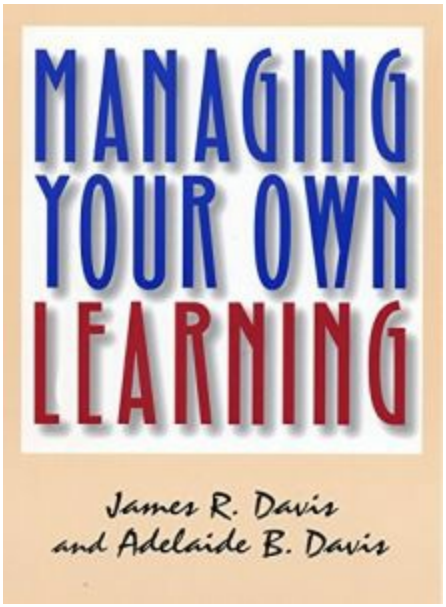

Book Managing Your Own Learning

James R. Davis
Berrett-Koehler, 2000

Recommendation

Managers and trainers rely on James R. Davis and Adelaide B. Davis' book on training strategies, which the authors now have adapted as a personal self-help guide to learning. Although they touch briefly on underlying learning theories and present examples of learning from diverse academic fields (i.e. psychology, sociology, philosophy and communications), this is primarily a step-by-step manual. It begins with a brief self-assessment, guiding you to examine your strengths and weaknesses and to decide what you want to learn. Then, the authors explain how and when to use each of the seven major approaches to learning: behavioral, cognitive, inquiry, mental models, collaborative, virtual realities and holistic learning. They also suggest the best ways to learn in each category. Their well organized book lists major principles, enumerates rules, and provides a summary of each chapter. *BooksInShort* recommends this individually directed manual to those who wish to make the most of the time they spend absorbing new information.

Take-Aways

- The four keys to effective learning are: planning for learning, organizing your participation in learning, motivating yourself to learn and controlling your learning.
- Start your learning plan with an honest analysis of what you have already learned.
- To identify gaps in your learning, compare what you know with what you want to know.
- Well established theories about learning support each of the seven ways to learn.
- Behavioral learning requires acquiring a new skill.
- Cognitive learning involves learning from presentations or other acquired information.
- Inquiry learning is based on thinking and asking questions.
- Use mental models to learn problem solving and decision making.
- Learning through virtual reality involves practicing activities in a safe, simulated environment.
- Holistic learning is learning from experience.

Summary

Preparing to Learn

At this time of rapid change, everyone must be a perpetual learner. The key to being a good learner is learning more about learning, so that you can make the most of what you learn from any effort you undertake. You want to become proficient at the process of learning itself. You need to have this ability, since what counts today are not credentials but high-quality performance, which requires the ability to continually learn and improve.

> "Effective thinkers in the workplace are the people who generate ideas, develop and analyze proposals, invent new products, devise new services, suggest quality improvements, or sift through the information flowing through the organization to distinguish sense from nonsense."

The four keys to being an effective learner are:

1. Plan for learning — Don't wait for learning opportunities. Analyze what you need to learn and seek out experiences that fulfill your needs.
2. Organize your participation in learning — You will learn more if you understand how learning occurs and decide how you can participate most effectively.
3. Motivate yourself to learn — Understand what inspires and intrigues you.
4. Control your learning — Seek feedback on how well you have learned. Research other resources that can provide you with additional information so you can learn more.

Your Learning Plan

To begin the learning process, create a learning plan. First, honestly analyze what you have already learned. Assess your formal education. What are your proficiencies — your basic skills or building blocks of learning, such as reading, writing, speaking, communication skills, language skills and performance skills? In what fields are you conversant — what are the fields in which you know the basic information and ways of thinking? What are your specialties? Where do you have special expertise, in either an academic, occupational, or professional area? Create a chart in which you assess what you have previously learned at each level of knowledge. Note the gaps in your learning and figure out what else you want to know and achieve. Be as specific as you can when you do this analysis.

