

PSYCHOLOGY

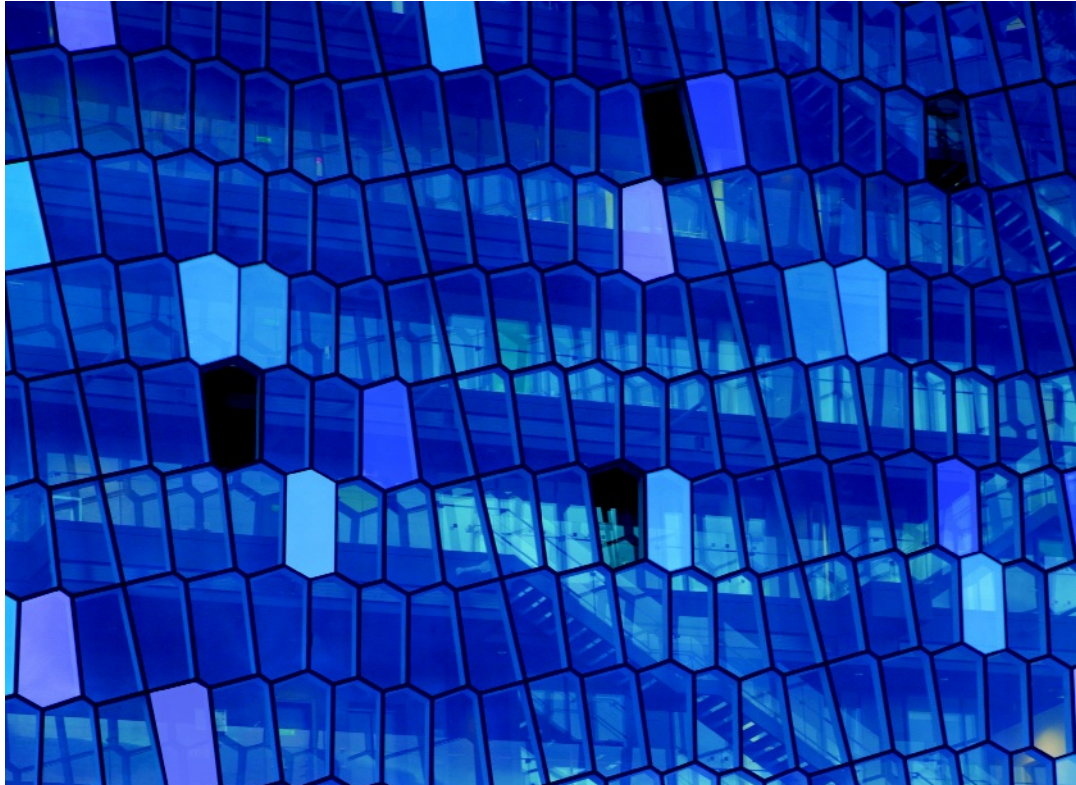
MODULES FOR ACTIVE LEARNING 14E



Coon ♦ Mitterer ♦ Martini

Psychology

Modules for Active Learning 14e



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For Saskia
—Tanya

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Dennis Coon

Dennis Coon

Dennis Coon is the author of *Psychology: A Journey* and *Introduction to Psychology: Gateways to Mind and Behavior*, as well as *Psychology: Modules for Active Learning*. Together, these textbooks have been used by more than 2 million students. Dr. Coon frequently serves as a reviewer and consultant to publishers, and he edited the best-selling trade book *Choices*. He also helped design interactive digital modules for PsychNow!

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Preface

To You, the Student—An Invitation to Learn Psychology

Greetings from your authors! We look forward to being your guides as you explore the exciting field of psychology and our ever-evolving understanding of human behavior. In a very real sense, we wrote this book about you, for you, and to you. We sincerely hope that you will find, as we do, that what you learn is at once familiar, exotic, surprising, and challenging.

Reading Psychology

In *Psychology: Modules for Active Learning*, we have done all we could imagine to make it enjoyable for you to read this book. We trust that you will find your first journey through psychology to be quite interesting and useful to you in your everyday life. Each module takes you into a different realm of psychology, such as personality, abnormal behavior, memory, consciousness, and human development. Each realm is complex and fascinating in its own right, with many pathways, landmarks, and interesting detours to discover. Like any journey of discovery, your exploration of psychology will help you better understand yourself, others, and the world around you. It's definitely a trip worth taking.

Studying Psychology

Psychology is about each of us. It asks us to adopt a reflective attitude as we inquire, “How can we step outside ourselves to look objectively at how we live, think, feel, and act?” Psychologists believe that the answer is through careful thought, observation, and inquiry. As simple as that may seem, thoughtful reflection takes practice to develop. It is the guiding light for all that follows.

Psychology: Modules for Active Learning is your passport to an adventure in active learning, not just passive reading. To help you get off to a good start, the opening module of this book is our short “manual,” *Module 1: The Psychology of Reflective Studying*. In it, we describe what you can learn by taking this course, including the skills you'll develop that can be helpful in both your personal and professional life. In Module 1, you'll also read about a variety of study skills, including the *reflective SQ4R* method, which you can use to get the most out of this book, your psychology course, and your other courses as well.

To You, the Instructor—An Invitation to Teach Psychology

Thank you for choosing *Psychology: Modules for Active Learning* for your students and for your course. Marcel Proust wrote, “The real voyage of discovery consists not in seeing new landscapes, but in having new eyes.” It is in this spirit that we have written this book to promote not just an interest in human behavior but an appreciation for the perspective of the psychologist as well.

As we point out to your students in *Module 1: The Psychology of Reflective Studying*, there is a big difference between experiencing and reflecting on experience (Norman, 1994). For John Dewey (1910), reflective thinking is the “active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it, and the further conclusion to which it tends.” The psychologist's perspective, of course, involves reflecting on human behavior in a variety of ways. When it comes to studying psychology, reflective cognition requires actively thinking *about* what you have just read, which results in deeper understanding and memory. Please consider looking at *Module 1* because it explains to your students in some detail how to become a more reflective student and outlines how they can get the most out of this book and your course. By the way, we encourage you to assign your students to read it as well, if at all possible.

Throughout this book, we have tried to select only the “best” material from the many topics that could be presented. Nevertheless, *Psychology* covers not only the heart of psychology, but also many topics at the cutting edge of current knowledge, including a focus on the practical applications of psychology, the growing importance of neuroscience, and the richness of human diversity. New information, anecdotes, perspectives, and narratives appear throughout the 14th edition. The result is a concise book that is readable, manageable, informative, and motivating. At the same time, we have structured this book to help students consolidate the skills to learn efficiently and to become better critical thinkers. Without such skills, students cannot easily go, as Jerome Bruner (1973) put it, “beyond the information given.”

The Teaching Challenge

Wouldn't it be nice if all of our students came to our courses highly motivated to explore psychology and well prepared to cope with the learning challenges we create for them? As the authors of this textbook, we have together accumulated over 70 years of classroom experience teaching tens of thousands of college and university students. Although we have found most students to be generally well intentioned, our modern world certainly does immerse them in their work, careers, families, intimate relationships, popular culture, and life in general. As we compete for ever-more-limited student attention, we must do more than just lecture in psychology. We also must motivate our students to read and learn as well as educate them about how to learn effectively (Matthew & Sternberg, 2009; Paternoster & Pogarsky, 2009).

We have explicitly designed and written the 14th edition of *Psychology: Modules for Active Learning* to foster deeper student engagement with the field of psychology, better memory for what has been read and studied, and a deeper understanding of how to become more reflective learners and thinkers. To help you and your students reach these goals, we have organized our design philosophy around four core principles:

1: Flexible Modular Organization

Over the years, many instructors have asked us for a textbook that can be used more flexibly. In response, we created *Psychology: Modules for Active Learning*. First and foremost, *Psychology* is a complete first course in psychology. Whether you prefer shorter, more concise self-contained modules, or are comfortable with a traditional chapter-by-chapter organization, *Psychology* can work for you. It is organized into 16 major module clusters (think of them as chapters), to allow you flexibility in assigning topics for your course. Because each module is written to be more self-contained than an equivalent chapter section, you will find it easier to omit modules and reorder the sequencing of modules (and hence module clusters). Of course, if you intend to have your students read all of a module cluster in order, the modules making up each cluster nevertheless flow just as well as a more traditional chapter's section-by-section format.

