

## Research-Based Criteria for Formulating Scenarios:



The scenarios found in the Asrina training library address the following seven criteria, derived from a comprehensive survey of the literature on developing effective scenario-based, problem-based or case-based curriculum. We examined research on using these models of instruction across disciplines including business, education, engineering, law, medicine, and nursing. *We include this list as a resource for other trainers who might wish to develop their own interactive scenarios for use in health education, workforce development, or other settings.* Complete citations below.

<b>Effective scenarios should be....</b>	
<b>Criteria</b>	<b>Relevant Research</b>
<b>1. Ambiguous &amp; Open-Ended</b> <i>Scenarios should lack a single right answer and embody complexity</i>	<ul style="list-style-type: none"><li>• “the problem should be sufficiently open, so that discussion is not curtailed too early in the process ” (Dolmans 1997)</li><li>• “through practice with complex, ill-structured problems in the classroom, students often realize that many of life’s problems that initially appear insurmountable are more easily managed when divided into subproblems and systematically addressed” (Ritchie 1997, p. 430)</li><li>• problem-based teaching should “not require attainment of one ‘right’ answer” (Ritchie 1997, p. 433)</li><li>• people “make multiple, complicated decisions and observations set in unpredictable circumstances. Cases communicate a strong sense of complex interactions, perceptions, and decision making” (Mostert 2007, p. 2)</li></ul>

<p><b>2. Immediate &amp; Actionable</b>  <i>Scenarios should convey a sense of immediacy that forces participants to formulate a plan of action</i></p>	<ul style="list-style-type: none"> <li>• “analysis of some specific situation forces the student to deal with ‘as is” and not the ‘what if’ (Raju 1999, p. 502)</li> <li>• “the imperative of relating analysis and action: the traditional academic focus has been to know; the practitioners’ focus has been on action” (Raju 1999, p. 502)</li> </ul>
<p><b>3. Contextualized &amp; Situated</b>  <i>Scenarios should be set in a situation or context that is relatable and intrinsically interesting to participants</i></p>	<ul style="list-style-type: none"> <li>• “Scenarios should have sufficient intrinsic interest for the students or relevance to future practice” (Dolmans 1997)</li> <li>• “provide a meaningful context within which prior learning is activated and new knowledge is gained” (Drummond-Young 2001)</li> <li>• “students develop an understanding of the problem from a holistic point of view” (Raju 1999, p. 502)</li> <li>• “the problem scenario should be relevant to practice, of sufficient interest to motivate student self-study, and should require learners to use thinking skills beyond simple knowledge and comprehension” (Drummond-Young 2001)</li> <li>• “case-based instruction emphasizes context-dependent practical problem-solving” (Mostert 2007, p. 2)</li> <li>• “cases provide analyses of problematic situations at various levels of abstraction and from multiple points of view” (Mostert 2007, p. 2)</li> <li>• “problems that have been found to be the most successfully used to teach problem solving exhibit realistic and contextualized situations, require active engagement,</li> </ul>

	<p>include key concepts or processes to master, extend over time, and require that solutions include the development of a product" (Ritche 1997, p. 433)</p> <ul style="list-style-type: none"> <li>• "Context complexifies, but it also make decision-making more human and realistic. Context allows us to 'liberate' ourselves from the legal rules by fighting them off with grounds for exceptions, departures and even defiance" (Menkel-Meadow 2000, p. 784)</li> </ul>
<p><b>4. Connected to Prior Knowledge</b>  <i>Scenarios should allow opportunities for multiple types of knowledge to be incorporated as resources</i></p>	<ul style="list-style-type: none"> <li>• "thick descriptions give us more factors to take into account, more facts, more information, more emotional and sociological, as well as rule-based inputs to consider when we decide what action to take" (Menkel-Meadow 2000, p. 794)</li> <li>• "Basic science should be presented in the context of a clinical scenario to encourage integration of knowledge" (Dolmans 1997)</li> <li>• "Scenarios should promote participation by the students in seeking information from various learning resources" (Dolmans 1997)</li> </ul>
<p><b>5. Discussion-Oriented</b>  <i>Scenarios should contain openings/cues/triggers that prompt discussion or debate</i></p>	<ul style="list-style-type: none"> <li>• "Scenarios should contain cues to stimulate discussion and encourage students to seek explanations for the issues presented" (Dolmans 1997)</li> </ul>

<p><b>6. Extrapolation-Enabling</b>  <i>Scenarios should lends themselves to extrapolation or generalization to other similar scenarios or classes of scenarios</i></p>	<ul style="list-style-type: none"> <li>• “We generally attribute wisdom to those who can transcend the limitations of particular principles or specific experiences when confronted by situations in which each of the alternative choices appears equally ‘principled’” (Shulman 1992, p. 12)</li> <li>• “Because these problems tend to mimic real-life challenges, knowledge gained through problem-based learning is often more transferable and generalizable than knowledge gained through more traditional instruction” (Ritche 1997, p. 433)</li> </ul>
<p><b>7. Insight-Producing</b>  <i>Scenarios should lead to insights that confirm opinions, alter opinions, reveal inadequacy in current principles, illuminate difficulties in proposed approach, or suggest new information to be pursued</i></p>	<ul style="list-style-type: none"> <li>• Functions that cases should perform (adapted from Menkel-Meadow 2000)       <ol style="list-style-type: none"> <li>(1) CONFIRM: reinforce what you already thought was the ‘right’ rule/action in the described situation</li> <li>(2) ALTER: change your view of what the “right” resolution of a particular ethical dilemma might be</li> <li>(3) REVEAL INADEQUACY: suggest an inadequacy (ambiguity, lack of clarity, contradictory conflict) in the current rules or principles you thought applied to the situation</li> <li>(4) ILLUMINATE DIFFICULTY: reveal some challenges with, or new approach to, some similar situation with which you are confronted</li> <li>(5) PURSUE NEW INFORMATION: suggest some additional information that you might want to have to evaluate the situation or consider an action taken</li> </ol> </li> </ul>

## **Works Cited:**

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