CRITICAL THINKING IN THE SOCIAL SCIENCES

In this brief chapter about critical thinking I make no claims that what is written in the following pages is universally accepted. There is, however, some basic agreement among many who think and write about critical thinking. The following is an attempt to apply concepts of critical thinking to the social sciences in a brief, understandable way.

One can look at critical thinking from at least two perspectives. One is looking at it as a process. This involves looking at the different steps or sequences that one would take in applying critical thinking to solving a problem. The second perspective is to examine the traits, attributes or characteristics of a critical thinker. In this chapter I will start off with traits or characteristics of critical thinkers and then explain a procedure that one can use to apply critical thinking to problem solving.

In the opinion of this author, there are five major attributes of critical thinkers. They are: intellectual humility, an attitude of skepticism and questioning, awareness of bias, intellectual courage and metacognition.

Intellectual Humility

Intellectual humility is the ability to admit to oneself that the knowledge one possesses on almost all topics is incomplete and possibly incorrect, at least in part. Critical thinkers assume that they are ignorant about many things. They understand that their knowledge and wisdom is limited by the time they live in, the people they have met, their own intelligence and many other factors. Excessive pride in one’s knowledge is often the mother of ignorance. And people who think that they know answers usually don’t look for alternative explanations.

It may seem odd, but one should take pride in the ability to admit that he or she is ignorant about many topics. Wisdom (or critical thinking) begins with appreciating how little we know.

A logical extension of this line of reasoning is that little critical thinking is possible without substantial knowledge or information that is specific to the subject. One might possess a PHD in sociology but have very little knowledge of economics. This person would find it difficult to evaluate the merits of supply-side economic theory. An economist is not an expert on automobiles or raising children or U.S. policies towards China. A renowned psychologist will not be able to explain the behavior of a particular person without knowing quite a bit about this person. One cannot expect to make an informed decision about the merits of a political issue or any issue unless one has
substantial information and understanding of subject involved. It is impossible to think critically about a topic that one knows little about. For this reason, social scientists place a high value on research—the cure for much ignorance.

**Skepticism/Questioning**

Skepticism is an intellectual trait that often comes with age and training, but it is an ability that can be improved at any age. It is the mental state that does not accept information received by most sources as being completely true or accurate. This begins with the "knowledge" that we ourselves possess. All of us cannot possibly be completely correct about our religious beliefs, for example. Most of us have very different beliefs on many religious topics. Therefore, many of our religious beliefs are probably wrong or at least somewhat so. The same is true in politics, raising children, and our beliefs about abortion, drugs, and sexual practices. Some of us must be wrong; therefore one must be skeptical about many of the deep-seated beliefs and values we hold dear. YOU AND I ARE OFTEN WRONG. Believe it. Assume it.

If we are often wrong, so are others. Information in newspapers and books is frequently incorrect, at least partially. This author has often found incorrect information in textbooks and in scholarly articles published in the most respectable journals. Needless to say, if one trusts what our politicians say to be the whole, unadulterated truth, then one is not a critical thinker. Parents are often wrong; "experts" who have doctorates completely disagree at times. Teachers are sometimes wrong, so are priests and ministers, doctors and lawyers, scientists and philosophers.

Simply put, just because you read it in the newspaper, saw it on CNN or heard it from your teacher, doesn’t mean it’s true. Don’t assume that the information you receive is exactly correct or aptly applied in context.

Skepticism and questioning are logical partners. Critical thinkers are wary of easy, pat, or traditional answers and find questions that they think are unanswered. If the important questions are not asked, or are ignored, then new, creative solutions or answers will never be found. **The future may well belong more to those who ask the right questions than to those who are good at finding answers.**

The key is the identification of the important questions. Once one has identified the major points of an argument or the important assumptions of a position then one can start finding the key questions. These questions can seldom be answered completely; in the social sciences, in particular, one must often be satisfied with some amount of uncertainty.

Critical thinkers question—themselves, their colleagues, experts, textbooks, accepted doctrine. They welcome questions about their own opinions. They are deliberately, consciously open minded.
Bias

The third quality that a critical thinker in the social science must possess is the awareness that everyone is biased and prejudiced in some form. It should be understood here that the words "bias" and "prejudice" are used in the academic sense, meaning preferences, inclinations, or predispositions. Not all biases or prejudices are negative. For example, if a woman falls in love with an Ethiopian man named Mohamed, the way she looks at all Ethiopians and all people named Mohamed will be affected in a positive way. She will be biased by her experiences and feelings. Every experience changes how we see things.

There are many types of biases. Four important ones are self-interest, cultural bias, national bias, and personal bias. Each deserves a few words of explanation.

Self Interest

In the social sciences, and particularly in Political Science, it is axiomatic that people favor whatever is in their perceived self-interest. College students easily see the benefits of reductions in tuition or tax credits for college courses. Businesspersons tend to believe that the government places unnecessary restrictions on business activities and overtaxes private enterprise. Senior citizens generally see increases in social security payments as positive. U.S. citizens find it easy to believe that the United States is the best country in the world. Young women usually favor tough laws against sexual harassment, while business owners and male supervisors often look upon such laws with something less than total enthusiasm. Critical thinkers need to aware of the natural bias that we humans have to favor ideas and beliefs that are in our own self-interest.

