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Regarding a Definition of Critical Thinking

Many people who feel that they don't know what critical thinking is, or means, request a definition. When they realize there is no *one* definition of critical thinking given by all theorists, many people feel frustrated and confused. "Even the experts can't agree about what they're talking about. How can I teach it if I don't know what it is, and no one else can tell me?" This reaction, though understandable, is somewhat mistaken. Although theorists provide a variety of definitions, they do not necessarily reject each others' definitions. They feel that their own definitions most usefully convey the basic concept, highlighting what they take to be its most crucial aspects, but they do not necessarily hold that other definitions are "wrong" or worthless. Novices, on the other hand, often get caught up in the wording of definitions and do not probe into them to see how compatible their meanings are. The various proposed definitions, when examined, are in fact much more similar than they are different.

Furthermore, because of the complexity of critical thinking, its relationship to an unlimited number of behaviors in an unlimited number of situations, its conceptual interdependence with other concepts (such as the critical person, the reasonable person, the critical society, a critical theory of knowledge, learning, literacy, and rationality, not to mention the opposites of these concepts), it is important not to put too much weight on any one definition. A variety of useful definitions have been formulated by distinguished theoreticians, and we should value these diverse formulations as helping to make important features of critical thought more apparent.

Harvey Siegel, for example, has defined critical thinking as "thinking appropriately moved by reasons". This definition helps us remember that our minds are often *inappropriately* moved by forces other than reason: by desires, fears, social rewards and punishments, etc. It points out the connection between critical thinking and the classic philosophical ideal of rationality. Yet, clearly, the ideal of rationality is itself open to multiple explications. Similar points can be made about Robert Ennis' and Matthew Lipman's definitions.

Robert Ennis defines critical thinking as “rational reflective thinking concerned with what to do or believe.” This definition usefully calls attention to the wide role that critical thinking plays in everyday life, for, since all behavior is based on what we believe, all human action is based upon what we in some sense *decide* to do. However, like Siegel’s definition, it assumes that the reader has a clear concept of rationality and of the conditions under which a decision can be said to be a “reflective” one. There is also a possible ambiguity in Ennis’ use of ‘reflective’. As a person internalizes critical standards — sensitivity to reasons, evidence, relevance, consistency, and so forth — the application of these standards to action becomes more automatic, less a matter of conscious effort and, hence, less a matter of overt “reflection” (assuming that Ennis means to imply by ‘reflection’ a special consciousness or deliberateness).

Matthew Lipman defines critical thinking as “skillful, responsible thinking that is conducive to judgment because it relies on criteria, is self-correcting, and is sensitive to context.” This definition is useful insofar as one has a clear sense of the difference between responsible and irresponsible thinking, as well as what to encompass in the appropriate self-correction of thought, the appropriate use of criteria, and appropriate sensitivity to context. Of course, it would not be difficult to find instances of thinking that were self-correcting, used criteria, and responded to context *in one sense* but nevertheless were *uncritical* in some other sense. For example, one’s particular criteria might be uncritically chosen or the manner of responding to context might be critically deficient in a variety of ways.

We make these points not to underestimate the usefulness of these definitions but to point out limitations in the process of definition itself when dealing with a complex concept such as critical thinking. Rather than working solely with one definition of critical thinking, it is more desirable to retain a host of definitions, and this for two reasons: 1) in order to maintain insight into the various dimensions of critical thinking that alternative definitions highlight, and 2) to help oneself escape the limitations of any given definition. In this spirit, we will present a number of definitions which we have formulated. Before reading these definitions, you might review the array of teachers’ formulations in the chapter “What Critical Thinking Means to Me”. You will find that virtually all the teachers’ definitions are compatible with each other, even though they are all formulated individually. Or consider the following list of definitions.

Critical Thinking is:

- a) skilled thinking which meets epistemological demands irrespective of the vested interests or ideological commitments of the thinker;
- b) skilled thinking characterized by empathy into diverse opposing points of view and devotion to truth as against self-interest;
- c) skilled thinking that is consistent in the application of intellectual standards, holding oneself to the same rigorous standards of evidence and proof to which one holds one’s antagonists;
- d) skilled thinking that demonstrates the commitment to entertain all viewpoints sympathetically and to assess them with the same intellectual standards, without reference to one’s own feelings or vested interests, or the feelings or vested interests of one’s friends, community or nation;
- e) the art of thinking about your thinking while you’re thinking so as to make your thinking more clear, precise, accurate, relevant, consistent, and fair;
- f) the art of constructive skepticism;
- g) the art of identifying and removing bias, prejudice, and one-sidedness of thought;

- h) the art of self-directed, in-depth, rational learning;
- i) thinking that rationally certifies what we know and makes clear wherein we are ignorant;
- j) the art of thinking for one's self with clarity, accuracy, insight, commitment, and fairness.

