A discussion of how to teach rhetoric emphasizes the student's need to discover the content of a piece of writing. Thus, what is needed in teaching is a plan which draws attention to the experience—first and then to the task of communicating effectively. Such a plan for teaching rhetorical invention is outlined and discussed. The outline consists of seven groups of questions which teachers might train students to use. The discussion suggests the value of a design for questioning and the types of student evaluation which may be evoked from the questions. (BN)
Discovery Through Questioning: A Plan for Teaching Rhetorical Invention

RICHARD L. LARSON

If there is one crucial difference between the treatment of “invention” by classical rhetoricians and by the authors of texts on “rhetoric” today, it is this: for the classical rhetoricians “invention” is one step in what Aristotle called “finding the available means of persuasion in a given case,” while for present-day writers of textbooks invention is finding something—anything—to say about any chosen subject. Aristotle, Cicero, and their followers trained students to argue for a particular proposition of fact or of value or of policy—these may correspond roughly to forensic, epideictic, and deliberative discourse, respectively—that had already been securely determined. They evidently assumed that if the exact proposition to argue was in doubt, the speaker knew what the propositions that might be argued, and had only to decide which proposition best fitted the facts. Either the client was guilty of murder, for example, or the homicide was accidental, or the client acted in self-defense. Either the dead warrior deserved honor for his humane treatment of captives, or he was a coward and a weakling for failing to punish captured enemies ruthlessly. Either the state should make war on its enemies until it wins, or the state should negotiate with its enemies. After he had chosen his ground, the speaker could draw on his knowledge of rhetoric to help him defend it.

To be sure, as Richard Hughes points out, “argument” for Aristotle is “discovered judgment” on questions such as those listed above; “the rhetorician . . . discovers a judgment in an area where experience is still flexible enough to take many shapes” (“The Contemporaneity of Classical Rhetoric,” College Composition and Communication, October, 1965, p. 158). But what is discovered is still a judgment (presumably on an issue that admits of alternative resolutions), and the judgments (propositions) from which the speaker had to choose were suggested to him almost immediately by his data. Once he had discovered his judgment, his task became that of adapting his arguments, the design of his discourse, and his mode of expression to his audience and the occasion for speaking. Or, as Professor Hughes puts it a few sentences later in the article just cited, the speaker’s task was to propagate “that realized judgment in whatever structures [would] lead to a duplication of his discovery in the mind of his audience.”

The authors of current texts on rhetoric (particularly the rhetoric of written communication), however, do not assume that young writers and speakers who will use their books have in hand a proposition (or more than one) ready to be argued. These students are a long way, it seems, from being ready to argue prop-

Mr. Larson, Director of Composition at the University of Hawaii, wrote the Rhetorical Guide to the Borzoi College Reader. He is preparing a book on the teaching of expository writing.
ositions of fact, value, or policy. Con-
fronting the task of writing an essay,
most students are barren of ideas, our
text-writers tell us, or they are inclined
to prefer unworkably broad subjects
(e.g., "heroes in Dickens"), or they have
many undeveloped ideas—none of them
well-formed propositions that can be
argued in an essay. When they discuss
invention, our text-writers apparently
seek no more than to get students to
write something specific—it seems not to
matter what—about some subject—it
seems not to matter which. (In "Teach-
Students the Art of Discovery," 
College Composition and Communi-
cation, February, 1968, David Harrington
demonstrates the fuzziness and relative
emptiness of the advice about invention
in many current texts.) Writing and
speaking are simply chores assigned by
teachers of English and Speech, rather
than means for putting across an author's
convictions vividly to readers or listeners
so that author and audience may ap-
proach a meeting of minds (what Ken-
neth Burke calls "identification").

Granting that the treatment of in-
vention in many current "rhetoric" texts
is superficial, these books may be quite
correct in assuming that in teaching in-
vention we face a task which the rhet-
oricians of Greece and Rome evidently
did not try to address. That is the task
of helping students decide what experi-
ences, or parts of experiences, should
be discussed. To state the point differ-
ently, the task is to help students see
what is of interest and value in their
experiences, to enable them to recognize
when something they see or read or feel
warrants a response from them, in other
words to stimulate active inquiry into
what is happening around them in place
of the indifference or passivity with
which they often face other than their
most dramatic experiences. Of course
some students often have convictions to
express (propositions to argue) and most
students have such convictions some-
times. So teaching "invention" as the
classical rhetoricians perceived it is by
no means irrelevant, although we might
wish our students to think of rhetoric,
and therefore of invention, not as a
means of persuasion (which can be
achieved unfairly) but as the art of writ-
ing so as to win the reader's respect for
their convictions in every case, and his
assent wherever assent can be fairly
won. What is needed for the teaching
of invention today, therefore, is a plan
that will help the student explore his
experiences to discover when it is im-
portant to speak out, and that will help
him speak out effectively on those oc-
casions. We need a plan that draws at-
tention first to the experience and then
to the task of communicating effectively.

