

White Paper

Clinical Judgment: What Does This Mean and What Can We Do About It?



CLINICAL JUDGMENT: WHAT DOES THIS MEAN AND WHAT CAN WE DO ABOUT IT?

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Nursing and Health Professions faculty agree that the ultimate academic goal for new graduates is to be able to “think like a clinician.” Yet, what does “thinking like a clinician” actually mean? How can faculty structure learning activities so that students develop a beginning level of competence in this skill? This White Paper discusses the underlying thought processes clinicians use in making clinical judgments and suggests some strategies to encourage students to integrate this approach into their clinical practice. A bibliography of selected articles highlighting teaching–learning strategies designed to encourage critical thinking is also provided.

“Thinking like a clinician” — whether a nurse, a radiological technologist, or other clinician — involves making professional decisions through the lens of the knowledge, skills, and attitudes of the profession. Literature on the subject suggests that **CRITICAL THINKING** is necessary to be able to “think like a clinician.” Most accreditation standards emphasize the importance of preparing students to develop critical thinking abilities as part of nursing and health professions curricula. There are a multitude of definitions of critical thinking, but one that is simple, yet meaningful is:

Critical thinking is the process of identifying and evaluating evidence to guide decision-making. (Paul & Elder, 2008)

Riddell (2007) argues that the process of clinical thinking is not simple and requires an “explanation rather than a definition.” To illustrate this complexity, experts have identified a number of actions that must be implemented in order for critical thinking to occur. These behaviors include:

1. Raising vital questions and problems and articulating them clearly.
2. Assessing one’s own assumptions about the information and the implications of these assumptions.
3. Gathering and synthesizing relevant information.
4. Interpreting information gathered in the context of a particular situation and evaluating the conclusions reached against accepted standards and criteria.
5. Being open minded about new approaches and comparing the tentative solution with alternates through a reflective process.
6. Communicating with others while figuring out solutions to complex problems.

Critical thinking is a generic process that can be applied in a wide range of professional and personal situations.

CLINICAL JUDGMENT is the use of the critical thinking process in order to make clinical decisions. Benner, Tanner, and Chesla (1996) suggest that “clinical judgment refers to the way in which nurses come to understand the problems, issues, or concerns of patients, attend to salient information, and respond in concerned and involved ways.”

To provide a framework for making clinical decisions, Tanner (2004) developed a **CLINICAL JUDGMENT MODEL**, drawn from over 200 research studies. This model is based upon the following five assumptions:

- Clinical judgments are influenced more by what nurses bring to the situation than the objective data about the situation at hand.
- Sound clinical judgment rests, to some degree, on knowing the patient and his or her typical pattern of responses, as well as engagement with the patient and his or her concerns.
- Clinical judgments are influenced by the context in which the situation occurs and the culture of the nursing care unit.

- Nurses use a variety of reasoning patterns, alone or in combination.
- Reflection on practice is often triggered by a breakdown in clinical judgment and is critical for the development of clinical knowledge and improvement in clinical reasoning.

Tanner's Model (2004) defines **Clinical Judgment** as:

An interpretation or conclusion about patient needs, concerns or health problems and the decision to take action (or not), use or modify standard approaches, or improvise new ones based on the patient's responses.

She hypothesizes that there are four phases to clinical judgment: noticing, interpreting, responding, and reflecting. While this model is designed to describe clinical judgment in nursing practice, Tanner suggested that it may also be applied in other clinical disciplines.

In 2008, Benner, Hughes, and Stuphen further defined thought processes associated with "thinking like a clinician." They suggested that there are numerous types of thinking that a clinician might use, including clinical reasoning, clinical reflection, and clinical judgment. The definitions of these concepts are also helpful in planning activities that help students "think like a clinician."

Critical Reflection: Examining the underlying assumptions and radically questioning or doubting the validity of arguments, assertions, and even facts of the case.

Critical Reasoning: A process whereby knowledge and experience are applied in considering multiple possibilities to achieve the desired goals, while considering the patient's situation.

Clinical Judgment: Clinical reasoning across time about a particular situation.

Importance of Definitions in Helping Students to "Think Like a Clinician"

From a practical perspective, these theoretical definitions can guide faculty in planning learning activities that offer opportunities to practice the various behaviors associated with critical thinking/clinical judgment. Let's explore some of these activities.

Directed Reading

Since nursing and health professions curricula are reading-intensive, helping students improve their reading comprehension and critical thinking skills through a directed-reading approach may be a helpful activity to insure success. Hoffman (2008) suggests that using prompts as part of a reading assignment can improve students' critical thinking skills. These prompts might include asking students to write a paragraph about what the student thought the reading was about based on its title. This exercise helps students become aware of their own assumptions. Student might also be required to identify content they didn't understand and the ways they sought answers to their questions. They might also be asked to write a summary of the reading, describing significant points and/or identifying unanswered questions.