A Definition of Critical Thinking

We can now give a definition of critical thinking that helps tie together what has been said so far, a definition that highlights three crucial dimensions of critical thought:

- 1) the perfections of thought
- 2) the elements of thought
- 3) the domains of thought

The Definition:

Critical thinking is disciplined, self-directed thinking which exemplifies the perfections of thinking appropriate to a particular mode or domain of thought. It comes in two forms. If disciplined to serve the interests of a particular individual or group, to the exclusion of other relevant persons and groups, it is sophistic or *weak sense critical thinking*. If disciplined to take into account the interests of diverse persons or groups, it is fairminded or *strong sense critical thinking*.

Critical thinkers use their command of the elements of thought to adjust their thinking to the logical demands of a type or mode of thought. As they come to habitually think critically in the strong sense, they develop special traits of mind: intellectual humility, intellectual courage, intellectual perseverance, intellectual integrity, and confidence in reason. Sophistic or weak sense critical thinkers develop these traits only narrowly in accordance with egocentric and sociocentric commitments.

Now we shall explain what we mean by the *perfections* and *imperfections* of thought, the *elements* of thought, the *domains* of thought, and *traits of mind*. In each case we will comment briefly on the significance of these dimensions. We will then relate these dimensions to the process of helping students to come to terms, not only with the logic of their own thought, but with the logic of the disciplines they study, as well.

The Perfections and Imperfections of Thought

clarity	_____	vs	_____	unclearly
precision	_____	vs	_____	imprecision
specificity	_____	vs	_____	vagueness
accuracy	_____	vs	_____	inaccuracy
relevance	_____	vs	_____	irrelevance
consistency	_____	vs	_____	inconsistency
logical	_____	vs	_____	illogical
depth	_____	vs	_____	superficiality
completeness	_____	vs	_____	incompleteness
significance	_____	vs	_____	triviality
fairness	_____	vs	_____	bias or one-sidedness
adequacy (for purpose)	_____	vs	_____	inadequacy

Each of the above are general canons for thought; they represent legitimate concerns irrespective of the discipline or domain of thought. To develop one's mind and discipline one's thinking with respect to these standards requires extensive practice and long-term cultivation. Of course achieving these standards is a relative matter and often they have to be adjusted to a particular domain of thought. Being *precise* while doing mathematics is not the same as being precise while writing a poem or describing an experience. Furthermore, there is one perfection of thought that may be periodically incompatible with the others, and that is *adequacy to purpose*.

Because the social world is often irrational and unjust, because people are often manipulated to act against their interests, because skilled thought is often used to serve vested interest, those whose main purpose is to forward their selfish interests, often skillfully violate the common standards for good thinking. Successful propaganda, successful political debate, successful defense of a group's interests, successful deception of one's enemy often requires the violation or selective application of many of the above standards. The perfecting of one's thought as an instrument for success in a world based on power and advantage differs from the perfecting of one's thought for the apprehension and defense of fair-minded truth. To develop one's critical thinking skills merely to the level of adequacy for social success is to develop those skills in a lower or *weaker* sense.

It is important to underscore the commonality of this weaker sense of critical thinking for it is dominant in the everyday world. Virtually all social groups disapprove of members who make the case for their competitors or enemies, however justified that case may be. Skillful thinking is commonly a tool in the struggle for power and advantage, not an angelic force that transcends this struggle. It is only when the struggle becomes mutually destructive and it becomes advantageous for all to go beyond the onesidedness of each social group, that a social ground can be laid for fairmindedness of thought. No society yet in existence cultivates fairness of thought generally in its citizens.

