Walking down 10th Street in Hermosa Beach the other day, I saw a helmetless young man skillfully slalom his skateboard downhill toward the beach. Ignoring the stop sign at Hermosa Boulevard, he flashed across all four lanes of traffic and coasted on down the hill. My immediate reaction was, "Whew! Lucky that dude wasn’t killed!" since I had often seen cars on Hermosa roll through that particular stop sign. Whatever was occupying his attention, the skateboarder did not appear to have self-preservation on his mind that day!

Whether he reflected on it or not, the skater decided to run the stop sign. Similarly, we all make decisions all the time, with some of our choices made more thoughtfully than others. We’ve all underestimated obstacles, overlooked reasonable options, and failed to anticipate likely consequences. Life will continue to present us with our full share of problems, and when we err, we often think about the better decisions we could have made if we’d given it a little more thought.

Critical thinking is the process of reasoned judgment. Because this book is about that process, it is about how to go about deciding what to believe or what to do. This is not a book about what we should believe or do. The purpose of the book is to assist you in strengthening your critical thinking skills and habits of mind. Why should you strengthen these skills and habits? To solve problems and make decisions more thoughtfully.
You will recall how you were inspired to **THINK CRITICALLY** and to question without fear, to seek out radically different solutions and to voice them without reprisal, to read widely and deeply, and to examine without end and grow intellectually... What I ask is this: pass it on.

Navy Adm. Mike Mullen, June 11, 2009

---

**Risk and Uncertainty Abound**

We might not skateboard through an intersection, but none of us can escape life’s risks and uncertainties. Uncertainties apply to potentially good things, too. For example, people might be uncertain when choosing a major, taking a part time job, making a new friend, or responding to President Obama’s call for volunteer service. You never know what new friendships you will make, what new skills you will acquire, what new opportunities might emerge for you, how your efforts will benefit other people, or how much satisfaction you may feel. Whenever a choice is being contemplated, to maximize our chances for welcome outcomes and to minimize our chances for undesirable outcomes, we need to employ purposeful, reflective judgment. Sure, winning is great, but it’s just not a good idea to play poker unless we can afford to lose. We need to think ahead, to plan, and to problem solve. This means we need **critical thinking**.

All of us encounter opportunities in our daily lives to engage problems and decisions using strong critical thinking. In a nation that values self-reliance and initiative, the stronger our critical thinking skills and habits of mind, the greater our prospects for success. Imagine a population that made thoughtful and informed judgments about the policy issues and social questions of its day. It is unlikely that such a citizenry would blindly accept whatever the authorities said was true or unquestioningly comply with whatever those leaders commanded. Some have argued that corporations that hope to succeed in a global high-tech world will have to cultivate exactly the kind of internal culture that fosters strong critical thinking. Fortunately, a great many leaders in government, business, education, military, and religious organizations truly value critical thinking. The quote from Admiral Michael Mullen, Chairman of the Joint Chiefs of Staff, is only one example.

Obviously, a society of knowledgeable people determined to apply strong critical thinking skills to evaluate the policy decisions of their leaders might pose major difficulties for those in power. Not everyone in a leadership position has the confidence and the wisdom to want to cultivate critical thinking. A master of irony, the late George Carlin says it could be "Dangerous!" Go to www.TheThinkSpot.com

<<< George Carlin offers his comical take on education and critical thinking. He ironically speaks about feeding mental junk food to the masses so that people in power can maintain control.

