. It is, therefore, important for organisations to provide a range of learning programmes to meet the varying needs of individuals [**MAKING LINKS:** See Chapter 8].

Expectancy theory: This theory suggests that three particular factors influence an individual's behaviour: expectancy, instrumentality and valence. *Expectancy* relates to the belief or understanding that exhibiting certain behaviours and performing well are related. In the context of HRD, we might ask: does the individual have the learning 'know how' or ability to learn? *Instrumentality* is the expectation that performing a particular type of behaviour, for example, undertaking a Bachelor degree in Accountancy, will lead to a particular outcome, for example, obtaining a traineeship with an accountancy firm. In the context of HRD, we might ask: does the individual believe that the outcomes identified for a learning or development activity will be achieved? *Valence* relates to the actual value an

individual puts on a particular outcome. In the context of HRD, we might ask: are these learning outcomes valued by the individual? Individuals face various behavioural choices which they assess depending on their expectancy, instrumentality and valence. If we apply expectancy theory to HRD situations, we can say that learning is likely to occur where individuals are confident in the belief that they have the ability to learn the knowledge, skills or attitudes the HRD activity is designed to address (expectancy); this learning is related to certain outcomes, such as improved performance or enhanced rewards (instrumentality); and the individuals value these particular outcomes (valence). Figure 4.2 below provides an overview of the expectancy theory of motivation.

Figure 4.2: Expectancy Theory of Motivation



Source: Adapted from Noe (2010)

[Beginning of boxed feature: Consider This....]

Think about a module on your certificate, diploma or degree programme. How did the lecturer incorporate the features of adult learning theory into the design and delivery of the module? Could the lecturer incorporate any other adult learning principles into the module to enhance your learning? How did the approach taken by the lecturer differ from that taken by your primary school teachers?

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[A] Experiential Learning and the Learning Cycle

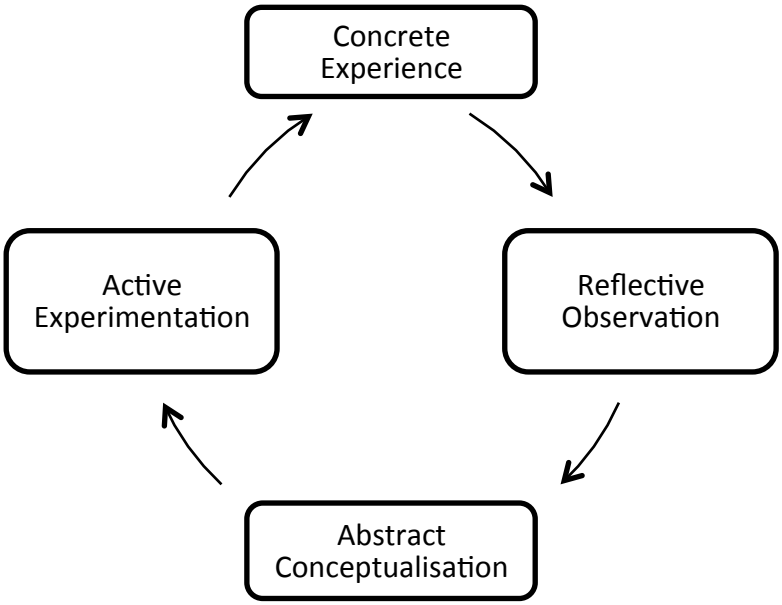
A key principle of learning is that individuals learn best through experience. The impetus for engaging in learning can be the result of a gap between an individual's past experience and

their current experience (Rogers and Horrocks, 2010). In other words, the knowledge and skills gained as a result of an individual's past experience may no longer meet the knowledge and skills needed now to cope with current role requirements and the kinds of experiences and Individual will engage in as part of this role. The concept of **experiential learning** was founded by writers, such as John Dewey, Jean Piaget and Kurt Lewin (Miettinen, 2000), and was further developed in the 1980s by David Kolb (see Kolb, 1984) [**KEY TERM:** learning through action and reflection]**.** Experiential learning theory (ELT) is based around a number of important principles (Kolb and Kolb, 2009):

- learning is best seen as a process, rather than a series of potential outcomes;
- learning involves the creation of knowledge on the part of the individual;
- learning involves 're-learning' in that the learning process should seek to explore learners underlying 'beliefs and ideas' and to consider the integration of these with new and more developed ideas;
- learning involves the whole person, i.e. 'thinking, feeling, perceiving and behaving' (p. 43); and
- learning occurs through the interaction between an individual and his/her environment.

Much of the focus in the context of experiential learning is on the learning process itself. Kolb's work in this area resulted in the development of a four-step 'learning cycle' (see Figure 4.3). This cycle should not be confused with the systematic HRD cycle discussed elsewhere in this textbook. He suggests that learning occurs in a step-by-step cycle and that individual learners should engage in all four steps in this cycle to become effective learners. Kolb argues that effective learning will occur where individuals display a degree of flexibility by adopting a learning approach that is appropriate in a given situation. Each step in the cycle does not make sense on its own and is not particularly useful if undertaken in isolation from the other steps. The learning cycle is just that – a cycle – the learner can begin at any one of the four steps and the process itself should be viewed as a continuous one.