One source of help in finding this
plan may be the psychologists who have
studied the phenomenon of "creativity,"
as Gordon Rohman demonstrated in the
report of his experiments with "pre-
writing" exercises a few years ago in
writing classes at Michigan State Univer-
sity, which were based in part on theories
by Rollo May and Arthur Koestler about
the process of creating. These writers
argue that if a student is to create, to
"bring [something new] into birth" (Rollo
May's words), he must learn to
understand thoroughly his experiences,
the data he has to work with—what May
calls his "world." He must become in-
timately familiar with the details of those
experiences, the possible relationships
among facts, and the possible implica-
tions of those facts. He must then be
willing to transform, reformulate, or re-
combine those experiences into new imag-
ined forms. As May puts it, the crea-
tive person (including, presumably, a

1Useful discussions of the psychology of cre-
vativity appear in Calvin Taylor and Frank Wil-
liams, eds., Instructional Media and Creativity
(New York, 1966), especially in the papers by
J. P. Guilford and Malcolm Provus.
student seeking new ideas) must engage in an intense "encounter," voluntarily or involuntarily, with his experiences or what he sees around him. "Genuine creativity is characterized by an intensity of awareness, a heightened consciousness. ... The creative act is an encounter characterized by a high degree of consciousness" ("The Nature of Creativity," Etc.: a Review of General Semantics, Spring, 1959, pp. 264-265, 268). "Creating," as the psychologists use the term, can surely be thought of as another name for "invention."

I propose therefore, that in our teaching of "invention" we make a persistent effort to force students to become as familiar as possible with the facts, and possible relationships among the facts, about experiences on which they might write, and also that we force them to examine the facts underlying concepts they consider important and the content of propositions on which they may want to write. I use the term "fact," in reference to concepts, to designate linguistic or semantic experiences that help form a concept (the encounters that a person has had with believers and churches, for example, help establish the concept of "religion"). When speaking of the "content" of a proposition, I refer to the range of possible statements the words used in that proposition might make, the premises it takes for granted, the judgments it may imply, the feelings it may stir, and so on. I propose that students come to this thorough knowledge of their experiences, concepts, and propositions through a process of systematic questioning—questioning which students engage in mostly by themselves, rather than questioning conducted for them by the teacher. The teacher may demonstrate the technique of systematic questioning, but the students must apply the technique for themselves if they are really to learn its usefulness.

I have, accordingly, prepared an outline of questions that teachers of rhetoric might train students to use. The questions are divided into seven groups; I think that most of the writing assignments we give, or better still, most of the occasions a student might find for writing, can be classified in one of the seven groups. Occasions for writing about literature (including intellectual prose) and history, for example, fall into group IB or ID. Occasions for writing about objects or events that we have directly observed (including personal experiences) fall into IA or IB. If the student is examining more than one event, the activity falls into group ID.

Using Robert Gorrell's terms, I suggest that the kinds of subjects enumerated in Group I are "topics requiring comment." The study of propositions, or "topics with comment already supplied," is dealt with in Part II. The study of questions, which are topics on which the writer has yet to choose among possible comments, is also included under Part II. The central inventive questions under Part II, of course, are those dealing with how the proposition can be supported, that is, how the writer can induce his reader to believe, or at least respect, the proposition. Almost equally important are the questions that invite the student to consider fully what he is saying: What do all the words in context—not just the subjects and verbs, but the adverbs, adjectives, prepositions, and the very order of parts in the sentence—say to the reader? Invention under Part II consists of discovering what needs to be said in order to cause the reader to believe all of the important assertions contained in the proposition.

In compiling the questions, I have drawn freely on the work of logicians, rhetoricians, and theorists of language. Use of logical techniques of division and classification is encouraged in many of the questions. Paul Rodgers' suggestions
about training students to observe objects precisely (in “Breaching the Abstraction Barrier,” College Composition and Communication, February, 1966) were especially helpful. So were some concepts (such as “range of variation”) introduced by the tagmemic theorists. Applying perspectives from different sources, I am convinced, can call attention to the importance of data that may at first seem insignificant, and can suggest ways of restructuring a body of data so as to disclose features of an experience that had not been recognized but that are well worth writing about. This construction of new patterns and frameworks, what Professor Guilford in Instructional Media and Creativity calls “system-building,” is an important step in the process of creation.