This is particularly true in how we explain our behavior. We have a natural tendency to rationalize, that is, to explain what we do in the best possible light. As a parent I tell myself at times that I shouldn’t clean up so much, it would be better for my children to learn this all-important value. If my students are not doing well in my classes there is the tendency to blame the students. After all if it isn’t the students’ fault then….

Cultural Bias

All of us have been biased by the general culture that we live in. A culture is a group of deep-seated beliefs, values, and customs that have been transmitted by past generations. It is a way of thinking, of valuing. Different cultures teach distinct ways that men, women, children, mothers, fathers, and others should be treated. In the USA, men and women are viewed primarily as social and political equals-- in the 21st Century. This was not generally true during the 19th and most of the 20th Century. Today women are not considered equal to men by most people in India, China, Iran, Saudi Arabia and many other countries. In the main U.S. culture, monogamy is the law as well as the cultural norm. This is not so in Morocco or Iraq. The USA stresses individualism. The
Japanese stress group values. Cultures teach divergent values relative to sexual relations, drug use, abortion, homosexuality, honesty, and many other subjects.

We have been taught to see things in certain ways by our culture. Culture is a subtle form of brainwashing, of indoctrination. It is impossible to completely undo its effects completely. Often we are not aware of the powerful effects that our culture has on us until we are exposed to other cultures or ways of thinking. For example, reading these words will probably make little impression on you unless you have lived in another culture or experienced other people of different cultures for a long or intense time period.

Language is part of a culture. It is not only a vehicle for communication; each language has a view of the world inherent in it. English, for example, is a very straightforward, practical, egalitarian language. Most other languages have many different ways of saying the word “you.” There is “you” that people of inferior status use to address their social superiors or elders. There is a “you” for close friends, a “you” that should be used for professional meetings and introductions. Lovers have a special “you,” as do mothers and fathers for their children. Two Japanese or Vietnamese may need to talk with each other for a half hour before they know how to address each other. In English, we just say “you”---simple, time saving, direct, and equal. The predominant culture in the United States tends to consider all humans as possessing the same intrinsic value. Our “you” expresses this sentiment. It is part of the way our culture looks at humans.

Most languages think of almost all things as having a gender. For example, in Spanish, one’s nose is feminine (la nariz) while one’s foot is masculine (el pie). A house is feminine and a tree is masculine. In English, we don’t have male and female things, we just have “things.” In this sense our language objectifies “things.” Other cultures look at homes and trees, for example, as a more organic part of life.

You and I are also part of sub-cultures. We are from a specific area of the country, from a particular ethnic group or groups. We have been brought up in a certain religion or a certain non-religion. In short, there are types of people who have brought us up and whom we think of as “us.” Sub-cultures can be very different. Think of the sub-cultures of Florida —African Americans, Puerto Ricans, Mexicans, Haitians, Jews, Cubans, Indians, White Southerners and others. We may have the same overall culture, but our sub-cultures are often very different. This means that we think, value, and believe differently. These values and ways of thinking are put into our heads much like chefs stuff portabella mushrooms with crabmeat stuffing. We didn’t choose the culture. It was fed (given) to us.

Cultures create bias. They create preferences, prejudices, ways of thinking and believing. Critical thinkers understand that their cultures have taught them beliefs and values that may make a lot of sense, little sense or nonsense.

Personal Bias
We are also products of a personal culture—a way of thinking that was given to us by our parents and those who raised us. Each family has its own special customs and values. For example, your parents may be strong Republicans, ardent conservationists, and fishing enthusiasts. They may have taught you the value of saving your money, treating your elders with respect and the importance of cleanliness. Or not. But your family was certainly different than mine. This means that even though we may come from the same area, be of the same ethnic group, and go to the same church, we will have somewhat different values because of our family.

National Bias

All of us are members of a particular country or nation-state. Usually we identify with this country, its government, and the people in it. We want to believe good things about our country and our people. They are usually considered an extension of ourselves. Countries, organizations, or individuals who seem to be opposed to our country are usually easily disliked and certainly mistrusted. Also, each country has a different media, a different history, and a different government that tries to tell us how wonderful it is and how lucky we are to be from this country. Nationalism is created, learned. If you were Bolivian you would think very differently about the United States. And very differently about Bolivia.

In the latest military conflict that the United States has been involved in (Iraq) France and Germany, two traditional allies, did not support the Bush administration’s actions in the United Nations. Many people in all three countries have taken their government’s position as their own and felt offended that other people and other countries took different positions. In fact, there were many negative things said and written in all three countries.

Many politicians try to take advantage of this tendency that we have to think of nations as “us” and “them.” Critical thinkers need to be aware of this bias. It contributed to fascism and other historical disasters. The word “we” in the context of nationalism can lead to a collective closing of the mind—a blindness to the humanity and wisdom of others.

There is no such thing as an “objective” person. We are all subjective. No human has an objective opinion of any social issue. We come into every situation with beliefs, values, and customs that affect our view. Critical thinkers are aware of these biases. In attempting to form opinions on different issues, our biases and the biases of others must be taken into account. Discovering one’s biases and trying to compensate for them is a life-long process.

