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**Critical Thinking,
Clinical Reasoning,
and Clinical Judgment**
A Practical Approach

6th
EDITION

Critical Thinking, Clinical Reasoning, and Clinical Judgment

A Practical Approach

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*To nurses everywhere and to the newest generation of critical thinkers in my life.
I learn so much from you!*

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CRITICAL THINKING: AN INTERNATIONAL HEALTH CARE IMPERATIVE

Last week I saw the following bumper sticker on the car in front of me: Critical Thinking: A National Deficit. At first I laughed . . . then I thought, “How true!” As we move into this digital age with increased emphasis on meeting standards and achieving cost-effective, quality outcomes, critical thinking is an international health care imperative. I hear from nurses here in the United States and all over the world—Canada, Europe, Mexico, South America, Australia, New Zealand, Iceland, Africa, Singapore, and the Philippines, to name a few. They all have the same questions: How can we improve our nurses’ and students’ ability to think critically? What do we need to do to develop our own thinking skills? How can we help task-oriented individuals who have narrow views of the work they do? How do we assess critical thinking in diverse learners and nurses? How can we measure progress? Educators, leaders and staff are recognizing the need for a consistent, evidenced-based way to teach and evaluate critical thinking. It’s no wonder: Critical thinking—nurses’ ability to do the important thinking they need to do in changing, complex times—decides whether they succeed or fail. It makes the difference between keeping patients and caregivers safe and putting them in harm’s way.

I’m happy to tell you that this edition brings clarity and practical, evidence-based strategies to help you promote, develop, and evaluate critical thinking. It gives a much needed talking point for dialogue among learners, teachers, and leaders about what we’ve learned from research, what’s going well, and what needs to change. It answers questions like, “How do you assess critical thinking in diverse learners and nurses?” “Do critical thinking instruments work?” “What’s the best way to prepare for high-stakes testing, such as NCLEX[®] and certification exams?”

In accordance with my mission, the goal of this book is to help you promote excellence in nursing as measured by exceptional patient and learner outcomes and nurses’ job satisfaction. This includes helping students, nurses, teachers, and leaders do the following:

- Develop the critical thinking, learning, and interpersonal skills needed to partner with patients, families, communities, and one another.
- Keep the focus on patient and caregiver safety and welfare.
- Get patients, families, and communities actively involved in managing and improving their own health.

WHAT’S NEW TO THIS EDITION

This is a major revision that continues to be what our readers tell us: This book is easy to follow, has lots of examples for meaningful learning, and gives solid, cutting-edge information in an engaging way. Here’s a summary what’s new to this edition:

- **MORE ON CLARIFYING RELATIONSHIPS AMONG CRITICAL THINKING, CLINICAL REASONING, AND CLINICAL JUDGMENT.**
- **A NEW CHAPTER ON CRITICAL THINKING AND LEARNING CULTURES** addresses how to develop a climate in which “everyone teaches and everyone learns.” It includes building a safety culture, promoting caring and excellence, and respecting the needs of diverse learners and workforce.

- **EXPANDED CONTENT ON USING CRITICAL THINKING INDICATORS** and the 4-Circle Critical Thinking Model.
- **MORE ON CRITICAL THINKING EVALUATION** helps you answer questions like, “How do you assess critical thinking in diverse learners and nurses?” “Do critical thinking instruments work?” “What’s the best way to prepare for high-stakes testing, such as NCLEX® and certification exams?”
- **GREATER FOCUS ON LEGAL ASPECTS, SCOPE OF PRACTICE, AND DELEGATION** helps you get organized, set priorities, and make safe and effective clinical decisions.
- **PRACTICAL STRATEGIES TO DEVELOP LEADERSHIP AND SELF-MANAGEMENT SKILLS** such as managing your time, preventing and dealing with mistakes, navigating and facilitating change, and making conflict work in positive ways.
- **COMPLETELY UPDATED** to address health care reform and standards, competencies, and recommendations from the Academy of Medicine, the Quality and Safety for Nursing Education organization, The Joint Commission, the National League for Nursing, the American Nurses Association, and other key organizations and publications on how to transform nursing and nursing education to meet today’s health care needs.
- **NEW FULL-COLOR DESIGN** includes elements that help you gain a sense of salience (what’s most important):
 1. **HIGH-LIGHTED GUIDING PRINCIPLES** give fundamental rules and strategies you need to remember to get the best results, regardless of changing circumstances.
 2. **KEY CONCEPTS, LISTED AT THE BEGINNING OF EACH CHAPTER**, facilitate use in concept-based curriculums.
 3. **NEW MAPS AND TOOLS** guide you “to think things through” to make sound decisions.
 4. **MORE EXERCISES** help you apply and retain major content.