Each module in *Psychology* concludes with a summary and a feature called a *Knowledge Builder*. These “mini-study guides” challenge students to quiz themselves, relate concepts to their own experiences, and to think critically about the principles they are learning. If students would like more feedback and practice, an integrated MindTap®

Psychology for this title is available at www.cengagebrain.com. To learn more about MindTap, please see the section of this preface entitled “A Complete Course—Teaching and Learning Supplements.”

2: Readability and Narrative Emphasis

Many introductory psychology students are reluctant readers. Selecting a textbook is half the battle in teaching a successful course. A good textbook does much of the work of imparting information to your students. This frees class time for your discussion, extra topics, or media presentations. It also leaves students asking for more. When a book overwhelms students or cools their interest, teaching and learning suffer. If students won't read the textbook, they can't very well be reflective about what they have read.

That's why we've worked hard to make this a clear, readable, and engaging text. *Psychology: Modules for Active Learning* is designed to give students a clear grasp of major concepts without burying them in details. At the same time, it offers a broad overview that reflects psychology's rich heritage of ideas. We think that students will find this book informative and intellectually stimulating.

Because we want students to read this book with genuine interest and enthusiasm, not merely as an obligation, we have made a special effort to weave narrative threads through the book. Everyone loves a good story, and the story of psychology is compelling. Throughout *Psychology*, we have used intriguing anecdotes and examples to propel reading and sustain interest.

Practical Applications To make psychology even more inviting to students, we have emphasized the many ways that psychology relates to practical problems in daily life. For example, a major new feature of this book is the *Skills in Action* modules, located periodically throughout the book. These high-interest discussions bridge the gap between theory and practical applications by exploring how psychology has contributed to our understanding of the skills that are valuable at work and in our relationships. We believe that it is fair for students to ask, “Does this mean anything to me? Can I use it? Why should I learn it if I can't?” The *Skills in Action* modules allow them to see the benefits of adopting new ideas, and they breathe life into psychology's concepts. The skills in question also happen to help you and your students meet the American Psychological Association's (2013) Guidelines for the Undergraduate Major (see Table I.1).

TABLE I.1 | APA Guidelines 2.0 Met by *Psychology: Modules for Active Learning*

Modules	Topic of Module Cluster	Skills in Action Topic	Chapter Addresses Material from APA Guidelines 2.0:
1	How to Study	N/A	4.1, 5.2, 5.3, 5.5
2–6	Research Methods	Information Literacy	1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1
7–11	Brain	Self-Regulation	1.1, 1.2, 5.2
12–16	Development	Behaving Ethically	1.1, 1.2, 2.5, 3.2, 5.1
17–22	Sensation and Perception	Communication	1.1, 1.2, 4.1, 4.2, 4.3, 5.4
23–26	Consciousness	Metacognition	1.1, 1.2, 5.2, 5.3
27–31	Learning	Behavioral Self-Management	1.1, 1.2, 5.2
32–36	Memory	Giving Memorable Presentations	1.1, 1.2, 4.2, 5.3
37–41	Cognition and Intelligence	Creativity and Innovation	1.1, 1.2, 1.3, 2.3, 2.5
42–45	Emotion and Motivation	Positivity and Optimism	1.1, 1.2, 1.3, 2.5, 4.3, 5.4
46–49	Sexuality	Diversity and Inclusion	1.1, 1.2, 1.3, 2.5, 3.2, 3.3, 4.3, 5.1, 5.4
50–54	Personality	Leadership	1.1, 1.2, 2.1, 3.3, 5.1, 5.2, 5.4
55–59	Health	Stress Management	1.1, 1.2, 1.3, 3.3, 5.1
60–64	Psychopathology	Emotional Intelligence	1.1, 1.2, 3.2, 3.3, 4.3, 5.1, 5.4
65–69	Therapies	Managing Mental Health Problems	1.1, 1.2, 1.3, 3.3
70–74	Social	Teamwork	1.1, 1.2, 3.2, 3.3, 4.3, 5.1, 5.4
75–78	Applied Psychology	Career Preparation	1.1, 1.2, 1.3, 2.3, 5.1, 5.5

3: Integrated Support for Active Learning

Studying, rather than reading, a textbook requires the active cognitive engagement that psychologist Donald Norman (1994) calls *reflective*. In his book, *Thinking, Fast and Slow*, Daniel Kahneman describes it as *System 2* thinking (Kahneman, 2011). Being reflective when you read a textbook involves asking yourself if you understand what you are reading, how it might relate to things you already know, what new questions your reading might trigger, and so on. The resulting elaboration of the just-read new information is, perhaps, the best way to foster understanding and form lasting memories (Gadzella, 1995; Goldstein, 2015; Sternberg, 2017).

It is in this spirit that we have again improved the design of this edition of *Psychology* to encourage students to become more reflective, active learners. To achieve this important pedagogical goal, the traditional SQ4R method has again been updated to *reflective SQ4R*, an active-learning format, to make studying psychology an even more rewarding

experience. As students explore concepts, they are encouraged to think critically about ideas and relate them to their own experiences. Notice how the steps of the reflective SQ4R method—*survey, question, read, recite, reflect, and review*—are incorporated into the modular design:

Survey Features at the beginning of each module help students build cognitive maps of upcoming topics, thus serving as advance organizers (Ausubel, 1978; Gurlitt et al., 2012). A photograph and short preview arouse interest, give an overview of the module, and focus attention on the task at hand. A list of *Survey Questions* also is given as a guide to active reading. These questions are now numbered, making it easier for students and instructors to relate the *Survey Questions* to a matched set of learning objectives that appear throughout the materials that accompany this textbook.

The answers to *Survey Questions* open intellectual pathways and summarize psychology’s “big ideas.” Ultimately,

those answers provide a good summary of what students have learned. With these module-opening features, we invite students to read with a purpose and actively process information.

Question *How can questioning be built into a textbook?* Italicized *Dialogue Questions*, such as the previous sentence, are the sorts of questions that students might find themselves thinking as they begin reading a section of text. As such, they model a dialogue in which the questions and the reactions of students are anticipated—that is, *Dialogue Questions* prompt students to look for important ideas as they read, thus promoting active learning while serving as advance organizers. They also clarify difficult points in a lively give-and-take between questions and responses.

Further, as noted earlier, each major module section begins with one or more *Survey Questions*. As students read a module, they can try to discover the answers to these questions. They can then compare their answers with the ones listed in the module summary.

Read We've made every effort to make this a clear, readable text. To further aid comprehension, we've used a full array of traditional learning aids. These include boldface terms, bulleted and numbered summaries, robust illustrations, summary tables, a name index, and an integrated subject index and glossary. As an additional aid, figure and table references in the text are set apart by different colored text and small geometric shapes. These “placeholders” make it easier for students to return to the section that they were reading after they have paused to view a table or figure.

We have made the glossary function in this edition as powerful as possible. The *Main Glossary*, at the end of the book, is integrated with the *Subject Index*, making it easy to link important definitions to where they are discussed in the text. As in earlier editions, all glossary items are bold and defined in-text when the term is first encountered. This aids reading comprehension because students get clear definitions when and where they need them—in the general text itself. In addition, the parallel *Running Glossary* defines key terms in the margins of the relevant pages, making it easy for students to find, study, and review important terms.

Recite A *Knowledge Builder* at the end of each module gives students a chance to test their recall and further develop their understanding of preceding topics. Each *Knowledge Builder* includes a *Recite* section, a short, noncomprehensive quiz, to help students actively process information and assess their progress. *Recite* questions, which are not as difficult as in-class tests, are meant to offer a sample of what students could

be asked about various topics. Students who miss any items are encouraged to backtrack and clarify their understanding before reading more. In other words, completing *Recite* questions serves as a form of recitation to enhance learning.

Reflect Simple recitation is usually not enough to foster deeper understanding, so in each module, we invite students to engage in two distinct types of reflection: self-reflection and critical thinking:

- ▶ **Self-Reflection** Self-reflection (or self-reference) makes new information more meaningful by relating it to what is already known (Klein and Kihlstrom, 1986). We provide many opportunities for self-reflection throughout *Psychology*. The text is written with many contemporary references, examples, and stories to make it easier for students to relate what they are reading to their own life experience. Similarly, to help students further elaborate their new understanding, each *Knowledge Builder* includes a series of *Self-Reflect* questions that encourage students to connect new concepts with personal experiences and prior knowledge. Finally, as we mentioned previously, *Skills in Action* modules invite students to relate psychology to the development of many skills helpful in their daily lives.
- ▶ **Critical Thinking** Being reflective about psychology involves more than self-reflectively asking “What does this have to do with me and what I already know?” It also involves reflecting more deeply about the field. Our book also invites students to think critically about psychology.