Intellectual Courage
This attribute of a critical thinker is the ability to think, and then voice thoughts that are unpopular. It is the capability to challenge beliefs that one holds dearly or that one’s group or country accepts—often without question. It is the courage to question commonly accepted convictions or dogma in the face of ridicule or at the cost of great personal anguish. One of Albert Einstein's most famous quotes was this, "Great spirits have always found violent opposition from mediocre minds. The latter cannot understand it when a man does not thoughtlessly submit to hereditary prejudices but honestly and courageously uses his intelligence."

It is often said that it takes courage to act on one’s true beliefs. While there is truth in this, it takes often takes more courage to doubt the beliefs taught by one’s parents, family, friends, and country. It is usually more difficult to choose beliefs and values than it is to act on them. Although we normally think that we chose the values and beliefs we hold dear, in truth they have usually been given to us by our family, friends, or culture. We can see very easily that others are conditioned to think in certain ways. It is much more difficult to see this in ourselves. We understand that a child born to Hindu parents, in a Hindu village in India would grow up to be a Hindu. We understand that a Palestinian child brought up in a Palestinian refugee camp by parents who hate Israelis would grow up to hate Israelis. We see that these people did little to choose their beliefs, but we think that they should try to rise above their current situations and try to see the value of other religions, other cultures. In reality these people are us. It is we who must understand how conditioned we are. Our circumstances are different from the people mentioned above, but the indoctrination was (is) there. Our task is to recognize the indoctrination and rise above it. This often means spending substantial time and energy thinking and researching; it is much easier to simply go along with what we have been taught.

In early November of 2001 there was a controversy caused by Bill Mahr, the host of a late-night television show in the United States called Politically Incorrect. Mahr said that the suicide bombers who flew the planes into the World Trade Center and the Pentagon weren’t cowards “since they had been willing to die for a cause.” He went further saying: “...we have been the cowards. Lobbing cruise missiles from two thousand miles away. That's cowardly. Staying in the airplane when it hits the building, say what you want about it. Not cowardly...” His comments created a great deal of public anger. Because of this a number of advertisers said they would no longer have their products advertised on his show and some network affiliates of ABC refused to carry his program. It took intellectual courage on the part of some Americans to entertain the possibility that Mahr could have been correct, at least in part.

In another sense, however, perhaps these suicide bombers were cowards. They certainly were not cowards in the physical sense, since they gave up their lives voluntarily. Perhaps, though, they were cowardly in the sense that they did not question what they were taught. Possibly they did not have the courage to doubt their superiors, friends, and associates. Were they brave enough to doubt themselves? It is not possible to know the answers to these questions with total certainty, but they are the kind of questions that we must ask.
Critical thinkers cannot shy away from unpopular, uncomfortable questions. They question the actions and beliefs of their parents, their country, their friends, their teachers and themselves. They have the courage to voice their opinions even when they know they may be publicly criticized.

**Metacognition**

Metacognition involves all the traits and skills of critical thinking. Perhaps the best short definition of it is “thinking about thinking.” Another definition would be the conscious and deliberate monitoring and regulating of one’s thinking. In the Social Sciences this is one of our ultimate goals. We want to be aware of why we are thinking in a certain way. We want to make ourselves aware of how we and others have reached conclusions or have the opinions we do. We want to pay attention to the methods we use to analyze or interpret information. In short, we wish to inform and improve our thinking by being conscious of the thinking procedures that we employ. This is metacognition.

For example, you have an opinion about the use of marijuana. Metacognition involves analyzing why you have this opinion. How is it that you came to the conclusion that marijuana should or should not be legalized? What biased you? Have you carefully researched the topic? Are you afraid to change your opinion because it would make your past statements about marijuana (and therefore you) look foolish? Were you exposed to a culture that pushed you towards this belief? Do you have direct experience to validate your beliefs? Did you take the word of some “expert” like a teacher, minister or parent?

Metacognition involves stepping outside of ourselves (figuratively, of course) and watching ourselves think. One starts with the realization that in major part most of what we believe and how we think has been determined by factors that we had little control over. Metacognition means that we pay attention to the processes that we use when we think or when we attempt to solve a problem. It means that we are aware of the methodology we are using when we try to answer important questions.

Suppose, for example, that a friend of yours calls you and tells you that she just had an argument with her boyfriend about the United States giving foreign aid to African countries to help them fight the AIDS epidemic. She thinks that we should spend the money here in the United States to solve our own problems; her boyfriend believes that the United States should greatly increase our financial assistance to the African countries that are most affected. She says she wants to come over to talk to you about this issue. She trusts your opinions and wants to know what you think. She wants you to help her examine her thinking.
As stated above, metacognition involves considering all the other traits of critical thinkers as one watches oneself think. To start off, one might use intellectual humility. What do you know about AIDS? Do you know how serious the problem is in Africa? Does what happens in Africa affect us in the USA? If so, how much and in what ways? How badly is the money needed? How likely is it that our financial assistance will do what it is supposed to do?

Being aware of your ignorance, you decide to find some information. You know your U.S. government teacher is generally knowledgeable about these topics so you decide to call him. He doesn't have much time to talk since he is on his way to a meeting, but he briefly tells you that he is in favor of much more financial assistance and gives you his reasons. They sound like sensible reasons, but you know that your teacher is a liberal. He is clearly biased, so you are somewhat skeptical of his opinion. You therefore begin to do some research on the Internet. You find many articles written by Africans who see this as a major international issue. You find articles written by Libertarians and conservatives in the USA who recommend that Africans learn to deal with their problems and we should worry about our own. You are considering the biases of all of these people while you are reading their thoughts.