---

**Positive Examples of Critical Thinking**

- A person trying to interpret an angry friend's needs, expressed through a rush of emotion and snide comments, to give that friend some help and support
- A manager trying to be as objective as possible when settling a dispute by summarizing the alternatives, with fairness to all sides to a disagreement
- A team of scientists working with great precision through a complex experiment in an effort to gather and analyze data
- A creative writer organizing ideas for the plot of a story attending to the complex motivations and personalities of the fictional characters
- A person running a small business trying to anticipate the possible economic and human consequences of various ways to increase sales or reduce costs
- A soccer coach during halftime working on new tactics for attacking the weaknesses of the other team when the match resumes
- A student confidently and correctly explaining exactly to his or her peers the methodology used to reach a particular conclusion, or why and how a certain methodology or standard of proof was applied
- An educator using clever questioning to guide a student to new insights
- Police detectives, crime scene analysts, lawyers, judges, and juries systematically investigating, interrogating, examining, and evaluating the evidence as they seek justice
- A policy analyst reviewing alternative drafts of health care legislation determining how to frame the law to benefit the most people at the least cost
- An applicant preparing for a job interview thinking about how to explain his or her particular skills and experiences in a way that will be relevant and of value to the prospective employer
- Parents anticipating the costs of sending their child to college, analyzing the family’s projected income, and budgeting project-ed household expenses in an effort to put aside some money for that child’s education
to access a video clip of Carlin on critical thinking. Some are so worried about the risks to their own power and position that they do not see the benefits to their organization’s core purposes if its people are strong critical thinkers. Unscrupulous Machiavellian leaders might well ponder the question of how to distract, divert, or derail other people’s critical thinking so that they can maintain their own power and control. After viewing the George Carlin clip we can almost hear the answer he might have imagined: Force-feed the population mental junk food by filling the popular media with celebrity insanities, sports trivia, exaggerated reports of imminent catastrophes, and outrageous opinions pumped out by extremist talk-show hosts like methane over a Coalinga cattle yard.

**CRITICAL THINKING AND A FREE SOCIETY**

Information is power. As we saw with the Iranian elections in 2009, an organization that can withhold information or distort it to fit official orthodoxy is in a much better position to suppress dissenters and maintain its position of control. The Iranian government curtailed Internet access, blamed the United States and Great Britain for fomenting opposition, and used the coercive power of the police and the social status of the ruling clergy to maintain its control. Thus, the desire to know who truly won the election, voiced by the hundreds of thousands who at first protested in the streets of Teheran, soon dissipated. Even those with strong critical thinking skills could not get the information needed to make a correct application of those skills. It was hard to know what to think. And the fear of imprisonment and retaliation put major damper on efforts to find out. History has many similar examples to offer. The bottom line is that it is difficult to foster the free and open questioning and the fair-minded search for the truth that is characteristic of critical thinking in any civil, religious, or corporate society that equates education with uniformity of belief, that punishes people who question authority, or that withholds the truth from its own people.

By contrast, in a free society, where education is about learning to think, where the powers of the state are used to protect the right to free and open inquiry, where people have the courage and the brains to ask hard questions, and where there is unfettered access to accurate information, then “perception management” is far more difficult. Perception management is the carefully choreographed manipulation of the beliefs and feelings of large numbers of people. Going beyond marketing and spin, perception management uses fear, anger, distortion, disinformation, and deceit, whatever it takes, including creating martyrs for the cause, faking enemy threats, lying to the media, destroying documents, etc., to achieve its goals. Those goals are always to influence people’s beliefs and behavior, typically toward one outcome rather than another. The important thing is that the people would probably not believe those things nor do those things if they had access to all of the relevant information. We will see an example of this kind of dishonesty in Chapter 3 with a video clip of an interview with a Victor Crawford, a man who spent his career doing perception management on behalf of the tobacco industry.

One reason higher education in America is internationally admired and yet feared is that it has the potential to teach critical thinking. The upside is great progress in learning and culture, and hence huge benefits for society. Problem solvers using critical thinking have achieved massive breakthroughs in science, technology, commerce, and the arts, such as G3 cell phone technology, cancer treatments individualized to a person’s unique DNA, global e-business, and new forms of music and architecture. But, at the same time, all that critical thinking can make interactions awkward at times. Not only is it harder for tyrants when people begin thinking for themselves, but people are apt to disagree, policy issues become more complicated to resolve, public discourse is more confusing, and decision making takes more time.