Figure 4.3: Kolb's Learning Cycle



Source: Adapted from Kolb (1984)

The learning process very often begins with an individual undertaking a particular action or task and then seeing the effect of this particular action or task (concrete experience). Following the execution of the action, the individual would typically attempt to reflect on the resulting effects of the action and to determine if he/she could anticipate what might happen if the same action was taken again in the same circumstances (reflective observation). The third step involves the individual in trying to understand the general principle under which the particular instance falls and in generating new ideas and drawing conclusions from his/her previous actions (abstract conceptualisation). The last step in the learning cycle involves the application or testing of these new ideas through action in a new circumstance, i.e. we attempt to do things better or differently the next time around (active experimentation). Let's imagine you have been asked to make a presentation during your HRD class. You spend some time preparing the presentation and then make the presentation in class today (*concrete experience*). After finishing the presentation, you reflect on how it went and the feedback received from your lecturer and fellow classmates (*reflective observation*). You then give some thought to your experience of making this particular presentation, relate it to your previous presentations in college

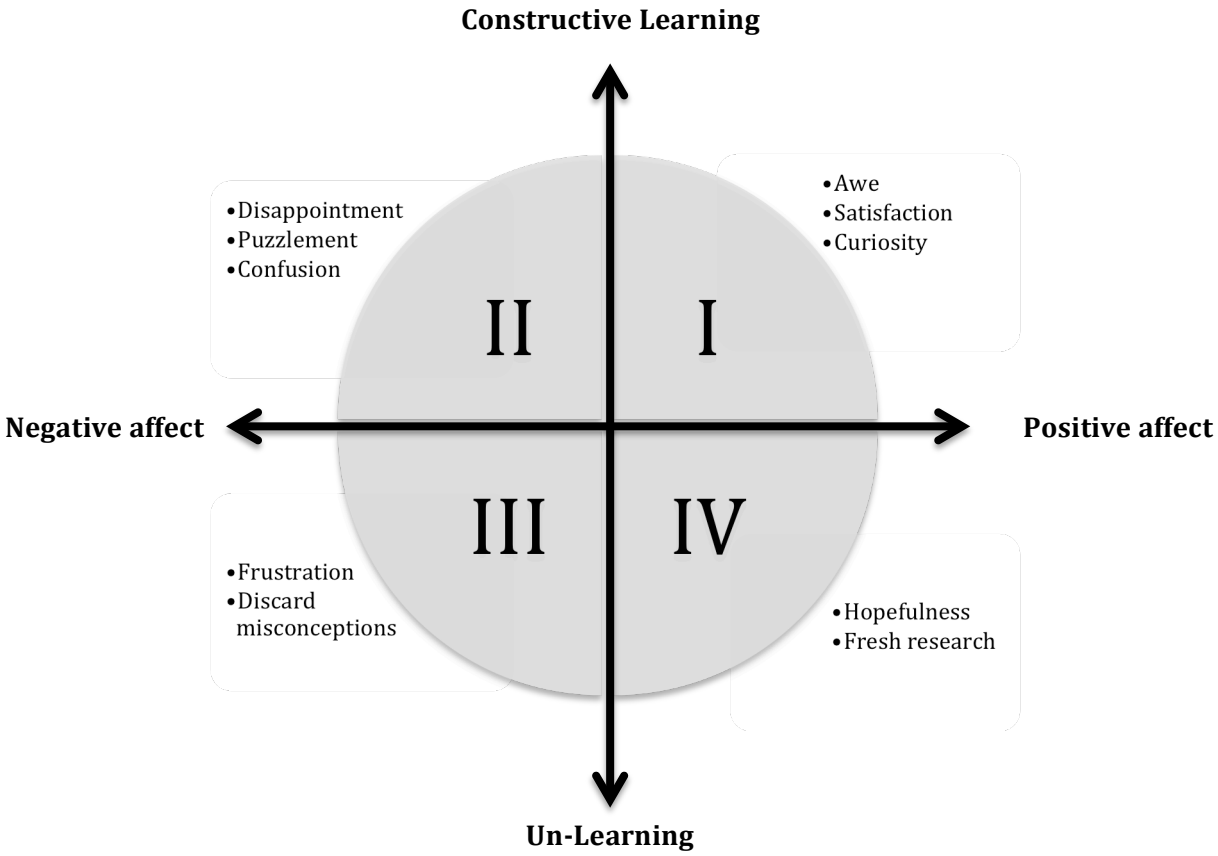
and consider any theories or knowledge on how to make an effective presentation (*abstract conceptualisation*). Finally, you consider how you might improve your presentation skills by trying out a different approach to the preparation and delivery of your next presentation (*active experimentation).*

Kolb's cycle highlights two particularly useful issues: the importance of incorporating real, concrete experiences into the learning process; and the value to be gained by individuals and organisations from allocating adequate time for learners to reflect on what has been learned and how this learning might be used to facilitate future behaviour change and performance improvement on the part of individuals. The cycle also highlights a number of implications for HRD practitioners to consider when delivering learning and development interventions, particularly, the need to identify learners who spend too much time on one particular step in the cycle and/or avoid spending time on others.