The active, questioning nature of the reflective SQ4R method is, in itself, an inducement to critical thinking. In addition, every *Knowledge Builder* includes *Think Critically* questions. These stimulating questions challenge students to think critically and analytically about psychology. Each is followed by a brief answer with which students can compare their own thoughts. Many of these answers are based on research and are informative in their own right. Many of the *Survey Questions* that introduce topics in the text also act as models of critical thinking.

Further, Module 2 explicitly discusses critical thinking skills and offers a rational appraisal of pseudopsychologies. In addition, the discussion of research methods in Modules 4 and 5 is actually a short course on how to think clearly about behavior. These methodology modules are augmented by

Module 6, a *Skills in Action* module, which offers suggestions about how to critically evaluate claims in the popular media. Modules 37–41, which cover cognition, language, creativity, and intelligence, include many topics related to critical thinking. Taken together, these features will help students think more reflectively about your course and the field of psychology while they also gain thinking skills of lasting value.

Review As we noted previously, all important terms appear in a *Running Glossary* throughout the book, which aids review. In addition, the *Main Glossary* is integrated with the *Subject Index*. When reviewing, students can easily link definitions of concepts with the appropriate section of the book where those concepts are introduced and discussed.

As also noted, periodic *Skills in Action* modules show students how psychological concepts relate to their daily lives. The information found in *Skills in Action* modules helps reinforce learning by enlisting self-reference while illustrating psychology's practicality.

To help students further consolidate their learning, each module ends with a *Summary* restating all of the major ideas presented earlier in the module and organized around the same *Survey Questions* found at the beginning of, and throughout, the module. In this way, we bring the reflective SQ4R process full circle and reinforce the learning objectives for the module.

4: Integrative Themes: *The Whole Person*

No one linear module organization can fully capture the interconnectedness of our field. We have, of course, included the usual in-text cross-references. But to better convey this richness, we also explore the natural complexity of psychology by weaving several more-detailed themes throughout the modules of *Psychology*.

Starting in Module 3, we expand on the notion that human behavior is better understood when examined from three complementary perspectives: the biological, the psychological, and the sociocultural, again often in *The Whole Person* summaries. You may choose to explicitly present these perspectives to your students. Alternatively, you might leave these for your students to explore and unconsciously absorb.

The Biological Perspective: The Growing Importance of Neuroscience Our students, partly because of the popular media, are increasingly aware that the brain and the nervous system play a role in shaping human behavior. While

the *Brain and Behavior* modules (Modules 7–11) deal with the usual topics such as methods of studying the brain, neural functioning, synaptic transmission, the structure of the nervous system and brain, and the endocrine system, we deliberately include a discussion of the biological perspective in many of the other modules comprising this book.

The Psychological Perspective: The Centrality of Self-Knowledge We have threaded the psychological perspective throughout this book in many ways. It is, of course, central to psychology. In this edition of *Psychology*, we continue to place special thematic emphasis on the self. In doing so, we respond to Timothy Wilson's (2009) criticism that introductory psychology courses do not spend enough time exploring the issue of self-knowledge, despite the fact that students are terribly interested in learning more about themselves. Many of the new *Skills in Action* modules encourage the development of self-knowledge, including modules on self-regulation (Module 11), metacognition (Module 26), and emotional intelligence (Module 64). Besides, as you may have already noted, our focus on active, reflective learning also is designed to improve our students' self-awareness. Throughout the book, we follow the development of the self from the beginnings of self-recognition in infancy to the development of wisdom in old age.

The Sociocultural Perspective: Human Diversity, Culture, and Gender Of course, no introductory psychology textbook would be complete without a discussion of human diversity and the multicultural, multifaceted nature of contemporary society. In *Psychology*, students will find numerous discussions of human diversity, including differences in race, ethnicity, culture, gender, abilities, sexual orientation, and age. Too often, such differences needlessly divide people into opposing groups. Our aim throughout this book is to discourage stereotyping, prejudice, discrimination, and intolerance. We've tried to make the book gender neutral and sensitive to diversity issues. All pronouns and examples involving females and males are equally divided by gender. In artwork, photographs, and examples, we have tried to portray the rich diversity of humanity. In addition, a new *Skills in Action* module (Module 49) tackles the importance of diversity and provides suggestions about how students can work toward building effective relationships with a wide variety of people. In short, many topics and examples in this book encourage students to appreciate social, physical, and cultural differences and to accept them as a natural part of being human.

Psychology: Modules for Active Learning— What’s New in the 14th Edition?

Thanks to psychology’s ongoing vitality and suggestions from thoughtful professors, we have again been able to improve this book in many ways.

Perhaps most important, we have a new author joining the writing team. Dr. Tanya Martini has contributed our new *Skills in Action* modules, which introduce students to the idea that learning psychology is about more than learning content. They also help your students meet the American Psychological Association’s (2013) Guidelines for the Undergraduate Major (see Table 1.1 earlier in this preface).

The other major change in this edition has been the absorption of the special features, such as the *Brainwaves* boxes. While boxed features dangle high-interest content in front of students, they do so at a cost to the overall organization of the text that surrounds them. By absorbing this material, we are better able to contextualize it, improving the overall readability of the book.

On the organizational side, we have responded to reviewer comments about both the degree of modularity of *Psychology: Modules for Active Learning* and its suitability for use in the more traditional chapter format. On the one hand, we have extensively reorganized this edition to enhance the modularity of individual modules and make it even easier to assign individual modules without compromising student understanding. Reflecting this major update, the table of contents is now organized into 78 modules (rather than 16 chapters). Professors can now more easily assign reading for a complete, albeit brief, introductory course with as few as 20 modules. On the other hand, for professors who prefer traditional chapter organizations, the 78 modules comprising this edition are grouped by title into 16 easily identifiable module clusters, preserving the chapter-by-chapter sequence of previous editions.

On the pedagogy side, we have again enhanced our focus on active processing, reflection, and critical thinking. The learning system embedded in this book, reflective SQ4R, cues students more than ever to the role of thoughtfulness while reading and studying. From a revised explanation of the power of elaborative encoding in the modules on memory and an expanded discussion of the distinction between experiential and reflective cognition in the modules on cognition, to repeated invitations (in context throughout the book) to process more deeply, we have done everything possible to invite your students to become even more mindful.

On the content side, the 14th edition of *Psychology: Modules for Active Learning* has been extensively updated and features some of the most recent and interesting information in psychology, plus fully updated statistics and extensively expanded and updated references. The following text gives some highlights of the new topics and features that appear in this edition.

Module 1: The Psychology of Reflective Studying

- ▶ Module 1 has been reorganized and now also incorporates material previously included in *Module 80: Life After School*.
- ▶ It now provides readers with a clear statement about the twin goals of most psychology courses—furthering students’ knowledge of the discipline while developing relevant skills.
- ▶ This module also offers updated information on how to read effectively, use digital media, study more efficiently, take good notes, prepare for tests, perform well on various types of tests, create study schedules, and avoid procrastination.

Modules 2–6: Introducing Psychology

- ▶ Module 2, *Psychology, Critical Thinking, and Science*, now includes a description of research by Wilson and Nisbett (1978) that famously illustrates the importance of objective methodologies while highlighting the failure of subjective introspection as a trustworthy method in psychology.
- ▶ We now expand on the contrast between the falsifiability of scientific theories as opposed to the confirmation bias and uncritical acceptance of pseudopsychologies such as astrology.
- ▶ Module 3, *Psychology Then and Now*, continues the critique of introspectionism through a discussion of the “imageless thought” controversy.
- ▶ The rise of cognitive psychology is now included in the coverage of the history of psychology.
- ▶ The section on diversity in early psychology has been expanded into an explanation of why it is important to avoid overly narrow approaches—namely, because they tend to produce biased research.
- ▶ Module 4, *The Psychology Experiment*, clarifies the concept of statistical significance and adds a section explaining meta-analysis.

- Module 6, *Information Literacy*, is an updated *Skills in Action* module that provides a discussion of information literacy, including how to be a wiser consumer of web-based information.