> "The essence of behavioral learning is action — having the opportunity to practice the skill under guidance."

To apply this approach to improving your job performance, analyze the job itself. Examine what you need to know to perform your job well, or better. Discuss your job with others to get their suggestions on how to accomplish your job so effectively that you become more valuable to your company. Think about transforming the job into a different and better job. Project your job into the future to imagine what skills you might need.

> "The mind needs some system for dealing with the complexity posed by problem solving and decision making. This is why we turn to mental models."

Include related learning in your plan, so that you learn material beyond your field. This enables you to communicate better with your peers, subordinates and superiors. This related learning also can give you a broader perspective about your own field and about diverse ways to become more effective.

> "Generate information that will help you decide what you need to learn to be able to improve performance, develop capacity, or build on your interests. The goal is knowing what you need and want to know."

Once you have analyzed your current learning, compare what you have discovered with what you want to know, so you can identify gaps to fill. Then, determine what kind of formal and informal learning is necessary to fill these gaps. Once you have a clear idea of what you want to learn, you can think clearly about how you want to learn it.

Learner, Know Thyself

When you really know yourself as a learner, you can estimate your own needs and potential more accurately. This allows you to match your abilities more effectively with what and how you want to learn. Consider your age, intelligence, aptitude, achievement or current level of learning and motivation. Also, know your learning style — including your personality type and your preferred sensory modalities for learning (auditory, visual, or tactile-kinesthetic). This can help you choose and shape the learning experiences that are best for you. Armed with this information, you can select appropriate learning situations, recognize your strengths and limitations, realize the effort you will need to expend, and determine how much time you will need to invest in learning.

The Seven Ways of Learning

In managing your own learning, you will find it helpful to know about the seven ways of learning. Well established theories about learning underlie these approaches, which have been the subject of extensive research. Select a method according to how you learn and what you want to know. These seven learning methods are: behavioral learning, cognitive learning, inquiry learning, mental models, collaborative learning, virtual realities and holistic learning. Use the type of learning that is best for achieving the results you want.

Behavioral Learning: New Skills

Use behavioral learning to gain a new skill. This approach works for learning mental, cognitive, or physical skills (which psychologists call psychomotor skills). B.F. Skinner first developed the ideas behind behavioral learning in the 1950s, building on the work of E. L. Thorndike. He created one of the first learning theories — that behavior is affected by consequences, such as reward or punishment.

> "Learning is the key to flourishing and prospering in this new area. Learning awakens our sensibilities, enables us to actualize our aspirations, and takes us places we never dreamed of going."

The basic approach of behavioral learning is to set goals or objectives, and then pursue them in a series of small steps called tasks. This process is known as task analysis. Start by establishing a learning baseline, such as by taking a written or physical "pretest," to show your current level of skill. Then analyze the tasks involved and work on learning each step. As you go along, seek feedback on how you are doing and reinforce yourself with rewards for good performance. Punishment can serve as negative reinforcement, but generally just the avoidance of punishment or negative consequences discourages unwanted behavior. Focus on positive rewards.

> "Include in your plan for learning the related learning you will need outside your field so that you can communicate better, broaden your perspective and be more creative and effective."

Today, you can use this approach in computer-based learning, including computer-assisted instruction (CAI), which provides reinforcement through feedback programmed into the software itself.

Cognitive Learning: Learning from Presentations

Cognitive learning involves learning new ideas or functions from presentations or acquired information. The theory of cognitive learning says that you learn as information makes an impression on any of your five senses. Your internal filters let information pass through or screen it out, depending on what you want to know. Information that comes in is analyzed and encoded. It enters your short-term memory for a few seconds, and will disappear unless you store it (that is, learn it) in long-term memory.

> "Context, meaning and prior knowledge deeply affect our understanding of information."