One of the most neglected processes in present creative-training procedures, and yet one of the most important of the common creative processes found in the very productive creator, is the construction of systems. Most descriptions of what creative persons do mention that relatively early in the total sequence of events some kind of system appears, whether it be a theme, a story plot, a motif, or some other kind of outline affair. This is the backbone, the skeleton, or framework of the major production to come. Within the total framework, subsystems are also developed . . . (p. 91)

For the student who applies rigorously the questions I have listed, then, invention may indeed become synonymous with “creation” or “discovery.” Use of these questions may help to alter his entire way of perceiving experiences, both inside and outside of the English composition class.

This design for questioning is of value, of course, only if students know how to apply it rigorously. When a teacher assigns a subject for writing, he can direct students in use of these questions by helping them see the class into which the subject falls and then asking them deliberately to apply all of the questions that pertain to it. In class discussion the first, tentative answers to many of the questions listed may lead to other questions—such as about the nature and value of the observations or other evidence used in those first answers, possible sources of data that have been overlooked, possible analogies between what has been observed and what can be remembered from the past, and so on. Not all of the questions, of course, will produce useful answers for every subject, and the student should learn which questions provide valuable ideas on which subjects and which ones are comparatively fruitless on those subjects. To learn this skill of discriminating among questions will help the student to discover more rapidly how to find out what matters in the data before him.

The process of questioning can also be carried on silently by the student himself once he has mastered the questions, or, perhaps more promising, it can be carried on by students working in small groups. Use of such study groups would turn over the responsibility of learning to the students themselves, and would encourage students to help teach each other—both of them practices increasingly favored by innovative classroom teachers.

Invention of matter for discussion does not, of course, follow immediately and automatically upon rigorous application of questions to possible subjects for composing. Students have still to evaluate the details and perspectives turned up by the questions. There are at least three sorts of evaluations that can help stimulate the desire to write. The first, which Gordon Rohman emphasized in his experiments at Michigan State, is the discovery that the subject being studied can be compared in some way to another subject or to a remembered experience, and that the analogy may hint toward
a generalization (a statement of the discovery that the same characteristic may be attributed to many items). Much of the literary analysis performed by scholars (and by students as well) relies on this sort of evaluation. So does the study, for example, of a particular work or art or architecture, when the identification of the details of that object calls to mind similar details in other works already studied and encourages generalizations about an artist, a subject, or a period.

The second kind of evaluation is simply personal response: “I like a thing” or “I don’t like it”; “I believe this thing or event is good or is not good or is dangerous.” Of course, some students make personal judgments freely, and we want them to do so; students who refuse to commit themselves frequently write banal papers. But we also want their judgments to be informed by knowledge of the facts. Detailed questioning turns up the facts and may bring into focus the standards for making judgments, both of them necessary for responsible writing—opposed to capricious writing—about personal judgments.

The third kind of evaluation, perhaps the most useful, is the detection of conflict, inconsistency, or inexplicability in the answers to the questions. If the student analyzing a subject can discover in his analysis a problem that matters to him, he is on his way to informative exploration of the subject and toward something worth saying in a piece of writing. To suspect that what happens at the end of a novel is not adequately accounted for by what we know about the principal characters puts the student on the road toward either a more thorough understanding of that novel or a reasoned assessment of that novel. To discover that the actions of a group, or even a whole society, are in conflict with its ostensible goals, for example, is to find an occasion for warning the members of that group and for proposing different actions. One stimulus to writing is puzzlement or discomfort, as Richard Whately implied when he identified introductions “inquisitive,” “paradoxical,” and “corrective” as common in rhetorical discourse. One of the jobs of a teacher of writing may be to induce creative puzzlement in his students; to resolve the puzzle they may want to search and to write.