History shows what happens when people are not vigilant defenders of open, objective, and independent inquiry. We saw the results to a greater or lesser extent in Hitler’s Germany, in Communist Russia, and, sadly, even in early 21st-century United States: Governments aggrandize their own power by fear-mongering and alarming people with doomsday scenarios. They wage wars of choice (e.g., the U.S. invasion of Iraq in 2003), not of necessity (e.g., United States’ entry into WWII). They spy on their own citizens (e.g., the powers granted to the executive branch of government by the Patriot Act to monitor phone calls and e-mail), ignore the rights of various groups of people (e.g., the profiling by law enforcement agencies of Muslim Americans, Mexican Americans, and Blacks),

---

**Our whole constitutional heritage rebels at the thought of giving government the power to control men’s minds.**

Thurgood Marshall, Former U.S. Supreme Court Justice
Very few really seek knowledge in this world. Mortal or immortal, few really ask. On the contrary, they try to wring from the unknown the answers they have already shaped in their own minds – justification, explanations, forms of consolation without which they can’t go on. To really ask is to open the door to the whirlwind. The answer may annihilate the question and the questioner.

Spoken by the vampire Marius in The Vampire Lestat

forbid research on certain topics (e.g., stem cell research aimed at benefiting the victims of spinal cord injuries or Parkinson disease), accuse those who ask hard questions of disloyalty, and brand critics as traitors (e.g., the extreme rhetoric of the 2008 election, which became so vicious that Senator John McCain, a true American hero, had to speak out against it).

THE ONE AND THE MANY

Individual decisions can seem isolated and yet when they accumulate, they can have a far-reaching impact. For instance, in China the one-child policy has been in force for about 30 years. Culturally, there has always been a strong preference for male children and if families could only have one child, most wanted a boy. In household after household, family after family made the choice to do whatever seemed necessary, including infanticide, to ensure a male heir. The collective impact of those millions of individual decisions now burdens that nation. In some villages, the ratio of unmarried men to unmarried women is twenty to one. Today brides fetch payments as high as five years of family income. Those parents who decided to raise their first-born daughters sure look smart now.

Six billion of us share a planet in which economic, cultural, political, and environmental forces are so interconnected that the decisions of a few can impact the lives of many. Short-sighted and self-interested decisions made by corporate executives, bankers, stock traders, legislators and government regulatory agencies plunged the world into a global economic depression, which has cost trillions of dollars, devastated honest and well-run companies, bankrupted pension plans, destroyed families, and put tens of millions of people out of work. What were the decision-makers thinking? What blinded all of us to the foreseeable consequences of our choices?

Another reason why we need to think critically: Acting on beliefs accepted without reflection and decisions made thoughtlessly can be devastating to us and to our families, friends, co-workers, society, environment, and planet. We might believe that, in the great sweep of history, we generally are making progress toward the good.

Karl Popper argues that this notion can be comforting particularly to authoritarian and totalitarian organizations. But the evidence suggests that civilizations rise and fall, that economies flourish and flounder, that the arts are encouraged and suppressed, that advances in learning are made and then forgotten. As a species we have very few advantages, other than our oversized brain and the critical thinking it can generate. We would be unwise not to use what little we have.

What Do We Mean by “Critical Thinking”?

EXPERT CONSENSUS

At this point you might be asking yourself, “OK, so critical thinking will change our habits of mind, but what is critical thinking, exactly?” To answer that question precisely, an international group of 46 recognized experts in critical thinking research collaborated. The men and women in this group were drawn from many different academic disciplines, including philosophy, psychology, economics, computer science, education, physics, and zoology. For more than a year and a half, from February 1988 through September 1989, the group engaged in a consensus-oriented research process developed by the Rand Corporation known as the “Delphi” method. The challenge put to the experts was to come up with a working consensus about the meaning of “critical thinking,” which could serve instructional and assessment purposes from K-12 through graduate school and across the full range of academic disciplines and professional fields. They also asked themselves questions that relate to Chapters 2 and 3, namely: “What are the core critical thinking skills and subskills? How can we strengthen those skills in students? Who are the best critical thinkers we know, and what habits of mind do they have which lead us to consider them the best?”

Long story short, the expert consensus forged defined “critical thinking” as “the process of purposeful, self-regulatory judgment.” The purpose is straightforward: to form a well-reasoned and fair-minded judgment regarding what to believe or what to do. The “self-regulatory”

Critical thinking—making well-reasoned judgments about what to believe and what to do—is essential to consistently successful decision making in business and professional practice, at every level of education, and wherever the quality of one’s decisions and the accuracy of one’s beliefs make a difference.
part refers to our capacity to monitor our own thinking process and to correct any mistakes we might detect. The first realization emerging from this definition was that critical thinking was a “pervasive human phenomenon.” Critical thinking is occurring whenever an individual or a group of people makes a reasoned and reflective judgment about what to believe or what to do.