Modules 7–11: Brain and Behavior

- Module 7, *The Nervous System*, now opens with a clearer and more integrated exposition of the overall functioning of the nervous system.
- The incremental nature of postsynaptic potentials is now more clearly described, better foreshadowing a subsequent discussion of neural networks.
- Module 9, *Hemispheres and Lobes of the Cerebral Cortex*, now integrates a discussion of hemispheric specialization with a discussion of hemispheric dominance and handedness
- Prefrontal cortex is now explicitly linked with the concept of executive functions such as self-regulation and metacognition.
- Module 10, *The Subcortex and Endocrine System*, now clarifies the relationship between the brainstem and the hindbrain and simplifies the discussion of the reticular formation.
- Module 11, *Self-Regulation*, is a new *Skills in Action* module that introduces students to the concept of self-regulation, pointing out its connection to the frontal lobes and its relevance to managing behavior in a variety of contexts.

Modules 12–16: Human Development

- Module 12, *Heredity and Environment*, now draws clear distinctions between genome and phenome and introduces the concept of epigenetic processes.
- Material on infant and early childhood sensory and motor development has been reorganized and streamlined.
- Module 13, *Emotional and Social Development in Childhood*, now more clearly foreshadows the distinction drawn between basic and nonbasic emotions in a later module on emotions, Module 42, *Overview of Motives and Emotions*.
- A new section on American Indian parents has been added to the material on ethnic differences in parenting.
- Module 15, *Adolescence and Adulthood*, offers an updated discussion of moral development.

- The discussion of adulthood has reorganized around the concept of subjective well-being.
- The section on middle adulthood has been expanded to include coverage of health, family, and career issues.
- Module 16, *Behaving Ethically*, is a new *Skills in Action* module that extends ideas about moral development to examine how personal ethics can vary according to context. The implications of behaving in ways that are not consistent with one's core beliefs are discussed, as are ways to create conditions that will allow people to align their actions with their values.

Modules 17–22: Sensation and Perception

- Module 17, *Sensory Processes*, has been reorganized and simplified.
- The unconscious side of sensory processing is better highlighted, as is psychophysics.
- Module 19, *The Nonvisual Senses*, now treats umami as one of the five basic taste sensations.
- Module 21, *Perception and Objectivity*, has been reorganized and streamlined to better distinguish between perceptual sets and perceptual learning.
- Module 22, *Communication*, is a new *Skills in Action* module that underscores the link between perception and both oral and written communication.

Modules 23–26: Consciousness

- Module 23, *States of Consciousness*, now distinguishes between disorders of consciousness and altered states of consciousness.
- Module 24, *Sleep and Dreams*, has been rewritten and streamlined to integrate all material on sleep and dreaming into a single module.
- Module 25, *Psychoactive Drugs*, now includes a more comprehensive discussion of patterns of drug use.
- The endocannabinoid system is discussed in the section on marijuana.
- A new section on medical marijuana has been added.
- Module 26, *Metacognition*, is a new *Skills in Action* module aimed at raising students' awareness about some of the issues that they should consider as they evaluate their own understanding and abilities in a variety of contexts, including school.

Modules 27–31: Conditioning and Learning

- Module 27, *Associative and Cognitive Learning*, has been streamlined and now more clearly links associative learning to experiential processing and cognitive forms of learning to reflective cognition.
- The section on modeling in the media has again been revised, reflecting a growing awareness that viewing violent media may not be as harmful as previously thought.
- Module 29, *Operant Conditioning*, has been streamlined and rewritten for greater clarity.
- Module 30, *Reinforcement and Punishment in Detail*, has also been streamlined and rewritten for greater clarity.
- Module 31, *Behavioral Self-Management*, is an updated *Skills in Action* module that streamlines and brings together in one module behavioral self-management techniques previously presented in two different modules.

Modules 32–36: Memory

- Module 32, *Memory Systems*, now treats the terms *short-term memory* and *working memory* as equivalent and offers an extended discussion.
- The finding that processing images does not interfere so much with processing verbal information is discussed as the *multimedia principle*.
- The role of culture in directing memory encoding is now explored.
- Module 34, *Forgetting*, has been streamlined for greater clarity.
- Module 35, *Exceptional Memory*, now integrates material on “natural” memory strategies along with artificial (mnemonic) strategies into a single module on how to improve your memory.
- Superior episodic memory is now distinguished from superior semantic memory.
- Module 36, *Giving Memorable Presentations*, is a new *Skills in Action* module that uses memory concepts to demonstrate how to use visual media such as Microsoft PowerPoint or Keynote in such a way that the central message of the presentation is more likely to be remembered.

Modules 37–41: Cognition and Intelligence

- Module 37, *Modes of Thought*, opens with the distinction between experiential (Type 1) and reflective (Type 2) processing and includes a discussion about automaticity and the Stroop effect.
- The distinction between connotation and denotation is now presented in the section on language, which has been reorganized for greater clarity.
- Module 37, *Problem Solving*, has been streamlined for greater clarity. Definitions of inductive and deductive thought are now included in this module.
- Module 38, *Creative Thinking and Intuition*, has also been streamlined and reorganized for greater clarity.
- Module 40, *Intelligence*, includes a reworked section on the Flynn effect.
- Module 41, *Creativity and Innovation*, is a new *Skills in Action* module that includes new material related to creativity and its relation to innovation.

Modules 42–45: Motivation and Emotion

- Module 42, *Overview of Motives and Emotions*, has been streamlined for greater clarity.
- The role of melatonin in regulating sleep is explored in greater detail.
- Module 43, *Motivation in Detail*, more directly differentiates biological factors in short-term hunger control and long-term weight control.
- The section on behavioral dieting has been reorganized.
- Module 45, *Positivity and Optimism*, is a new *Skills in Action* module that explores the distinction between dispositional optimism and an optimistic explanatory style.

Modules 46–49: Human Sexuality

- The modules covering human sexuality have been extensively reworked and reorganized for greater clarity.
- Module 46, *Sex and Gender*, now integrates material on biological sex and psychosocial gender.
- The concept of sexually antagonistic selection is used to explain how homosexuality might be genetically transmitted.

- Module 47, *The Human Sex Drive, Response, and Attitudes*, is a reorganization/integration of material previously organized differently.
- Module 48, *Sexual Problems*, is a reorganization/integration of material previously organized differently: rape, sexual dysfunctions, and paraphilic disorders.
- Module 49, *Diversity and Inclusion*, is an updated *Skills in Action* module that discusses diversity and inclusion and offers students tips about how they can foster positive relationships with a wide range of people.

Modules 50–54: Personality

- Module 50, *Overview of Personality*, integrates an overview of personality theories with material on assessing personality, yielding an introduction to the concept of personality.
- Module 51, *Trait Theories*, now discusses the *dark triad*, a subclinical personality type combining Machiavellianism, psychopathy, and narcissism.
- Module 52, *Psychodynamic and Humanistic Theories*, now includes coverage of the neo-Freudians Alfred Adler and Carl Jung.
- Module 53, *Behavioral and Social Learning Theories*, has been streamlined.
- The discussion of the evolution of trait theory has been simplified.
- Humanism is now clearly identified as a “third force” in psychology.
- Module 54, *Leadership*, is a new *Skills in Action* module that connects personality to leadership and provides students with several important skills that they can work on if they are interested in fostering their ability to lead others.

Modules 55–59: Health Psychology

- Module 55, *Overview of Health Psychology*, has been streamlined.
- Module 56, *Stressors*, has also been streamlined.
- Module 58, *Stress and Health*, still covers the Type A personality but now expresses skepticism about the concept, in line with the recent research literature.
- Module 59, *Stress Management*, is an updated *Skills in Action* module that offers a revised set of suggestions for managing stress.

Modules 60–64: Psychological Disorders

- Module 60, *Defining Psychopathology*, has been extensively rewritten and reorganized and now features new sections on diagnosis and types of symptoms of these illnesses, as well as causes.
- Material on psychology and the law has been expanded and now includes a discussion of the diminished responsibility defense.
- Module 61, *Psychotic Disorders*, has been reorganized and streamlined for greater conceptual cohesion.
- Module 62, *Mood Disorders*, now includes material on suicide.
- Module 63, *Anxiety, Anxiety-Related, and Personality Disorders*, has been streamlined and now includes discussion of a new theory of obsessive-compulsive disorder (OCD).
- Module 64, *Emotional Intelligence*, is an updated *Skills in Action* module that offers a revised set of suggestions for becoming more emotionally intelligent.

Modules 65–69: Therapies

- Module 67, *Behavior Therapies*, has been streamlined.
- Module 68, *Medical Therapies*, now includes an extended discussion of pharmacotherapies.
- Module 69, *Managing Mental Health Problems*, is an updated *Skills in Action* module that now includes material on empirically supported therapies, basic counseling skills and considering therapy.