[A] Emotions and Learning

Kort *et al*. (2001) suggest the existence of a complex relationship between emotions and learning. They have developed a four-quadrant learning spiral model that incorporates a range of emotions that individuals may exhibit during learning (see Figure 4.4). Emotions are shown on the horizontal axis with positive, pleasurable outcomes on the right and negative, unpleasant outcomes on the left. Learning is shown on the vertical axis with the construction of learning at the top and un-learning at the bottom. The learner would preferably begin in either quadrant I where they are curious or very interested in a new area or topic and move through the material with ease or in quadrant II where they are motivated to reduce confusion or puzzlement on a particular topic. Either way, the learner is concerned with constructing knowledge. If they have failed to adequately resolve any puzzlement regarding with they are learning, the learner may move into quadrant III and may begin to feel frustrated. The learner amalgamates their knowledge and becomes aware of how their learning is progressing, i.e. what they know and don't know, and moves into quadrant IV where they develop fresh ideas and enthusiasm for learning which may push them back into quadrant I again where the spiral continues.

Figure 4.4: Kort's Learning Spiral Model



Source: Kort *et al* (2001)

[A] Learning Styles

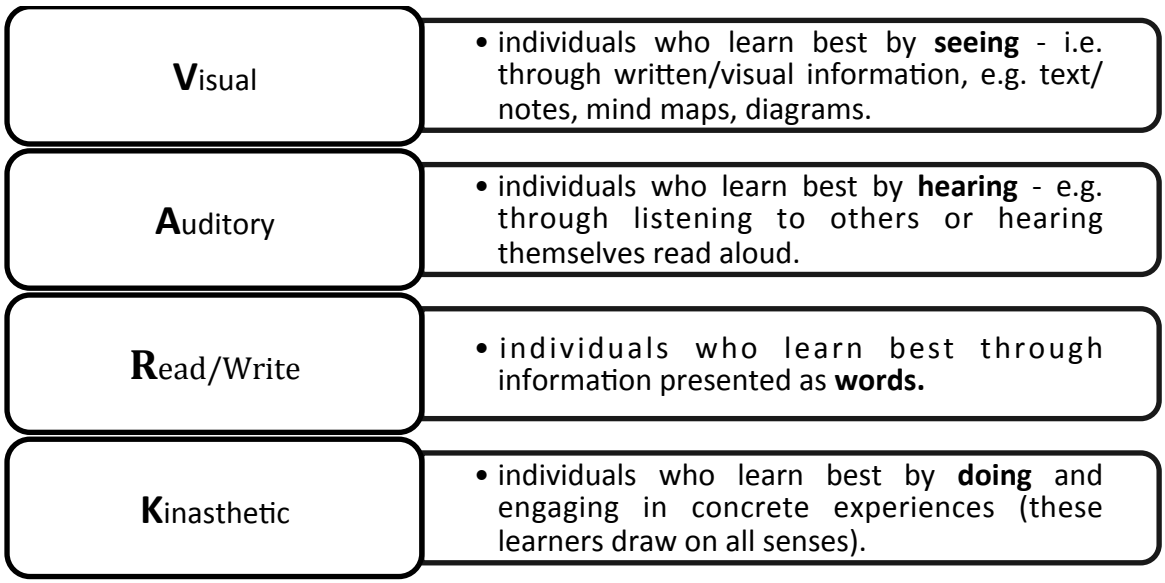
When we consider each of the learning theories presented in this chapter, there is a danger that we assume that all individuals learn in much the same way. Individuals may vary in their **learning styles** and preferences [**KEY TERM:** the methods and approaches individuals use during the learning process]. An understanding of learning styles is an important consideration when delivering HRD interventions and activities. As individuals, understanding our own learning style allows us to select learning opportunities and activities that best match our style and provide us with the chance to develop or improve other aspects of our learning approach (Torrington *et al.*, 2011). A large number of learning style frameworks exist and Coffield *et al*. (2004) reviewed thirteen such models, grouping them into families of learning styles and placing them on a continuum from fixed learning styles to those of a more flexible nature. While a discussion of each of these models is

beyond the scope of this chapter, three learning style frameworks will be presented here: the VARK sensory learning styles inventory (Fleming, 1995); Honey and Mumford's (1992) learning styles and Felder and Silverman's (1988) Learning Style Model.

VARK Sensory Learning Styles

We receive information through our various senses (e.g. through hearing, seeing, touching). Understanding how these senses contribute to learning is an important step in identifying how an individual learner might improve their learning process. Figure 4.5 provides an explanation of each of the VARK learning styles developed by Fleming (1995).

Figure 4.5: VARK Sensory Learning Styles



Source: Adapted from Fleming (1995)