WHAT’S THE SAME ABOUT THIS EDITION

The following content and features are retained:

- How to think like a nurse to give patient-centered and family-centered care.
- Making patient and caregiver safety and welfare top priority in all thinking, including:
 1. Taking responsibility for being “a safety net” when helping co-workers, anticipating what they may need and pitching in to prevent mistakes (e.g., “I think that glove is contaminated, so let me get you a new one.” or “Here’s a new needle.”).
 2. Maintaining nursing surveillance (the need to constantly monitor for safety and improvement).
- The idea that developing skilled communication is as important as developing clinical skills.
- The roles of logic, intuition, and creativity.
- The importance of developing inquisitiveness and self-efficacy (feeling confident about your ability to learn and accomplish personal and professional goals).
- Using simulation and debriefing.
- Moving to a predictive model—*Predict, Prevent, Manage, Promote*
- The importance of thinking ahead, thinking-in-action, and thinking back (reflecting on practice).
- The role of preceptors in helping new nurses to develop clinical reasoning.
- Developing informatics skills (accessing, using, and creating electronic records).
- Applying brain-based learning principles (using strategies that get your brain plugged into learning).

- Giving practical information and strategies in a concise format (gives theory, strategies, and exercises to apply content).
- *Think, Pair, Share* exercises throughout promote deep learning through peer and expert collaboration.
- HMO (Help Me Out) cartoons, based on real incidences, address the funny things that happen to patients and caregivers. If you have a story to share, please contact me at <http://www.AlfaroTeachSmart.com>.

Additional Benefits. Once again, you get access to Evolve resources, as listed on the inside front cover.

HOW TO USE THIS BOOK

You can use this book to guide a specific course or as an adjunct to other courses. You get the best results if you begin to use it in beginning courses and continue to refer to it as you progress through various learning stages. You may even consider making parts of the book required reading *before* starting nursing school. For example, pre-nursing students can benefit greatly from reading [Chapters 1 to 3](#).

Here's the big picture of how content is organized:

- **Chapters 1–3 give the foundation for developing critical thinking, clinical reasoning, and clinical judgment.*** Here, you learn the “what and how” of critical thinking. You gain insight into how personality, upbringing, and culture affect thinking and get strategies to help you overcome personal challenges. [Chapter 3](#) explores critical thinking in learning and safety cultures and gives strategies to make the most of clinical learning experiences. You also get strategies for passing any test, including NCLEX.[®]
- **Chapters 4–6 focus on reasoning in the clinical setting.** Here, you gain the knowledge and skills needed to develop sound nursing judgment and make safe and effective clinical decisions. You gain a foundation for moral and ethical reasoning, research, evidence-based practice, and quality improvement. In [Chapter 6](#), you apply what you learned in [Chapters 4 and 5](#) by working with case scenarios that are based on real incidents. You practice key nursing process skills such as assessing systematically, drawing valid conclusions, and setting priorities.
- **Chapter 7 helps you develop the interpersonal, teamwork, and self-management skills you need to lead and succeed.** Today, every nurse must lead. Advocating for your patients, yourself, your peers, and your community requires highly developed interpersonal, communication, and situation-specific reasoning abilities.

Here are some things help you make the most of your reading:

The Best Way to Read this Book

The Best Way to Read This Book Is However You Choose to Read It

1. If you like the traditional approach, read it from beginning to end. You'll enjoy the narrative, logical approach, and numerous scenarios and examples designed to help you understand and remember content.
2. If you like to use your own unique approach—for example, the back to front approach (read summaries before text), the “skip around to the stuff that looks interesting” approach, or the “read the stuff that will be on the test first approach”—here are some of the features that help you focus on what's most important.

Continued

The Best Way to Read this Book—cont'd

Preceding each Chapter

- **This Chapter at a Glance:** Allows you to scan major headings.
- **Learning Outcomes and Key Concepts List:** Helps you focus on what's most important and decide where you stand in relation what you need to learn.

Following each Chapter

- **Critical Thinking and Clinical Reasoning Exercises:** Direct you to use content, helping you clarify understanding and move information into long-term memory.
- **Key Points/Summary:** Reminds you of the most important content.

Other Features you Need to Know About

- **Response Key:** When appropriate, to help you evaluate your responses to the exercises throughout, you can find example responses in [Appendix A](#). (All exercises that have an example response are marked with an asterisk.) This is called a response key, rather than an answer key, to avoid implying that there's only one right answer to each question. In some cases, a variety of responses are acceptable. (Great minds don't always think alike!) The point of the exercises isn't necessarily to come up with one right response; rather, the point is to get in touch with the thinking that led you to your response and to be able to evaluate and correct your thinking as needed.
- **Critical Moments:** Give simple strategies that can make a BIG difference in results.
- **Other Perspectives:** Offer interesting (and sometimes amusing) points of view.

Reading Efficiently

Use an organized and efficient learning approach, for example:

- **Survey:** Scan the abstract, major headings, tables, and illustrations.
- **Question:** Turn major headings into questions.
- **Read:** Read, taking notes and answering your questions.
- **Review, Recite, and Reread:** Review the chapter (or your notes), reciting key content out loud, and then ask yourself, "What's still not clear here?" Read the sections you don't understand again, and raise questions to ask in class or discuss with your peers.

WHO SHOULD READ THIS BOOK?