Modules 70–74: Social Psychology

- Module 70, *Social Behavior and Cognition*, no longer includes a discussion of Zimbardo’s infamous prison experiment, in light of recent critiques that it is seriously compromised by demand characteristics.
- Social status and social power are now distinguished.
- Buyer’s regret* is now discussed in the context of cognitive dissonance theory.
- Module 71, *Social Influence*, now offers a streamlined discussion of cults.
- Module 72, *Prosocial Behavior*, now includes a critical discussion of the Kitty Genovese murder and its role in inspiring research on the bystander effect.

- Material on adult attachment styles, previously included in Module 13, now appears in Module 72.
- Module 73, *Antisocial Behavior*, has been rewritten and reorganized and now offers a streamlined discussion of cults and a rewritten discussion of prejudice.
- Module 74, *Teamwork*, is a new *Skills in Action* module that discusses research related to teamwork, including the distinction between groups and teams. It provides students with evidence-based suggestions about the skills that can be developed to improve their ability to work effectively with others.

Modules 75–78: Applied Psychology

- Module 75, *Industrial/Organizational Psychology*, has been reorganized and rewritten.
- Module 76, *Environmental Psychology*, has been reorganized and rewritten.
- The persuasive potential of social norms based approaches is explored in the context of environmentalism.
- Module 78, *Career Preparation*, is a new *Skills in Action* module that outlines suggestions for students who are interested in ensuring that they develop an appropriate skill set for their career of choice. It includes information about learning experiences that can help promote career-related skills, as well as methods for documenting their abilities.

Appendix: Behavioral Statistics

- A new module-opening vignette and photo invite students to read more about statistics.

A Complete Course—Teaching and Learning Supplements

A rich array of supplements accompanies *Psychology: Modules for Active Learning*, including several that use the latest technologies. These supplements are designed to make teaching and learning more effective. Many are available free to professors or students. Others can be packaged with this book at a discount. Contact your local sales representative for more information on any of the listed resources.

Summary

We sincerely hope that teachers and students will consider this book and its supporting materials a refreshing change

Student Support Materials

Introductory students must learn a multitude of abstract concepts, which can make a first course in psychology difficult. The materials listed here will greatly improve students' chances for success.

MindTap® Psychology: Modules for Active Learning is a personalized, fully online digital learning platform of authoritative content, assignments, and services that engages your students in a singular interactive learning path. By incorporating the SQ4R method in a uniquely modular format, MindTap students improve their reading and study skills while they are learning psychology. MindApps such as Kultura (which allows you to insert inline media into your curriculum) and View Progress (which allows you to track student engagement and class progress) offer you choice in the configuration of coursework and enhancement of the curriculum. Students will love Mastery Training, a tool that uses distributed practice to help students retain key terms and concepts. MindTap is well beyond an eBook, a homework solution or digital supplement, a resource center website, a course delivery platform, or a Learning Management System. It is the first in a new category—the Personal Learning Experience. MindTap for *Psychology: Modules for Active Learning* allows complete flexibility in how a course is built, making it easier to take advantage of the modular and SQ4R format.

Instructor Resources

Teaching an introductory psychology course is a tremendous amount of work, and the supplements listed here should help make it possible for you to concentrate on the more creative and rewarding facets of teaching. All of these supplements are available online for download. Go to login.cengage.com to create an account and log in.

The Instructor Companion Site for this title will include an *Instructor's Resource Manual*, which provides a wealth of teaching tips and classroom resources; *Cengage Learning Testing Powered by Cognero*, multiple-choice questions correlated to learning objectives, Bloom's taxonomy level, and difficulty; and PowerPoint slides providing concept coverage with dynamic animations, photographs, and video.

from the ordinary. Creating it has been quite an adventure. In the pages that follow, we think students will find an at-

tractive blend of the theoretical and the practical, plus many of the most exciting ideas in psychology. Most of all, we hope that students using this book will discover that reading a college textbook can be informative while also being entertaining and enjoyable.

Acknowledgments

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We also wish to thank Dr. Robin Akawi, of Sierra Community College, for her always thoughtful questions, which have led to a number of improvements in this edition, most notably in the discussion of the hindbrain/brain stem distinction.

Dr. Christopher Ferguson, of the Psychology Department at Stetson University, prompted revisions in our treatment of the Zimbardo prison study, the Kitty Genovese murder, and especially the topic of violence and the media. Thank you, Chris.

We offer a special thank-you to the students at the Nebraska Indian Community College taking Introduction to Psychology in 2015, for triggering a deep conversation about the portrayal of American Indians in introductory psychology textbooks. In further discussions with NICC faculty Darla Korol, MSW, Human Services Division Head, and Wynema Morris, Native American Studies Division Head, several sections of this new edition, and in particular, a new section on Native American parenting, reflect their profound insights and wisdom.

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Katherine McNellis, Lakeshore Technical College

Sam Olive, Henry Ford Community College

Robert Strausser, Northwest Mississippi Community College

Victoria Wiese, Lakeshore Technical College

Producing *Psychology: Modules for Active Learning* and its supplements was a formidable task. We are especially indebted to Marta Lee-Perriard for supporting this book. We also wish to thank the individuals at Cengage who so generously shared their knowledge and talents over the past year. These are the people who made it happen: Charles Behensky, Charlene M. Carpentier, Kimiya Hojjat, Karen Hunt, Adrienne McCrory, Don Schlotman, Juliet Stamperdahl, Jasmin Tokatlian, and Jennifer Wahi.

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Last of all, we would like to thank our spouses, Sevren, Heather, and David, for making the journey worthwhile.

The Psychology of Reflective Studying

Well, Hello There!

As your authors, we are delighted to welcome you to the “manual” for this textbook. No! Don’t skip this, please. Read on.

Few of us prefer to start a new adventure by reading a manual. We just want to step off the airplane and begin our vacation, get right into that new computer game, or start using our new camera or smartphone. Please be patient. Successfully learning psychology depends on how *reflective* you are as you read your textbook, listen during your classes, study for exams, and then write them.

Students who get good grades tend to work more reflectively, not just longer or harder. They also tend to understand and remember more of what they’ve learned long after their exams are over. Psychology is for their lives, not just for their exams. In this module, we explore a variety of ways to become more reflective learners.



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~SURVEY QUESTIONS~

- | | |
|--|---|
| <p>1.1 How can studying psychology help me in my personal and professional life?</p> <p>1.2 How can I get the most out of this textbook?</p> | <p>1.3 How can I get the most out of class time?</p> <p>1.4 How can I best prepare for tests?</p> |
|--|---|

What’s in It for You?—More Than You Might Think

Survey Question 1.1 How can studying psychology help me in my personal and professional life?

As you begin exploring the field of psychology, you may well be asking yourself what you’ll get out of it. In general, most of your courses will offer you opportunities to learn in two important ways. The first has to do with course *content*—in this introductory psychology course, the content is what you’ll learn about the field of psychology. This includes what psychological research tells us about memory, social relationships, brain functioning, children’s development, and

psychopathology (to name just a few topics). But taking a psychology course will also promote your learning in a second way—specifically, it will teach you about the *skills* that you’ll need to be successful in your personal and professional life.

What do you mean by “skills”? When we talk about skills, we’re often talking about things that you can do, such as communicate clearly or work well with others. But in some cases, the term *skills* can also refer to personal characteristics; for example, independence, tolerance, and adaptability are often considered to be important skills.

TABLE 1.1 | APA Guidelines for the Undergraduate Psychology Major

- Goal 1: Knowledge Base of Psychology
- Goal 2: Scientific Inquiry and Critical Thinking
- Goal 3: Ethical and Social Responsibility in a Diverse World
- Goal 4: Communication
- Goal 5: Professional Development

(Adapted from American Psychological Association, 2013. For complete details, go to: www.apa.org/ed/precollege/about/learning-goals.pdf.)

These two broad categories of learning—content and skills—are outlined in the American Psychological Association’s (APA) *Guidelines for the Undergraduate Psychology Major (version 2.0)* (American Psychological Association, 2013). It is well worth having a look at the full document (which is available online), but you can start by having a look at **Table 1.1**.

Some students assume that their only goal is to learn “the facts” about psychology, or the course content. In other words, they think their degree is all about Goal 1. A student with this mindset will usually complain when given an assignment that involves working with a small group of students to evaluate some research articles in the PsycINFO database. “Why do I have to do this with these other people?” he or she might grouse. “And why don’t you just explain to me what the experts say about these articles so that I can get on with learning it for the exam?” Students who understand that their education is also about acquiring skills—like being able to communicate clearly (Goal 4), work as part of a team (Goal 5), and think critically (Goal 2)—will appreciate that professors set up assignments to build skills, as well as furthering what you know about psychology.