How important did the experts think critical thinking was? They put their answer to that question this way: “Critical thinking is essential as a tool of inquiry. As such, critical thinking is a liberating force in education and a powerful resource in one’s personal and civic life. While not synonymous with good thinking, critical thinking is a pervasive and self-rectifying human phenomenon.”

So long as people have problems to solve and decisions to make, so long as they have things to learn and issues to resolve, there will be ample opportunities to use our critical thinking skills and habits of mind.

“CRITICAL THINKING” DOES NOT MEAN “NEGATIVE THINKING”

Critical thinking is not about bashing what people believe just to show how clever we are. Nor is critical thinking about using our skills to defend beliefs that we know are untrue or decisions we know are poor. Critical thinking is intended to be used to seek truth (small “t”) with intellectual energy and with integrity. Thus, critical thinking is skeptical without being cynical. It is open-minded without being wishy-washy. It is analytical without being nitpicky. Critical thinking can be decisive without being stubborn, evaluative without being judgmental, and forceful without being opinionated.

HOW TO GET THE MOST OUT OF THIS BOOK

Growth in critical thinking is about becoming more skillful and mentally disciplined. To maximize your growth, this book offers a variety of exercises, examples, and topics to think about. Some of these are intentionally jarring. Those among us who find it frightening to follow reason and evidence wherever they may lead, even if they go against cherished beliefs, will find it difficult to make progress in critical thinking. The same is for those of us who try to avoid making decisions that involve uncertainty or risk or who try to live without ever questioning our own assumptions.

Think for a moment about learning to play a musical instrument or learning to play a sport. In both, improvement comes from practicing the requisite skills and strengthening our resolve to keep at it until we begin to see improvements. As we experience success at the skills part, enjoyment increases, and our disposition to keep applying ourselves.

Group Discussion: George Carlin and Admiral Mike Mullen

1 Watch the classic George Carlin commentary on the seven words you cannot say on television. Give reasoned and fair-minded consideration to the question “What exactly makes a word a ‘dirty word’?” Is there a difference between using the word and simply mentioning that word? Why is it acceptable to use one of those seven words in some contexts or with a particular intent, but not in other circumstances? Who has the authority to forbid other people from enunciating or writing certain individual words, and how did they get that power over others?

2 Discuss George Carlin’s hypothetical question: “What if there were no hypothetical questions?”

3 George Carlin warned that those with great power and control would fear critical thinking. But, if that is so, what are we to make of the address by Navy Admiral Mike Mullen, who is the Chairman of the Joint Chiefs of Staff, to a group of graduating senior military officers at the National Defense University on June 11, 2009? Access the clip of George Carlin’s “Seven Words You Can Never Say on Television” at www.TheThinkSpot.com.
grows. And, having an ever more positive attitude about striving to improve, we tend to enjoy more success as we seek to refine our skills. Each aspect feeds the other. To be a success the player must become not only able but willing, not just skillful but disposed to use those skills.

We learn to play a musical instrument so we can enjoy making music. We learn a sport to enjoy playing the games. We work on our skills and mental dispositions not for their own sake, but for the sake of making music or playing the game. This is true with critical thinking, too. The defining purpose of critical thinking is to make reflective judgments about what to believe or what to do. We will work on both the skill part and the dispositional part as we move through this book. But we want to keep in mind that our purpose is to use them as tools to come to good judgments about what to do or what to believe.

**Evaluating Critical Thinking**

Even when we are first learning a musical instrument or a sport, we can tell that some of our peers are better at the instrument or the sport than others. We all make progress, and soon we are all doing much better than when we first started. We do not have to be experts to begin to see qualitative differences and to make reasonable evaluations. This, too, is true of critical thinking. There are some readily
available ways to begin to make reasonable judgments concerning stronger or weaker uses of critical thinking. The following example illustrates some of these methods.

**THE STUDENTS’ ASSIGNMENT**

Imagine a professor has assigned a group of four students to comment on the Edward M. Kennedy Serve America Act. Among other things, this bill, signed into law on April 21, 2009, designates September 11th as a national day of service. The group has access to the information about the bill reproduced here and on the Internet.

