CHAPTER 3
LEARNING AND MOTIVATION

ESSENTIAL OUTCOME

After completing the lesson on this chapter, students should have a grasp on what learning is and how it occurs. They should be able to identify and describe the stages of learning and appreciate how learning styles and preferences impact training effectiveness.

CHAPTER LEARNING OUTCOMES

After reading this chapter, students should be able to:

- describe how to classify learning outcomes

- explain how people learn using the three stages of learning and resource allocation theory

- use Kolb's learning styles to distinguish the different ways people learn

- compare and contrast the different theories of learning and motivation

- explain why training motivation is important for learning

- describe the model of training effectiveness

KEY CONCEPTS: HOW DOES THIS CHAPTER CONNECT TO THE WORLD OF TRAINING AND DEVELOPMENT?

1. As students learned in the previous chapter, organizations can only learn when their employees do, therefore it is vital for training and development professionals to have a firm grasp of how learning occurs.

2. Training is not a goal in and of itself—learning and the development of skills and behavioural changes that result are the goals of training. Learning outcomes help trainers target training to achieve specific learning goals. Classifying learning outcomes using a model like Gagné's (described on pages 74–75 and illustrated in Table 3.1) provides trainers with a useful framework for selecting appropriate outcomes, whether they be verbal (declarative knowledge), intellectual (procedural), cognitive, motor skills, or attitudinal.

3. Learning is a process, and happens in stages. Learning theories such as ACT (adaptive character of thought) or resource allocation theory provide insight into how these stages work, and have real-world application for trainers in designing effective learning programs.

4. No two people are exactly alike, nor do they learn exactly alike. Learning style theories, such as Kolb's (described on page 79 and illustrated in Table 3.3), are helpful for trainers tailoring lessons to accommodate the various learning styles and preferences of trainees.

5. An understanding of a few of the more common learning theories (such as conditioning theory, social cognitive theory, and adult learning theory) is also essential knowledge for trainers when it comes to designing and delivering effective training programs. In particular, the differences between how adults learn vs. how children learn (as illustrated in Table 3.4, Teaching Children versus Adults, on page 86, and The Trainer's Notebook 3.2, Implications of Adult Learning Theory for Training, on page 87) should be emphasized.

6. Since motivation also plays a key role in learning, motivational theories (such as Maslow's need hierarchy, Alderfer's ERG theory, and expectancy theory) help trainers design and deliver training in ways that tap into both the intrinsic and extrinsic motivations of trainees to help them learn effectively and successfully. This part of the lesson should emphasize the importance of goals (proximal and distal goals and goal orientation), as well as the impact that training motivation has on training effectiveness.

7. Finally, the model of training effectiveness (described on page 95 and illustrated in Figure 3.2) shows the linkages between training, personal factors, and attitudes with learning and retention, individual behaviour and performance, and organizational effectiveness.

STUDENT MOTIVATION: WHY SHOULD STUDENTS CARE?

Students by their very nature have an inherent interest in learning and can readily identify with its importance and value, so they will easily associate themselves with the central concept of learning. However, they may find it challenging to grasp and assimilate the numerous theories introduced and described in this chapter. It is important, therefore, to emphasize the practical application of each of the theories presented. Students should be able to reflect on their own sources of motivation, which may help the various theories and approaches seem more applicable to their own reality. The Implications for Training section that follows each theory presented should therefore be emphasized and expanded upon where deemed necessary.

BARRIERS TO LEARNING: WHAT ARE SOME COMMON STUDENT MISCONCEPTIONS AND STUMBLING BLOCKS?

Theories are found interesting by some learners, while others may find their eyes glaze over as they quickly lose interest. Should this happen, and it is very likely, it presents a perfect teaching moment to show the practical implications of the theories to the field of training and development. The mixed response, if received, is an ideal time to engage the class in a discussion on why this happens, and what it says about learning styles and preferences, expectancy theory, and motivation for learning!

ENGAGEMENT STRATEGIES: WHAT CAN I DO IN CLASS?

1. During the first 10 minutes of the class, ask students to take a minute to think about and jot down their motives for taking this course. Ask them to call out their reasons as you record them on a white board or flipchart. Once a suitable number of reasons are cited, ask the class to review the list and identify which of the motives could best be described as "intrinsic," and which best described as "extrinsic." Hold a general discussion on the role motivation plays in learning, and conclude this opening exercise by explaining the focus of this lesson is on learning, a topic with which everyone in the room has direct and relevant experience.