You come to the tentative conclusion that the USA should increase financial assistance to those African countries that are most in need and to international organizations that are in the forefront of combating the AIDS epidemic. A thought then occurs to you. If the United States should contribute more money to this cause, what about you? Shouldn't you contribute to one or more of these international organizations? You don't have a lot of money and any contribution you make will hurt. You think why shouldn't the government use your tax dollars to do this? Isn't that what taxes are for?

Then you start to wonder if you are copping out. Is it easier for you to believe that tax money should be used because you don't want to make the sacrifice? Because it will make it more difficult for you to buy the new computer you are saving for? You wonder if you have the courage to face the logical consequences of your own beliefs.

You are metacogitating.

How about that for a word? Put it into your word-processing software and watch it cogitate.

The Critical Thinking Process

There is a five-step process that I recommend when using critical thinking to evaluate an argument or a belief presented either verbally or in writing. These are the steps.

1. Identify the major point(s) of the argument or belief.
2. Summarize clearly the logic or reasons presented in support of the major point(s).

3. Identify the major assumptions that underlie the logic or reasons supporting the major point.

4. Analyze the major assumptions and the reasoning behind the major points.

5. Identify the major questions that need to be addressed before one can know with confidence that the arguments or reasoning is sound.

Each step requires some explanation.

**Identifying the Major Point**

The first step in using critical thinking to evaluate an argument is clearly articulating the major point of the argument or belief. Sometimes the major point is clear, other times not, but it must be identified before one can start the process. Usually it can be stated in a few words. Here are a few examples: “The death penalty is good.” “Abortion is wrong.” “The United States should spend more money on education.” “The United States cannot defeat terrorism by only using military options.” “Homosexuals should be allowed to marry legally.”

In conversations, the major point is often stated at the beginning. In editorials, it is usually contained in the title. In essays, it should be found in the first paragraph and repeated in the last paragraph. In a long essay or editorial there are often several important points, but usually one is the key.

**Summarizing the Logic or Reasoning**

The second step involves summarizing the major arguments or evidence presented in support of the major point. This can be challenging for many reasons. If a person is listening to a verbal argument or belief the reasons are often given at different times and in the reverse order of importance. In a written essay, the usual form is to mention the least important supporting argument first and the most important one last. In conversations, the order of importance is often not easily ascertained and can only be found by careful questioning. In any case, the supporting arguments must be stated as clearly as possible. They are the essence of the argument or the belief.
Identifying the Major Assumptions

The third step is perhaps the most important. It is discovering the assumptions that have been made in the argument or position that is being analyzed. This is at the core of critical thinking. What does the speaker or writer assume? Most beliefs or arguments have a few basic assumptions that underlie them. Many of these assumptions are neither clearly stated nor easily understood. Identifying these assumptions is of utmost importance.

Many assumptions are hidden, even from the person who is presenting the argument. For example, many people assume that if a country has elections where the voters are not coerced and the votes are counted honestly that a democratic government is the result. In this argument some assumptions are obvious. The writer assumes that democratic governments allow voters to vote freely and that if these votes are counted honestly then a democratic government is the result. A major hidden assumption here is that these are the only two factors that determine if a country has a democratic government. It is assumed that other factors are not important.

Many United States politicians observed elections in El Salvador in the early 1980’s and saw that Salvadoran citizens were not prevented or coerced in voting, and observed that the voting results were counted honestly. Therefore, they declared that the government that was elected by this process was democratic and legitimate. The U.S. government then supported this government and gave it, and the military that supported it, over a billion dollars in aid. Many of the opposition groups that fought this government and its military declared themselves to be socialist or Marxist. Clearly then, it would seem the U.S. administration was correct in supporting this democratic government.

In fact, the government and the military in El Salvador systematically murdered almost anyone who spoke against them. Reporters were shot; union organizers tortured and killed; priests, nuns, teachers and others were assassinated if they spoke against the military or the government. The government controlled the newspapers, television and radio. The only thoughts or statements that they allowed to be printed, shown or spoken in the media were those that the military permitted. Voters did not have real choices because true opposition was not allowed to run or was not allowed to explain their viewpoints.

The United Nations did an investigation in El Salvador to find out what really happened. Their findings were that the military and its supporters in the government had murdered approximately 10,000 people in El Salvador during the time that the United States was supplying billions of dollars in aid.
Precisely because assumptions are often hidden, critical thinking must be imaginative. One must look as much at what has been ignored as at what has been considered. Key assumptions are often not stated and the person who is making them is often completely unaware of them. An example might be of a person who believes abortion is wrong. When questioned why he believes this, his answer is that it is against God’s will. When asked how he knows this, he says that it is in the Bible. When pushed further he says that his minister read him passages from the Bible that the minister interpreted as being against abortion.

There are many assumptions that this person made. He assumed that his minister interpreted the Bible correctly, that the minister correctly applied the interpretation to abortion, and that other sections of the Bible did not contradict the particular sections that the minister was referring to. He also assumed that the particular version of the Bible was the only correct one, and that this version was correctly translated into English. There are, of course, other assumptions here. In this case not all of the assumptions can be researched adequately. One must choose the ones that are most crucial and that actually can be researched. In the case above, and in many other cases, research will not produce a definitive answer, but it should uncover much information and create a greater appreciation of the complexity of the issues involved.

