

Teaching & Learning Strategies

Selected Journal Articles

Source	Strategy	Take-Home Message
<p>Abeggien, J. & Conger, C. (1997). Critical thinking in nursing: classroom tactics that work. <i>Journal of Nursing Education</i>, 36, 452-458.</p>	<p>Multiple strategies were presented within the context of one Community Health nursing course.</p>	<p>This article essentially describes the development of a CT format for a course. CT activities described include small group activity, journaling, text notes, case studies, discussions, self assessments.</p> <p>Authors reported that most of the facts, concepts, principles, theories, and ethical issues that were formally presented in lecture emerged without purposeful intervention in the new course format using CT strategies.</p>
<p>Baker, C.R. (1996). Reflective learning: A teaching strategy for critical thinking. <i>Journal of Nursing Education</i>, 35, 19-22.</p>	<p>Reflection</p>	<p>Article discusses the value of reflection in the development of critical thinking for nursing students.</p> <p>Reflective journals discussed as one specific reflective strategy.</p>
<p>Callister, L.C. (1996) Maternal interview: A teaching strategy fostering critical thinking. <i>Journal of Nursing Education</i>, 35, 29-30.</p>	<p>Interviews</p>	<p>This article describes an assignment involving interviews to develop critical thinking skills. Students were asked to interview their own mothers regarding their birth experiences. Students are asked to write up interviews/ in class they discussed the findings looking for commonalities and differences. Authors believe this assignment fosters CT skills in cognitive and affective domains of learning.</p>
<p>Candela, L., Michael, S.R., Mitchell, S. (2003). Ethical Debates: Enhancing Critical Thinking in Nursing Students. <i>Nurse Educator</i>, 28(1), 37-39.</p>	<p>Debate</p>	<p>Students used systematic process to identify, research, resolve, and reflect on ethical issues. Students are given debate criteria to follow including time frame, rebuttal periods, questions, inclusion of ethical and legal concepts and requirements for scientifically based arguments.</p> <p>This process utilized critical thinking during debate preparation and execution.</p>

<p>Daley BJ, Shaw CR, Balistreri T, Glasenapp K & Piacentine L. (1999). Using concept maps: A strategy to teach and evaluate critical thinking. <i>Journal of Nursing Education</i> 38, 42-47.</p>	<p>Concept Maps</p>	<p>Article describes use of concept maps in educational settings; includes how to create a concept map.</p>
<p>Davidhizar, R & Lonser, G. (2003). Storytelling as a Teaching Technique. <i>Nurse Educator</i>, 28, 217-221.</p>	<p>Storytelling</p>	<p>This article describes the value of storytelling as a nursing education teaching technique. This technique essentially involves telling a story from a clinical setting and analyzing/critiquing the scenario.</p> <p>Authors suggest this may be a way to assess a student's ability to think critically.</p>
<p>Elliott, D.D. (1996). Promoting critical thinking in the classroom. <i>Nurse Educator</i>, 21(2):49-52.</p>	<p>This article presents a variety of CT techniques for use in the classroom.</p>	<p>Strategies discussed in this article include:</p> <ul style="list-style-type: none"> • Analogies • Pair share • Round robin • Jigsaw • PMI
<p>Gray, M.R. (2003). Beyond content: Generating critical thinking in the classroom. <i>Nurse Educator</i> 28(3):136-140.</p>	<p>Seminar Learning in which students must reflect on their learning and critique their thinking.</p>	<p>Students placed in 3 tasks/roles: co-leaders present topic; participant's discuss content; evaluator's analyze elements of thought within the presentation and discussion.</p>
<p>Inouye, J. Flannely, L. (1998). Inquiry-Based Learning as a teaching strategy for critical thinking. <i>Clinical Nurse Specialist</i>, 12(2), 67-69,</p>	<p>Inquiry-based learning (IBL) utilizes critical thinking skills in the context of problem-solving in nursing situations.</p>	<p>This article presents a type of problem-based learning known as IBL in which students' problem-solve clinical situations. IT is a student centered method for learning which promotes critical thinking. Shift is away from content and towards integration of information into situations.</p>
<p>Jones, D.C. & Sheridan, M.E. (1999). A case study approach: Developing critical thinking skills in novice pediatric nurses. <i>The Journal of Continuing Education in Nursing</i>, 30, 75-78.</p>	<p>Case Study</p>	<p>This article describes the use of case studies to provide application learning situations to novice pediatric nurses.</p> <p>Provides means for a preceptor to evaluate competence to care for children using a clinical competency checklist as well as a qualitative evaluation summary.</p>
<p>Jenkins, P., Turick-Gibson, T. (1999). An exercise in critical thinking using role-playing. <i>Nurse Educator</i>, 24(6), 11-14.</p>	<p>Role Playing</p>	<p>Describe benefits of role-playing – create artificial situations in which the student is asked to feel, think, and act in the role of another person. Students are asked to journal reflecting on the experience furthering the use of CT skills.</p>