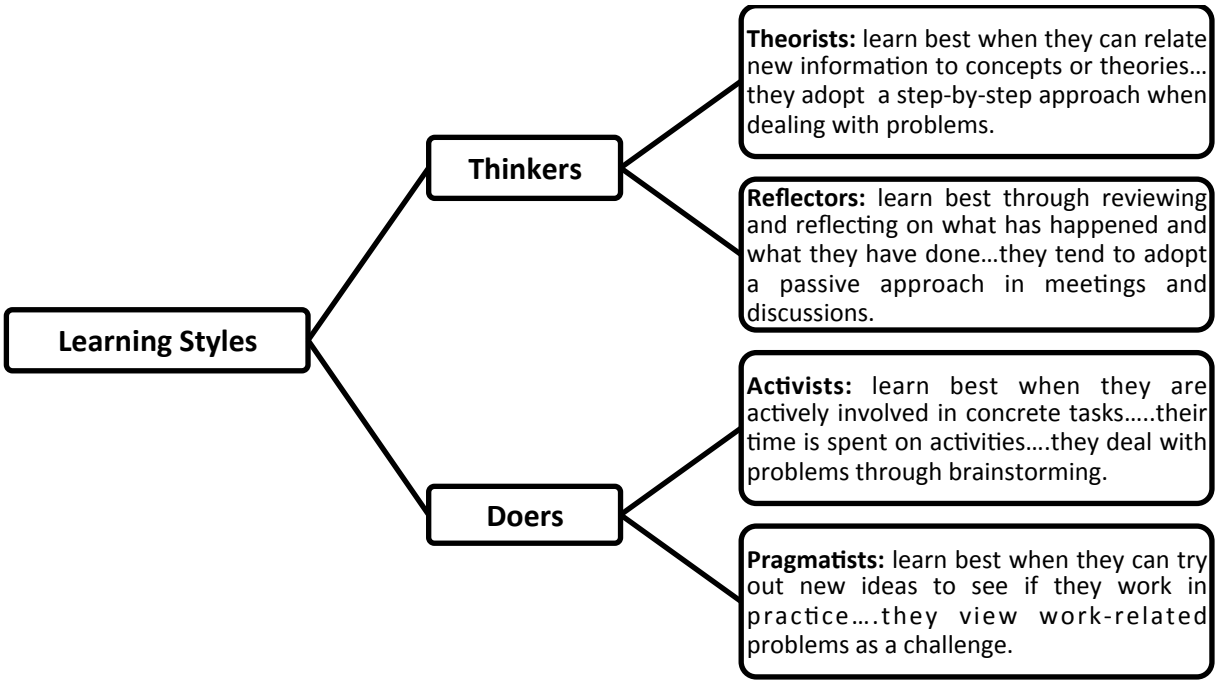
While a learner may have a preference for one particular sensory learning style, other styles should be explored also. Why not complete the VARK learning styles questionnaire online and see what kind of sensory learner you are (see http://www.vark-learn.com). Interestingly, Flanagan (1997) suggests that individual learners recall 20% of what they read; 30% of what they hear; 40% of what they see; 50% of what they say; 60% of what they do; and 90% of what they read, hear, see, say and do. Learning style preferences influence the kinds of day-to-day activities from which individuals learn best and this has important

implications for the design of HRD activities. Knowledge of an individual's learning style is very useful information as it allows us to begin to consider how HRD practitioners and trainers might design effective HRD activities to appeal to adults with different sensory learning styles [**MAKING LINKS:** see Chapter 8]. HRD practitioners should develop approaches that allow learners to fully draw upon their own style of learning (Rogers and Horrocks, 2010).

Honey and Mumford's Learning Styles

Another well recognised set of learning styles are those developed by Honey and Mumford (1992). They have identified four styles of learning that can broadly be categorised into two groups: 'thinkers' and 'doers'. Figure 4.6 provides an explanation of each group and the four styles evident across these groups. As you review these, you are encouraged to reflect on the learning style that you tend to exhibit most often.

Figure 4.6: Honey and Mumford's Learning Styles

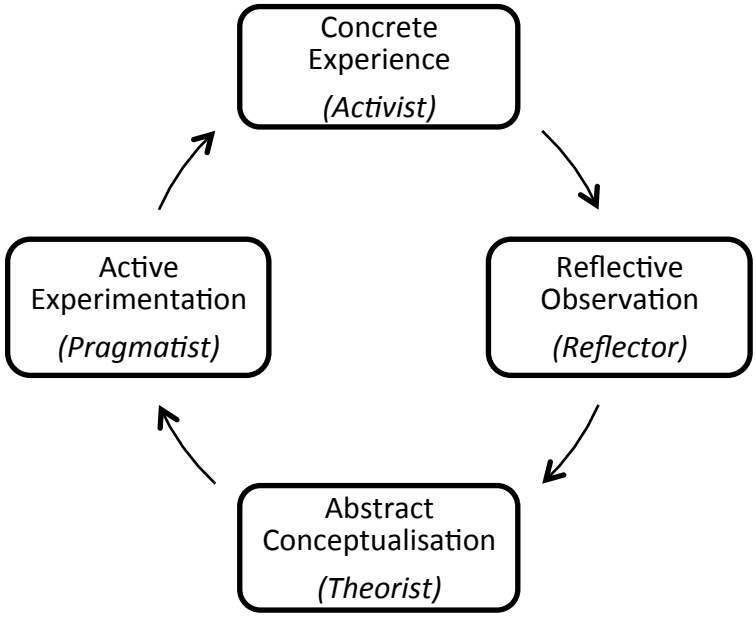


Source: Adapted from Mumford (1995)

Honey and Mumford (1992) suggest that individuals tend to have a preference for particular learning styles over others. Such preferences can lead to a distortion of the learning process as presented in Kolb's learning cycle so that greater emphasis is placed on some stages of the cycle to the detriment of others. Individuals who effectively learn from experience

possess and utilise all four learning styles. One of the aims of helping individuals to understand their learning is to facilitate them in reviewing their learning style so that they can begin to explore how they might become better equipped to work through all four stages of the learning cycle. Honey and Mumford suggest that 'no single style has an overwhelming advantage over any other. Each has strengths and weaknesses but the strengths may be especially important in one situation, but not in another instance' (2006: 43). Figure 4.7 illustrates how Honey and Mumford's learning styles relate to each of the four stages in Kolb's learning cycle.

