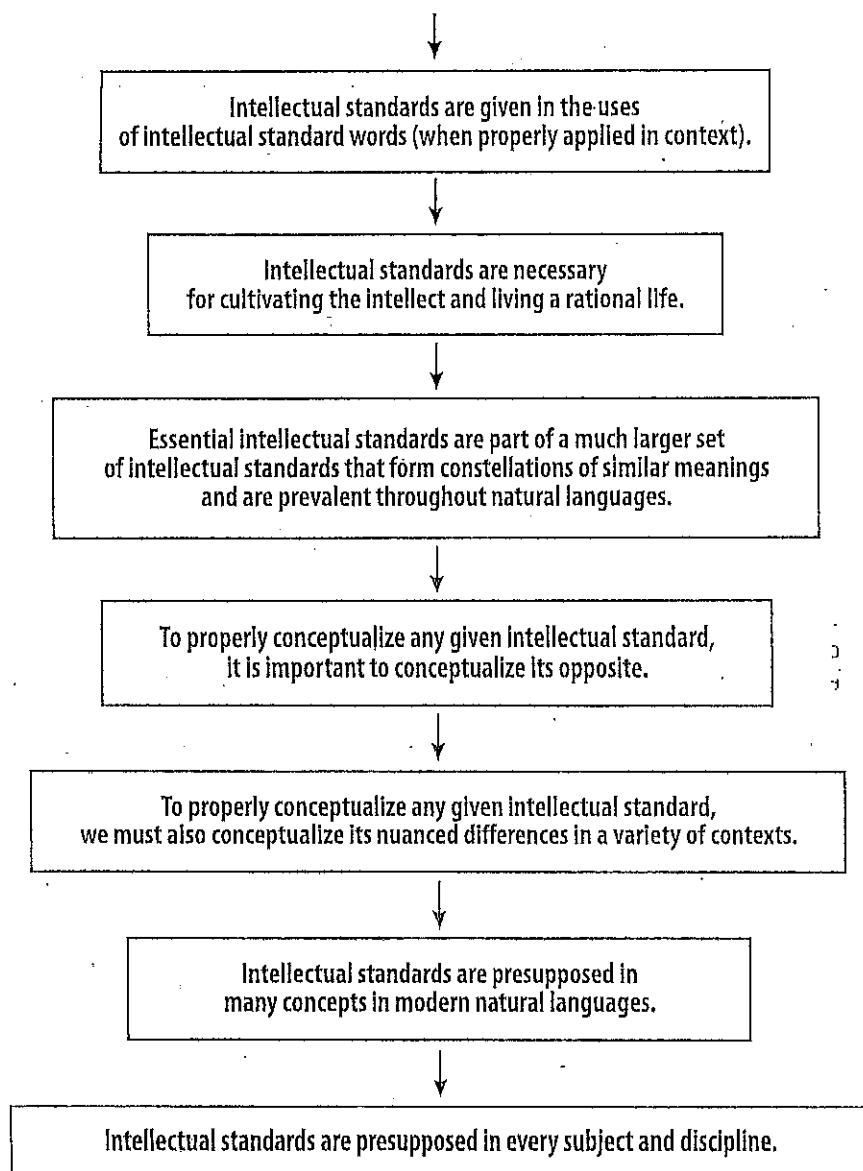


Intellectual Standards



By way of introduction, we will begin with some essential intellectual standards.

Some Essential Intellectual Standards

We postulate that there are at least nine intellectual standards important to conducting affairs of everyday life. These are, again, clarity, precision, accuracy, relevance, depth, breadth, logicalness, significance, and fairness. The importance of these intellectual standards is given in their indefeasibility. We suggest, in other words, that it is unintelligible to claim that any instance of reasoning is both sound and yet in violation of these standards. To see this, suppose someone were to claim that her/his reasoning is sound regarding "x," though, at the same time, admittedly unclear, inaccurate, imprecise, irrelevant, narrow, superficial, illogical, trivial and unfair with respect to "x." Beginning with these nine intellectual standards will help set the stage for conceptualizing intellectual standards (more broadly) and for appreciating the essential role of intellectual standards in human reasoning.