The Elements of Thought

Both sophistic and fairminded critical thinking are skilled in comparison with uncritical thinking. The uncritical thinker is often unclear, imprecise, vague, illogical, unreflective, superficial, inconsistent, inaccurate, or trivial. To avoid these imperfections requires some command of the elements of thought. These include an understanding of and an ability to formulate, analyze, and assess:

- 1) The problem or question at issue
- 2) The purpose or goal of the thinking
- 3) The frame of reference or points of view involved
- 4) Assumptions made
- 5) Central concepts and ideas involved
- 6) Principles or theories used
- 7) Evidence, data, or reasons advanced
- 8) Interpretations and claims made
- 9) Inferences, reasoning, and lines of formulated thought
- 10) Implications and consequences which follow

Focusing on the nature and interrelationships of the elements of thought illuminates the logic of any particular instance of reasoning or of any domain of knowledge. For example, *at least one question is at issue in every instance of reasoning*. Can the student identify and precisely express those problems or questions, distinguishing the differences between them?

All human reasoning is oriented to serve some purpose or goal. Can students clearly express their purpose or goal and adjust their thinking to serve it? Can students analyze and critique

their purpose or goal? Do students recognize the point of view or frame of reference in which they are thinking? Do they consider alternative points of view?

All reasoning must start somewhere and proceed in some direction. Can students identify what they are assuming or taking for granted in their reasoning? Can they follow out the implications and consequences of their reasoning? Can they identify contradictions in their thought?

All reasoning uses some ideas or concepts and not others. Can students identify and analyze the most fundamental concepts in their reasoning? Can they determine, for example, whether they are using a term in keeping with established usage or modifying that usage?

Most reasoning relies on principles or theories to make sense of what one is reasoning about. Can students identify the principles or theories they are using? Can they clarify them, question them, consider alternatives, apply them precisely?

Most reasoning is based on some experiences, evidence, or data which are interpreted and used as the basis of inferences. Can students identify the experiences, evidence, or data they are using or basing their reasoning upon? Can they identify their inferences? Can they rationally argue in favor of their inferences? Can they formulate and consider possible objections to their inferences?

Finally, as we have already emphasized, *all disciplines have a logic.* Can students discuss the logic of the disciplines they are studying? Can they identify their fundamental goals or purposes? The kind of questions they attempt to answer? Their basic concepts or ideas? Their basic assumptions? Their basic theories or principles? The sort of data, evidence, or experiences they focus upon? Whether there is fundamentally one or multiple conflicting schools of thought within the discipline? When students cannot answer these questions about a subject field, they cannot think critically within it. They have no idea how to begin to compare one field to any other, nor therefore how to correct or qualify the results of one field in light of the results of another.

Traits of Mind

There are, we believe, at least seven interdependent traits of mind we need to cultivate if we want students to become critical thinkers in the strong sense. They are:

- a) *Intellectual Humility:* Awareness of the limits of one's knowledge, including sensitivity to circumstances in which one's native egocentrism is likely to function self-deceptively; sensitivity to bias and prejudice in, and limitations of one's viewpoint.
- b) *Intellectual Courage:* The willingness to face and assess fairly ideas, beliefs, or viewpoints to which one has not given a serious hearing, regardless of one's strong negative reactions to them.
- c) *Intellectual Empathy:* Recognizing the need to imaginatively put oneself in the place of others to genuinely understand them.
- d) *Intellectual Good Faith (Integrity):* Recognition of the need to be true to one's own thinking, to be consistent in the intellectual standards one applies, to hold oneself to the same rigorous standards of evidence and proof to which one holds one's antagonists.
- e) *Intellectual Perseverance:* Willingness to pursue intellectual insights and truths despite difficulties, obstacles, and frustrations.
- f) *Faith in Reason:* Confidence that in the long run one's own higher interests and those of humankind at large will be served best by giving the freest play to reason, by encouraging people to come to their own conclusions by developing their own rational faculties.
- g) *Intellectual Sense of Justice:* Willingness to entertain all viewpoints sympathetically and to assess them with the same intellectual standards, without reference to one's own feelings or vested interests, or the feelings or vested interests of one's friends, community, or nation.

These intellectual traits are interdependent. Each is best developed while developing the others as well. Consider intellectual humility. To become aware of the limits of our knowledge, we need the *courage* to face our own prejudices and ignorance. To discover our own prejudices, we must *empathize* with and reason within points of view we are hostile toward. To do so, we must typically *persevere* over a period of time, for reasoning within a point of view against which we are biased is difficult. We will not make that effort unless we have the *faith in reason* to believe we will not be deceived by whatever is false or misleading in the opposing viewpoint, and an *intellectual sense of justice*. We must recognize an intellectual *responsibility* to be fair to views we oppose. We must feel *obliged* to hear them in their strongest form to ensure that we are not condemning them out of ignorance or bias on our part. At this point we come full circle back to where we began: the need for *intellectual humility*.