Figure 4.7: Kolb's Learning Cycle & Honey and Mumford's Learning Styles



Think about your own studies and how you might display one or more of the four learning styles. If you were a *theorist*, one might expect that you would prefer to understand the theories and concepts you are learning. In so doing, you would likely set out to understand the theory and to gather information and facts that would facilitate this understanding. For example, if you were studying the topic of e-learning, you might set out to carefully read your class notes and textbook and you might then gather some additional information available on the topic through sources such as the Chartered Institute of Personnel and Development or other academic journals and readings. If you were a *reflector*, you may not participate in class discussions on e-learning. Instead, you might attempt to internalise and

reflect on the key elements of that topic and to make sense of the topic for yourself in your own time. If you were an *activist*, you would engage in activities during your studies that would allow you to learn by doing. For example, you might engage in discussions, brainstorming and problem-solving exercises on e-learning with your classmates. If you were a *pragmatist*, you might think about how to apply what you have learned about e-learning to a real situation. For example, if university decided to offer your Diploma/Degree programme of studies in an online/e-learning format from next year, how might you apply what you have learned regarding the various e-learning design considerations to be taken into consideration when re-designing this programme.

Felder-Silverman's Learning Style Model

According to the Felder and Silverman (1988) model of learning styles, individuals display strong, moderate or mild learning preferences along four continua:

- *active* (individuals learn by doing things and by working with others) or *reflective* (individuals learn by thinking about things and prefer working on their own);
- *sensing* (individuals prefer facts and procedures and are concrete thinkers) or *intuitive* (individuals prefer theories and are abstract thinkers);
- *visual* (individuals prefer visual illustrations of material, such as diagrams and pictures) or *verbal* (individuals prefer the spoken and written word);
- *sequential* (individuals learn in small incremental steps and in a linear manner) or *global* (individuals learn in large steps and engage in a holistic thinking process).

Having considered the human and dispositional factors that influence learning and also the above models of learning styles, it is important to consider some other issues that may have an influence on learning style. We might expect that the 'cultural conditioning' individuals experience through the education system they have participated in will have an influence in moulding their preferences for certain learning styles (De Vita, 2001: 167). Research conducted by Joy and Kolb (2009: 83) highlights a number of variables, including culture, that impact on learning style. They suggest that culture influences an individual's preferences for 'abstract conceptualisation versus concrete experience', but only marginally influences an individual's preferences for 'active experimentation and reflective

observation'. Joy and Kolb's findings also suggest that the discipline or area of study being undertaken by an individual may also influence 'a person's liking for abstraction or concreteness' and that level of education may also be an influencing factor. In research conducted by Charlesworth (2008) on Indonesian, Chinese and French students in their first semester in higher education, Eastern students were found to have stronger preferences for the reflector style and weaker preferences for the activist style compared to Western students at least at the beginning of their studies. Cuthbert (2005: 244) suggests that learning style 'represents part of the 'baggage' that the learner brings to the learning situation'.

In concluding the above discussion, while learning styles have been popular among HRD practitioners, some criticisms of learning styles and learning models are evident in the literature. The weak theorisation of learning styles (Coffield *et al*., 2004) and the absence of empircal research that proves how learning styles impact on learning and teaching (Hall and Moseley, 2005) have been noted. In research conducted by Peterson *et al*. (2009: 521), researchers in the learning styles field were concerned with the 'lack of validity, confusion in definitions, fragmented theory and abundance of concepts and tests'. The measurements used to identify learner styles and preferences are largely subjective in nature with learners making these judgements themselves (Coffield *et al*., 2004). It has also been suggested that the theory on learning styles remains relatively silent on how cognitive skills are developed and considerable differences remain among theorists on the various components of learning styles (Hall and Moseley, 2005). Furthermore, the 'mere process models (e.g. 'the learning cycle')' and the 'simple dichotomies' sometimes presented in learning styles models often fail to adequately capture the importance of developing an ability to both process information and learn in 'versatile and integrative ways' (Sadler-Smith, 2014: 86). The dearth of research on how learning styles impact on learning outcomes has also been noted (Menaker and Coleman, 2007). Finally, Felder and Spurlin (2005: 105) suggest that 'the point of identifying learning styles is not to label individual students and modify instruction to fit their labels'. Instead, they argue against teaching exclusively to facilitate particular student preferences for learning styles.

[Beginning of boxed feature: Building your Skills]

You are the HRD Executive for a financial services company in Stockholm. Ten new employees, primarily recent graduates, will be joining the organisation in the coming months. You will need to design and deliver a two-day induction training programme for these new hires. How would you go about identifying the new team members' learning styles and incorporating learning activities into induction that draw on the various styles?