One of the things that you might notice as you look through Table 1.1 is that many of the skills listed aren’t really specific to psychology—they’re likely to be just as relevant to someone majoring in history or business or biology. After all, people in all disciplines need to understand how to communicate well, work well with others, and behave ethically.

Some of the most important advice we can give you, then, is to remember to focus on the skills that you are learning throughout your studies at university, whether in psychology or other subjects. They may not always seem obvious when you’re reading a textbook or when you’re completing your assignments, but when it comes



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Work on developing your skills may seem like a waste of your time compared with putting that time into learning course content. But don’t sell it short; your skill set will be just as important as your content expertise whether you go on to post-graduate education or a career.

time for you to hit the job market, you’ll be happy that you did.

A Psychologist’s Skill Set

To understand why your skill set is important, have a look at **Table 1.2**, which lists a few of the career opportunities open to psychology majors.

TABLE 1.2 | A Skills-Based List of Some Potential Careers for Psychology Majors

Addictions counselor	Manager
Administration	Market research analyst
Advertising	Marketing
Career/employment counselor	Mental health worker
Case worker	Motivational researcher
Child care worker	Personnel
Child welfare worker	Population studies researcher
Community worker	Probation or parole officer
Correctional officer	Professional consultant
Counselor	Program coordinator
Cultural diversity consultant	Psychiatric assistant or aide
Customs or immigration	Public health statistician agent

TABLE 1.2 | (Continued)

Day care worker, supervisor	Public opinion interviewer
Educational counselor	Public relations
Entrepreneur	Recreation specialist
Fundraiser or development officer	Research assistant
Gerontology	Sales representative
Government researcher	Social services
Health services	Social worker
Hospice coordinator	Teaching
Human resources	Technical writer
Immigration officer	Travel agent
Labor relations specialist	Youth worker

Adapted from Canadian Psychological Association (2016)

Travel agent? Think about it for a moment. A travel agent may not need content expertise, such as being able to list Freud's stages of psychosexual development or explain what psychological functions are controlled by the different parts of the brain. But it *would* help to be able to work independently, do your own research, be able to make presentations to individuals or groups, have some sensitivity to cross-cultural issues, write well, and, in general, work well with people. While these sorts of skills also can be learned in other ways, studying psychology provides a "golden opportunity" for you to develop an impressive set of skills that are sought by many employers.

How This Book Will Help You with Skill Development

You probably won't be surprised to learn that *Psychology: Modules for Active Learning* has been written with the APA Guidelines in mind, in an effort to help you further develop your career-related skill set. Here are some skill highlights:

- Skills in Action modules:** Every few modules, you will encounter a *Skills in Action* module. Each of these modules connects the field of psychology to a skill that is likely to be useful across a broad range of career paths. These modules, combined with the digital resources for this book, will allow you to measure your skill level

and give you practical ideas you can use to improve your skill set.

- Study skills:** In this module, we discuss a full set of study skills, from how to read and listen for understanding to how to take tests and overcome procrastination. We also introduce the importance of reflective processing, and we carry this idea throughout the book. All of those skills are very helpful in many different jobs.
- Research skills:** We will introduce you to science and psychological research, from the research methods in Modules 2–6 to the Statistics Appendix. This will help you be a more educated and literate consumer of research in your chosen career, especially if it involves applying psychological research in any way.
- Critical thinking skills:** From the discussion of critical thinking in Modules 2 and 6 to the *Think Critically* questions at the end of the modules, we stress critical thinking skills. The term *critical thinking* actually encompasses a wide array of related skills, including defining problems, searching for and evaluating information to address those problems, and synthesizing and applying information that you gather. You can see why such skills are in high demand among employers.
- Cultural awareness skills:** OK, so we couldn't take you on a field trip to Japan, but throughout the book, we will invite you to reflect on the differences among people of different ethnicities, sexual orientations, ages, and genders. This kind of information will be particularly important when you find yourself having to work with others whose background or belief system is not the same as your own.

Not to put too fine a point on it, but that's a lot of career-relevant skills, no? Of course, we understand that the classroom isn't the only place to learn skills that can help you in your personal life and career. Many college and university students will also have part-time jobs, or will participate in other learning experiences such as study abroad, community-based volunteering, or campus activities such as student government or clubs. Often, the skills that you develop through these extra-curricular experiences will support or complement the skills that you can learn through the assignments that you'll complete for your courses.

For example, common part-time student jobs involving interaction with the public (e.g., waiting tables, customer service, or retail jobs) often help to build *verbal* communication skills such as the ability to speak to others, and to listen effectively to what others are saying.

In contrast, class assignments often build *writing* skills and the ability to *read and understand* complex material. When you are attempting to persuade an employer that you have a broad range of communication skills, then you should make sure that you discuss what you have learned from a variety of experiences both inside and outside of the classroom to demonstrate the full range of your abilities.

Reflective Learning: The Most Important Ingredient

Simply deciding that you want to learn content or skills isn't going to actually make it happen. To understand why, think about the last time you spent the evening vegging out in front of the television. It probably was fun, but you may have noticed that you didn't think too much about what you were watching and that your subsequent memories are not detailed. You were engaging in **experiential processing**, more or less passively soaking up the experience (Kahneman, 2011; Norman, 1994).

Now contrast that with your experience in a recent job interview. It is highly unlikely that you got through the interview by relying on experiential processing alone (and even less likely that you landed the job if you did). Instead, you actively and carefully listened to the questions and put some serious effort into thinking through the implications of answering in different ways before responding. No drifting off here; you were focused and controlled until you left the interview, when you likely breathed

a much-deserved sigh of relief. By reacting mindfully (Siegel, 2007), you engaged in **reflective processing** (Kahneman, 2011; Norman, 1994). Rather than just having an experience, you *actively thought* about it. Similarly, **reflective learning** occurs when you engage in deliberately reflective and active self-regulated study (Anthony, Clayton, & Zusho, 2013; Mega, Ronconi, & De Beni, 2014). Here, in general, is how you can promote reflective learning of both content and skills:

1. **Set specific, objective learning goals.** Begin each learning session with specific goals in mind. What knowledge or skills are you trying to master? What do you hope to accomplish (Pychyl, 2013)?
2. **Plan a learning strategy.** How will you accomplish your goals? Make daily, weekly, and monthly plans for learning. Then put them into action.
3. **Be your own teacher.** Effective learners silently give themselves guidance and ask themselves questions. For example, as you are learning, you might ask yourself, "What are the important ideas here? What do I remember? What don't I understand? What do I need to review? What should I do next?"
4. **Monitor your progress and correct when necessary.** Reflective learning depends on self-monitoring. Exceptional learners keep records of their progress toward learning goals (pages read, hours of studying, assignments completed, and so forth). They quiz themselves, use study guides, and find other ways to check their understanding while learning. Consider asking yourself these questions regularly as you work toward mastering both course content and skills: Do any specific areas of your work need improvement? If you are not making good progress toward long-range goals, do you need to revise your short-term targets? If you fall short of your goals, you may need to adjust how you budget your time. You may also need to change your learning environment to deal with distractions such as browsing the web, daydreaming, talking to friends, or testing the limits of your hearing with your iPod.
5. **Reward yourself.** When you meet your daily, weekly, or monthly goals, reward your efforts in some way, such as going to a movie or downloading some new music. Be aware that self-praise also rewards learning. Being able to say "Hey, I did it!" can be rewarding. In the long run, success, self-improvement, and personal satisfaction are the real payoffs for learning.



"I'm too busy going to college to study."

Reflective Reading—How to Tame a Textbook

Survey Question: 1.2 How can I get the most out of this textbook?

How can I be more reflective while reading? One powerful way to be more reflective is through **self-reference**. As you read, relate new facts, terms, and concepts to your own experiences and information that you already know well. Doing this will make new ideas more personally meaningful and easier to remember. **Critical thinking** is another powerful way to be more reflective. Critical thinkers pause to evaluate, compare, analyze, critique, and synthesize what they are reading (Chaffee, 2015). You should, too. In Module 2, we will learn how to think critically about psychology.