These traits are applicable to *all* domains or modes of knowledge, not merely to some. Like the perfections and elements of thought, with which they are intimately intertwined, they are universally relevant. Of course, those reasoning to achieve selfish ends often betray intellectual standards to gain success. Schooling today neglects this deep-seated problem of selfish thought. Though most students enter and leave school as essentially uncritical thinkers, some develop a range of critical thinking skills to advance selfish ends. Yet the difference between selfish and fairminded thought rarely becomes a significant issue in instruction. Before going further, therefore, something more should be said about the nature of selfish thought.

Selfish Critical Thinking, Prejudice, and Human Desire

Human action is grounded in human motives and human motives are typically grounded in human desire and perceived interest. Getting what we want and what advances our prestige, wealth, and power naturally structures and shapes how we understand the situations and circumstances of our daily lives. We routinely categorize, make assumptions, interpret, and infer from within a viewpoint which we use to advance our personal ends and desires. We are, in a word, naturally prejudiced in our own favor. We reflexively and spontaneously gravitate to the slant on things that justifies or gratifies our desires. It is not enough to be taught to be ethical, honest, kind, generous, thoughtful, concerned with others, and respectful of human rights. The human mind easily construes situations so it can conceive of selfish desire as self-defense, cruelty as discipline, domination as love, intolerance as conviction, evil as good.

The mere conscious will to do good does not remove prejudices which shape our perceptions or eliminate the on-going drive to form them. To minimize our egocentric drives, we must develop critical thinking in a special direction. We need, not only intellectual skills, but intellectual character as well. Indeed we must develop and refine our intellectual skills *as* we develop and refine our intellectual character, to embed the skills in our character and shape our character through the skills.

People not only *can*, but often *do* create the illusion of moral character in a variety of ways. For instance we systematically confuse group mores with universal moral standards. When people act in accordance with the injunctions and taboos of their groups they naturally feel righteous. They receive much praise in moral terms. They may even be treated as moral leaders, if they act in a striking or moving fashion. For this reason, people often cannot distinguish moral from religious conformity or demagoguery from genuine moral integrity.

Genuine moral integrity requires intellectual character, for *bona fide* moral decisions require thoughtful discrimination between what is ethically justified and what is merely socially approved. Group norms are typically articulated in the language of morality and a socialized per-

son inwardly experiences shame or guilt for violating a social taboo. In other words, what we often take to be the inner voice of conscience is merely the internalized voice of social authority — the voice of our mother and father, our teachers and other “superiors” speaking within us.

Another common way we systematically create the illusion of morality is through egocentrically structured self-deception, the shaping and justification of self-serving perceptions and viewpoints. When engaged in such spontaneous thought we systematically confuse our viewpoint with reality itself. We do not experience ourselves as selecting among a range of possible perceptions; quite the contrary, it seems to us that we are simply observing things as they are. What is really egocentric intellectual arrogance we experience as righteous moral judgment. This leads us to see those who disagree with us as fools, dissemblers, or worse.

Since our inner voice tells us our motives are pure and we see things as they really are, those who set themselves against us, or threaten to impede our plans, seem the manifestation of evil. If they use violence to advance their ends, we experience their action as aggressive, as blind to human rights and simple justice. But if we use it, it is justifiable self-defense, restoring law and order, protecting right and justice.

Self-announced prejudice almost never exists. Prejudice almost always exists in obscured, rationalized, socially validated, functional forms. It enables people to sleep peacefully at night even while flagrantly abusing the rights of others. It enables people to get more of what they want, or to get it more easily. It is often sanctioned with a superabundance of pomp and ceremony. It often appears as the very will of God. Unless we recognize these powerful tendencies toward selfish thought in our social institutions, in what appear to be lofty actions, we will not face squarely the problem of education.

Education, properly conceived, cultivates knowledge through higher order thinking, a process which simultaneously cultivates traits of mind intrinsic to the standards and values presupposed by fairmindedness. Unless we take the tendency toward selfish thinking seriously, we are apt to contribute to students' critical thinking only in the narrow-minded sense.

