The crisis in educology is a crisis of scholarship. The crisis is centered in a rejection of rationality following from the sterility of the methods which have governed inquiry into education. The knowledge about education which was to result from such inquiry endeavors did not materialize, and rationality was found wanting. Yet, to achieve knowledge of education, one must be rational. So it appears that knowledge of education is impossible. Elsewhere I have argued, as have others, that educology should be used for knowledge of education. (See Perspectives On Education As Educology, edited by James E. Christensen, University Press of America, 1981.) Thus, the scholar who is attempting to advance educology faces a crisis. To solve the crisis, the following question must be answered: “How is educology possible?”

This crisis, which today has matured in educational inquiry, earlier was noted by Husserl in all of scholarship. However, Husserl saw it rightly as the “seeming collapse of rationalism” (Phenomenology And The Crisis Of Philosophy, trans. by Quentin Lauer, Harper Torchbooks, 1965, p. 191) and explained why it seemed to collapse. Moreover, he set forth a resolution in the form of rationalism correctly understood, what he called “a genuine rationalism.”

Husserl stated that a simplistic understanding of rationalism resulted in its “exteriorization, its absorption in ‘naturalism’ and ‘objectivism’” (p. 191). Naturalism is defined by S. P. Lamprecht, an avowed naturalist, as:

a philosophical position, empirical in method, that regards everything that exists or occurs to be conditioned in its existence or occurrence by causal factors within one all-encompassing system of nature, however spiritual or purposeful or rational some of these things and events may in their functions and value prove to be. (Naturalism And The Human Spirit, edited by Y. H. Kikorian, Columbia University Press, 1944, p. 18.)

 Whatever is, is either physical or is psychical but dependent upon the physical — an accompaniment. Consciousness and ideas are naturalized. There is no essential alteration in this interpretation when, in the eighteenth century empiricist sense, nature is broken up into complexes of sensations. Objectivism is a position that the being of the world is its existence and that whatever is merely subjective must be eliminated.

The collapse of rationalism is most apparent in the method of those striving for knowledge about human beings, psychologists and sociologists. Psychologists as long as they take a naturalistic and objectivistic standpoint cannot accomplish the analysis of consciousness that is necessary to validate their descriptors.
... modern exact psychology, by the very fact [begin page 222] that it considers itself as already methodically perfect and strictly scientific is actually unscientific wherever it will pursue the sense of the psychical element that enters into psychophysical regularities, i.e., wherever it will penetrate to a real psychological understanding. On the other hand, it is equally unscientific in all those cases where the deficiencies of unclarified representations of the psychical lead to obscure posing of problems and consequently to more apparent results. The experimental method is indispensable particularly where there is a question of fixing intersubjective connections of fact. Still it presupposes what no experiment can accomplish, the analysis of consciousness itself. (Husserl, p. 94)

6 Also, sociologists who take a naturalistic and objectivistic standpoint cannot accomplish the analysis of social phenomena that is necessary to validate their descriptors.

[Sociology as social statistics] gathers valuable facts and discovers in them valuable regularities, but of a very mediate kind... [It cannot] arrive at an explicit understanding and a real clarification of them... (Husserl, p. 93)

7 Without validation of descriptors, psychology and sociology is nonsense. The nature they investigate has no meaning, human and social nature has no meaning. The naturalistic and objectivistic perspective eliminates consciousness, the subject, and so meaning.

8 Educologists too strive for knowledge of human being; they strive for knowledge of the teaching-learning process. Elsewhere I have argued that education is not as broad as learning, but rather includes only guided active learning. So learning that is non-guided — fortuitous learning and discovery learning — are excluded. Training too is excluded, since it is passive learning. (See Educational of the Free, Philosophical Library, 1981). Education then is a phenomenon that involves subjects: subjects who are guiding the formation of the consciousness of other subjects (learners) and so are teachers, and subjects (learners) who are actively participating in the formation of their consciousness and so are students. To study education, therefore, is also to study consciousness, namely the conscious formation of consciousness.