These three sources of the impulse to write come, as I have said, from the study of topics for which comments have not already been supplied. The impulse to write, I have implied, comes from the discovery of a comment that seems worth making. The process of invention need not stop, however, when comment has been added to topic. For adding comment to topic gives the writer a proposition, and most propositions can be understood better by applying to them the questions listed in Part II of my outline. Though a comment supplied by a student after he has asked numerous questions about a body of data may not require as much further effort at invention as a comment handed to the student cold for discussion, even those comments that have been generated by a student (or a professional writer) after an analysis of data and a search for ways of resolving his puzzles merit systematic analysis. If the writer has arrived at a conviction, he still has the task of leading his reader to respect that conviction. To do so, he must be sure that he knows what points in his comment need elaboration, explanation, clarification, illustration, and what support his comment obligates him to provide. What he cannot elaborate usefully he may need to drop. What he cannot support he may need to reconsider and perhaps to alter. Those underlying, unstated assumptions which the reader must accept before he can respect the writer’s opinions may themselves need support, and the search for support may disclose
the need for further examination of data, perhaps even for a change in the comment. When Loren Eiseley writes, for example, that "...we are all potential fossils still carrying within our bodies the crudities of former existences, the marks of a world in which living creatures flew with little more consistency than clouds from age to age" (*The Immense Journey* [New York, 1957], p. 6), he accepts the obligation to discover materials that will make clear what he means by this judgment about human evolution, to present data that will illustrate and substantiate his claim, to reveal what he is assuming about the course of evolution, and perhaps to demonstrate why this perception is important enough for a reader to ponder.

In short, once a possible comment has been discovered, it can be evaluated, perhaps revised. The invention of a comment for the writer's topic is not a process that is quickly finished; it continues with testing and revision of possible assertions until the comment that best suits the writer's data is found. Finding a suitable way of stating one's comment on a topic, then, is often itself a problem for which the writer must find a solution; he must identify alternative statements and test them to see whether they are workable.

I have emphasized here the discovery of the content for a piece of writing, and I have not discussed the discovery of a form for ordering that content nor of language for the presentation of that content. Teachers of composition spend a great deal of time talking about ways of arranging data, about outlines, plans of organization, rhetorical strategies, usage, diction, figures of speech, and punctuation. Though doubtless important, these techniques ought always to be the servants of an idea, not its masters, which is what they sometimes seem to be. If there is nothing to say, there is no reason to spend much energy on how to say it. Students know this, even if their teachers do not seem to, and they act on the knowledge. This fact—I hesitate to call it a discovery—calls, I think, for considerable refocusing of our efforts as teachers, as theorists of rhetoric, away from the formal, stylistic, and even logical difficulties of a completed utterance to the process by which a writer comes to have something to say in the first place. If we can help the student find something to say that matters, he may reciprocate by expending a little energy on the form and language with which he says it. But even if he doesn't, he may still write with conviction and excite our interest as readers—something that no empty utterance, however perfect its form, can do.

Our curricula in composition and rhetoric, in fact, might be organized to give students practice in analyzing, by means of questions such as those listed here, a succession of increasingly complex experiences. Such a plan would be quite as legitimate as one that uses rhetorical techniques or great issues as an organizing principle. The course in composition might then become a course in discovering what is worth writing about in the successive experiences. Discussions of ways to organize papers and of "voices" to adopt might follow, and be subordinate to, efforts at this kind of discovery. The course in rhetoric might regain some of its lost dignity if instructors insisted first of all upon the worth and importance of what their students said.

One further point. Leaders of professional organizations of English teachers warn that the profession has failed to convince the American public that what it does for its students is important enough to warrant continued support and encouragement—from Congress, from the U.S. Office of Education, from foundations. I apologize for adding such a pragmatic argument to a discussion of
pedagogy, which of course should be unsullied by crass motives, but if English teaching is having trouble with its "image," the reason may be its seeming preoccupation with form and expression at the expense of ideas. The student's ability to discover ways of talking about his observations and experiences, though no more important to the teacher of English than his ability to arrange and state ideas, may be what is most valuable to him outside his English classroom in his later role as professional man and citizen. To decide that we will help students to discover and perfect ideas may be one way to define for ourselves a role that adult citizens can applaud. And, the highest of tributes, even our students may esteem more than they do now our courses in composition.

A PLAN FOR TEACHING RHETORICAL INVENTION

I. "Topics" That Invite Comment

A. Writing about Single Items (in present existence)
- What are its precise physical characteristics (shape, dimensions, composition, etc.)?
- How does it differ from things that resemble it?
- What is its "range of variation" (how much can we change it and still identify it as the thing we started with)?
- Does it call to mind other objects we have observed earlier in our lives? why? in what respects?
- From what points of view can it be examined?
- What sort of structure does it have?
- How do the parts of it work together?
- How are the parts put together?
- How are the parts proportioned in relation to each other?
- To what structure (class or sequence of items) does it belong?
- Who or what produced it in this form? Why?
- Who needs it?
- Who uses it? for what?
- What purposes might it serve?
- How can it be evaluated, for these purposes?