2. For In-Class Exercise 5, on page 99: Divide the class in groups of 4–5 students. Ask each group to focus on a specific theory of motivation and use the theory to answer the question. Each team is to present its list of suggested techniques. As an alternate exercise, divide the class in two and have them compete against the clock to brainstorm the most ideas for increasing motivation. Tell them there will be a prize for the winning team. Have a small prize (such as candy) for all members of both teams. Debrief and ask about how they felt about competing, and about the motivational effects of rewards and punishments.

3. For In-Class Exercise 6, on page 99: Have students complete the exercise with the help of a learning partner to promote dialogue and deeper reflection and understanding. Have students present their assessments in class.

4. For In-Class Exercise 7, on page 99: Conduct as outlined. Option: Have students present their self-management programs in class or as an assignment.

5. For In-Class Exercise 8, on page 100: Conduct as outlined. Option: Have students present their classification of outcomes in small groups. As a second option, list the benefits on a handout sheet and have students label each to complete the classification exercise. Offer a prize to the student(s) who finish fastest, most accurately, etc. as another way to demonstrate the potential power of extrinsic motivation (rewards).

Suggestions for Large Class Exercises

a) This is a quick activity to create opportunity for movement and to physically "see" who is in each learning style. Post four signs around the room, one for each learning style. Ask students to move to the sign that best represents their learning style. In large classes, this may give you about 20+ students per learning style. It is valuable for students to physically see how many others share their learning style, so the large group is fine. Ask someone to count how many students are in each group and estimate the percent of the class with that learning style.

b) Continuing from part a: Have the larger groups split up into 4–5 smaller groups and create a top five list of ways they like to learn. Have the groups come back together and see what elements they have identified are common, and add unique elements to one list. Post these on a flipchart (or white board) for the entire class to review.

Suggestions for Technology-Enhanced Classrooms

a) Use the Internet to locate an online learning styles assessment and have students complete this. See the Web Links section that follows for a suggested source.

b) Show photographs (or online images) of famous people who are successful in their field, and who are known to have high degree of motivation, locus of control, persistence, or perfectionism. Suggestions include well-known sports figures such as Tiger Woods, Wayne Gretzky, Michael Phelps, or entertainers like Beyoncé. Have students discuss ways in which these individuals have shown a high degree of training motivation in learning their "craft" and the personal characteristics they exhibit that influence this.

Suggestions for Internet Classes

a) Ask students to research three famous people whom they believe have shown a high degree of training motivation; have students post their examples and rationale to the discussion board.

b) Have students discuss their decision to take an online course. What factors led to their decision? What factors related to learning style and motivation did they consider?

ASSESSMENT TOOLS

You may wish to make use of the Test Bank or PowerPoint slides, or at the end of a class ask a student to summarize the key points from the lesson.

REFLECTIONS ON TEACHING: HOW CAN I ASSESS MY OWN "PERFORMANCE"?

Good teaching requires the practice of ongoing self-assessment and reflection. At the completion of this lesson, you may find it helpful to reflect on the following and consider whether you want or need to make any adjustments for subsequent lessons.

1. What worked in this lesson? What didn't?
2. Were students engaged? Were they focused or did they go off on tangents?
3. Did I take steps to adequately assess student learning?
4. Did my assessments suggest that they understood the key concepts?
5. What (if anything) should I do differently next time?
6. How can I gather student feedback?
7. How can I use this feedback for continuous improvement of my teaching?

Suggestion for quick feedback on your teaching: All too often instructors wait until the end of the course to ask students to provide feedback on you as a teacher (often from the end-of-course evaluation). While the feedback data derived from these end-of-course evaluations are helpful for subsequent courses, they do nothing to help you adjust to the learning needs and preferences of your current students for this course. By this point in the course, your students should probably have a good idea of your teaching style, and it may be helpful to solicit some feedback from them in terms of how your teaching style and delivery methods help (or hinder) their learning and mastery of the course learning outcomes, so that you can consider making adjustments that might better facilitate their learning.