These ways to improve learning can be combined into the **reflective SQ4R method**. SQ4R stands for *survey, question, read, recite, reflect, and review*, which are six steps that can help you get more out of your reading:

- S = *Survey*. Skim through the text before you begin reading it. Start by looking at topic headings, figure captions, and summaries. Try to get an overall picture of what lies ahead. Because this book is organized into short modules, you can survey just one module at a time if you prefer.
- Q = *Question*. As you read, reword each major topic heading into one or more questions. For example, when you read the heading “Sleep Stages,” you might ask: “Is there more than one stage of sleep?” “What are the stages of sleep?” “How do they differ?” Asking questions prepares you to read with a purpose.
- R1 = *Read*. The first R in SQ4R stands for *read*. As you read, look for answers to the questions you asked. Read in short bites, from one main topic heading to the next, and then stop. For difficult material, you may want to read only a paragraph or two at a time.
- R2 = *Recite*. After reading a small amount, you should pause and recite or rehearse. Try to mentally answer your questions. Also, make brief notes to summarize what you just read. Making notes will reveal what you do and don’t know, so you can fill in gaps in your knowledge (Peeverly et al., 2003).

If you can’t summarize the main ideas, skim over each section again. Until you can understand and remember what you just read, there’s little point to reading more. After you’ve studied a short “bite” of text, turn the next topic heading into questions. Then read to the following heading.

Remember to look for answers as you read and to recite or take notes before moving on. Ask yourself repeatedly, “What is the main idea here?” Repeat the question–read–recite cycle until you’ve finished an entire module (or just a part of a module if you want to read shorter units).

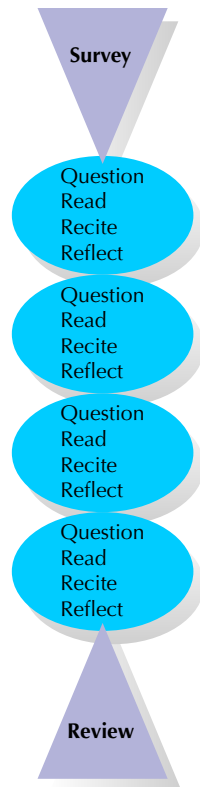
- R3 = *Reflect*. As you read, reflect on what you are reading. As stated earlier, two powerful ways to do this are self-reference and critical thinking. This is the most important step in the reflective SQ4R method. The more mindfulness and genuine interest that you can bring to your reading, the more you will learn (Hartlep & Forsyth, 2000; Wong, 2015).
- R4 = *Review*. When you’re done reading, skim back over a module or read your notes. Then check your memory by reciting and quizzing yourself again. Try to make frequent, active review a standard part of your study habits (see ► **Figure 1.1**).

Does this really work? You bet! Using a reflective reading strategy improves learning and course grades (Taraban, Rynearson, & Kerr, 2000). It also results in enhanced long-term understanding. Simply reading straight through a textbook can give you intellectual indigestion. That’s why it’s better to stop often to survey, question, recite, reflect, review, and digest information as you read.

How to Use Psychology: Modules for Active Learning

You can apply the reflective SQ4R method to any course of study. However, we have specifically designed this textbook to help you *reflectively* learn psychology. Please consider

- Experiential processing** Thought that is passive, effortless, and automatic.
- Reflective processing** Thought that is active, effortful, and controlled.
- Reflective learning** Deliberately reflective and active self-guided study.
- Self-reference** The practice of relating new information to prior life experience.
- Critical thinking** An ability to evaluate, compare, analyze, critique, and synthesize information.
- Reflective SQ4R method** An active study-reading technique based on these steps: survey, question, read, recite, reflect, and review.



► **Figure 1.1**

The reflective SQ4R method. Active learning and information processing are promoted by the reflective SQ4R method. You begin with a survey of the module, or module section, depending on how much you plan to read. You then proceed through cycles of questioning, reading, reciting, and reflecting and conclude with a review of the section or the entire module.

trying out the following suggestions as you work through this module:

Survey Each module opens with a survey that includes a short introduction to what will be covered, as well as a list of *Survey Questions*. You can use these features to identify important ideas as you begin reading. The introduction should help interest you in the topics that you will be reading about, and the Survey Questions are a good guide to the kinds of information that you should look for as you read. In fact, answers to the Survey Questions are a good summary of the core concepts in each module. If, years from now, you still remember those core concepts, your authors will be happy indeed.

After you've studied these features, take a few minutes to do your own survey of the module, including the figure captions and module-ending material. You should also notice that each major module heading is accompanied by a Survey Question. Doing so will help you build a mental map of upcoming topics.

Question How can I use the reflective SQ4R method to make reading more interesting and effective? Try to actively interact with your textbooks as you read. Perhaps the most effective way to do this is to ask yourself a lot of questions as you read. For example, as noted earlier, modules and major module sections begin with headings; try turning them into questions. One Module 2 heading is “Critical Thinking—Take It with a Grain of Salt.” Turn this into a question that occurs to you, such as “Why should I be skeptical of what I read?” If you read with an aim toward answering your questions, you will be much more likely to get the key points in what you are reading. *Dialogue Questions* like the one that began this paragraph will also help you focus on seeking information as you read. These questions are much like those running through the minds of students like you as they read this book. Similarly, the Survey Questions are repeated throughout each module to help you recognize key topics. Try to anticipate these questions. Even better, be sure to ask your own questions.

Read As an aid to reading, important terms are printed in **boldface type** and defined when they first appear. (Some are followed by pronunciations—capital letters show which syllables are accented.) You'll also find a *running glossary* in the lower right-hand corner of pages that you are reading, so you never have to guess about the meaning of technical terms. If you want to look up a term from a lecture or another module, check the main *Subject Index/Glossary*. This mini-dictionary is located near the end of the book. In addition, figures and tables will help you quickly grasp important concepts.

Recite To help you study in smaller “bites,” each module in this textbook ends with a brief study guide called a *Knowledge Builder*. After reaching a Knowledge Builder, it is worthwhile to stop reading to recite or rehearse what you just read. Make summary notes and try mentally answer your questions. Recitation will tell you what you do and don't understand. Answering the “Recite” questions in the Knowledge Builders gives you another way to check on how well you understand and remember what you just read.

Reflect Every Knowledge Builder also includes opportunities to reflect on what you have just read. *Think Critically* questions invite you to reflect more deeply about the how and why of what you have just read, and *Self-Reflect* questions help you connect new ideas to your own life. (Don't forget to take notes and recite and reflect on your own.)

Review Each module concludes with a point-by-point *Summary* to help you identify psychology's big ideas and enduring principles. These summaries are organized around

the same Survey Questions you read at the beginning of the module. Ultimately, they will provide a good high-level summary of what you learned in this course. By making these ideas your own, you will gain something of lasting value: you will learn to see human behavior as psychologists do. For further review, you can use the running glossary in the margin, as well as boldface terms, figures, and tables.

■ **Table 1.3** summarizes how this text helps you apply the reflective SQ4R method. Even with all this help, there is still much more that you can do on your own.

Going Digital

Digital media can also offer several ways to learn more reflectively from this textbook. Dedicated reflective support for studying this textbook can be found by using MindTap.

MindTap *What is MindTap?* MindTap is a highly personalized, fully online learning platform that integrates in one site all of the authoritative content, assignments, and services that accompany your textbook, *Psychology: Modules for Active Learning*.

TABLE 1.3 | Using the Reflective SQ4R Method

Survey	▶ Module-Opening Introduction
	▶ Survey Questions
	▶ Figure Captions
	▶ Module Summaries
Question	▶ Topic Headings
	▶ Survey Questions
	▶ In-Text Dialogue Questions
Read	▶ Boldface Terms
	▶ Running Glossary (in margin)
	▶ Figures and Tables
Recite	▶ Recite Questions (in Knowledge Builders)
	▶ Practice Quizzes (online)
	▶ Notes (make them while reading)
Reflect	▶ Reflect Questions, including Think Critically and Self-Reflect questions (in Knowledge Builders)
	▶ Skills in Action Modules (throughout the text)
Review	▶ Module Summaries
	▶ Boldface Terms
	▶ Running Glossary (in margin)
	▶ Figures and Tables
	▶ Practice Quizzes (online)

What can I expect to get out of MindTap? Many of the more active elements of reflective learning are better presented digitally. There is room, for example, to include only a few practice quizzes in a print textbook (and the reader has to self-score them). In contrast, digital media make it feasible to present more extensive practice materials, as well as to provide immediate feedback.