You should read this book if:

- You're an educator, leader, or preceptor in need of evidence-based strategies and tools to promote critical thinking in students and staff.
- You're a student or beginning nurse and want to be more confident and competent in making patient care decisions.
- You need to prepare for standard tests like National Council Licensure Examinations (NCLEX[®]) or professional certification exams.

Assumptions and Promises

Before I began to write this book, I made some assumptions:

- You want to learn.
- Your time is valuable, and you don't want to waste it.
- You like to learn the most important things first.
- You learn better when you're motivated, know why information is relevant, and choose your own way of learning.

Continued

Assumptions and Promises—cont'd

- You know yourself best, so it's inappropriate for me to tell you how to think.
- You feel a sense of accomplishment when you gain the knowledge and skills that help you be more independent.

Because of these assumptions, I promise to:

- Let you know what's most important.
- Use lots of examples and present information in a usable way.
- Give the "reasons behind the rules."
- Encourage you to choose what works for you.
- Help you develop the skills required to be a better thinker, independent learner, and more effective nurse.

PATIENTS, CLIENTS, CONSUMERS, STAKEHOLDERS, "HE/SHE"

To reflect that patients and clients are health care consumers who are *individuals* with unique needs, values, perceptions, and motivations, often a fictitious name or "someone," "person," "consumer," or "individual" is used (instead of "patient" or "client"). The term *stakeholder* is now used when talking about all the individuals and groups who have a vested interest in how care is given. (Examples of stakeholders include patients, significant others, caregivers, and insurance companies.) He and she are used interchangeably to avoid the awkwardness of using "he/she."

TELL US WHAT YOU THINK

We want to hear your struggles and concerns. Whether you're a student, staff nurse, leader, or educator, if you have a problem with something, it's likely that others do too. Your problems are our opportunities to learn, improve, and help others with similar issues. Please let me know what you think.

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What Are Critical Thinking, Clinical Reasoning, and Clinical Judgment?

THIS CHAPTER AT A GLANCE...

Critical Thinking: Behind Every Healed Patient
 Critical Thinking: Not Simply Being Critical
 Rewards of Learning to Think Critically
 How This Book Helps You Improve Thinking
 Describing Critical Thinking
 Problem-Focused Versus Outcome-Focused Thinking
 What About Common Sense?
 What Do Critical Thinkers Look Like?
 Critical Thinking Indicators

What's Familiar and What's New?
 4-Circle CT Model: Get the Picture?
 Thinking Ahead, Thinking-in-Action, and Thinking Back
 Putting It All Together
 Critical Thinking Exercises
 Think, Pair, Share
 Key Points/Summary
 References

LEARNING OUTCOMES

After completing this chapter, you should be able to:

1. Describe critical thinking, clinical reasoning, and clinical judgment in your own words, based on the descriptions in this chapter.
2. Give at least three reasons why critical thinking skills are essential for students and nurses.
3. Explain (or map) how the following terms are related to one another: critical thinking, clinical reasoning, clinical judgment, decision-making, problem-solving, and nursing process.
4. Identify four principles of the scientific method that are evident in critical thinking.
5. Compare and contrast the terms problem-focused thinking and outcome-focused thinking.
6. Clarify the term critical thinking indicator (CTI).
7. Use CTIs, together with the 4-Circle CT model, to identify five critical thinking characteristics you'd like to improve.
8. Explain why knowing the nursing process is needed for clinical reasoning and passing the NCLEX[®] and other standard tests.
9. Identify the relationships among healthy workplaces, learning cultures, safety cultures, and critical thinking.
10. Compare and contrast the terms thinking ahead, thinking-in-action, and thinking back.

KEY CONCEPTS

Critical thinking, clinical reasoning, clinical judgment, critical thinking indicator (CTI), nursing process, healthy workplace, learning culture, safety culture, thinking ahead, thinking-in-action, thinking back.

CRITICAL THINKING: BEHIND EVERY HEALED PATIENT

A powerful quote from an online blog sets the stage for this chapter: “Behind every healed patient is a critical thinking nurse.”¹ Critical thinking—your ability to focus your thinking to get the results you need—makes the difference between whether you succeed or fail. It makes the difference between keeping you and your patients safe and being in harm’s way. Whether you’re trying to set priorities, collaborate with a difficult person, or develop a plan of care, critical thinking—deliberate, informed thought—is the key.

Developing critical thinking starts with having a good understanding of what it IS. As a colleague of mine says, too many nurses believe that critical thinking is like an “amorphous blob” that you can’t describe—something that you’re “just supposed to *do*.” To improve thinking, you must be specific about exactly what’s involved when thinking critically in various situations. Thinking is a skill, just like music or tennis. It flows and changes depending on current conditions, and it requires gaining specific knowledge, skills, and experience.

This chapter helps you start the journey to improving your ability to think critically in two steps: (1) First, you learn why health care organizations and nursing schools stress the need for critical thinking. (2) Second, you examine exactly what it is and how it relates to clinical reasoning, clinical judgment, and nursing process.

GUIDING PRINCIPLE

The first step to developing critical thinking is to gain a deep understanding of what it entails in various circumstances.