[End of boxed feature]

[Beginning of boxed feature: Active Case Study]

Improving Individual Learning at The Courtyard Hotel in Toyko

You have recently been appointed to the position of HRD Manager at The Courtyard Hotel in Toyko. The hotel has been experiencing falling bed occupancy rates and fewer bookings for conferences, weddings and other similar events. While some of these business problems may stem from the difficult economic environment many organisations are facing, others relate more to the Courtyard's current HRD practices. For example, the number of customer complaints regarding the level of service from staff in a number of areas has been growing (including complaints about the knowledge and skills of the reception desk staff and the general organisation and management of various wedding and conference events). The level of turnover among the more experienced staff in the hotel has also increased recently much to the concern of management.

One of your initial tasks is to evaluate the effectiveness of the hotel's current approach to HRD and, particularly, how it facilitates learning on the part of all employees. The employees and department managers you have spoken with are critical of the opportunities currently available for staff to enhance their own learning in the workplace. From these informal discussions with employees and department managers, it appears that: the hotel management have not previously invested in employees' learning and development to any significant extent; employee turnover may, in part, be explained by the lack of opportunities for individual learning; and the only training or learning activity that employees are expected to attend is the two-hour induction programme upon their appointment.

In general, opportunities for individual learning are not currently provided in a planned or systematic manner and do not draw upon the full range of possible formal and informal learning activities. Apart from induction, the only other oportunities for individual learning provided are: financial support for staff willing to undertake formal qualifications in hotel management; and some short ad-hoc half-day courses on customer service skills, event management and food and beverage operations. These training courses are generally delivered in a classroom setting where an outside trainer presents the training content largely in a one-way, non-interactive manner using a powerpoint presentation. There is no evidence of any discussions with the employees regarding the objectives of this training or of any follow-up with employees after the training to determine the extent to which they are practicing and applying what they have learned.

1. Describe the weaknesses of the hotel's current approach to HRD with respect to its individual learning and development activities.
2. What suggestions could you make about how the underlying principles of both social learning and adult learning theories might be used to improve the effectiveness of individual learning?
3. How might the four steps in Kolb's Learning Cycle be useful to the hotel in improving its approach to individual learning?

[End of boxed feature]

[Beginning of boxed feature: Spotlight on Skills]

As a student you may have already developed a particular set of learning skills or a certain learning style over the years and become comfortable with this style. However, the adoption of this learning style may not necessarily result in the best use of your study time or lead to the most effective outcomes from the perspective of your learning and grades achieved. Consider the VARK sensory learning styles described earlier in this chapter.

- Which learning style do you tend to exhibit most often?
- How might you draw upon other learning styles?
- How might your learning skills be enhanced by drawing on a wider range of sensory learning styles?

- What might your lecturers need to do, or change, to facilitate your use of the full range of learning styles?

[End of boxed feature]

[A] E-Learning and Individual Learning

We turn our attention now to the topic of e-learning. In recent years, organisations have been utilising a much wider range of new technologies to facilitate formal, informal and blended learning and development activities (CIPD, 2013a). While e-learning methods tend to be used for specific types of training, including information technology skills, induction for new staff, customer service skills and health and safety training, there has been much debate about whether it is appropriate for the development of 'soft' skills, such as interpersonal communication (See CIPD, 2013a; Derouin *et al*., 2005).

There is no doubt that technology is having a major impact on the activities of HRD functions, but also in meeting the needs of individuals for more flexible, customised, engaging and interactive learning opportunities. Although traditional classroom instruction is still used by almost all companies, the growing use of emerging technologies in learning and development activities is increasingly evident. Many of the new technologies that have emerged in recent years will serve as a supplement to the more traditional forms of learning you will be reading about in this textbook. While e-learning allows organisations to deliver training and development activities in an entirely online format, it is not expected that e-learning will replace the more traditional, face-to-face, ways of learning we are all familiar with. Indeed, e-learning is often utilised in combination with face-to-face classroom learning, what is often referred to as 'blended learning'.

Benefits of e-learning: The increased use of technology has allowed learning to become a much more dynamic process and it leads to several benefits for individuals (see, for example, Bondarouk and Ruël, 2010; Brown *et al*., 2006; Welsh *et al*., 2003): individuals can more easily access knowledge and learning opportunities to suit their own needs, i.e. where and when they want; and learners can also interact with, and customise, the learning content to meet their own needs. The use of technology can also facilitate a greater level of digital collaboration between learners, i.e. technology can be used to enhance and extend

the ability of individuals to work together irrespective of their geographic location. Digital collaboration can take place in two ways: (i) in a *synchronous* manner where HRD practitioners/trainers and individual learners interact with each other in a live or real-time way; and (ii) in an *asynchronous* manner where the interactions between the HRD practitioners/trainers and individual learners occur in a non-real-time way, i.e. learners access the learning information and resources at a time that best suits them (see Hrastinski, 2008). Training and learning can be delivered more quickly to geographically dispersed individuals and in a shorter period of time; updating of content is relatively easy; many of the principles of effective learning set out earlier in this chapter, for example, the provision of feedback to learners, the opportunity to practice what has been learned; and clarity on the learning aims and expected outcomes can be built into e-learning activities. E-learning programmes can also to be used to create online networks with other learners and subject matter experts.

Social Learning: Earlier in this chapter, we considered the growing attention being paid to informal learning activities. In their factsheet on e-learning, the CIPD (2013a) highlight both the formal and informal nature of e-learning activities:

> The development of e-learning has in subsequent years progressed rapidly to encompass a wide range of both formal course-based e-learning packages and products together with a huge variety of complementary or alternative e-learning techniques, such as sharing knowledge or links to resources via social/interactive media sites and viewing/participating in online lectures, web seminars (webinars), podcasts or microblogging.