<p>Krejci, J.W. (1997). Imagery: Stimulating critical thinking by exploring mental models. <i>Journal of Nursing Education</i>, 36, 482-484.</p>	<p>Imagery</p>	<p>This article describes the use of imagery as a teaching strategy to reframe mental models.</p> <p>Author indicates this can be a powerful teaching strategy; success may be related to skill of instructor to enhance imagery experience. Author has in-depth experience and training in imagery.</p>
<p>Morrison, S. & Free, K.W. (2001). Writing multiple-choice test items that promote and measure critical thinking. <i>Journal of Nursing Education</i>, 17-24.</p>	<p>Article focuses on specific criteria for writing multiple-choice test items to promote and measure CT.</p>	<p>Criteria to write multiple-choice questions that promote and measure CT include:</p> <ul style="list-style-type: none"> • Writer must have knowledge of current clinical practice. • Include rationale for each test item • Write questions at application or above cognitive level • Require multilogical thinking in order to answer the questions • Require a high level of discrimination to choose from among plausible alternatives.
<p>Pond, E.F., Bradshaw, J.J. & Turner, S.L. (1991)</p> <p>Teaching strategies for critical thinking. <i>Nurse Educator</i> 16(6), 18-22.</p>	<p>Article presents various teaching strategies for teaching CT in classroom and clinical setting.</p>	<p>Strategies discussed include:</p> <ul style="list-style-type: none"> • Case studies • Writing and thinking • Computer assisted instruction • Process oriented teaching • Portable Patient Problem Pack • Nursing process
<p>Staib, S. (2003). Teaching and Measuring Critical Thinking. <i>Journal of Nursing Education</i>, 42(11), 498-508.</p>	<p>Article presents various teaching strategies for teaching CT based on a review of the literature.</p>	<p>Strategies described include:</p> <ul style="list-style-type: none"> • Concept maps • Role playing • Computer Instruction • Case Studies
<p>Su, W.M. (2007). Writing context-dependent item sets that reflect critical thinking learning outcomes. <i>Nurse Educator</i>, 32(1), 11-15.</p>	<p>Describes using context-dependent item sets to evaluate CT skills</p> <p>Context-dependent item sets are modified case studies in which students discuss the stem situation, propose alternative outcomes, or an incomplete stem where the students propose multiple problems</p>	<p>Sets require considerably more time to prepare and grade</p> <p>Take more time for students to do</p> <p>Variability among graders</p> <p>Overall student feedback is positive</p>
<p>Redding, D.A. (2001). The development of critical thinking among students in baccalaureate nursing education. <i>Holistic Nurse Pract.</i> 15 (4), 57-64.</p>	<p>Theory</p>	<p>This article presents a conceptual framework as a model to explain variables contributing to CT and clinical judgment.</p>

<p>Van Eerden, K. (2001). Using critical thinking vignettes to evaluate student learning. <i>Nursing and Health Care Perspectives</i>, 22, 231-234.</p>	<p>Use of vignette (case study) to evaluate critical thinking.</p>	<p>Authors suggest vignettes can be used as a method of assessing critical thinking outcomes, and may be reflective of actual nursing practice.</p>
<p>Ward, C.W. (2006). Developing critical thinking in nursing. <i>Academy of Medical Surgical Nurses Newsletter</i>, 15(5), 1, 14-15.</p>	<p>Descriptive article on teaching CT</p>	<p>Learning environment should make participants feel respected and contributions valued</p> <p>Asking and paraphrasing questions to help students arrive at desired response</p> <p>Includes conferences with discussion of clinical scenarios</p> <p>CT can be taught and practice refines it</p>
<p>Weis, P., Guyton-Simmons, J. (1998). A computer simulation for teaching critical thinking skills. <i>Nurse Educator</i>, 23(2), 30-33.</p>	<p>Presents a computer simulation as a method to teach content and critical thinking skills.</p>	<p>The computer simulation described in this article was developed from case studies.</p> <p>Learner must progress in step-by-step sequence. Along the way, the learner is given information, responds to the information through the process of gathering additional information and determines what should be done next.</p> <p>Computer simulation forces students to interpret data, make decisions, and develop plans of action.</p>