CRITICAL THINKING: NOT SIMPLY BEING CRITICAL

Critical thinking doesn’t mean simply being negative or full of criticism. It means not accepting information at face value without carefully evaluating it. When you think critically, you examine assumptions, evaluate evidence, and uncover underlying values and reasons.²

There are many positive uses for critical thinking—for example, developing workable solutions to complex problems, deliberating about courses of action to take, or determining ways to improve consumer satisfaction.

In *critical thinking*, the term *critical* may be replaced with *important*. In other words, critical thinking is “important thinking” you need to do to answer questions or assess, prevent, or manage problems. Nurses often use *critical thinking* to imply thinking that’s crucial must be done to manage specific problems. For example, “We’re working with our nurses to develop the critical thinking needed to identify people at risk for infection early.”

REWARDS OF LEARNING TO THINK CRITICALLY

Learning what critical thinking is—what it “looks like” and how you “do it” when circumstances change—helps you:

- **Gain confidence**, a trait that’s crucial for success; lack of confidence is a “brain drain” that impedes thinking and performance.
- **Be safe and autonomous**; it helps you decide when to take initiative and act independently, and when to get help.
- **Improve patient outcomes and your own job satisfaction** (nothing’s more rewarding than seeing patients and families thrive because you made a difference).

BOX 1-1 Key Learning and Workplace Skills**To succeed in the workplace and as learners, you must know how to:**

- Be a self-starter and take initiative, ownership, and responsibility.
 - Work independently and in groups to solve problems and develop plans.
 - Teach yourself and others; advocate for yourself and others.
 - Use resources: Allocate time, money, materials, space, and human resources.
 - Establish positive interpersonal relationships: Work on teams, lead, negotiate, and work well with diverse individuals.
 - Access, evaluate, and use information (organize and maintain files, interpret and communicate information, use computers to process data, and apply information to current situations).
 - Assess social, organizational, and technologic systems.
 - Apply professional and ethical standards to guide decision-making.
 - Monitor and correct performance; design and improve systems.
 - Use technology: Select equipment and tools; apply technology to tasks; maintain and troubleshoot equipment.
- Accomplishing the skills in the list above requires you to have the following:
- Basic skills: Reading, writing, speaking, listening, mathematics
 - Thinking skills: Knowing how to learn, reason, and think creatively; generate and evaluate ideas; see things in the mind's eye; make decisions; and solve problems
 - Personal qualities: Responsibility, self-esteem, self-confidence, self-management, sociability, and integrity

Yet thinking isn't "like it always was." Health care delivery is increasingly complex and dynamic, requiring very specific thinking and workplace skills (Box 1-1). Consider how the following points relate to the importance of developing sound critical thinking skills:

- Critical thinking is the key to preventing and solving problems. If you can't think critically, you become a part of the problems.
- Critical thinking is crucial to passing tests that demonstrate that you're qualified to practice nursing—for example, the National Council Licensure Examination (NCLEX[®]), the Canadian Nurse Registered Examination (CNRE), and other certification exams.
- In all settings, nurses are expected to take on new responsibilities, collaborate with diverse individuals, and make more independent decisions. High-performance organizations need workers with solid thinking skills and personal qualities such as reliability and integrity.³
- Nurses' roles within the context of the entire workforce, the nursing shortage, social issues, and technology continue to evolve. As a nurse, you must be a key player in designing and implementing more effective and efficient health care systems.^{4,5}
- The complexity of care today requires knowledgeable individuals who are thought-oriented rather than task-oriented. For the public to value the need for nurses, we must change our image from being simply "a caring, helpful hand" to one that shows that we have specific knowledge that's vital to keeping patients safe and helping them get and stay well. We must "wear not only our hearts, but also our brains on our sleeves."⁶
- Patients and families must be active participants in making decisions; as the saying goes, "Nothing about me, without me." Knowing how to lead, advocate, and teach and empower patients and families to manage their own care requires highly developed critical thinking and interpersonal skills.
- Critical thinking skills are key to establishing the foundation for lifelong learning, a healthy workplace, and an organizational culture that's more concerned with reporting errors and promoting safety than "pointing fingers" and "blaming" (Box 1-2).

BOX 1-2 Healthy Workplace and Safety and Learning Cultures**Healthy Workplace Environment**

Healthy workplace standards form the foundation for a climate that fosters critical thinking by providing an atmosphere that's respectful, healing, and humane. These standards stress the need for (1) effective communication, (2) true collaboration, (3) effective decision-making, (4) appropriate staffing, (5) meaningful recognition, and (6) authentic leadership. A safe and respectful environment requires each standard to be maintained, because studies show that you don't get effective outcomes when any one standard is considered optional.

Safety Culture

When a group has a culture of safety, everyone feels responsible for safety and pursues it on a regular basis. Patient safety is top priority. To identify main causes of mistakes and build systems to prevent them, there's more concern about reporting errors than placing blame. Nurses, physicians, and technicians look out for one another and feel comfortable pointing out unsafe behaviors (e.g., when hand sanitation has been missed or when safety glasses should be worn). Safety takes precedence over egos or pressures to complete tasks with little help or time. The organization values and rewards such actions.