This leads us to the final step in the critical thinking process.

Analyzing the Assumptions and Reasoning

The final step in the critical thinking process involves analyzing the assumptions and making a judgment on the reasoning of the author. It should be understood at the outset that most stated assumptions are rarely completely correct or incorrect. Most assumptions make some sense; frequently the errors come in overgeneralizing or ignoring the influence of factors not considered. Finding ignored factors takes imagination, but imagination is aided by information. As you research, you will see things that you did not think of before which will then lead you to other ideas.

The key here is research. The word is used in a broad sense. Research can be asking only one person some particular questions. If you are having difficulties with your plumbing, it makes sense to ask a plumber before you start ripping out the pipes in your home. Research can involve asking many people through various means. People with medical problems often benefit from consulting with several specialists. If one wants to build a dream home it makes sense to talk to realtors, builders, architects, specialists in insulation, air-conditioning and so on.
Unfortunately, research in the social sciences often means painstakingly looking for information in different databases on the Internet. Clearly, the skill that one possesses and the time one devotes to the research are important factors. But critical thinkers understand that little critical thinking can be done without substantial information specific to the topic at hand. Finding information, then, is crucial to analyzing assumptions.

There are a few common mistakes in assumptions and reasoning in the social sciences that one should be aware of.

One frequent assumption that people make is to think that others have the same understanding of the words or terms used. “Welfare” is such a word. If you ask people to list the programs that they consider as welfare, you will find that there is a wide variation. The same can be said of the words "conservative," "liberal", "Christian," or "American." Often the military of one country calls its actions “defensive,” and the actions of other countries as “offensive.” Such was the case in the Cuban missile crisis in 1961, for example. The Soviet government termed the installation of nuclear missiles in Cuba as a “defensive” tactic. The U.S. government considered it offensive. In an example earlier in this essay there was a debate over the word “coward.” The subject of this essay, critical thinking, is a term that means different things to different people. Most people think that critical thinking is something that should be taught in schools and practiced by all people. But since there is little agreement over what the term really means there is therefore little agreement over what should be taught. Such misunderstandings over terms are common. One must not assume that people have the same understanding of terms or words.

Another problem concerns overgeneralizations. Overgeneralizations are essentially misstatements. Usually an overgeneralization ascribes or attributes something to a group that is only true of some of group. For example, one often hears that conservatives in the United States oppose abortion. In reality, many conservatives do support some kinds of abortions. Many support abortions when the female has been raped; others support abortion to save the life of the mother. Others simply are pro-choice; they think abortion, in the early stages at least, should be left up to the pregnant woman. Pennsylvania Senator Arlen Specter, a Republican, is conservative, but he is pro-choice. One could more accurately say that most Evangelical Christians in the South oppose most kinds of abortions. This is a generalization that is broadly true. It is not an overgeneralization.

Another common assumption that people make regarding social issues is that there is one or two simple things that need to be done to solve the “problem.” This oversimplification of the problem leads to overgeneralizations regarding the solutions.

Usually there are many factors that contribute to a given situation; very seldom is there just one. Also, frequently the factors that cause certain phenomena act
upon each other in various ways. Consider, for example, the following factors: poverty, ignorance, illness, illegitimacy, malnutrition, and feelings of hopelessness. All of these factors interrelate. In a sense they all contribute to creating the others. At a given point in time, one factor might be more causal than others. For example, poor children might well be malnourished; they are then likely to be ill frequently. Sick, malnourished children often do poorly in school, become dropouts, have children without being married, and feel that they will never be able to succeed. They then find it difficult to provide good nutrition, decent guidance or motivation to their children. Their problems are often reproduced in the next generation.

It would be incorrect to say that only poverty causes malnutrition. Many factors can cause malnutrition. It would be incorrect to say that only ignorance causes poverty; there are many factors that can lead to poverty. One could say that poverty can be a contributing factor to malnutrition or that ignorance is often a factor related to poverty.

Below are a few statements that offer a single causal explanation for situations or conditions that are far more complex.

WE HAVE DISCIPLINE PROBLEMS IN SCHOOLS BECAUSE PARENTS DO NOT TEACH THEIR CHILDREN RESPECT AT HOME.

WE HAVE SO MUCH CRIME IN THE UNITED STATES BECAUSE PENALTIES ARE TOO LENIENT.

PEOPLE WHO ARE ON WELFARE ARE TOO LAZY TO WORK.

STUDENTS WHO GET LOW GRADES DO NOT STUDY.

WE HAVE SO MANY ABORTIONS IN THE UNITED STATES BECAUSE IT’S SO EASY TO HAVE AN ABORTION.

THE DIVORCE RATE IS SO HIGH IN THE UNITED STATES BECAUSE PEOPLE ARE TOO SELFISH TO WORK ON MARITAL PROBLEMS.

THE REASON THAT SO MANY BLACK MEN ARE IN PRISON IS BECAUSE OF DISCRIMINATION.

Another frequent assumption is to ascribe causation to correlation. A relationship is causal if one factor directly brings about another, that is, the second factor could not have and would not have occurred if not for the first. As stated above, almost never is there a single cause for social phenomena.
A correlation is simply a relationship. Two things occur at the same time, or one after the other, but one does not cause the other, rather they both may be caused by other, non-related factors.