The Spirit of Critical Thinking

To tie all of the above together, consider how the concept of critical thinking can be unpacked. The term 'critical', as we use it, does not mean thinking which is negative or finds fault, but rather thinking which evaluates reasons and brings thought and action in line with our evaluations, our best sense of what is true. The ideal of the critical thinker could be roughly expressed in the phrase 'reasonable person'. Our use of the term 'critical' is intended to highlight the intellectual *autonomy* of the critical thinker. That is, as a critical thinker, I do not simply accept conclusions (uncritically). I evaluate or critique reasons. My critique enables me to distinguish poor from strong reasoning. To do so to the greatest extent possible, I make use of a number of identifiable and learnable skills. I analyze and evaluate reasons and evidence; make assumptions explicit and evaluate them; reject unwarranted inferences or “leaps of logic”; use the best and most complete evidence available to me; make relevant distinctions; clarify; avoid inconsistency and contradiction; reconcile apparent contradictions; and distinguish what I know from what I merely suspect to be true.

The uncritical thinker, on the other hand, doesn't reflect on or evaluate reasons for a particular set of beliefs. By simply agreeing or disagreeing, the uncritical thinker accepts or rejects conclusions, often without understanding them, and often on the basis of egocentric attachment or unassessed desire. Lacking skills to analyze and evaluate, this person allows irrelevant reasons

to influence conclusions, doesn't notice assumptions and therefore fails to evaluate them, accepts any inference that "sounds good"; is unconcerned with the strength and completeness of evidence, can't sort out ideas, confuses different concepts, is an unclear thinker, is oblivious to contradictions, and feels certain, even when not in a position to know. The classic uncritical thinker says, "I've made up my mind! Don't confuse me with the facts." Yet, critical thinking is more than evaluation of simple lines of thought.

As I evaluate beliefs by evaluating the evidence or reasoning that supports them (that is, the "arguments" for them), I notice certain things. I learn that sometimes I must go beyond evaluating small lines of reasoning. To understand an issue, I may have to think about it for a long time, weigh many reasons, and clarify basic ideas. I see that evaluating a particular line of thought often forces me to re-evaluate another. A conclusion about one case forces me to come to a certain conclusion about another. I find that often my evaluation of someone's thinking pivots around the meaning of a concept, which I must clarify. Such clarification affects my understanding of other issues. I notice previously hidden relationships between beliefs about different issues. I see that some beliefs and ideas are more fundamental than others. As I think my way through my beliefs, I find I must orchestrate the skills I have learned into a longer series of moves. As I strive for consistency and understanding, I discover opposing sets of basic assumptions which underlie those conclusions. I find that, to make my beliefs reasonable, I must evaluate not individual beliefs but, rather, large sets of beliefs. Analysis of an issue requires more work, a more extended process, than that required for a short line of reasoning. I must learn to use my skills, not in separate little moves but together, coordinated into a long sequence of thought.

Sometimes, two apparently equally strong arguments or lines of reasoning about the same issue come to contradictory conclusions. That is, when I listen to one side, the case seems strong. Yet when I listen to the other side, that case seems equally strong. Since they contradict each other, they cannot both be right. Sometimes it seems that the two sides are talking about different situations or speaking different languages, even living in different "worlds". I find that the skills which enable me to evaluate a short bit of reasoning do not offer much help here.

Suppose I decide to question two people who hold contradictory conclusions on an issue. They may use concepts or terms differently, disagree about what terms apply to what situations and what inferences can then be made, or state the issue differently. I may find that the differences in their conclusions rest, not so much on a particular piece of evidence or on one inference, as much as on vastly different perspectives, different ways of seeing the world, or different conceptions of such basic ideas as, say, human nature. As their conclusions arise from different perspectives, each, to the other, seems deluded, prejudiced, or naive. How am I to decide who is right? My evaluations of their inferences, uses of terms, evidence, etc. also depend on perspective. In a sense, I discover that *I have a perspective*.

I could simply agree with the one whose overall perspective is most like my own. But how do I know I'm right? If I'm sincerely interested in evaluating beliefs, should I not also consider things from other perspectives?

As I reflect on this discovery, I may also realize that my perspective has changed. Perhaps I recall learning a new idea or even a system of thought that changed the way I see myself and the world around me in fundamental ways, which even changed my life. I may remember how pervasive this change was — how I began to interpret a whole range of situations differently, continually used a new word, concept, or phrase, paid attention to previously ignored facts. I realize that I now have a new choice regarding the issue under scrutiny.