Learning Culture

In a learning culture, teaching and learning are key parts of daily activities. Everyone is encouraged to create learning opportunities and share information freely. Leaders, teachers, and staff are approachable and promote self-esteem and confidence by treating learners with kindness and showing genuine interest in them as people. Learners are encouraged to feel that they belong to the team. Teaching strategies are tailored to individuals, not tasks. Promoting research and improving care quality is "everyone's job."

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GUIDING PRINCIPLE

Ensuring patient and caregiver safety and welfare must be given top priority in all thinking in nursing.

HOW THIS BOOK HELPS YOU IMPROVE THINKING

To keep your interest and help you understand and remember what you read, this book is designed based on principles of brain-based learning.^{7,8} Let's look at what brain-based learning is and how this book is organized to help you improve, regardless of your skill level.

Brain-Based Learning

Brain-based learning uses strategies that help your brain get "plugged in to learning." For example:

1. **You learn best when there's logical progression of content** and you're engaged by a conversational style that gives lots of examples, strategies, and exercises to help you apply content to the "real world."
2. **Gaining deep understanding requires intensive analysis**, which means thinking about the same topics in various ways.
3. **Understanding and retaining what you read requires that you make learning meaningful** by using your own unique way of processing how content relates to you personally, rather than trying to memorize a bunch of facts.

4. **Humor reduces stress, keeps your interest, and helps you learn.**
5. **Thinking is like any skill (e.g., music, art, and athletics).** We each have our own styles and innate or learned capabilities. We all can improve by gaining insight, acquiring instruction and feedback, and deliberately working on the skills in real and simulated situations.

Organized for Novices and Experts

Whether you're a novice or an expert, the following organization helps you connect with what you already know and move on to developing the complex skills you need to succeed today.

- **Chapters 1 to 3 give the foundation for developing critical thinking, clinical reasoning, and clinical judgment.** Here, you learn the “what and how” of critical thinking. You gain insight into how personality, upbringing, and culture affect thinking and get strategies to help you overcome personal challenges. [Chapter 3](#) explores critical thinking and learning cultures, in which “everyone teaches and everyone learns.” It gives you strategies to help you make the most out of clinical learning experiences and pass high-stakes tests such as NCLEX[®] and other certification exams.
- **Chapters 4 to 6 focus on reasoning in the clinical setting.** Here, you gain the knowledge and skills needed to develop sound nursing judgment and make safe and effective clinical decisions. You gain a foundation for moral and ethical reasoning, research, evidence-based practice, and quality improvement. In [Chapter 6](#), you apply what you learned in [Chapters 4](#) and [5](#) by working with case scenarios that are based on real incidents. You practice key nursing process skills such as assessing systematically, drawing valid conclusions, and setting priorities.
- **Chapter 7 helps you develop the interpersonal, teamwork, and self-management skills you need to lead and succeed (e.g., managing your time).** Today, every nurse must be a leader. Advocating for your patients, yourself, your peers, and your community requires highly developed interpersonal and communication abilities. In Skill 7.0, *How to Prevent and Deal with Mistakes Constructively*, you learn how to meet quality and safety standards and keep patients, caregivers, and yourself safe.

DESCRIBING CRITICAL THINKING

When trying to get an in-depth understanding of something, we sometimes call this “peeling the onion.” When you peel an onion you go through many layers to get to the core. Let’s “peel the critical thinking onion” by looking at various descriptions of what it entails.

Thinking Versus Critical Thinking

You may be wondering what’s the difference between *thinking* and *critical thinking*. The main differences are *purpose* and *control*. Thinking refers to any mental activity. It can be “mindless,” like when you’re daydreaming or doing routine tasks like brushing your teeth. Critical thinking is controlled and purposeful, using well-reasoned strategies to get the results you need.

The Best Description

Critical thinking is a complex process that changes depending on context (circumstances). For this reason, there is no one *right* definition. Many authors develop their own descriptions to complement and clarify someone else’s (which is, by the way, a good example of thinking critically: critical thinking requires you to “personalize” information—to analyze it and decide what it means to you rather than simply memorizing someone else’s words). In fact, the description that you put in your own words may be the best one because it’s most likely to have an impact on your reasoning abilities. Keep this in mind as you think about the following synonym and commonly seen descriptions.

A Synonym: Reasoning

A good synonym for critical thinking is *reasoning* because it implies careful, deliberate thought. Today, students learn “four Rs”: reading, ’riting, r’ithmetic, and reasoning.

