

CRITICAL THINKING D

	<p><i>The seven CCTDI dispositional scales are discipline neutral, yet each can be readily interpreted within the liberal arts and sciences as well as professional disciplines. Below, each scale is described as it pertains to the outcomes of college level liberal education and college level professional preparation.</i></p>	
1	<p>The Inquisitiveness scale on the CCTDI measures one's intellectual curiosity and one's desire for learning even when the application of the knowledge is not readily apparent. Intellectual curiosity and a desire to know are among the defining characteristics of the liberally educated person. Considering that the knowledge base for competent engineering (psychology, nursing, teacher education, journalism) practice continues to expand, a deficit in inquisitiveness would signal a fundamental limitation of one's potential to develop expert knowledge and professional practice ability.</p>	
2	<p>The Open-mindedness scale addresses being tolerant of divergent views and sensitive to the possibility of one's own bias. Open-mindedness is crucial for citizens of a pluralistic, multi-cultural society which values tolerance and understanding of the beliefs and lifestyles of others. Conversely, dispositional intolerance of divergent views might preclude effective client services, clinical practice interventions, or educational efforts in such varied populations as those with substance abuse problems, those in the criminal justice system, and those enmeshed in urban violence.</p>	
3	<p>The Systematicity scale measures being organized, orderly, focused, and diligent in inquiry. No particular kind of organization, e.g. linear or non-linear, is given priority on the CCTDI. Organized approaches to problem-solving and decision-making are hallmarks of a thoughtful person regardless of the problem domain being addressed. The inclination to approach problems in an orderly and focused way is an indispensable part of competent clinical (accountancy, managerial, psychological, scientific) practice, and deficits in systematicity might particularly predispose a nurse (CPA, pharmacist, attorney, physician) to the possibility of negligence in practice.</p>	

4	<p>The Analyticity scale targets prizing the application of reasoning and the use of evidence to resolve problems, anticipating potential conceptual or practical difficulties, and consistently being alert to the need to intervene. Analyticity is a core disposition for the inquiring mind. Persons with this characteristic are inclined to want to anticipate the consequences of events and ideas, and to use reason, rather than some other strategy to address serious problems as well as entertaining puzzles.</p> <p>Analyticity is a virtue for the psychologist (scientist, educator, humanist, jurist, economist) as a scholar and researcher; but it is no less important to the nurse (teacher, attorney, journalist, physician, psychologist, pharmacist, journalist, manager) as a working professional. Being analytical disposes the person in professional practice to connect observations with her/his theoretical knowledge base, and to anticipate events likely to threaten the safety or limit potential or create an advantage for a given client.</p>	
5	<p>The Truth-seeking scale targets the disposition of being eager to seek the best knowledge in a given context, courageous about asking questions, and honest and objective about pursuing inquiry even if the findings do not support one's self-interests or one's preconceived opinions. Once a liberally educated person acknowledges a given set of facts to be the case or a given set of reasons to be relevant and forceful, that person is inclined to adjust his or her beliefs in accord with those facts and reasons. The truth-seeker is one who remains receptive to giving serious consideration to additional facts, reasons, or perspectives even if this should necessitate changing one's mind on some issue. The truth-seeking professional (student, faculty member, scholar) continually evaluates new information and evidence. In contrast, being un-attuned to counter-evidence perpetuates professional practice which is unreflective and unresponsive to changes in its theory-base. Deficits in truth-seeking may subject a client to malpractice resulting from the practitioner's inattention to evidence of a missed diagnosis or the changing status of their case.</p>	
6	<p>The Cognitive Maturity scale targets the disposition to be judicious in one's decision-making. The CT- mature person can be characterized as one who approaches problems, inquiry, and decision making with a sense that some problems are necessarily ill-structured, some situations admit of more than one plausible option, and many times judgments must be made based on standards, contexts and evidence which preclude certainty. This dispositional attribute has particular implications for responding to ill-structured problems and making complex decisions involving multiple stakeholders, such as policy-oriented and ethical decision-making, particularly in time-pressured environments. Cognitive maturity in CT would appear to be critical to the development of expertise as a clinician, administrator, educator, attorney, or a policy-maker in any venue.</p>	