- “The bill encourages voluntary service. The legislation provides for gradually increasing the size of the Clinton-era AmeriCorps to 250,000 enrollees from its current 75,000. It outlines five broad categories where people can direct their service: helping the poor, improving education, encouraging energy efficiency, strengthening access to health care, and assisting veterans.”

- “AmeriCorps offers a range of volunteer opportunities including housing construction, youth outreach, disaster response and caring for the elderly. Most receive an annual stipend of slightly less than $12,000 for working 10 months to a year.”

- “The bill also ties volunteer work to money for college. People 55 and older could earn $1,000 education awards by getting involved in public service. Those awards can be transferred to a child, grandchild, or even someone they mentored.”

- “Students from sixth grade through senior year of high school could earn a $500 education award for helping in their neighborhoods during a new summer program.”


**THE STUDENTS’ STATEMENTS:**

**Student #1:** “My take on it is that this bill requires national service. It’s like, . . . a churchy-service-sorta-thing. But, you know, like run by the government and all. We all have to sign up and do our bit before we can go to college. That’s a great idea. Think about it, how could anyone be against this legislation? I mean, unless they are either lazy or selfish. What excuse could a person possibly have not to serve our country? The president is right, we need to bring back the draft so that our Army has enough soldiers, and we need to fix health care and Social Security. I don’t want to pay into a system all my working life only to find out that there’s no money left when it’s my time to retire.”

**Student #2:** “Well I think this bill is a stupid idea. Who’s going to agree to work for a lousy $12,000 a year? That’s nuts. I can earn more working at Target or by enlisting in the Navy. This legislation is just more foolish liberal nonsense that takes our nation one step closer to socialism. Socialism is when the government tries to control too many things. And now the president is trying to control volunteer service. Maybe you want to build houses for poor people or clean up after hurricanes, but I don’t see how any of that is going to help me pass physics or get me a better job after college.”

**Student #3:** “I think there are problems with the legislation, too. But you’re wrong about people not wanting to volunteer. The number of hits on the AmeriCorps Web site keeps going up and up each month. Retired people, students, and people who just want to make a difference go there and to Serve.gov to see what opportunities might exist near where they live. On the other hand, I do have issues with the government being the organizing force in this. Volunteerism was alive and well in America before Big Brother got involved. I don’t see why we need to spend 5.7 billion dollars getting people to do what they were already going to do anyway. We shouldn’t pay people to be volunteers.”

**Student #4:** “That’s the point, some of them wanted to do volunteer service but they need a small incentive. Nobody is going to get rich on the stipends the government is offering. I think that people who want to keep government at arm’s length are going to have problems with this bill. They are right that it is another way that government is worming itself into every facet of our lives. But a lot of people feel that way about religion, too; that’s why they do not want to volunteer in programs sponsored by religious groups, because they don’t want to be seen as agreeing with all the beliefs or that group. The real question for me is the effect that this legislation might have on the future politics of our nation. All these volunteers could become, in effect, people the Administration can call on in the next election. Organizing tens of thousands Americans who basically agree with the idea of public service at public expense is like lining up the Democratic voters who will want to be sure these policies are not reversed by the Republicans. I’m not talking about a vague idea like “socialism,” I’m talking about clever politics, positioning the Democratic Party for success in 2012. On balance, that’s OK with me. But we need to understand that this legislation will result in more than just a lot of wonderful work by a large number of generous Americans who are willing to give of their time to help others.”

Having reviewed the information about this legislation and read the statements by each of the four students, how would you evaluate those statements in terms of the critical thinking each displays?
# The Holistic Critical Thinking Scoring Rubric

A Tool for Developing and Evaluating Critical Thinking  
Peter A. Facione, Ph.D., and Noreen C. Facione, Ph.D.