Common Critical Thinking Descriptions

Consider the following critical thinking descriptions that complement and clarify one another:

- “Knowing how to learn, reason, think creatively, generate and evaluate ideas, see things in the mind’s eye, make decisions, and solve problems”³
- “Reasonable, reflective thinking that focuses on what to believe or do”⁹
- “The ability to solve problems by making sense of information using creative, intuitive, logical, and analytical mental processes... and the process is continual”¹⁰
- “Knowing how to focus your thinking to get the results you need (includes using logic, intuition, standards, and evidence-based practice)”¹¹

Clinical Reasoning, Critical Thinking, and Clinical Judgment

The terms *clinical reasoning*, *critical thinking*, and *clinical judgment* are often used interchangeably. But there is a slight difference in how nurses use these terms:

- **Clinical reasoning**—a specific term—is the process you use to think about issues at the point of care—for example, deciding how to prevent and manage patient problems. For reasoning about other clinical issues (e.g., teamwork, collaboration, and streamlining work flow), nurses usually use the term *critical thinking*.
- **Critical thinking**—a broad term—includes reasoning both outside and inside of the clinical setting. Clinical reasoning and clinical judgment are key pieces of critical thinking in nursing.
- **Clinical judgment** refers to the result (outcome) of critical thinking or clinical reasoning—the conclusion, decision, or opinion you make after thinking about the issues.
- To clarify the relationships among critical thinking, clinical reasoning, and clinical judgment, study [Figure 1-1](#).



FIGURE 1-1 Clinical judgment—the result of critical thinking.

Critical Thinking Versus Nursing Process

American Nurses Association (ANA) standards state that the nursing process—*assessment, diagnosis, outcome identification, planning, implementation, and evaluation*—serves as a critical thinking model that promotes a competent level of care.¹² This means that the nursing process—*Assess, Diagnose, Plan, Implement, and Evaluate*—is the major tool for clinical reasoning. It’s the first tool you need to know to think like a nurse and pass NCLEX[®] and other exams. In [Chapter 6](#) you will practice using the nursing process as a tool for clinical reasoning.

Applied Definition: Thinking in the Clinical Setting

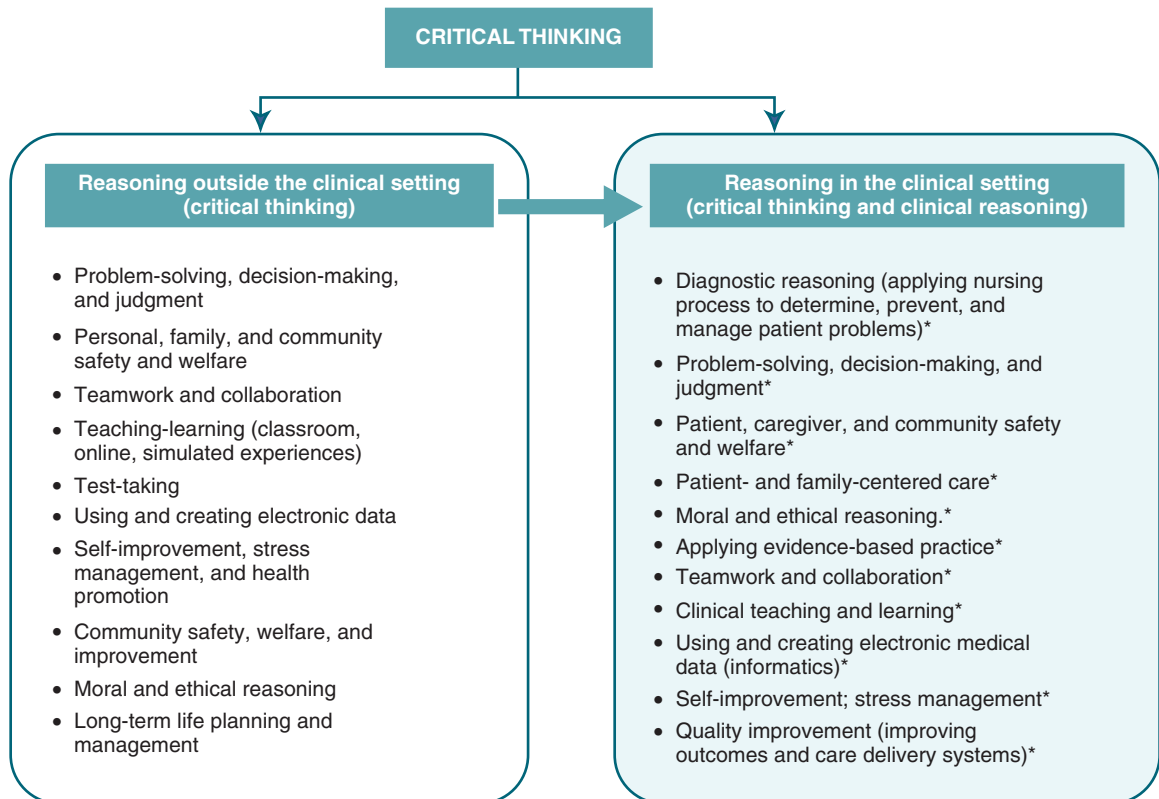
To understand important points about thinking in the clinical setting—a setting that’s challenging, complex, and regulated by laws and standards—study the following applied definition.

Critical thinking in nursing—which includes clinical reasoning and clinical judgment—is purposeful, informed, outcome-focused thinking that:¹³

- Is guided by standards, policies, ethics codes, and laws (individual state practice acts and state boards of nursing).