One quick and efficient way to accomplish this is by inviting your students to do a "stop-start-continue" exercise. Ask them to divide a page in three with these headings (or give it to them on a handout), and ask them to simply identify the things you do as a teacher that impede their learning (things to stop doing), things they would like you to do that would help them learn (things to start doing), and things you do that help them learn (things to continue doing). An alternate way to gather this data quickly is to supply students with a few sticky notes, and on their way out the door have them place the notes on the appropriately labelled flipchart papers you have strategically (and conveniently) put up near the classroom exit.

If you choose to use this method of gathering feedback, be sure to do the following:

1. Ensure confidentiality—don't ask students to put their names on the feedback, and assure them you have no interest in trying to figure out their identity from their handwriting or printing.
2. Related to point 1, ask them to be honest, but in a constructive manner. Reinforce to them that you view your teaching and their learning as a sort of partnership, and that you will take their feedback seriously and in the constructive manner in which it was intended.
3. Be sure to follow up and share with the class a synopsis of the feedback received. Discuss with them what you intend to do with it—the things (big or

small) that you are willing or able to change (to start, stop, or continue doing), and those suggestions you will not implement, along with some rationale as to why.

This exercise, if done thoughtfully and with proper execution, can make a significant contribution to creating a more engaging, respectful, and collaborative classroom learning environment.

ADDITIONAL RESOURCES

Chapter Summary

We began this chapter by stating that a major goal of training and development is learning. We also described two classification schemes for learning outcomes. The learning process was described in terms of three stages of learning (declarative, knowledge compilation, and procedural knowledge) and resource allocation theory. Differences in how individuals prefer to learn were then discussed in terms of Kolb's learning styles. Two major theories of learning (conditioning theory and social cognitive theory) as well as adult learning theory were then described along with their implications for training and development. The chapter also described need theories and process theories of motivation and their implications for training. Training motivation was also discussed along with its predictors and consequences, with a special emphasis on goal-setting theory. The chapter concluded with a model of training effectiveness that shows the linkages between training, personal factors, and attitudes with learning and retention, individual behaviour and performance, and organizational effectiveness.

Lecture Outline

COMMENTS	ACTIVITY
A. Introduction	
We engage in learning every day, but how often do we pause to reflect on what learning really means, and how it occurs?	Ask students to provide their own working definitions of learning. After discussion, introduce the definition provided in the text.
B. Learning Outcomes	
It is helpful to organize types of learning into domains. One of the best known classification systems was developed by Gagné and enhanced by Kraiger et al.	Show a slide of the learning outcome categories. Describe and ask students to suggest examples for each.
C. Stages of Learning	
Does learning happen all at once, or does it occur in stages?	Ask students to consider how they learn—such as right now, for example.

	Invite them to reflect on what they have learned today, starting from the moment they woke up. Describe Anderson's ACT theory and ask them to consider if it fits with their experience. Highlight an example that would be common to the class and have students discuss this experience.
D. <u>Learning Styles</u> Do different individuals learn differently? Should we learn in only one way?	Describe Kolb's learning styles and ask students to narrate training or educational experiences that revealed their learning styles. Consider showinga Web page on Kolb (link listed under Web Links, below). Discuss the implications of learning styles for training designers. Show Table 3.3.
E. <u>Learning Theories</u> Learning has been researched extensively—the result is plenty of theories! They can help us understand how learning happens, and use that knowledge to make training more effective.	Conduct this section using the "jigsaw" method. Have students work in "home" teams to first discuss learning generally, then organize them into "expert" teams each focused on a particular theory. Then have them return to their home teams to teach each other. Debrief by calling randomly on individual groups and group members. Identify the differences between the theories. Identify their relation to learning.
F. <u>Motivation Theory</u> Highlight the key motivation theories. Remind students that our interest in them is in relation to their impact on learning. Review the difference between distal, proximal, mastery, and performance goals.	Ask students to identify one of their own distal, proximal, mastery, and performance goals. Share these with a partner.

G. <u>Training Motivation</u>
<u>What are the predictors and</u> G. <u>Training</u>
<u>G. Training Motivation</u>
What are the predictors and
consequences of a trainee's motivation
to learn?

Describe training motivation and discuss
Describe training motivation and discuss
the importance of locus of control, and
ask students to consider their own. Ask
students to think about a goal they have
set for themselves, then have them pair
up and share their goals with their
partner. Have them consider and discuss
how personally motivating their
described goal is to them, and to
consider how motivational goal-setting
theory may be, and why it might not
always be so motivating in many cases.

