**CHAPTER 2 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:

* Define learning and workplace learning and describe how individuals learn though formal and informal learning methods
* describe how to classify learning outcomes
* explain how people learn using the three stages of learning and resource allocation theory
* use Kolb’s learning model and the VARK model to distinguish and describe the different ways people learn and the implications for training
* compare the different theories of learning and discuss their implications for training
* describe the six core principles of andragogy and their implications for training programs
* explain goal-setting theory and why training motivation is important for learning and training effectiveness
* describe the model of training effectiveness

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

1. As students discovered in the previous chapter, learning is key to organizational effectiveness, therefore it is vital for training and development professionals to have a firm grasp of how learning occurs. Appreciating that while formal learning is important, the majority of workplace learning occurs informally (refer to the 70-20-10 model on page 42) therefore having a grasp on how to facilitate informal learning in organizations (see The Trainer’s Notebook 2.1 on page 46) is vitally important.
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 classification schemes (described on pages 46–48 and illustrated in Table 2.3) 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 occur 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 pages 50–51 and illustrated in Table 2.5), and the VARK model (described on pages 51–52) 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 2.6, Teaching Children versus Adults, on page 59, and The Trainer’s Notebook 2.3, Implications of Adult Learning Theory for Training and Development, on page 60) should be emphasized.
6. Since motivation also plays a key role in learning, an appreciation of Goal-setting Theory (pages 61–63) helps 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 pages 64–66 and illustrated in Figure 2.2) shows the linkages between training, personal factors, and attitudes, and 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 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 goal orientation foci (LGO, PPGO, or APGO) as described in page 62 applies to their particular motives. 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 69: 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 how they felt about competing, and about the motivational effects of rewards and punishments.
3. For In-Class Exercise 6, on page 69: 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 70: 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 70: 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

1. This is a quick activity to create opportunity for movement and to physically “see” who is in each learning style based on the VARK model as described on pages 51–52. Post four signs around the room, one for each learning style (“visual,” “aural/auditory,” “read/write,” and “kinesthetic”). Ask students to move to the sign that best represents their learning style. In large classes, this may give you about 12+ students per learning style. It is valuable for students to 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 percentage of the class with that learning style.
2. Continuing from part (a), have the larger groups split up into 4–5 smaller groups (pairs or triads work well) 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

1. Use the Internet to locate the VARK learning style questionnaire (http://vark-learn.com/the-vark-questionnaire) and have students complete this.
2. Show photographs (or online images) of famous people who are successful in their field, and who are known to have a 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

1. 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.
2. 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 them as teachers (often from the end-of-course evaluations). 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. This is an opportune time to execute this feedback exercise as you can readily make the connection between teaching styles and the learning styles explored in this chapter.

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 then defined learning and workplace learning and explained the difference between formal and informal learning. Then two classification schemes for learning outcomes were described. The learning process was explained in terms of three stages of learning (declarative knowledge, knowledge compilation, and procedural knowledge) and resource allocation theory. Differences in how individuals prefer to learn or learning styles were discussed with respect to Kolb’s model of learning styles and the VARK model. Three theories of learning (conditioning theory, social cognitive theory, and adult learning theory) were described along with their implications for training and development. The chapter also described goal-setting theory and different types of goals and their implications for training and development. Training motivation was also discussed along with its predictors and consequences. The chapter concluded with a model of training effectiveness that shows the linkages between training and development, individual factors, trainee attitudes, learning and retention, individual behaviour and performance, and organizational effectiveness.

# Lecture Outline

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| 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. Define workplace learning and lead a brief discussion on the 70-20-10 model as described on page 42 and in Table 2.2 on page 44. Ask students if this notion fits with their own work experiences. | | |
| B. Learning Outcomes  It is helpful to organize types of learning into domains. Perhaps the best-known classification system was developed by Gagné and enhanced by Kraiger et al. | | Show a slide of the learning outcome categories and refer to Table 2.3, Learning Outcomes Classification Schemes on page 47. Describe and ask students to suggest working 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. Learning Styles  Do different individuals learn differently? Should we learn in only one way? | | | Describe Kolb’s learning styles and ask students to share training or educational experiences that revealed their learning styles. Consider showing a Web page on Kolb (link listed under Web Links, below).  Consider having students complete the VARK Learning Styles questionnaire (see link in Web Links, below) and conduct the exercise as described in the Suggestions for Large-Class Exercises, above.  Discuss the implications of learning styles for training designers.  Show Table 2.5 on page 51. | |
| 1. Learning Theories   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.   1. Motivation   Highlight goal-setting theory and discuss the aspects of goal orientation as described on pages 62–63, emphasizing the implications for training. Remind students that our interest in this section is in relation to its impact on learning.  Review the difference between distal, proximal, learning, and performance goals. | | | 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 (Conditioning Theory, Social Cognitive Theory, and Adult Learning 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.  Ask students to identify one of their own distal, proximal, learning, and performance goals. Share these with a partner. | |
| G. Training Motivation  What are the predictors and consequences of a trainee’s motivation to learn? | 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. A Model of Training Effectiveness Training and learning are linked to each other, as well as to individual and organizational performance. | Put up a slide or overhead of Figure 2.2. Describe it. Refer to Chapters 4 and 9 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: https://www.businessballs.com/self-awareness/kolbs-learning-styles-64/