- Is driven by patient, family, and community needs, as well as nurses' needs to give competent and efficient care (e.g., streamlining charting to free nurses for patient care).
- Is based on principles of nursing process, problem-solving, and the scientific method (requires forming opinions and making decisions based on evidence).
- Focuses on safety and quality, constantly re-evaluating, self-correcting, and striving to improve.
- Carefully identifies the key problems, issues, and risks involved, including patients, families, and key stakeholders in decision-making early in the process. Stakeholders are the people who will be most affected (patients and families) or from whom requirements will be drawn (e.g., caregivers, insurance companies, third-party payers, and health care organizations).
- Uses logic, intuition, and creativity and is grounded in specific knowledge, skills, and experience.
- Calls for strategies that make the most of human potential and compensate for problems created by human nature (e.g., finding ways to prevent errors, using technology, and overcoming the powerful influence of personal views).

Figure 1-2 clarifies the relationships of many aspects of critical thinking in nursing. It also highlights important Quality and Safety Education for Nurses (QSEN) and Institute of Medicine (IOM) competencies.



*Relates to ANA practice standards, The Joint Commission Standards, Quality and Safety Education for Nurses competencies, and Institute of Medicine competencies

FIGURE 1-2 *Critical thinking* is an umbrella term that includes many aspects of reasoning inside and outside of the clinical setting. The terms *clinical reasoning*, *critical thinking*, *problem-solving*, and *decision-making* are often used interchangeably. Your ability to reason outside of the clinical setting affects your ability to reason in the clinical setting. (Copyright 2015 by R. Alfaro-LeFevre. <http://www.AlfaroTeachSmart.com>)

GUIDING PRINCIPLE

Critical thinking in nursing is guided by professional standards, policies, ethics codes, and laws (individual state practice acts and state boards of nursing regulations).

PROBLEM-FOCUSED VERSUS OUTCOME-FOCUSED THINKING

Problem-focused thinking and outcome-focused thinking are closely related. You need excellent problem-solving skills to achieve desired outcomes (results). But, consider the following:

- **There are many ways to solve a problem.** There are quick fixes, “one-size-fits-all” solutions, temporary and long-term solutions, and solutions that are satisfactory but could be better. Outcome-focused thinking aims to fix problems in ways that get you *the best results*.
- **Sometimes there are so many problems that the best approach may be to focus on outcomes rather than problems.** For example, if you work on a team with many interpersonal problems, your manager might say, “We have a long history of problems, and it will take forever to fix them. I want to see us all working as a team. I’m asking you to put the problems aside and get agreement on roles, responsibilities, and behavior, so that our patients get good care and we enjoy coming to work.”

WHAT ABOUT COMMON SENSE?

Is critical thinking simply *common sense*, something that can’t be taught? The answer is “No.” Some people are born with the gift of common sense, but a lot of it is *learned from experience*. You can put someone with great common sense in a new or stressful situation, and you’re likely to see behaviors that don’t seem at all sensible. Think about the following scenario, a true story.

SCENARIO CRITICAL THINKING: SIMPLY COMMON SENSE?

As an evening supervisor, I stopped to check on a new graduate who was in charge for the first time. She appeared to be “in over her head,” nervous, and running around. Calmly, I asked how things were going. She replied, “Fine, except for the man in Room 203. His temperature was 104° F an hour ago. We drew blood cultures, gave aspirin, and started him on antibiotics.” I asked, “What’s the temperature now?” She replied, “He’s not due until 8 PM” (3 hours later). It seemed common sense to me that you would check the temperature more frequently when it was that high. Wanting to set a collaborative tone, I stressed the need to check it more frequently, and asked her to keep me informed. I also made sure I came back frequently to see how things were going. At the time, I believed this nurse had no common sense, but she went on to be an excellent clinician with a track record of success. She was simply inexperienced, nervous, and overwhelmed in a new situation. She may even have been subconsciously defending an oversight.

Common sense may be innate, but it also comes from knowledge and experience. What may be common sense to you, based on your upbringing, schooling, or experience, may not be so to someone else. If you encounter someone who seems to have no common sense, don’t jump to conclusions. Dig a little deeper to determine the real issues: Is there a knowledge, confidence, communication, or organizational skills problem? Is the person simply inexperienced or stressed by a new environment? Has the person become complacent? Could a learning disability be contributing to the problem? Like critical thinking, common sense often can be taught if you determine the underlying problems and do something about them.

WHAT DO CRITICAL THINKERS LOOK LIKE?

Research shows that most critical thinkers have high foreheads and furrowed brows, probably because of all the thinking they do. If you're not questioning this statement, then you're not thinking critically about what you're reading. When I ask, "What do critical thinkers look like?" I mean, "What characteristics do we see in someone who thinks critically?" Consider the following description:

*The ideal critical thinker is habitually inquisitive, self-informed, trustful of reason, open-minded, flexible, fair-minded in evaluation, honest in facing personal biases, prudent in making judgments, willing to reconsider, clear about issues, orderly in complex matters, diligent in seeking relevant information, reasonable in selecting criteria, focused in inquiry, and persistent in seeking results that are as precise as the subject and the circumstances of inquiry permit.*¹⁴

CRITICAL THINKING INDICATORS

Studying *behavior*—what good thinkers *do and say*—helps you get a picture of what critical thinkers "look like." Box 1-3 describes personal critical thinking indicators (CTIs). Personal CTIs are brief descriptions of behaviors and characteristics often seen in individuals who are critical thinkers. These behaviors are called *critical thinking indicators* because they *indicate* characteristics of critical thinkers. A survey of 65 expert nurses from various backgrounds showed agreement

BOX 1-3 Personal Critical Thinking Indicators

SELF-AWARE: Identifies own learning, personality, and communication style preferences; clarifies biases, strengths, and limitations; acknowledges when thinking may be influenced by emotions or self-interest.