9 The main stream of educational inquiry followed the lead of psychology. Educational research became dominated by experimentation. Difficulties arising from attempting to manipulate aspects of the educational process in the controlled way necessary lead some educational researchers to abandon the psychological approach for that of the sociologist. Data was collected from processes as they occurred in order to discover [begin page 223] regularities. Since what was given in nature was not disturbed, the way of the sociologist became known as a naturalistic mode of inquiry. However, as noted above, both psychological and sociological ways are naturalistic. Meaning is seen to reside in the object (nature) whether one manipulates nature to secure it or discovers it there without manipulation. Moreover, both are objectivistic insofar as the subjective is eliminated. The adoption of these modes of inquiry did not permit treating consciousness, so inquiry did not produce an understanding of education, i.e., the conscious formation of consciousness.

10 Attempts to rectify the situation in educational inquiry occurred under the rubric, qualitative or naturalistic inquiry. The position taken was that education first must be described, i.e., the properties of education must be set forth. Then one could proceed to discover regularities, i.e., set forth relations between the properties.

11 Since description is the first or natural history stage of inquiry, this approach was called naturalistic. The second stage, imitative of psychology and sociology, was tried and failed, because the first stage had been neglected and so no meaning base was present. There must be sense. But the method was natural, within the naturalistic standpoint, and so could not give meaning. Nature, data, cannot give meaning, only inquirers can. The inquirer cannot be passive; she or he must be active in constructing signs to interpret phenomena. Nor did the inquiry situation improve when ecological and ethnographic standpoints were taken alongside of the naturalistic one. Rightly a more complete meaning of education which includes the
environmental and cultural should be sought. However, no meaning whatsoever can be found within a naturalistic standpoint.

12 This naturalistic approach also was called qualitative, because it was thought that quantification is not involved in setting forth descriptors. Qualities not quantities were thought to be set forth. Such thinking is based on a too limited sense of quantitative, a sense whose reference is numbers. In its complete sense, quantitative involves extension. When one sets forth descriptors, one sets forth categories in order to classify instances. Classes have range. All is a quantifier. The domain of the qualitative as opposed to the quantitative is unique. A unique is not even one of a kind; a unique defies categorization.

13 It is patent that if rationality is conceived within a naturalistic and objectivistic framework, it can yield no educology. The empirical approach adopted from psychology or sociology is sterile. Moreover, the missing meaning cannot be supplied by description that issues from what is called naturalistic or qualitative educational inquiry.

14 Perhaps it is the case that consciousness cannot be studied from a rational standpoint. To consider this case, consciousness must be explicated. Consciousness is self-awareness, but all consciousness is a self being aware of something. It is a self giving sense or meaning to objects that appear as phenomena. Signification occurs, since signs set forth the meaning. Peirce defines a sign as “something that stands to somebody for something in some respect or capacity” (Collected Papers, 2.248). Peirce furthermore characterizes three primary kinds of signs. First, there is the index which he states is “a sign which refers to the Object that it denotes by virtue of being really affected by that object” (2.248). An example would be a darkened sky as a sign of a storm to come. Second, there is the icon which he states is “a sign which refers to the Object that it denotes merely by virtue of characters of its own” (2.247). An example would be a diagram as a sign of a space shuttle. Finally, there is the symbol which he states is “a sign which is constituted a sign merely or mainly by the fact that it is used or understood as such” (2.307). An example would be the term consciousness used as a sign for a state of self-awareness. Consciousness, thus, is a cognitive state in which indices or icons or symbols and so meaning is generated.

15 But consciousness is not simply a cognitive state. A cognitive state cannot occur without volition and feeling. Conation is involved, because signs are always standing for somebody. An I gives meaning; there is intentionality. Moreover, since there is self-awareness, there is feeling; there is a state of affect. Within experiencing or consciousness, we can logically sort out cognition, conation, and affect, but in any experiencing all three are together.