7	<p>The CT Self-Confidence scale measures the trust one places in one's own reasoning processes. CT self-confidence allows one to trust the soundness of one's own reasoned judgments and to lead others in the rational resolution of problems. An appropriate level of CT self-confidence, increasing in relation to one's maturity and in relation to one's mastery of CT skills, would be the desired developmental trajectory for all students. Rises and falls in CT self-confidence might suggest the progress of a person through developmental levels, with a rise of CT self-confidence indicating comfort at a given level of cognitive development and a fall in CT self-confidence resulting from the same cognitive dissonance which gives impetus to an upward movement. Whether an individual's level of CT self-confidence is warranted is another matter, however. Some under-estimate their ability to think critically, while others over-rate their CT ability. Practicing professionals who over-rate their CT abilities may act with inadequate caution, while those whose CT self-confidence is lower than their actual CT skills level might be expected to demonstrate a lack of leadership in both intimate client contacts and larger group settings.</p>	
	Reflection, Metacognition, Self-Regulation	
1	<p>Identifies <u>strengths</u> and <u>weaknesses</u> in own thinking; recognizes personal assumptions, values and perspectives, <u>compares to others</u>’, and evaluates them in the context of alternate points of view.</p>	

ISPOSITIONS

"The ideal critical thinker is habitually inquisitive, well-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 the selection of criteria, focused in inquiry, and persistent in seeking results which are as precise as the subject and the circumstances of inquiry permit." (APA, 1990, p. 3)

In general an inquisitive person can be predicted to agree with: "No matter what the topic, I am eager to know more about it." "Learn everything you can, you never know when it could come in handy." And, "Studying new things all my life would be wonderful." Those inclined away from inquisitiveness might say, "most college courses are uninteresting and not worth taking."

Persons who are intolerant toward divergent views might be expected to agree with: "Open-mindedness has limits when it comes to right and wrong." And, "You are not entitled to your opinion if you are obviously mistaken." In contrast, persons inclined toward open-mindedness could be predicted in general to agree with: "It's important to me to understand what other people think about things." And, "It concerns me that I might have biases of which I am not aware."

One would expect persons disposed toward systematicity to generally agree with "I always focus the question before I attempt to answer it." However, in general, one would expect them to disagree with: "My opinion about controversial topics depends a lot on who I talked to last." "My problem is I'm easily distracted." And, "People say I rush into decisions too quickly."

Persons with a positive inclination toward analyticity can, in general, be predicted to disagree with: "I pretend to be logical, but I'm not." And, "There is no way to know whether one solution is better than another." But, we can predict they would tend to agree with, "It bothers me when people rely on weak arguments to defend good ideas." And, "People need reasons if they are going to disagree with another's opinion."

Persons positively disposed toward truth-seeking can be predicted in general to disagree if prompted with: "Everyone always argues from their own self-interest, including me." "If there are four reasons in favor and one against, I'll go with the four." And, "To get people to agree with me I'd give any reason that worked."

Face validity in attitudinal measures is not always desirable as it introduces the potential for socially desirable response sets. Although socially desirable response sets might lead to the CCTDI reporting higher than "true" scores, items on the CCTDI discriminate well between respondents, attracting endorsements from those individuals who oppose the value of various aspects of the disposition toward CT. Those who score low on the maturity scale, for instance, typically agree with the statements: "The best argument for an idea is how you feel about it at the moment." "Things are as they appear to be." And, "The best way to solve problems is to ask someone else for the answers." These example prompts, like the example prompts quoted above, when taken not individually but along with those several others that form each of the seven CCTDI scales, permit us to describe with confidence the CT inclinations and disinclinations of groups of students.

Students who display confidence in their reasoning would be expected to agree with prompts such as "Tests that require thinking, not just memorization, are better for me." And, "I take pride in my ability to understand the opinions of others."

Reflect on your own thought process. "What did you learn from this process?" "What would you do differently next time to improve?"