InstructionalDesign.org is another excellent resource. A link to its 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>

The VARK learning style questionnaire as described in the body of the chapter can be found here: (<http://vark-learn.com/the-vark-questionnaire/>)

**Suggestions for End-of-Chapter Exercises**

1. For In-Class Exercise 1, on page 69: 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 69: Conduct exercise as described, having students work in small groups of 3–5.
3. For In-Class Exercise 3, on page 69: 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 69: As an alternate to a course, ask students to consider an actual workplace training experience they have had recently.
5. For In-Class Exercise 5, on page 69: Without naming names, ask students to keep their favourite course and/or favourite in mind as they consider the question.
6. For In-Class Exercise 6, on page 69: have students pair up to discuss their responses to this exercise. Emphasize working together in a non-judging manner and to respect each other’s confidentiality.
7. For In-Class Exercise 7, on page 70: conduct as described.
8. For In-Class Exercise 8, on page 70: assign half of the class to conduct the exercise using Gagne, and the other half using Kraiger, Ford and Salas.
9. For In-Class Exercise 9, on page 70: conduct as a small group or table group exercise.
10. For In-Class Exercise 10, on page 70: consider assigning as a take-home exercise (for marks or perhaps for bonus marks).

# Case Incident: Management Training at IKEA

Suggested Answers to Case Incident Questions:

1. Students should refer to Table 2.3 on page 47 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 the chapter.
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 that 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 2.5 on page 51. While answering the question specifically is challenging given the limited information provided about the Kolb model as well as about 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). 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 2.6 on page 59. 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 2.3 on page 60) 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 (Kolb model) and Auditory Learners (VARK) 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 use of visual material (e.g., infographics, videos, etc.), more time for reflection on what was learned (including modelling professionalism while participating in workplace training), 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 6) and 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 25):
   * 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 the training context in terms of providing incentives to implement, removing obstacles inhibiting implementation,

or both.

# Flash Forward Question

Students should refer to Figure 3.1, The Needs Analysis Process (page 83) and work their way through the flow chart to assist with answering this question. The Trainer’s Notebook 3.2, The Training Solution Checklist on page 98 and Table 3.3 Performance Problems and Training on page 99 would also prove quite helpful. Students should be able to ascertain that the gap or deficiency related to the fact that the supervisors were not conducting the performance appraisals as required; however, it is unclear whether that was due to a skills deficiency (which may require a training solution) or some other obstacle or barrier, which may not require a training solution but could be addressed by other means (such as introducing incentives/consequences, for example).

# Rewrite the Case Question: Kolb’s Learning Cycle

Using Table 2.5, Learning Styles (page 51), students should write something along the lines of the following:

“The training consultant delivered a training session designed around Kolb’s Learning Cycle. The consultant first gave the nursing supervisors an opportunity for a concrete experience by having them run through a mock performance of an appraisal session with a learning partner (learning by experience), followed by having them observe and critique a video of a properly run performance appraisal session and then comparing it to the one they just experienced (learning by reflecting). The nursing supervisors then had an opportunity to work with their learning partner to consider how they might adapt the mock session they ran to be more like the properly run session they observed in the video (learning by thinking). Finally, the nursing supervisors re-did their mock performance appraisal session, incorporating the changes they identified with their learning partners (learning by doing).”

# 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 as 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 (e.g., keeping your job!).
5. While formal learning can be a valuable way for pool operators and employees to acquire technical skills and competencies, informal learning is a great way for them to transfer those skills and competencies to their day-to-day duties. Both should be used in conjunction to increase the effectiveness of the training program.