Some people say that welfare programs have caused single-parent families. They often point to statistics that show a large increase in single-parent families amongst poor people, especially black Americans, at the same time that welfare spending was increased in the United States. Some welfare programs, especially Aid to Families with Dependent Children, required that the parent be unmarried in order to qualify. Others, like Food Stamps, are income dependent, meaning that one’s income must be low enough to qualify. A single woman does not have a husband’s income to include in her application and therefore would be more likely to receive benefits. Some people argue that in order to receive more welfare benefits, many women do not marry or decide to divorce.

A critical thinker is wary of simple explanations or assumptions. What else could have contributed to an increase in single-parent families? Many people believe that there was a significant change during the Sixties and Seventies in the United States and other countries concerning sexual conduct and marriage. It became more acceptable to have sex outside of marriage; society also became more tolerant of divorce. The women’s movement encouraged women to find jobs, to become more independent, more self-sufficient. Another social phenomenon was occurring at the same time. Many African Americans were moving out of the South and out of rural areas and into big cities. As more poor people were moving to the cities, at the same time many well-paying, low-skill jobs were moving out of the city to the suburbs or being phased out by technology. Therefore, more poor people, especially black men, could not find jobs that paid much over minimum wage, making them more likely to be poor and less likely to be good marriage prospects.

In short, there are many possible factors that could have led to the increase in single-parent families. It is possible that the birth control devices that became increasingly available in the Sixties and Seventies had an effect on beliefs concerning sexual practices. Were the advancements in basic science responsible for the discoveries in birth control? Is it possible that the relationship between the increase in single-parent families and the concurrent increase in welfare programs is largely or mostly correlational? Were they both caused primarily by other factors? Was one partly causal of the other? These are some questions that a critical thinker might ask.

Another assumption common in the social sciences is that the numbers one sees or reads are exactly correct. One should not assume that the numbers found in newspapers, books or quoted on television or the radio are correct.
This writer has encountered many mistakes that supposedly reputable authors have made using numbers. Don’t trust teachers, or newspapers or textbooks to be correct always. Often they are not. In the spring of 1997 I was reviewing two US Government textbooks; one said that the U.S. Senate had sixteen standing committees; the other said there were seventeen. They were both printed the same year (1997). One might assume that something as simple as this wouldn’t be missed. But it was. (I used the Internet and checked the home page of the U.S. Senate. It said there were sixteen.)

In December of 1997 I found that an article that I was using in one of my classes said that foreign aid was only 0.012% of our budget. They misplaced the period. They meant to say 1.2% of our budget.

Frequently errors are made in reference to public opinion polls. The first mistake is to assume that the numbers cited in a poll are exactly representative of the general public. If a poll is done with scrupulous methodology, it still has a margin of error. For example, many polls say that they have a margin of error of + or - 3pts and a confidence level of 95%. This means that the numbers given in the poll have a probability of being correct 95% of the time within a range of + or - 3pts. If a person says that 52% of Americans are in favor of cutting Medicaid spending, because that is what a recent poll found, he is not being careful. The pollsters themselves would not say this. The only thing that is certain is that 52% of the people polled had this opinion. If the population being polled at the time was all adults over 18 in the United States, one might reasonably conclude that a similar percentage of this population would have answered the poll’s questions in the same way.

Secondly, poll figures are always indicative of people’s opinions in the past. For example, in early July of 2002, George Bush’s approval ratings— (percentage of people polled who thought he was doing a good or excellent job as President)— were slightly over 60% in several polls. Many authors then stated in magazines and newspapers that Bush’s approval ratings had slipped to 60% (from a high of almost 90% just after the occurrence of 9/11/2001). By the time articles appeared in periodicals, the polls were over a week old. Public opinion can change rapidly. What was true a week ago may well not be true today. Issues that are perennial or long-standing such as opinions on abortion or capital punishment generally do not change quickly. However, issues that the public knows little about, such the situation in Afghanistan, or in Bosnia, or terrorism often show significant changes in public opinion in short periods of time. This is also true of approval ratings. They can change rapidly. In Spring of 2007 George Bush’s approval ratings were bouncing around 30%. Who knows what the ratings will be a month from now?

Often numbers that are quoted as exact are not. Nobody knows exactly how many people live in the United States today. If someone says that there are 300 million people in the USA, he almost has to be wrong. If a Senator says that his bill will reduce spending on Medicaid by ten billion dollars over the next five
years, he is saying something he cannot possibly know. It will not be exactly ten billion dollars, and it may well be considerably more or less. No one knows how many people will apply for and be accepted for Medicaid payments over the next five years. Who can predict with precision what type of illnesses these people will have or what type of medical procedures will be available or how much these treatments might cost? One can **project** future savings; one cannot **know** exactly what they will be.

If someone says that the infection rate for HIV went down by 20% last year; he or she almost has to be incorrect. Reporting HIV infections is not exact. Many become infected and do not know it. If you read in the Orlando Sentinel that HIV infections have gone down by 20% the only thing you can say for sure is that the Sentinel reported 20%; you do not know if the Sentinel was correct. You cannot use the number with any certainty in any other way. Critical thinkers view numbers cautiously.