<table>
<thead>
<tr>
<th>Strong 4. Consistently does all or almost all of the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Accurately interprets evidence, statements, graphics, questions, etc.</td>
</tr>
<tr>
<td>• Identifies the salient arguments (reasons and claims) pro and con.</td>
</tr>
<tr>
<td>• Thoughtfully analyzes and evaluates major alternative points of view.</td>
</tr>
<tr>
<td>• Draws warranted, judicious, non-fallacious conclusions.</td>
</tr>
<tr>
<td>• Justifies key results and procedures, explains assumptions and reasons.</td>
</tr>
<tr>
<td>• Fair-mindedly follows where evidence and reasons lead.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Acceptable 3. Does most or many of the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Accurately interprets evidence, statements, graphics, questions, etc.</td>
</tr>
<tr>
<td>• Identifies relevant arguments (reasons and claims) pro and con.</td>
</tr>
<tr>
<td>• Offers analyses and evaluations of obvious alternative points of view.</td>
</tr>
<tr>
<td>• Draws warranted, non-fallacious conclusions.</td>
</tr>
<tr>
<td>• Justifies some results or procedures, explains reasons.</td>
</tr>
<tr>
<td>• Fair-mindedly follows where evidence and reasons lead.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unacceptable 2. Does most or many of the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Misinterprets evidence, statements, graphics, questions, etc.</td>
</tr>
<tr>
<td>• Fails to identify strong, relevant counterarguments.</td>
</tr>
<tr>
<td>• Ignores or superficially evaluates obvious alternative points of view.</td>
</tr>
<tr>
<td>• Draws unwarranted or fallacious conclusions.</td>
</tr>
<tr>
<td>• Justifies few results or procedures, seldom explains reasons.</td>
</tr>
<tr>
<td>• Regardless of the evidence or reasons, maintains or defends views based on self-interest or preconceptions.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weak 1. Consistently does all or almost all of the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Offers biased interpretations of evidence, statements, graphics, questions, information, or the points of view of others.</td>
</tr>
<tr>
<td>• Fails to identify or hastily dismisses strong, relevant counterarguments.</td>
</tr>
<tr>
<td>• Ignores or superficially evaluates obvious alternative points of view.</td>
</tr>
<tr>
<td>• Argues using fallacious or irrelevant reasons and unwarranted claims.</td>
</tr>
<tr>
<td>• Does not justify results or procedures, nor explain reasons.</td>
</tr>
<tr>
<td>• Regardless of the evidence or reasons, maintains or defends views based on self-interest or preconceptions.</td>
</tr>
<tr>
<td>• Exhibits close-mindedness or hostility to reason.</td>
</tr>
</tbody>
</table>

Reprinted with permission from The California Academic Press / Insight Assessment, – Assessing Critical Thinking Worldwide  
www.insightassessment.com  
USA Phone: (650) 697-5628

(c) 1994, 2009, Peter A. Facione, Noreen C. Facione, and Measured Reasons LLC, Hermosa Beach, CA. USA  
Permission is hereby granted to students, faculty, staff, or administrators at public or nonprofit educational institutions for unlimited duplication of the Holistic Critical Thinking Scoring Rubric when used for local teaching, assessment, research, or other educational and non-commercial purposes, provided that no part of the scoring rubric is altered and that “Facione and Facione” are cited as authors. (PAF49:R4:3:052009).
See which of the four fits best. At this point, before we have worked descriptions as "strong," "acceptable," "unacceptable," and "weak" and (HCTSR), this tool can aid us in evaluating real-life examples of critical thinking. Called "The Holistic Critical Thinking Scoring Rubric" (HCTSR), it aids in helping us strengthen these skills and fortify our intentions to use them when the occasion arises.

If that is true, then, like other things we do that we may not have formally studied, there probably is room for improvement. But we are not starting from zero. We have critical thinking skills, even if we have not yet refined them to their maximum potential. We know what it means to be open-minded and to take a systematic and objective look at an issue. We are familiar with the ordinary English meanings of common terms for talking about thinking such as "interpret," "analyze," "infer," "explain," "reason," "conclusion," and "fallacy" "argument." And, in a broad sense, a lot of the time we can tell the difference between strong reasoning and weak reasoning, even if we do not yet know all the details or terminology.

So, given that none of us are novices at critical thinking, we should be able to make a reasonable first stab at an evaluation of the thinking portrayed by the four students in the example on page 9. Just using our experience and common sense we can agree that #4 and #3 are stronger than #2 and #1.