GENUINE/AUTHENTIC: Shows true self; demonstrates behaviors that indicate stated values.

EFFECTIVE COMMUNICATOR: Listens well (shows deep understanding of others' thoughts, feelings, and circumstances); speaks and writes with clarity (gets key points across to others).

CURIOUS AND INQUISITIVE: Asks questions; looks for reasons, explanations, and meaning; seeks new information to broaden understanding.

ALERT TO CONTEXT: Looks for changes in circumstances that warrant a need to modify approaches; investigates thoroughly when situations warrant precise, in-depth thinking.

REFLECTIVE AND SELF-CORRECTIVE: Carefully considers meaning of data and interpersonal interactions, asks for feedback; corrects own thinking, alert to potential errors by self and others, finds ways to avoid future mistakes.

ANALYTICAL AND INSIGHTFUL: Identifies relationships; expresses deep understanding.

LOGICAL AND INTUITIVE: Draws reasonable conclusions (if this is so, then it follows that because...); uses intuition as a guide; acts on intuition only with knowledge of risks involved.

CONFIDENT AND RESILIENT: Expresses faith in ability to reason and learn; overcomes problems and disappointments.

HONEST AND UPRIGHT: Looks for the truth, even if it sheds unwanted light; demonstrates integrity (adheres to moral and ethical standards; admits flaws in thinking).

AUTONOMOUS/RESPONSIBLE: Self-directed, self-disciplined, and accepts accountability.

CAREFUL AND PRUDENT: Seeks help as needed; suspends or revises judgment as indicated by new or incomplete data.

OPEN AND FAIR-MINDED: Shows tolerance for different viewpoints; questions how own viewpoints are influencing thinking.

Continued

BOX 1-3 Personal Critical Thinking Indicators—cont'd

SENSITIVE TO DIVERSITY: Expresses appreciation of human differences related to values, culture, personality, or learning style preferences; adapts to preferences when feasible.

CREATIVE: Offers alternative solutions and approaches; comes up with useful ideas.

REALISTIC AND PRACTICAL: Admits when things aren't feasible; looks for useful solutions.

PROACTIVE: Anticipates consequences, plans ahead, acts on opportunities.

COURAGEOUS: Stands up for beliefs, advocates for others, doesn't hide from challenges.

PATIENT AND PERSISTENT: Waits for right moment; perseveres to achieve best results.

FLEXIBLE: Changes approaches as needed to get the best results.

HEALTH-ORIENTED: Promotes a healthy lifestyle; uses healthy behaviors to manage stress.

IMPROVEMENT-ORIENTED (SELF, PATIENTS, SYSTEMS): **Self**—Identifies learning needs; finds ways to overcome limitations, seeks out new knowledge. **Patients**—Promotes health; maximizes function, comfort, and convenience. **Systems**—Identifies risks and problems with health care systems; promotes safety, quality, satisfaction, and cost containment.

From Alfaro-LeFevre, R. (2015). *Evidence-based critical thinking indicators*. All rights reserved. No use without permission. Available at <http://www.AlfaroTeachSmart.com>

NOTE: This list is the ideal—no one is perfect.

that the CTIs were behaviors often seen in nurses who are critical thinkers.¹⁵ Review **Box 1-3** and rate where you stand in relation to each indicator, using the following 0 to 10 scale:

0 = This indicator is not easy for me.

10 = This indicator is pretty much habit for me.

As you evaluate yourself, keep in mind that some of you, because of your nature, will be harder on yourselves than others (and vice versa). If you have some trusted friends, peers, or family members, ask them how they see your behavior. Ask them to focus on *usual patterns of behaviors* (not single incidents) and to give you specific examples. The results of this exercise may reaffirm or surprise you.

GUIDING PRINCIPLE

In real life, there's no ideal critical thinker—no one's perfect. Even the best thinker's abilities vary, depending on circumstances such as confidence level and previous experience. What matters are *patterns* over time (does the person demonstrate critical thinking characteristics most of the time?).

Table 1-1 gives examples of what critical thinking is and what it's *not*. **Box 1-4** shows how other authors describe critical thinking traits. These traits were incorporated into the CTIs using simpler terms.

WHAT'S FAMILIAR AND WHAT'S NEW?

We understand something best by comparing it with things we already know: How is it the same, and how is it different? Let's examine what's familiar and what's new about critical thinking.

What's Familiar
Problem-Solving

Knowing specific problem-solving strategies is a key part of critical thinking. For example, if you're caring for someone after heart surgery, you must know strategies to prevent and treat