MindTap has been designed to make it easier for you to engage in reflective learning by presenting the entire course (yup, the textbook, too) through the reflective SQ4R learning path, which includes video and other interactive activities. You will be able to complete reading assignments, annotate your readings, complete homework, get detailed instant feedback on Guided Practice Activities, and interact with quizzes and assessments. MindTap includes a variety of apps known as “MindApps,” allowing functionality such as having the text read aloud to you, as well as synchronizing your notes with your personal Evernote account. MindApps are woven into the MindTap platform and enhance your learning experience with this textbook.

Psychology Websites As you read (reflectively, of course) through this textbook, you may, from time to time, find yourself wanting to read more about a particular topic. Consider following up by looking up some of the references included in this text. Suppose that you were just reading about procrastination and wanted to learn more about the reference *Pychyl (2013)*. You can look up all in-module references in the “References” section at the back of this text. There, you will find that Pychyl (2013) is a book (it happens to be an excellent recent paperback how-to about overcoming procrastination).

Sometimes, though, the reference that you are interested in will be a psychology journal article. To locate journal articles, you can use *PsycINFO*, a specialized online database offered by the American Psychological Association (APA). **PsycINFO** provides summaries of the scientific and scholarly literature in psychology. Each record in PsycINFO consists of an abstract (short summary), plus notes about the author, title, source, and other details. Entering the author’s name(s) and article title will bring you to the article in question. Also, all PsycINFO entries are indexed using key terms. Thus, you can search for various topics by entering words such as *procrastination*, *postpartum depression*, or *creativity* and find research papers on any topic in psychology that might interest you.

PsycINFO A searchable, online database that provides brief summaries of the scientific and scholarly literature in psychology.

Almost every college and university subscribes to PsycINFO. You can usually search PsycINFO from a terminal in your college library or computer center—for free. PsycINFO can also be directly accessed (for a fee) through the Internet via APA's PsycINFO Direct service. For more information on how to gain access to PsycINFO, check out www.apa.org/pubs/databases/psycinfo/index.aspx. Beware, though: many of the primary research papers available through PsycINFO are highly technical. Don't be put off by this; read and digest what you can. You'll pick up some interesting information and become a better psychology student in the process.

Aside from PsycINFO, there are a number of good websites that you can consult for reliable information about

psychology. For example, the American Psychological Association (APA) and the Association for Psychological Science (APS) maintain online libraries of general-interest articles on many topics. They are well worth consulting when you have questions about psychological issues. You'll find them at www.apa.org and www.psychologicalscience.org. For links to recent articles in newspapers and magazines, check the APA's PsycPORT page at www.apa.org/news/psycport/index.aspx. Other high-quality websites include those maintained by other professional organizations, such as the Alzheimer's Association (www.alz.org), and government agencies, such as the National Institute of Mental Health (www.nimh.nih.gov). (See Module 6 for more on the important skill of information literacy.)

Reflective Note Taking—LISAN Up!

Survey Question 1.3 How can I get the most out of class time?

Just as studying a textbook is best done reflectively, so, too, is learning in class (Norman, 1994). Like effective reading, good notes come from actively seeking information. A **reflective listener** avoids distractions and skillfully gathers ideas. Here's a listening/note-taking plan that works for many students. The letters LISAN, pronounced like the word *listen*, will help you remember the steps:

- L = *Lead. Don't follow.* Read assigned materials before coming to class. Try to anticipate what your teacher will say by asking yourself questions. If your teacher provides course notes or Microsoft PowerPoint® overheads before lectures, survey them before coming to class. Reflective questions can come from those materials or from study guides, reading assignments, or your own curiosity.
- I = *Ideas.* Every lecture is based on a core of ideas. Usually, an idea is followed by examples or explanations. Ask yourself often, "What is the main idea now? What ideas support it?"
- S = *Signal words.* Listen for words that tell you what direction the instructor is taking. For instance, here are some signal words:

<i>There are three reasons . . .</i>	Here come ideas
<i>Most important is . . .</i>	Main idea
<i>On the contrary . . .</i>	Opposite idea
<i>As an example . . .</i>	Support for main idea
<i>Therefore . . .</i>	Conclusion

- A = *Actively listen.* Sit where you can get involved and ask questions. Bring questions that you want answered from the last lecture or from your text. Raise your hand at the beginning of class or approach your professor before the lecture. Do anything that helps you stay active, alert, and engaged.
- N = *Note taking.* Students who take accurate lecture notes tend to do well on tests (Williams & Eggert, 2002). However, don't try to be a tape recorder. Listen to everything, but be selective and write down only key points. If you are too busy writing, you may not grasp what your professor is saying. When you're taking notes, it might help to think of yourself as a reporter who is trying to get a good story (Ryan, 2001; Wong, 2015).

Most students take reasonably good notes—and then don't use them! Many students wait until just before exams to review. By then, their notes have lost much of their meaning. If you don't want your notes to seem like chicken scratches, it pays to review them periodically (Ellis, 2016).

Using and Reviewing Your Notes

When you review, you will learn more if you take these extra steps (Ellis, 2016; Pychyl, 2013; Santrock & Halonen, 2013):

- ▶ As soon as you can, reflect on your notes to fill in gaps, complete thoughts, and look for connections among ideas.

- Remember to link new ideas to what you already know.
- Summarize your notes. Boil them down and organize them.
- After each class session, write down several major ideas, definitions, or details that are likely to become test questions. Then, make up questions from your notes and be sure that you can answer them.

Summary The letters LISAN are a guide to active listening, but listening and good note taking are not enough. You must also review, organize, reflect, extend, and think about new ideas. Use active listening to get involved in your classes and you will undoubtedly learn more (Van Blerkom, 2012).

Reflective Study Strategies—Making a Habit of Success

Survey Question 1.4 How can I best prepare for tests?

Grades depend as much on effort as they do on intelligence. But good students work more efficiently, not just harder, and that's true when they study as well as when they write exams. In this section, we provide some tips for improving your studying and test-taking skills.

Strategies for Studying

Recently, researchers reviewed more than 700 articles on 10 of the most commonly used learning strategies to determine which ones were the most effective (Dunlosky et al., 2013). One of the study strategies most commonly used by students—highlighting or underlining material in the text or lecture notes—was found to be a particularly *ineffective* way to master the material, largely because it doesn't usually promote active or reflective learning. If you cannot imagine your textbook without the pretty neon colors, make sure that you combine your highlighting with one (or more!) of the effective strategies that we discuss below.

Test Yourself A great way to improve grades is to take practice tests before the real one (Karpicke & Blunt, 2011), and this strategy came out as a clear winner in the review of learning strategies. In other words, reflective studying should include **self-testing**, in which you pose questions to yourself. You can use flashcards; Knowledge Builder Recite, Think Critically, and Self-Reflect questions; online quizzes; a study guide; or other means. As you study, ask yourself several questions and be sure you can answer them. Studying without self-testing is like practicing for a basketball game without shooting any baskets.

Use Spaced Study Sessions Another clear winner in the review of learning strategies was the use of spaced study sessions. It is reasonable to review intensely before an exam. However, you're taking a big risk if you are only cramming (learning new information at the last minute). Spaced practice is much more efficient (Anderson, J. R., 2014;

Dunlosky, et al, 2013). **Spaced practice** consists of a large number of relatively short study sessions. Long, uninterrupted study sessions are called **massed practice**. (If you “massed up” your studying, you probably messed it up, too.) Cramming places a big burden on memory. Usually, you shouldn't try to learn anything new about a subject during the last day before a test. It is far better to learn small amounts every day and review frequently.

Other Suggestions for Studying Ideally, you should study in a quiet, well-lit area free of distractions. If possible, you should also have one place only for studying. Do nothing else there: keep magazines, MP3 players, friends, cell phones, pets, Twitter®, video games, puzzles, food, lovers, sports cars, elephants, pianos, televisions, Facebook®, and other distractions out of the area. In this way, the habit of studying will become strongly linked with one specific place.

Also, many students *underprepare* for exams, and most *overestimate* how well they will do. A solution to both problems is **overlearning**, in which you continue studying beyond your initial mastery of a topic. In other words, plan to do extra study and review *after* you think you are prepared for a test. One way to overlearn is to approach all tests as if they will be essays. That way, you will learn more completely, so you really “know your stuff.”

Strategies for Taking Tests

OK, but what about actually taking the tests? Are there any strategies for that? You bet! You'll do better on all types of

Reflective listener A person who knows how to maintain attention, avoid distractions, and actively gather information from lectures.

Self-testing Evaluating learning by posing questions to yourself.

Spaced practice Practice spread over many relatively short study sessions.

Massed practice Practice done in a long, uninterrupted study session.

Overlearning Continuing to study and learn after you think that you've mastered a topic.