Critical thinking involves checking the **source** of statistics or numbers. For example, one might be wise to doubt statistics provided by the AFL-CIO on the job satisfaction of union and non-union labor. The national Chamber of Commerce likewise wouldn’t generate much confidence if they commissioned a study on the same topic. One might expect that academics would be trustworthy in their use of numbers. Unfortunately this is often not so. An article in the Orlando Sentinel on Friday, May 17, 1996 stated that a sociologist named Lenore J. Weitzman: "reported that women’s households suffered a 73 percent drop in their standard of living in the first year after divorce, while men’s households enjoyed a 42 percent rise." The paper then cited another professor who took the same numbers and found that women’s households had suffered a 27 percent decrease, while men’s had increased by 10 percent. The second study came some two years after the original book came out. According to the Sentinel, the original statistics were cited in 175 newspaper articles, 348 social science articles, 250 law review articles, 24 appellate and Supreme Court cases and President Clinton’s 96 budget.

One finds with disappointing regularity that people do not add, subtract or multiply correctly. These are simple operations, but often mistakes are made. These people are very possibly incorrect in their use of numbers simply because they are not careful. Often, however, mistakes are made because a person wants the numbers to say something. Their mistakes may not be conscious or completely deliberate, but one tends to find that the mistakes made have a marked tendency to support what the authors believe or wish to convince others of.

A critical thinker treats numbers with respect and does not assume the numbers written or used by others are correct.
Finally, one should not assume that the reasons given by a particular person in explanation of his actions are correct.

In politics, the reasons given for support or opposition to a given program are often a form of rationalization. A Republican Congressperson representing a wealthy suburban constituency is likely to support a cut in welfare payments and food stamps. If you ask him why, he might well say that there is evidence of fraud in these programs and that these programs foster laziness and dependency, things that are destroying what America stands for. There is probably an element of truth in what he says. However, it is very possible that since very few people in his district benefit directly from welfare and food stamps they see little need for it and vote for people who share their ideas.

A Congresswoman representing Harlem is likely to support affirmative action programs and say that they have greatly contributed to creating opportunity for ethnic minorities and women. Again, there is probably truth in what she says. However, it is very likely that many people she represents have directly benefited from affirmative action programs and it is clearly in their direct economic interest that these programs continue to exist.

Business groups believe if they can pay lower wages and less tax they can make increased profits, employ more people, invest in new business ventures and increase production. Unions believe that if employees are paid good salaries, the workers will work harder, spend more money, and therefore increase business productivity and sales. This will then enable businesses to hire more workers at higher salaries.

In summary, a critical thinking analysis of a position involves identifying the major point(s) to the argument, explaining the reasoning supporting the major point, identifying the major assumptions, analyzing these assumptions through research and identifying relevant questions that are still unanswered.
Citizens use different methods to convince government officials to use scarce resources in their interests. The success that one has in politics, as well as in our daily lives, depends greatly on our intrapersonal communications skills. The purpose of the following essay is to discuss ways of enhancing one’s ability to discuss important, and often emotional political topics with others. It is designed to make you more effective at getting others to listen to you; to allow you to express your point of view in such a way
that others will clearly understand what you wish to say and not be offended by the way
you say it. It is also intended to improve your ability to understand what others wish to
communicate to you.

There are certain behaviors that further effective intrapersonal communication in
political discussions and others that impede or hinder it. We will look first at things one
should do to promote effective communication.

The first rule of effective communication is simple. Be polite. Most of us want to prove
an offensive person wrong. We will often want to disagree with an impolite person and
look for ways to disparage or put down what he or she says.

The most important part of politeness is listening. If you wish people to listen to your
thoughts, you have to pay a price. YOU MUST LISTEN IN ORDER TO BE HEARD.
Listening doesn't mean hearing; it means actually paying attention and asking questions
to clarify meanings. If you think that what the other person is saying doesn’t make much
sense, ask questions. Make sure you know exactly what it is that you disagree with
before you attempt to persuade him or her to your point of view. Listening is one of the
greatest complements one can pay to a person. It is often reciprocated.

Secondly, it is extremely important to state opinions as opinions, and feelings as
feelings, not as if they were truths. You and I are experts on our feelings and opinions.
We are expert in little else. People who act like they are revealing eternal truths to the
ignorant masses are usually ineffective communicators. Who wants to listen to
someone’s sermon on the way things really are?

We must first understand that our beliefs are just that: beliefs not absolute facts. In the
social sciences a workable definition of a fact would be this: A fact is something that
exists or has existed that has been verified almost unanimously by many people with
different biases using different means of verification. For example, it is a fact that Bill
Clinton was the president of the United States in 1996. It is not a fact that he did a good
or bad job as president. It was a fact that Sadaam Hussein was President of Iraq in
1996. It was not a fact that he was a brutal dictator, or that he was the principal cause of
the Gulf War. In the social sciences very few things are considered to be facts; many
things are opinions. Some opinions have a high probability of being correct or true.
Others are very logical and seem sensible. But they are still opinions and must be
stated as such.

If you state something as if it were a fact, you might well consider it to be so. Your mind
is likely to be closed on the topic. If you wish to find out if you are open-minded on a
given topic, listen to yourself. If you consistently state your opinions as facts it is a good
indication that you your mind is closed. Use words like “I think” or “the way I see it”
instead. Speak for yourself. No need to reveal all of life’s mysteries to the rest of us.