H. <u>A Model of Training Effectiveness</u>
Training and learning are linked to each
other, as well as to individual and
organizational performance.

Put up a slide or overhead of Figure 3.2.
Describe it. Refer to Chapters 5 and 10
and introduce the topics of training
design and transfer of training.

Web Links

"Business Balls" is a virtual treasure trove of resources for trainers. An excellent
overview of Kolb's learning styles theory:
http://www.businessballs.com/kolblearningstyles.htm

InstructionalDesign.org is another excellent resource. A link to their overview of Gagné's
work:
http://www.instructionaldesign.org/theories/conditions-learning.html

Many free learning styles inventories are available online. Not all have been
scientifically validated, but each is helpful to some degree in helping learners shed
some light on their learning style preferences. Here is one from EducationPlanner.org
that is appropriate for inclusion in an online class or as a takeaway assignment in a
face-to-face class:
http://www.educationplanner.org/students/self-assessments/learning-styles-quiz.shtml

Suggestions for End-of-Chapter Exercises

1. For In-Class Exercise 1, on page 99: Ask for a volunteer to describe a friend or acquaintance (no real names, please!). As a problem-solving exercise, ask the class to brainstorm ways to increase the subject's self-efficacy and list their suggestions on a board or flipchart. Review the list and ask the class to pick out the best suggestions and explain their choices.

2. For In-Class Exercise 2, on page 99: Conduct exercise as described, having students work in small groups of 3–5.

3. For In-Class Exercise 3, on page 99: Ask each student to submit a copy of their goals to you. Review and provide feedback. An additional option is to review the goals and actual achievements at the end of the course. Alternatively, discuss whether students have typically set goals in other courses they have taken. Discuss the nature of these goals and their impact on performance.

4. For In-Class Exercise 4, on page 99: As an alternate to a course, ask students to consider an actual workplace training experience they have had recently.

Case Incident: Management Training at IKEA

Suggested Answers to Case Incident Questions:

1. Students should refer to Table 3.1 on page 75 to answer this question. They should be able to ascertain that manager training would more than likely involve most of the categories in Gagné's classification, perhaps with the exception of motor skills.   They should further be able to determine that the training would likely focus on the cognitive and affective domains in the Kraiger, Ford, and Salas classification scheme. In answering the second part of the question about management competencies, they should be able to list things like supervising people, managing projects and budgets, etc., and state that both formal and informal learning would likely be involved, as described in Chapter 2.

2. Students should conclude that the training program involves the three stages incorporated in the ACT theory: managers will learn facts and theory through the courses (declarative knowledge), and integrate their new learning with what they already know through their practicum assignments and job shadowing (knowledge compilation and procedural knowledge). A change students might recommend could be further formal opportunities to apply their learning once back in their home store (with the support of a mentor, perhaps).

3. Students should be comfortable listing and describing Kolb's four learning modes, as illustrated in Table 3.3 on page 79. While answering the question specifically is challenging given the limited information provided in the case, they should be able to relate to the concept that people learn differently and have

different preferences for how they learn, and that the IKEA training more than likely provides opportunities for all four modes of Kolb's model to be used.

Case Study: The Performance Appraisal Training Program

Suggested Answers to Case Study Questions:

1. Students should be able to answer that the expected learning outcomes involve verbal information, intellectual skills, cognitive strategies, and, perhaps most importantly, attitudes (internal states)—which seems to be the aspect of the training most needed but most lacking.

2. Conditioning theory explains that learning is a relatively permanent change in behaviour in response to a particular stimulus. The conditioning process emphasizes the importance of consequences of behaviour—in this case, there did not seem to be any consequence (positive or negative) to the supervisors learning or applying what they were supposed to learn in their training, so it should come as little surprise that there was no real change in behaviour as a result of the training. Social cognitive theory might explain the power of peer pressure (in this case negative), which led the supervisors to not take the training seriously (for example, the role play exercise), and in general not taking the training seriously. Having consequences for applying the skills acquired (positive or negative reinforcement) as well as some positive role modelling (either through supervisors who were committed to the performance management process leading by example, or by having senior leaders in the training modelling the training behaviours) might have improved the training outcomes significantly.