In cognitive learning, you must pay attention and stay focused. Since you cannot pay attention to everything, figure out what is most important (for example, discern the key points in a presentation). Don't overload your learning system. People can only focus on one thing at a time. Periodically refocus your attention and avoid distractions as you learn, so you continue to absorb information. It is natural to interpret what you are learning, so you will learn better if you look for overall patterns, context and meaning. Building bridges from your prior learning also helps you remember.

Inquiry Learning: Learning to Think

Inquiry learning uses thought and analytical questions. It involves evaluating information, criticizing it, transforming it, and using it to reach conclusions. The practice of learning by asking questions and answering them has a long history, going back to Plato and Aristotle.

> "Learning through inquiry is a way of learning that proceeds by asking questions."

The three types of thinking in inquiry learning are critical thinking, creative thinking and dialogical thinking. In critical thinking, you judge the authenticity, worth, or accuracy of something and look at its reasons or justifications. You need to ask the right questions, look for premises and assumptions and avoid jumping to the wrong conclusions. In creative thinking, you seek original ideas. Finally, in dialogical thinking, you evaluate different points of view and frames of reference as you examine both sides of an argument.

Mental Models: Solving Problems and Making Decisions

Mental models are helpful in finding and defining problems, generating ideas for solutions, and evaluating and choosing among possible solutions. Mental models can help you solve problems and make decisions because they help you deal with complexity. Using these models, you can proceed through the steps involved in solving a problem, weighing your options and predicting the likely outcomes of each choice.

> "Groups are especially good for diverse kinds of collaborative learning."

In the basic problem-solving model, start with a goal, consider the initial information you have, and look at the gap between the goal and your current problem. Then, explore different solutions and consider the barriers to each one. The mental models available for this process include random search, trial and error, a means-end analysis, working backwards from the goal, simplification, and using data, graphs, and diagrams. In decision making, you want to consider values, identify possible outcomes, weigh the desirability of different outcomes, predict their likelihood, establish your selection criteria, and make a choice.

Collaborative Learning: Learning in a Group

Collaborative learning involves changing opinions, attitudes and beliefs; understanding feelings and establishing empathy; working in teams, or building interpersonal speaking and listening skills. Group learning is effective in generating ideas, understanding communication and human relations, changing attitudes and practicing teamwork. Group communication usually operates on two simultaneous levels — on the task level, participants are communicating about the work to be done, and on the process level, participants are responding to the group's social needs. You can assume various roles in a group, such as the task-oriented role of being an information seeker or information giver, or the process-oriented role of being an encourager or harmonizer. Group learning occurs through sharing and listening as you work together to gain information or accomplish tasks.

Virtual Reality: Learning through Practice Simulations

Use virtual reality practice sessions when you want to improve performance by practicing professional activities in a safe, simulated environment. This is especially appropriate in risky situations, such as using a high-tech simulated cockpit to train a pilot or a plastic dummy to teach CPR. But even when no danger is present, you can increase your competence by practicing in realistic simulation conducted in a safe environment. This can include using a role-playing exercise before a critical presentation, or acting out an interaction between a dissatisfied customer and a sales clerk.

Holistic Learning: Learning from Experience

In learning from experience, you want to reflect on what has occurred and draw meaning from it. Then, you can absorb your new experiences into previously established frameworks of meaning (assimilation), change your interpretation to assign new meanings (accommodation), or adjust two or more sets of interpretations at the same time (differentiation and integration). As with the other models of learning, this helps you understand, retain and employ the knowledge you have acquired as the manager of your own learning.

About the Author

James R. Davis is a professor at the University of Denver. His books include *Better Teaching, More Learning* and *Interdisciplinary Courses and Team Teaching.* He co-authored *Effective Training Strategies: A Comprehensive Guide to Maximizing Learning in Organizations* with **Adelaide B. Davis.** She served as a training analyst for a state-managed public utilities company, and taught human resource management at the Federal University of Minas Gerais, Belo Horizonte, Brazil.