Thirdly, be specific whenever possible. Say exactly and clearly what you mean.
Generalize with great care. This is not to say that generalizing is wrong. Generalizations
are often necessary. In fact, much of what we learn in school and outside should allow us to make careful generalizations. Without them, we would be reduced to talking about specific individuals or specific events and be unable to apply what we have learned in one situation to others. Absolute generalizations, however, are particularly offensive because they lump all people or things or events into an undifferentiated glob.

Careful thinking and speaking requires specificity. Often particular examples or details are needed. Almost all U.S. citizens would agree that we should eliminate waste in government. But what does this mean? In reality, it means next to nothing without examples and details. Most people are generally in favor of or opposed to the death penalty. But such a position means little without details. Many citizens are in favor of the death penalty only for certain crimes, under certain conditions and for people of certain ages. Those who are opposed to the death penalty have specific reasons that need to be explained in detail to make sense. A position on gun control is often meaningless unless one explains the type of weapon, the conditions for use, and the specific limitations and means of enforcement. Being against drugs is largely nonsense unless one states what types of drugs (aspirin?) one is opposed to and why.

Finally, a good general practice to follow if one wishes to be an effective communicator is to complement others on what they have said before one starts mentioning disagreements. There are usually many points made in a discussion of social issues. If one states agreements first, others are more likely to listen to points of disagreement. If you think that another person has said something that makes a lot of sense, say so. That person is much more likely to listen to a person who is wise enough to recognize how smart he is.

Closely linked to this is clearly identifying points of disagreement. Ask specific questions about the perceived disagreement. To a person who says that anyone who kills another person deserves the death penalty ask questions like these. What about children? Soldiers? The mentally impaired? Crimes of passion? One might ask if that person is willing to have some innocent people put to death because of errors in the process. To a person who says he opposes gun control ask him about machine guns, child ownership, people from other countries, or those with prison records or who are mentally ill? Ask him if he thinks the same gun laws make sense in rural areas as compared to urban environments. One must understand clearly the points of disagreement before a fruitful discussion can take place. If one reacts emotionally to something that is not clear, one risks alienating the other person unnecessarily and the result is likely to be an argument rather than a productive discussion.

The major point here is effectiveness, not political correctness. All of us want to be listened to, to let others know what we think, need or desire. We want to be better students, better employers, lovers, friends, and relatives. Communication is key to all of these roles.

There are other things that effective communicators avoid.
First, and most important, is to avoid name-calling or pejorative (negative) categorization. Clearly if you call someone foolish or selfish or other such names the effect will be to offend. Do **not** say such things as, “that’s stupid” or “that’s crazy” or “that’s ridiculous.” That is, don’t use these words unless you wish to start an argument. If you are looking for an argument rather than an effective discussion, then by all means use these terms. You will have lots of arguments. Few people will want to talk to you.

Do **not** use these words: “You are wrong.” At least not if you wish to have a productive discussion. These words are offensive almost inherently. People are not “wrong.” Their opinions may be incorrect or mistaken, but a person is not "wrong." You and I are free to disagree with what others say or do. Clearly, people make mistakes of opinion, but if we personalize the discussion the result is likely to be an argument. Statements such as, “that’s ridiculous,” or “that’s total nonsense,” are almost as offensive.

Effective communicators avoid oversimplification and overgeneralization. They seldom use words like “all” “none” “always” “never” “completely” “everyone” “no one” “totally” and other absolutes. There is very little one can say about “all” Republicans or Democrats, for example, except that they are Republicans or Democrats. In order to know that people on welfare are lazy one would have to know all people on welfare in all countries in the world. One would also need to know that the listeners have the same understanding of the words “welfare” and “lazy." One of the most egregious example of this is politicians starting off a statement by saying “Americans." The word “American” is inexact in itself. Does one mean everyone in the United States at this moment? All the people in the Americas? More importantly, who is qualified to speak for all of us, whoever “we” may be? Who is qualified to talk about all Moslems or Jews or Cubans or Afghans? The use of oversimplification or overgeneralization is often a sign of sloppy, lazy thinking. It seldom leads to fruitful discussions since people are likely to be pointing out exceptions or incidents where the generalization or simplification does not apply.

Perhaps the most common abuse of overgeneralization or oversimplification is to state (and therefore think) opinions in good-bad, black-white or either-or terms. The danger here is oversimplifying a complex situation into only two alternatives or options. Although some situations can be so reduced, many cannot. Some examples might be:

- **Bush's economic policies don't work.**
  - It was either right to send the U.S. military to Afghanistan or it was wrong.
  - The death penalty has to be good or bad, take your pick.
  - In the first statement, does the speaker mean all of Bush's economic policies? Those relating to inflation, unemployment, interest rates, tax cuts? Is the writer thinking about the short term, the long run? Work for whom? The rich? The poor? Everybody at all times? What?
Regarding the second and third statements: right or wrong in what way, to whom, and at what time?

In conclusion, it is my opinion that an educated person realizes that on most subjects he or she has received incomplete, biased information, and therefore comes to tentative, careful conclusions and states them as such. By learning to speak carefully, and with precision you should have more productive conversations, antagonize fewer people, and be more effective.