Evaluating Evidence

Smith-Strøm and Nortveld (2006) investigated the extent to which a group assignment to critically appraise evidence about a clinical intervention would encourage students to use critical thinking. To successfully complete the assignment, students had to use critical thinking skills. As part of a four week course on evaluating evidence, student groups were expected to formulate a question, search the evidence, and then analyze it to determine its effectiveness in answering their question. The faculty chose group work for this assignment to add opportunity for student discussion. A post-course test demonstrated that students were individually able to apply these critical thinking skills to evaluate other types of evidence.

Case Studies

Unfolding case studies and Problem-Based Learning (PBL) activities are designed to encourage students to work through probable situations by generating hypotheses and testing them against relevant literature and personal experience. One of the reasons for using case studies is that there may be more than one “right” answer, a result that certainly mirrors real life. Regardless of the setting, students should feel safe in the environment in order to become fully involved in the activity. Topics chosen for case studies should feature the most important concepts being considered. At the completion of the case study, faculty should summarize key points for students.

Although results of research evaluating the extent to which case studies, particularly PBL activities, are more likely to improve students’ ability to use clinical judgment than other learning activities is mixed (Kowalszyk, 2011), this approach has been widely integrated into both classroom and simulation/clinical activities as individual or group assignments over the last decade.

Simulation and Virtual Patients

Case studies and scenarios are often included as part of simulation (low – or high-fidelity) and virtual patient activities. Again, there is conflicting evidence regarding whether simulation of any sort is better than other approaches to develop students’ clinical judgment. However, these approaches to learning are often chosen because of a lack of clinical opportunities available to students.

The use of simulation and case studies as an adjunct to, or substitute for, experience in clinical sites allows students to participate in complex health care situations that they may have no opportunity to experience in real life. In addition, Cook and Triola (2009) reviewed the literature to evaluate the effectiveness of the use of virtual patients — a clinical case that unfolds on the computer screen — in the education of health professions. The authors suggest that the most appropriate use of this teaching–learning methodology is to facilitate the development of clinical reasoning and to assess students’ abilities in that arena, both of which can more practically be done via simulation.

Questioning Strategies

An approach that can be effectively used to stimulate critical thinking in both class and clinical experiences includes asking students pertinent questions. This approach also requires a safe environment for best effect. These questions should not require rote memory, but should focus on “What if? Why? or How?” Hoffman (2008) describes how she tells students that “I will ask you questions until you don’t know the answer.” She explains that asking only questions the student knows will not stimulate them to learn new information. This approach can be used to enhance the students’ engagement in the learning process.

Preparation for Clinical Experience

To prepare for clinical experience, students may be expected to determine the likely care for the patient(s) to whom they are assigned. This expectation encourages students to review relevant pathophysiology and medications and identify appropriate interventions. Historically for nursing students, this preparation has included developing a nursing care plan. Marchigiano, Eduljee, and Harvey (2010) evaluated the effectiveness of care planning in encouraging critical thinking, as compared to directed journaling, as a strategy for nursing students to prepare for their clinical experience. The journaling process involved students answering questions regarding patient care situations.

Examples of these questions include:

Discuss how pertinent past medical conditions have had an effect on the patient's recovery.

Explain your first and most important priority and why.

Explain why you gave the medications you did, whether the dosages were appropriate, and what nursing interventions were required based on the use of this medication.

In this study, students were expected to complete two care plans and two journaling exercises as part of their preparation for clinical experiences. The study compared students' perception of their confidence in areas associated with critical thinking, including: 1) analyzing information, 2) making connections, 3) determining relevance, 4) setting priorities, 5) selecting appropriate interventions, 6) applying relevant knowledge, and 7) evaluating outcomes. The sample size of the study was small (n=51), making generalizability difficult. However, the analysis found that students felt journaling enhanced their confidence more than developing care plans in all areas except one. The respondents felt both types of assignments were equally effective in helping them to set priorities. Interestingly, the average amount of time students reported spending on the care plans was 6.75 hours versus 2.88 hours on the journaling exercise. Given the amount of time students (and faculty) spend on preparing (or grading) care plans, this is an interesting finding indeed!

Preparing Students for Critical Thinking Learning Activities

Faculty are often reluctant to use interactive teaching–learning strategies, particularly in classroom activities, because of student feedback that they want faculty to teach them (i.e., give them a lecture that highlights the answers to the test). In order to ensure the success of critical thinking activities and ultimately reach the goal of helping students to “think like a clinician,” faculty must set the stage regarding the importance of students honing their clinical thinking skills so that they can make appropriate clinical judgments in practice.

Early in the students' educational process, faculty should describe why students need skill in clinical judgment and the particular thinking processes required (asking questions, assessing assumption, synthesizing information, interpreting information, reflection, and communication). Throughout the students' course of study, faculty must emphasize that to be a competent clinician, one must integrate knowledge and clinical judgment in order to practice safely. Throughout the students' education, faculty should share the goal of the specific activity related to developing critical thinking skills, reiterating the need for this skill in clinical practice.

The use of critical thinking activities in class and simulated or actual clinical experiences fosters the development of new graduates that can “think like a clinician.” However, implementing these strategies is a complex and time consuming task. Please see the attached bibliography of selected articles on this topic to help you choose the best strategies for your classes.

Key words: critical thinking, clinical reasoning, clinical reflection, clinical judgment

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