I could simply accept the view that most closely resembles my own. But I realize that I cannot reasonably reject the other perspective unless I understand it. To do so would be to say, "I don't know what you think, but whatever it is, it's false." The other perspective, however strange it seems to me now, may have something both important and true, which I have overlooked and without which my understanding is incomplete. Thinking along these lines, I open my mind to the possibility of change of perspective. I make sure that I don't subtly ignore or dismiss these new ideas; I realize I can make my point of view richer, so it encompasses more. As I think within another perspective, I begin to see ways in which it is right. It points out complicating factors I had previously ignored, makes useful distinctions I had missed, offers plausible interpretations of events I had never considered, and so on. I become able to move between various perspectives, freed from the limitations of my earlier thought.

One of the most important stages in my development as a thinker, then, is a clear recognition that I have a perspective, one that I must work on and change as I learn and grow. To do this, I can't be inflexibly attached to any particular beliefs. I strive for a consistent "big picture". I approach other perspectives differently. I ask how I can reconcile the points of view. I use principles and insights flexibly and do not approach analysis as a mechanical, "step one, step two" process. I pursue new ideas in depth, trying to understand the perspectives from which they come. I am willing to say, "This view sounds new and different; I don't yet understand it. There's more to this idea than I realized; I can't just dismiss it."

Looked at another way, suppose I'm rethinking my stand on an issue. I re-examine my evidence. Yet, I cannot evaluate my evidence for its completeness unless I consider evidence cited by those who disagree with me. Similarly, I find I can discover my basic assumptions by considering alternative assumptions, alternative perspectives. I can examine my own interpretation of situations and principles by considering alternative interpretations. I learn to use fairmindedness to clarify, enhance, and improve my perspective.

A narrowminded critical thinker, lacking this insight, says not, "This is how I see it," but, "This is how it is." While working on pieces of reasoning, separate arguments, and individual beliefs, this person tends to overlook the development of perspective as such. Such thinking consists of separate or fragmented ideas and the examination of beliefs one at a time without appreciation for connections between them. While conscious and reflective about particular conclusions, this type of thinker is unreflective about his or her own point of view, how it affects his or her evaluations of reasoning, and how it is limited. When confronted with alternative perspectives or points of view, this person assesses them by their degree of agreement with his or her own view. Such an individual is given to sweeping acceptance or sweeping rejection of points of view and is tyrannized by the words he or she uses. Rather than trying to understand why others think as they do, such people dismiss new ideas, assuming the objectivity and correctness of their own beliefs and responses.

As I strive to think fairmindedly, I discover resistance to questioning my beliefs and considering those of others. I find a conflict between my desire to be fairminded and my desire to feel sure of what I think. It sometimes seems a lot easier to avoid the confusion, frustration, and embarrassment that I feel when re-assessing my beliefs. Simply trying to ignore these feelings doesn't make them go away. I realize that unless I directly address these obstacles to fairminded critical thought, I tend to seek its appearance rather than its reality, that I tend to accept rhetoric rather than fact, that without noticing it, I hide my own hypocrisy, even from myself.

By contrast, the critical thinker who lacks this insight, though a good arguer, is not a truly reasonable person. Giving good-sounding reasons, this person can find and explain flaws in

opposing views and has well-thought-out ideas, but this thinker never subjects his or her own ideas to scrutiny. Though giving lip service to fairmindedness and describing views opposed to his or her own, this thinker doesn't truly understand or seriously consider them. One who often uses reasoning to get his or her way, cover up hidden motives, or make others look stupid or deluded is merely using skills to reinforce his or her own views and desires, without subjecting them to scrutiny. Such people are not truly reasonable. By cutting themselves off from honestly assessing their own perspectives or seriously considering other perspectives, these people are not using their mental capacities to their fullest extent.

To sum up, the fully reasonable person, the kind of critical thinker we want to foster, contrasts with at least two other kinds of thinkers. The first kind has few intellectual skills of any kind and tends to be naive, easily confused, manipulated, and controlled, and therefore easily defeated or taken in. The second has skills, but only of a restricted type, which enable pursuit of narrow, selfish interests and effective manipulation of the naive and unsuspecting. The first we call "uncritical thinkers" and the second "weak sense", or selfish, critical thinkers. What we aim at, therefore, are "strong sense" critical thinkers, those who use the fullest powers of their minds in the service of sincere, fairminded understanding and evaluation of their beliefs.