A tool was designed to help us with this process of evaluation. It relies on the ordinary meanings of common terms used to talk about thinking. Called "The Holistic Critical Thinking Scoring Rubric (HCTSR)," this tool can aid us in evaluating real-life examples of critical thinking because it requires us only to describe an example of the four descriptions as "strong," "acceptable," "unacceptable," and "weak" and see which of the four fits best. At this point, before we have worked through any of the other chapters of the book, this simple tool/approach is sufficient to get us started evaluating critical thinking. Naturally, as we learn more about critical thinking, we will become better at applying the rubric and more facile at using the terminology it contains. Our evaluative judgments will improve, and our ability to explain our judgments will improve as well. In this way, the rubric actually become one of the tools we can use to improve our critical thinking. Where we may disagree with one another at first about the evaluative levels that best fit, in time as we work with the rubric and with others on applying it, we will begin to form clearer ideas of the differences not only between the extreme examples, but between examples that fall between the extremes.

To apply the HCTSR, take each student’s statement and see which level of the Rubric offers the best description of the reasoning evident in that statement. You will see that they line up rather well with the four levels of the HCTSR. Statement #4 is a good example of the top level, "strong – 4:" student statement #3 is "acceptable"; student statement #2 is "unacceptable" because it displays the problems listed in the HCTSR in category 2; and statement #1 is so far off base that it qualifies as "weak – 1."

The HCTSR is a great tool to use to evaluate the critical thinking evident in lots of different situations: classroom discussions, papers, essays, panel presentations, commercials, editorials, letters to the editor, news conferences, infomercials, commentator’s remarks, speeches, jury deliberations, planning sessions, meetings, debates, or your own private thoughts. Keep the focus on the reasoning, and do not let the fact that you may agree or disagree with the particular conclusions being advocated sway you. Do not worry if you feel unsure of yourself, having used the HCTSR only this one time. There will be plenty of additional opportunities for you to practice with it in the exercises in this chapter and in future chapters. Like a new pair of shoes, you will get comfortable with the tool. Think of it this way: The more you use the HCTSR, and the more adept you become at sorting out why something represents stronger or weaker critical thinking, the more you will improve your own critical thinking.

**The Holistic Critical Thinking Scoring Rubric**

**Purposeful, Reflective Judgment**

1. On April 27, 2009 only six days after the bill was signed by President Obama, NPR’s Michel Martin interviewed Deepak Bhargava about the Edward M. Kennedy Serve America Act on “Tell Me More.” With one or two classmates, or individually, listen to the interview and then use the HCTSR to evaluate the critical thinking evident in their conversation. Evaluate the discussion as a whole rather than evaluating the two people’s thinking separately. Access the interview at [www.thethinkspot.com](http://www.thethinkspot.com).

2. Each year, the U.S. Supreme Court decides which cases it will hear. In June 2009 it declined to review a case that would have brought before it the question of gays in the military. *The New York Times* published an editorial about that decision. Using the HCTSR, evaluate the critical thinking evident in that editorial. Remember to separate your personal views about gays in the military and your opinion about the Supreme Court’s decision from your evaluation. Access the article at [www.thethinkspot.com](http://www.thethinkspot.com).

3. When people first begin using a rubric like the HCTSR, it is important to calibrate their scoring with one another. Some individuals might initially rate something higher and others rate it lower. However, through mutual discussion, it is possible to help one another come to a reasonable consensus on a score. Identify two editorials and two letters to the editor that appear in your campus newspaper. Working with four classmates, individually rate those four things with the HCTSR. Then compare the scores that each of you initially assigned. Where the scores differ, discuss the critical thinking evident in the editorials or letters, and come to consensus on a score.
CRITICAL THINKING is purposeful, reflective judgment that is focused on deciding what to believe or what to do. Critical thinking is a pervasive human phenomenon. We all have some level of skill in critical thinking and we have the capacity to improve those skills. Critical thinking skills, which are the topic of Chapter 2, are used to engage purposeful and reflective judgment. Critical thinking habits of mind motivate us to use those skills and incline us toward adopting critical thinking, rather than using some other approach, when we must make important decisions about what to believe or what to do. Chapter 3 explores the critical thinking habits of mind that, like the skills, can be fostered and strengthened.