An explication of these essential intellectual standards follow:⁵

Clarity: Understandable, the meaning can be grasped; to free from confusion or ambiguity, to remove obscurities.

Clarity is a 'gateway' standard. If a statement is unclear, we cannot determine whether it is accurate or relevant. In fact, we cannot tell anything about it because we don't yet know what it is saying. For example, the question "What can be done about the education system in America?" is unclear. In order to adequately address the question, we would need to have a clearer understanding of what the person asking the question is considering the "problem" to be. A clearer question might be "What can educators do to ensure that students learn the skills and abilities which help them function successfully on the job and in their daily decision-making?"

Thinking is always more or less clear. It is helpful to assume that we do not fully understand a thought except to the extent that we can elaborate, illustrate, and exemplify it. Questions that focus on clarity in thinking include:

- Could you elaborate on that point? or Do I need to elaborate on that point?
- Could you express that point in another way? or Can I express that point differently?
- Could you give me an illustration? or Should I give an illustration?
- Could you give me an example? or Should I provide an example?
- Let me state in my own words what I think you just said. Am I clear about your meaning?
- I hear you saying "_____" Am I hearing you correctly, or have I misunderstood you?

⁵ Throughout this essay we explore a variety of intellectual standards as they are implied in the everyday use of words. However, most words in everyday use have more than one meaning and sometimes have meanings irrelevant to the assessment of intellectual quality. Be advised, therefore, that when we refer to a term as an intellectual standard or to a term presupposing intellectual standards we are referring exclusively to those uses of the word or term relevant to the proper assessment of reasoning.

Accuracy: free from errors, mistakes or distortions; true, correct.

A statement can be clear but not accurate, as in "Most dogs weigh more than 300 pounds."

Thinking is always more or less accurate. It is useful to assume that we have not fully assessed it except to the extent that we have checked to determine whether it represents things as they really are. Questions that focus on accuracy in thinking include:

- How could we check that to see if it is true?
- How could we verify these alleged facts?
- Can we trust the accuracy of these data given the source from which they come?

Precision: exact to the necessary level of detail, specific.

A statement can be both clear and accurate, but not precise, as in "Jack is overweight." (We don't know how overweight Jack is, one pound or 500 pounds.)

Thinking is always more or less precise. We can probably assume we do not fully understand it except to the extent that we can specify it in detail. Questions that focus on precision in thinking include:

- Could you give me more details about that?
- Could you be more specific?
- Could you specify your allegations more fully?

Relevance: bearing upon or relating to the matter at hand; implies a close logical relationship with, and importance to, the matter under consideration.

A statement can be clear, accurate, and precise, but not relevant to the question at issue. For example, students often think that the amount of effort they put into a course should be used in raising their grade in a course. Often, however, "effort" does not measure the quality of student learning, and when this is so, effort is irrelevant to their appropriate grade.

Thinking is always capable of straying from the task, question, problem, or issue under consideration. It is useful to assume we have not fully assessed thinking except to the extent that we have considered all issues, concepts, and information relevant to it. Questions that focus on relevance in thinking include:

- I don't see how what you said bears on the question. Could you show me how it is relevant?
- Could you explain the connection between your question and the question we are addressing?
- How does this fact bear upon the issue?
- How does this idea relate to this other idea?
- How does your question relate to the issue we are dealing with?

Depth: containing complexities and multiple interrelationships; implies thoroughness in thinking through the many variables in the situation, context, idea, question.

A statement can be clear, accurate, precise, and relevant, but superficial (that is, lack depth). For example, the statement "Just Say No," which was used for a number of years to discourage children and teens from using drugs, is clear, accurate, precise, and relevant. Nevertheless, those who take this injunction to solve the social problem of unhealthy drug use fail to appreciate the true complexities in the problem. Their thinking is superficial at best.