3. Students should be able to list and describe the adult learning principles listed in Table 3.4 on page 86. In their answers they might note the ingrained habits and attitudes (lack of openness to change) as the greatest single challenge in terms of the effectiveness of this training initiative. They should refer to the list of implications for training (The Trainer's Notebook 3.2 on page 87) and might comment that perhaps there was not enough emphasis on conveying the importance of the training, and that the role play may not have provided safe practice opportunities.

4. Students should likely be able to conclude that the training likely suited CE types the most, however it is possible the training provided opportunities for all four learning styles to be used at some point during the training to varying degrees. To improve the program, they may suggest things like more practice opportunities, more time for reflection on what was learned, or more time for group discussion.

5. Students should be able to identify that learner motivation was a significant problem, and that both intrinsic and extrinsic motivation was lacking (intrinsic because the supervisors did not see value in the training, and extrinsic because there did not seem to be any consequence tied to applying the skills that were to be acquired through the training). The consultant could have worked with administration to increase training motivation through the setting of training goals, establishing expectations for application, and establishing some consequences for behaviours exhibited by the trainees both during and after the training session.

Flashback Answers

1. Benefits of performance appraisal training:
   - Refer back to Figure 1.1 in Chapter 1 (page 7)—note how performance goals start the process, on which feedback is provided, leading to the evaluation of the performance, all the while supported by appropriate employee development interventions. Having supervisors trained in this process helps the organization achieve its goal of implementing the new nursing job requirements, and assist the nurses by identifying the training supports they require in order to be effective. Without this training and support it is unlikely the new nursing model skills expected will be evenly practised, resulting in uneven quality of care.
2. Training vis-à-vis the instructional systems design (ISD) model (refer back to Figure 1.4 on page 26):
   - It is evident that a proper needs analysis was not conducted. Assumptions were made that the problem (performance appraisals were not being conducted) was a training problem. Lack of skill on the part of the supervisors in knowing how to conduct proper performance appraisals may have been part of the problem, but attitudes and motivations toward appraisals were also a significant barrier to performance. Had this been taken into account during the person analysis stage of the needs analysis, it could have been addressed both within the training design and delivery context (dealt with in terms of the training objectives, content, and methods), as well as outside of the training context in terms of providing incentives to implement, removing obstacles inhibiting implementation, or both.
3. The hospital as a learning organization:
   - In terms of Senge's five "disciplines" (see pages 45–46), the hospital falls short on a number of accounts: the behaviours of many of the supervisors toward the training program does not reflect *personal mastery*; management did not do an effective job in creating a *shared vision* for the new nursing model; *mental models* of the performance appraisal process (and its importance and benefits) were not created; and the resistance toward the training and the behaviours of the trainees revealed a lack of *team learning* and *systems thinking*. Had the hospital culture embraced the learning organization principles the training would have been valued

more by the participants, who would have had a common appreciation for its importance to the organization.

4. Connection between organizational learning and training and development:
   - A learning culture regards training and development as crucial to organizational effectiveness, and as a necessary aspect of everyone's job. Were this the case in the hospital example, much of the resistance toward the training would have been negated, the learning more supported, and the skills developed would have been more evenly transferred to the workplace.

Running Case Study: Dirty Pools

Suggested Answers to Case Questions:

1. Both declarative and procedural knowledge involved; the outcomes will need to include cognitive strategies and attitudinal training, and to some extent motor skills will be involved (e.g., manipulating equipment used to collect and test water samples). Similarly, cognitive, skill-based, and affective outcomes will apply.

2. Conditioning theory can be put to good use as the trainees learn specific skills (shaping) and have them reinforced by the trainer (or virtual trainer, if the training is delivered online); learn to perform complex tasks such running tests (chaining); and applying what was learned during training on the job in conditions that could be different (generalization). Social cognitive theory could apply through the use of behaviour modelling by the trainer or experts, having trainees learn collaboratively (learning teams, learning partners, etc.), and by being sure to help build self-efficacy in the trainees as they attempt to learn new skills.

3. Adult learning principles could include involving trainees in the design of the training, emphasizing the value and importance of the training, drawing on the trainee's prior experiences where feasible, and possibly providing options for how to receive the training (e.g., classroom or online).

4. Trainees should have a healthy balance of intrinsic as well as extrinsic motivation. They can set their own learning goals and mesh them with the overarching goal of successfully completing the mandatory aspects of the training along with the consequences they entail (for example, keeping your job!).