Neither negative nor cynical, but thoughtful and fair-minded, critical thinking is essential for inquiry and learning. Critical thinking is a liberating force in education and a precondition for a free and democratic society. Strong critical thinking is a powerful resource and tremendous asset in one’s personal, professional, and civic life.

KEY TERMS

- **Critical thinking** is purposeful, reflective judgment that manifests itself in giving reasoned and fair-minded consideration to evidence, conceptualizations, methods, contexts, and standards in order to decide what to believe or what to do.

FIND IT ON THE THINKSPOT

This chapter features the ironic and at times caustic observations of the late George Carlin, comedian and social critic. I invite you to view video clips for this chapter and the dozens of other video clips cited throughout this book by going to [www.TheThinkSpot.com](http://www.TheThinkSpot.com).

Why am I inviting you to The Think Spot? You have the right to ask, given that this is a book about giving reasons and making strong arguments. Strengthening our critical thinking for use in real-life contexts requires that we practice with realistic examples. As valuable as text-based examples will be for us in this book, we must also use examples that are visual, auditory, and culturally complex. The best examples require us to analyze and interpret body language, gestures, and unspoken but implicit assumptions. Video clips, particularly if we watch them carefully and analyze them in detail, are powerful devices for engaging our critical thinking.

- I invite you to visit [www.TheThinkSpot.com](http://www.TheThinkSpot.com) to hear what George Carlin has to say about critical thinking. (p. 4)
- I ask that you watch a George Carlin clip and then discuss his views about the use of language that some may find offensive. (p. 7)
- The third discussion topic in that page 7 exercise refers to Admiral Mullen’s quote from page 4. The quotation is taken from a speech that is available to you at [www.TheThinkSpot.com](http://www.TheThinkSpot.com) too.
- Please use the NPR radio interview for the first HCTSR exercise. (p. 11)

In this chapter I put George Carlin side by side with Admiral Mullen, whom we can consider a strong and articulate representative of a more conservative political perspective. This juxtaposition is intentional. There are strong critical thinkers on all sides of the political spectrum. We cannot say that people who agree with us are necessarily strong critical thinkers and those who disagree are necessarily weak critical thinkers. Please be careful to remember this as you view the video clips and work through the exercises in this chapter and throughout the book. In this book, as in real life, we often encounter vivid images, topics, issues, people, and events that trigger positive or negative emotional responses. Critical thinking in real life must find its way through our initial emotional reactions and locate that place in our minds where reason, facts, and wise judgments guide what we believe and what we do. This takes practice.
Exercises

REFLECTIVE LOG EXERCISES
Think back over today and yesterday. Describe a problem you faced or a decision which you considered. Who was involved, and what was the issue? Describe how you thought about that problem or decision—not so much what you decided or what solution you picked, but the process you used. Were you open-minded about various options, systematic in your approach, courageous enough to ask yourself tough questions, bold enough to follow the reasons and evidence wherever they led, inquisitive and eager to learn more before making a judgment, nuanced enough to see shades of gray rather than only stark black and white? Did you check your interpretations and analyses? Did you draw your inferences carefully? Were you as objective and fair-minded as you might have been? Explain your decision in your log with enough detail that would permit you to go back a week or two from now and evaluate your decision for the quality of the critical thinking it demonstrates.

EXPLAIN WHAT IS WRONG WITH EACH
1. Critical thinking has no application in day-to-day life.
2. “Critical thinking” means making criticisms of other people’s ideas.
3. Democracies get along just fine even if people do not think for themselves.
4. Decisions about how I want to live my life do not affect other people.
5. Reflective decision making requires little or no effort.
6. Deciding what to believe or what to do is not possible without critical thinking.
7. If we disagree on something, then one of us is not using critical thinking.
8. Every time I make a judgment I am engaged in critical thinking.

GROUP DISCUSSION
Critical thinking takes effort! Why work so hard? Imagine what would it be like to live in a community where critical thinking was illegal? What might the risks and benefits of such a life be? How would the people living in that community redress grievances, solve problems, plan for the future, evaluate options, and pursue their individual and joint purposes? Now imagine what it would be like to live in a community where critical thinking was unnecessary? Can there be such a place, except perhaps as human specimens in some other species’ zoo?