Thinking can either function at the surface of things or probe beneath that surface to deeper matters and issues. We can assume we have not fully assessed a line of thinking except to the extent that we have fully considered all the important complexities inherent in it. Questions that focus on depth in thinking include:

- Is this question simple or complex? Is it easy or difficult to answer well and truly?
- What makes this a complex question?
- How are we dealing with the complexities inherent in the question?

Breadth: encompassing multiple viewpoints, comprehensive in view, wide-ranging and broadminded in perspective.

A line of reasoning may be clear, accurate, precise, relevant, and deep, but lack breadth (as in an argument from either the conservative or liberal standpoints which details the complexities in an issue, but only recognizes insights from one perspective).

Thinking can be more or less broad-minded (or narrow-minded) and breadth of thinking requires the thinker to reason insightfully within more than one point of view or frame of reference. We can assume we have not fully assessed a line of thinking except to the extent that we have determined how much breadth of thinking is required (and how much has in fact been exercised). Questions that focus on breadth in thinking include:

- What points of view are relevant to this issue?
- What relevant points of view have I ignored thus far?
- Am I failing to consider this issue from an opposing perspective because I am not open to changing my view?
- Have I entered the opposing views in good faith, or only enough to find flaws in them?
- I have looked at the question from an economic viewpoint. What is my ethical responsibility?
- I have considered a liberal position on the issue. What would conservatives say?

Logic: the parts make sense together, no contradictions; in keeping with the principles of sound judgment and reasonability.

When we think, we bring a variety of thoughts together into some order. When the combination of thoughts is mutually supporting and makes sense in combination, the thinking is logical. When the combination is not mutually supporting, is contradictory, or does not make sense, the combination is not logical.

Thinking can be more or less logical. It can be consistent and integrated. It can make sense together or be contradictory or conflicting. Questions that focus on logic include:

- Does all this fit together logically?
- Does this really make sense?
- Does that follow from what you said?
- Does what you say follow from the evidence?
- Before you implied this and now you are saying that, I don't see how both can be true. What exactly is your position?

Significance: having importance, being of consequence; having considerable or substantial meaning.

When we reason through an issue, we want to concentrate on the most important information (relevant to the issue) and take into account the most important ideas or concepts. Too often we fail to recognize that, though many ideas may be relevant to an issue, they may not be equally important. Similarly, we may fail to ask the most important questions and instead become mired in superficial questions, questions of little weight. In college, for example, few students focus on important questions such as, "What does it mean to be an educated person? What do I need to do to become educated?" Instead, students tend to ask questions such as, "What do I need to do to get an 'A' in this course? How many pages does this paper have to be? What do I have to do to satisfy this professor?"

Thinking can be more or less significant. It can focus on what is most substantive, what is of the highest consequence, what has the most important implications. Or it can focus on the trivial and superficial. Questions that focus on significance include:

- What is the most significant information we need to address this issue?
- How is that fact important in context?
- Which of these questions is the most significant?
- Which of these ideas or concepts is the most important?

Fairness: free from bias; dishonesty, favoritism, selfish interest, deception or injustice.

We naturally think from our own perspective, from a point of view which tends to privilege our position. Fairness implies the treating of all relevant viewpoints alike without reference to one's own feelings or interests. Because we tend to be biased in favor of our own viewpoint, it is important to keep the intellectual standard of fairness at the forefront of our thinking. This is especially important when the situation may call on us to see things we don't want to see, or give something up we would rather hold onto.

Thinking can be more or less fair. Whenever more than one point of view is relevant to the situation or in the context, the thinker is obligated to consider those relevant viewpoints in good faith. To determine the relevant points of view, look to the question at issue. Questions that focus on fairness include:

- Does a particular group have some vested interest in this issue that causes them to distort other relevant viewpoints?
- Am I sympathetically representing the viewpoints of others?
- Is the manner in which we are addressing the problem fair - or is our vested interest keeping us from considering the problem from alternative viewpoints?
- Are concepts being used justifiably (by this or that group)? Or is some group using concepts unfairly in order to manipulate (and thereby maintain power, control, etc.)?
- Are these laws justifiable and ethical, or do they violate someone's rights?