B. Writing about Single Completed Events, or Parts of an Ongoing Process (These questions can apply to scenes and pictures, as well as to works of fiction and drama.)
- What were the circumstances in which the event occurred? What did they contribute to its happening?
- How was the event like or unlike similar events?
- What were its causes?
- What were its consequences?
- What does its occurrence imply?
- What action (if any) is called for?
- What was affected (indirectly) by it?
- What, if anything, does it reveal or emphasize about some general condition?
- To what group or class might it be assigned?
- Is it (in general) good or bad? by what standard? How do we arrive at the standard?
- How do we know about it? What is the authority for our information?
- How reliable is the authority? How do we know it to be reliable? (or unreliable?)
- How might the event have been changed or avoided?
- To what other events was it connected? how?
- To what kinds of structure (if any) can it be assigned? On what basis?

C. Writing about Abstract Concepts (e.g., "religion," "socialism")
DISCOVERY THROUGH QUESTIONING

To what specific items, groups of items, events, or groups of events, does the word or words connect, in your experience or imagination?

What characteristics must an item or event have before the name of the concept can apply to it?

How do the referents of that concept differ from the things we name with similar concepts (e.g., "democracy" and "socialism")?

Does the word have "persuasive" value? Does the use of it in connection with another concept seem to praise or condemn the other concept?

Are you favorably disposed to all things included in the concept? Why or why not?

D. Writing about Collections of Items (in present existence) [These questions are in addition to the questions about single items, which can presumably be asked of each item in the group.]

What, exactly, do the items have in common?

If they have features in common, how do they differ?

How are the items related to each other, if not by common characteristics? What is revealed about them by the possibility of grouping them in this way?

What correlations, if any, may be found among the various possible sub-groups? Is anything disclosed by the study of these correlations?

Into what class, if any, can the group be divided as a whole be put?

E. Writing about Groups of Completed Events, Including Processes [These questions are in addition to questions about single completed events; such questions are applicable to each event in the group. These questions also apply to literary works, principally fiction and drama.]

What have the events in common?

If they have features in common, how do they differ?

How are the events related to each other (if they are not part of a chronological sequence)? What is revealed by the possibility of grouping them in this way (these ways)?

What is revealed by the events when taken as a group?

How can the group be divided? On what bases?

What possible correlations can be found among the several sub-groups?

Into what class, if any, can the events taken as a group fit?

Does the group belong to any other structures than simply a larger group of similar events? (Is it part of a more inclusive chronological sequence? one more piece of evidence that may point toward a conclusion about history? and so on)

To what antecedents does the group of eventslook back? Where can they be found?

What implications, if any, does the group of events have? Does the group point to a need for some sort of action?

II. "Topics" with "Comments" Already Attached

A. Writing about Propositions (statements set forth to be proved or disproved)

What must be established for the reader before he will believe it?

Into what sub-propositions, if any, can it be broken down? (What smaller assertions does it contain?)

What are the meanings of key words in it?

To what line of reasoning is it apparently a conclusion?

How can we contrast it with other, similar, propositions? (How can we change it, if at all, and still have roughly the same proposition?)
To what class (or classes) of propositions does it belong?
How inclusive (or how limited) is it?
What is at issue, if one tries to prove the proposition?
How can it be illustrated?
How can it be proven (by what kinds of evidence)?
What will or can be said in opposition to it?
Is it true or false? How do we know? (direct observation, authority, deduction, statistics, other sources?)
Why might someone disbelieve it?
What does it assume? (What other propositions does it take for granted?)
What does it imply? (What follows from it?) Does it follow from the proposition that action of some sort must be taken?
What does it reveal (signify, if true)?
If it is a prediction, how probable is it? On what observations of past experience is it based?
If it is a call to action, what are the possibilities that action can be taken? (Is what is called for feasible?) What are the probabilities that the action, if taken, will do what it is supposed to do? (Will the action called for work?)

B. Writing about Questions (interrogative sentences)

Does the question refer to past, present, or future time?
What does the question assume (take for granted)?
In what data might answers be sought?
Why does the question arise?
What, fundamentally, is in doubt?
How can it be tested? evaluated?
What propositions might be advanced in answer to it?
Is each proposition true?
If it is true:
  What will happen in the future?
  What follows from it?
  Which of these predictions are possible? probable?
  What action should be taken (avoided) in consequence?

[Most of the other questions listed under "Propositions" also apply.]