16 The explication of consciousness indicates that the subject is the one who engages in thought about the world, gives significance to the world. Since the subject is centrally involved, some have erroneously concluded that a subjectivistic standpoint is in order. Rationality is seen as an impossibility and is given up for power. Inquiry is set aside for negotiated consensus.

17 In 1878, Peirce published a paper, "The Fixation of Belief", in which he introduced the word inquiry to signify the rational way to settle doubt and so to fixate belief. The rational way to settle doubt is a way which is guided by criteria for seeking truth, i.e., for seeking one true opinion on some subject.

18 Acuinas presented a succinct definition of truth; “Veritas est adaequatio rei et intellectus.” (De Veritate, Q. 1, A. 1) Although the literal translation of the Latin is “Truth is the adequation of things and the intellect,” perhaps it is best understood as truth is the correspondence of thought to reality. In the words of Aristotle: “To say of what is that it is not, or of what is not that it is, is false; while to say of what is that it is, and of what is not that it is not, is true.” (Metaphysics 1011b 26 ff.)

19 Because of the fallibility of human beings, it should be obvious that they could err at any one time as to what beliefs are to be counted as true. For example, earlier the Phlogiston Theory was accepted. Today it is known that oxygen not phlogiston — a supposed volatile constituent of all combusti-
ble substances -- is involved in burning. Human error does not mean there is no truth or human beings cannot know what is true. There is advancement in knowledge.

20 Perhaps it is not as obvious that human fallibility produces disagreement at a given time as to the truth. Consider the disagreement between Reich and Freud about the nature of the unconscious. Reich claimed that what Freud presented as the unconscious — the basic sexual and aggressive nature of the human being — was not primary but secondary, a deformation of a basic social and non-aggressive human nature. Such human disagreement does not mean that there is no truth or human beings cannot know what is true. There will be advancement in human knowledge.

21 Human fallibility, thus, results in emergent truth for human beings. In other words, the human being does not possess an unlimited truth. Since *absolute* comes from the Latin *absolutus* meaning completed or unconditional, truth that is unlimited is absolute truth. It is truth with a T or it is Truth which some call God. As Peirce stated it: If belief “were to tend indefinitely toward absolute fixity,” the Truth would be obtained. (“What Pragmatism Is”)

22 Peirce acknowledged, however, that most persons do not seek Truth and so employ the method of inquiry. Most persons are not possessed by the “will to learn,” rather they rely on tenacity or authority or “agreeableness to reason.” In the method of tenacity, human willfulness settles the doubt. Instead of settlement on a transcendent basis, there is a shutting out from all influences so as to remain settled in a belief. Fiat is the essence of the method of authority; the test is what the leader thinks. Preference is the basis of agreeableness to reason; what the reason inclines to the reason claims.

23 On the basis of the explication of consciousness, to reject inquiry for tenacity or authority or agreeableness to reason, as in the method of negotiated consensus to settle educational problems, is wrong-headed. Even though the subject is the one who engages in thought about education, the experienced education cannot be an attribute of each personality. There are not multiple educational realities, even though there are multiple educational perspectives. Education experienced is to be distinguished from cognition of education. Education experienced enters into a common world which transcends cognition, though it includes cognition. The subjectivistic standpoint based upon the essence of consciousness will not do.

24 Unless a conception of rationalism outside of the naturalistic and objectivistic standpoints can be stated, educology is impossible. Subjectivism prevails. Turning to Husserl, “a genuine rationalism” can be presented so that educology is possible. The question, “How is educology [begin page 226] possible?” can be answered. The crisis in educology can be resolved.