Attention to social learning has considerably deepened in recent years as a result of the growing interest in, and use of, social media and collaborative learning tools such as, Twitter, YouTube, Facebook, LinkedIn, blogs, chat rooms, discussion boards (see Carliner, 2013; Thomas and Akdere, 2013). Such social media and interactive learning tools are often referred to as Web 2.0 technologies and, as CIPD (2013a) suggest, they provide individuals with new opportunities for 'collaboration, co-creation and sharing of content'. Indeed, the more widespread use of smartphones, accompanying applications (or 'apps') and cloud computing now provide individuals with much greater access to information and learning content while on the move.

Learner Control: Traditionally, the delivery of training and learning occurred in a very linear or ordered way. For example, trainers first presented the content of a training programme to learners and afterwards they, perhaps, spent time practicing and applying what had been learned during the training. The HRD practitioner or trainer tended to be in control and learners were expected to follow the content in the order it was presented in by the HRD practitioner. This is much like what you might be experiencing during your studies where Topic 1 is presented first, followed by Topic 2 and so forth. Traditional forms of HRD delivery placed the individual learner in a very passive role during the learning process, with little control over what was being learned, how it was being learned and the pace of the learning itself. E-learning has begun to change this by giving the learner much greater control over the learning process and allowing him/her to tailor their learning to meet their own individual needs (see London and Hall, 2011). Learning in this way now allows the individual learner to skip the parts of the learning content that he/she is already familiar and to engage in a much more active process of learning by exercising much greater control over learning content. E-learning also allows the individual learner to control the pace of learning (Derouin *et al*., 2005).

Learner Support: E-learning can pose a number of drawbacks for individual learners. Learning in this manner is often seen as a 'solitary activity' (Torrington *et al.*, 2009: 146) and depends to a large extent on one's motivation, level of self-directedness and the availabilty of well designed learning content. The motivation of individuals to actively engage with and complete a programme delivered in an e-learning format is fundamental. One of the challenges in designing e-learning activities is the development of adequate support for individual learners (Tynjälä and Häkkinen, 2005). Support is important at three key points: *before* commencing the e-learning programme where an introduction to the technology or learning platform being utilised is needed; *during* the e-learning activity where guidance on how to navigate the course and related activities, assistance in addressing any questions the learner may have during the learning process and feedback on progress being made; and *after* the e-learning activity where support on how to apply the learning gained to change behaviour or improve work-related performance may be needed. E-learning is unlikely to be effective if made available to learners who are inadequately prepared for this kind of learning and who are not sufficiently supported (CIPD, 2013a).

[Beginning of boxed feature: HRD in the News]

Chapter 1 provided you with an introduction to MOOCs and their growing prominence through a range of independent providers, in association with leading universities, across the world. The emphasis with MOOCs is on individual, self-managed, learning that occurs in a more informal manner. While many individuals enrol to MOOCs to meet their professional needs, others participate in these courses out of personal interest in a particular subject. MOOCs offer individuals relatively easy access to learning opportunities and provide them with another path to achieve their own personal learning goals. Such courses place the responsibility for learning on the individual and he/she identifies what they would like to learn and selects a suitable course that meets their learning needs and interests. As with all kinds of e-learning, MOOCs afford learners a considerable degree of flexibility in terms of how, where and when they engage in learning. They also incorporate an element of social learning through Web 2.0 technologies, such as Twitter and blogs. They involve minimal academic support and draw upon peer-to-peer learning and support. While incorporating the usual benefits associated with e-learning, MOOCs also come with some challenges, including the difficulty for individuals of maintaining motivation in an online setting and handling the online learning platform itself. The completion rate for MOOCs currently stands anywhere between 5% and 20% and this may be due, in part, to information overload and the lack of any reward or certification at the end of the course.

The question of whether MOOCs result in learning on the part of the individual has received little attention so far. Some commentators suggest that the learning experience may be somewhat undermined by the absence of individual support and feedback for learners. What we do know is that four types of MOOC learner archetypes have been emerging: (1) *lurkers* who enrol but at most only sample a small number of items in the MOOC; (2) *passive participants* who view the course as consisting of consumable content and who do not participate in any course activities, such as online discussions; (3) *active participants* who fully engage in all course activities, e.g. class discussions, exercises, social media interactions etc.; and (4) *drop-ins* who engage in some way with a particular course topic, but who do not try to complete the remainder of the course.

To conclude, we can see that, despite the possible drawbacks of this kind of learning, MOOCs have opened up further opportunities for informal learning on the part of individuals.

1. Why have MOOCs received so much attention recently and why might they be attractive to learners?
2. How might a more active approach to learning in MOOCs be encouraged?
3. What kind of support might be put in place for a learner undertaking a MOOC?

Sources:

http://competence.wordpress.com/2013/03/13/how-moocs-change-the-world-do-they-starting-a-list-of-myths-about-moocs/

http://journalistsresource.org/studies/society/education/moocs-online-learning-research-roundup

http://www.insidehighered.com/views/2013/06/03/essay-questioning-evidence-moocs-and-learning

http://www.learningsolutionsmag.com/articles/721/

http://mfeldstein.com/the-four-student-archetypes-emerging-in-moocs/

http://www.universitiesuk.ac.uk/highereducation/Documents/2013/MassiveOpenOnlineCourses.pdf

[End of boxed feature]

Effectiveness of e-learning: Of course, the big question for HRD practitioners to consider is whether e-learning is more, less or just as effective as other more traditional forms of learning. DeRouin *et al.* (2005) note the general dearth of research in this area. However, they point to research elsewhere that highlights the generally positive reactions of individuals to e-learning. However, they report mixed results from other research studies on the important question of whether improved learning outcomes occur where e-learning is used as the mode of delivery. They note that some studies suggest that there is no difference in learning outcomes between e-learning and more traditional delivery methods. DeRouin *et al.* (2005) highlight the other research reports that suggest e-learning can improve learning, while others report poorer learning outcomes as a result of e-learning. De

Rouin *et al.* also highlight that there is some suggestion that e-learning improves work behaviours, however, there are few studies that explore this in any great detail. The findings of the CIPD (2013b) annual learning and talent development survey indicate that the vast majority of those surveyed (91%) believed that the effectiveness of e-learning is enhanced where it is combined with other forms of learning. The survey also found that 72% of those surveyed believe that e-learning does not serve as a replacement for traditional classroom-type learning.

[Beginning of boxed feature: Building your Skills]

You have recently been appointed E-Learning Specialist in a travel company in Berlin called Dolphin International. Your manager is interested in your view on how best to increase informal learning among employees using technology and social media tools. Develop a one-page proposal for your manager on how Dolphin International might go about this task.

[End of boxed feature]

[A] Conclusion

This chapter aimed to deepen the reader's understanding of the complex process of learning. An understanding of the many human and dispositional factors that influence learning, the various learning theories presented and the stages in the learning process provided the reader with a good basis for designing and delivering effective learning and development activities in the workplace **[MAKING LINKS:** See Chapters 8 and 9**]**. It is hoped that that the chapter has also encouraged you to reflect on how you might improve your own learning and on how you might broaden the range of learning styles you draw upon during the course of your studies and beyond.

[A] Chapter Review Questions

1. Consider the three types of non-formal learning identified by Eraut (2004) – implicit, reactive and deliberative. Can you think of a time when you engaged in each of these types of non-formal learning?
2. Describe the human and dispositional factors that influence learning.

3. Why is an understanding of adult learning theory important for HRD practitioners? What value would it be to know that you were training a group aged between 25 and 40 years?
4. How useful is an understanding of how the application of social learning theory might work in practice?
5. What could a line manager do to encourage employees to more actively engage with all four stages in the learning cycle?
6. Why is the concept of 'learning styles' important for both HRD practitioners and individual learners to understand? What are the likely implications for learners of over-reliance on one particular learning style?
7. How might the effectiveness of an e-learning programme be enhanced from the perspective of: an individual's learning; and the programme's learning outcomes?
8. What barriers might prevent an individual from learning?

[A] Further Reading

Carbery, R. and Cross, C. (eds.) (2013) *Human Resource Management: A Concise Introduction*, Hampshire: Palgrave Macmillan (Chapter 9)

Coffield, F., Moseley, D., Hall, E., & Ecclestone, K. (2004). *Learning styles and pedagogy in post-16 learning: A systematic and critical review.* London: Learning and Skills Research Centre.

Derouin, R. E., Fritzsche, B. A. and Salas, E. (2005) 'E-learning in organizations', *Journal of Management*, *31*(6), 920-940.

Knowles, M. S., Holton III, E. F. and Swanson, R. A. (2011) *The Adult Learner: The definitive classic in adult education and human resource development* (7th ed), Oxford: Butterworth-Heinemann.

Rogers, A. and Horrocks, N. (2010): *Teaching Adults* (4th ed), Maidenhead: Open University Press/McGraw Hill.

Zemke R. and Zemke S. (1995) 'Adult Learning: What Do We Know For Sure?' *Training,* June, 31-8.

[N] Useful websites

http://www.oecd.org/edu/skills-beyond-school/recognitionofnon-formalandinformallearning-home.htm This OECD webpage provides a concise explanation of both formal and informal learning and provides a link to a report on the recognition of informal learning in various countries.

http://www.vark-learn.com This website contains information on the VARK learning styles questionnaire. Why not complete the questionnaire and see what learning style you tend to exhibit most often? A number of interviews with the designer of VARK can be found on the website also.

http://www.cipd.co.uk/hr-topics/e-learning.aspx The Chartered Institute of Personnel and Development (CIPD) website contains a number of useful articles on e-learning, including a factsheet and a survey report on trends in e-learning. If you are not a member of the CIPD, you will need to register as a guest to access these materials.

http://podcasts.cipd.co.uk/resources/podcasts/CIPD-Learning-Development-2010-podcast-42.mp3 This podcast discusses the role of technology in learning and considers what good and bad e-learning might look like. The podcast includes interviews with executives from two organisations.

http://reviewing.co.uk/research/experiential.learning.htm#axzz2UsrLcWE2 This website examines experiential learning and provides a number of links to other websites on the topic. It also includes some critiques of Kolb's learning cycle.