25 The resolution is stated by Husserl as follows:

   ... A really adequate empirical science of the psychical in its relations to nature can be realized only when psychology is constructed on the basis of a systematic phenomenology. It will be, when the essential forms of consciousness and of its immanent correlates, investigated and fixed in systematic connection on a basis of pure intuition, provide the norms for determining the scientific sense and content proper to the concepts whereby the empirical psychologist expresses the psychical itself in his psycho-physical judgments. ... Only then will the gigantic experimental work of our times, the plenitude of empirical facts and in some cases very interesting laws that have been gathered, bear their rightful fruit as a result of critical evaluation and psychological interpretation. (pp. 119-120)

26 What then is a systematic phenomenology? Systematic phenomenology is the use of formal patterns of intuition, rules for intuitive thinking, in order to present the essence of phenomena. It is the doing of descriptive metaphysics.

27 Intuitive thinking is non-discursive; it is a direct intellectual observation of an entity in which an entity reveals its essence. Thus, the leading rule of the method, is back “zu den sachen selbst.” By things is meant, of course, what is given. The intellectual observation of the given is the necessary foundation of all
true cognition. Every indirect acquisition of knowledge, deduction or retroduction, is a deduction or retroduction from something, and this something must be observable. The observation cannot be sensory, for the object (thing) is not an empirical datum. The object is an essence and so in the ideational realm.

28 The second rule relates to one part of the threefold eidetic reduction; it excludes the subjective. By the subjective is meant what is not of the object but is merely of or for the subject. The of refers to that which comes from the subject, e.g., feelings. The for refers to utilitarian considerations when not considered from a theoretical and so detached standpoint. This rule is familiar, for it is an essential constituent of the scientific method.

29 The third rule of the phenomenological method encompasses the second part of the eidetic reduction. This reduction excludes ideas acquired indirectly, i.e., ideas acquired from other ideas through deduction and retroduction. Indirect ideas must be based upon direct knowledge in order to have true meaning. For example, psychology is meaningless and so incomplete simply as psychology; its completeness depends upon phenomenology. Phenomenology provides the valid descriptors for psychology.

30 The fourth rule of the phenomenological method if followed results in the last part of the eidetic reduction, the exclusion of tradition. Tradition may provide knowledge not tested by the inquirer, but only things, phenomena, exactly as they stand before the intellectual eye should be considered; nothing else. A phenomenological groundwork should be sought.

31 The fifth rule of the phenomenological method is that of the twofold reduction. The first part of the reduction is the exclusion of the existence (Dasein) of the object. This is one of the fundamental differences between the phenomenological method and the empirical method. In the latter, the inquirer proceeds from data, but in the former, data have no significance. The second part of the reduction is the exclusion of everything contingent. To exclude everything contingent is to exclude everything inessential, only the whatness or essence is included. The process for this twofold reduction is like the method of counter-examples; it is the method of free imaginative variation. In this method, one inquires as to the essentiality of a property. But one does not appeal to empirical observation nor does one simply regard a property as essential. Instead with each property, one asks whether without it the example could be considered an example of the same sort of thing as before. One asks what properties an object must have in order to be recognized as an example of a certain kind of object.

32 The sixth and seventh rules of the phenomenological method are positive: see everything that is given and be descriptive. There is a tendency to see only what is taken to be important and so one is blind to certain elements in what is given. Consequently, one must strive for complete disclosure. Since objects are complex, they must be taken apart and the elements described. Heidegger calls this kind of analysis “exegesis” or “hermeneutics.”

33 If one follows the rules of the phenomenological method, then one can grasp essences. These essences are not relative, i.e., arbitrarily introduced by human beings through their conventions insofar as they assign meanings. Meanings are not arbitrarily assigned; there are essences to be grasped. The world which is experienced after the reduction to the pure life of consciousness is an intersubjective world, it is accessible to anyone. So the essence of education can be grasped. The metaphysics of education can be done. The essential properties of teacher, student, content, and context — the elements of the teaching-studenting process — can be set forth. A meaning basis for empirical studies of regularities can be provided. The crisis in educology can be resolved. Phenomenology is a genuine rationalism.

Elizabeth Steiner, Indiana University, U.S.A.