Better equipped than most teachers in a humanistic background and in a knowledge of advances in interdisciplinary study, the English teacher is well-qualified to achieve a major educational goal—to help a student acquire a disciplined attitude toward knowledge through the analysis of ideas. One method of teaching this goal is through the utilization of Richard McKeon's four-stage sequential approach to interdisciplinary study. In this plan, the student, with the guidance of the teacher, first learns how to acquire and evaluate facts; he then moves on to a creative discovery, to the presentation of his ideas, and, finally, to a systematization of his knowledge into a broad structure. Within these stages, each teacher must develop his own techniques; but if the four stages are followed in an interdisciplinary course of study, the result will tend toward the formation of an open-minded, creative, articulate, and purposive student. (LH)
MARK HOPKINS' LOG: TEACHING AND THE ANALYSIS OF IDEAS

M. E. Grenander

Mark Hopkins and his student on the two ends of a log, the classic paradigm in any discussion of education, has little validity today. Modern educational institutions, as I am not the first to observe, more nearly resemble the Mark Hopkins Hotel than Mark Hopkins' log. Yet the only new metaphors that seem to emerge are the IBM card and the computer. And the student, who feels that it is he who is being folded, spindled, and mutilated, naturally finds little attraction in these.

The reason, I suggest, lies in the fact that we have grown further and further from the whole question of ends and means in education. For student frustration today, whether so understood or not, basically revolves around these points. Education is a practical science; it sets up what tend to be self-fulfilling prophecies as the character of its students is being formed.

Thus the first problem to be considered is the end which we expect it to serve. It may be viewed as a science which will allow a student to "do his own thing." Or its end may be regarded as essentially social, aimed at turning the student into a contributing element in his society. Or its end may be considered primarily training in gamesmanship; life is a kind of chess combat, and the best educated student is the one who can outwit his opponent. Still another view, however, holds that the end of education is the development of a student with a disciplined attitude toward knowledge.

The first end of education is what militant students today think they want, or so their slogans would lead us to believe. The second and third ends are what they are attacking. Hence their assumption that destruction of established institutions of learning will in and of itself clarify the whole question of the ends and means of education. If, however, we turn our attention to the fourth end of education—the development of a student disciplined in his attitude to knowledge—we may have discovered a meeting ground for frustrated students, worried admin-

\[1\) In preparing this essay, I have been concerned with only one aspect of a single problem relevant to specialists in English Education. R. S. Crane's "The Idea of the Humanities," pp. 3-15 in Vol. I of the book by the same name (Chicago: The University of Chicago Press, 1967); and Richard McKeon's "Character and the Arts and Disciplines," Ethics, LXXVIII (January, 1968), 109-123, have helped me considerably. However, my comments here are merely a practical and limited application of a part of their arguments.

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Administrators, and baffled faculty. And it is to this last view of the end of education that I wish to address my remarks.

If we concur on this as a desirable end of education, we must then discover those means which will best bring it about. And this leads us to the humanities, for I believe there is a close connection between the ends and means of education and the ends and means of the humanities, certainly at the level of the senior high school and the junior college. It has often been noted that protest tends to be concentrated among students who insist (at least for themselves) on the worth and integrity of the individual human being. And it is owing to the relative neglect of an important humanistic discipline that students are reacting in mechanical and stereotyped fashion, in terms of the way they have been educated.

The late R. S. Crane defined the humanities in terms of their ends, or “distinctive objects”; and their means, or the disciplines through which we achieve these ends. Practically speaking, the two can never be separated. The distinctive objects of the humanities, he said, are those human achievements that cannot be explained by general natural laws or collective social processes. The four humanistic arts are the means through which they are grasped: linguistics, criticism, historiography, and the analysis of ideas. Of these four, it is the analysis of ideas as a means that I am particularly concerned with because of its relation to the means and ends of education generally.

And here we return once more to Mark Hopkins and his log. What kind of subject Hopkins and his student were exploring is crucial to the whole question of “relevance.” For nothing is ever relevant in the abstract. It must be relevant to something. As Paul Goodman points out in Growing Up Absurd: “when one cannot think of anything to do, soon one ceases to think at all.” Man must learn to deal with his environment, with himself and his society, and with the products of his arts. But it is possible to approach any one of these humanistically, for the humanities are not merely a convenient administrative grouping: they represent, rather, uniquely human achievements. Thus it is possible for a teacher in any discipline to approach his subject matter in a humanistic spirit. But few ought to be better equipped for this, by virtue of their background and training, than English teachers. And this means that while a many courses they will be dealing with linguistics, or criticism, or literary history, so far as the analysis of ideas is concerned they may need to go beyond the conventional confines of their subject and re-examine its relationship to more general problems. For it is commonly

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true that teachers of English tend to be in the vanguard of advances in interdisciplinary study, even when these continue to appear in school and college catalogues under the rubric of "English."

I am not talking of "Core" programs. Rather, I refer to a new approach to interdisciplinary study outlined recently by Richard McKeon. In trenchant contrast to those general education programs which merely add up units from different fields, he proposes a four-stage sequence. This sequence is the means whose end is the formation of a student with a disciplined orientation to knowledge. The sequence includes first, learning facts; second, creative activity; third, the presentation of the knowledge learned; and fourth, the systematization of that knowledge. Each stage, however, has a perversion to be guarded against. Thus, the student must not succumb to the tyranny of facts in Mr. Gradgrind fashion; rather, he must aim at disciplined sensitivity in the art of recovering and evaluating them. He must not succumb to the tyranny of mere novelty, but must aim at disciplined originality in the art of discovery. He must guard against the tyranny of empty precision, aiming at disciplined coherency in the art of presentation. And finally, he must guard against the tyranny of randomness, developing disciplined purposiveness in the art of systematization.

But what does this mean, specifically, for the teacher of English? How can he relate these concepts to the work he himself is doing? I can offer here merely the most general guidelines, and I wish to emphasize that what I am saying deals only with the humanistic art of the analysis of ideas. Criticism, linguistics, and literary history would each require a different approach. To begin with, even though the student is nominally in an English course, he may be working on problems which are not conventionally "literary." The recovery of facts, his first task, includes but goes beyond reading. Let us assume, as an example, that he is exploring the whole question of pollution in the Hudson River. He may acquire his facts from TV shows, interviews with experts, his own experiences, and so forth. He may read newspaper editorials, or brochures from industries dumping sewage into the Hudson, or pamphlets by the New York State Pure Waters Authority. If he has a bent for science, he may secure samples of Hudson River water and subject them to laboratory analyses. The point here, however, is that no matter where he gets his facts, he must learn to compare and evaluate them. Not all are of equal significance; he must learn to discriminate, to take into account probable bias, and to be aware that the recovery of information is a disciplined art. If he is not to succumb to the tyranny of facts, he must develop this art in
terms of his own interests and capabilities. This task is not easy, and it will pose challenging problems for the teacher. But his reward will be a student who has learned that "information retrieval" is only the beginning in the discipline of recovering facts, for no fact is inert; each has its context in terms of which it must be evaluated.

In the second place, having acquired a method for recovering facts, the student should move on to creative discovery. Since it will be based on a considered knowledge of the problem he is exploring, it will not be simply a fad: it will be a genuinely original insight. In the problem we have been considering—Hudson River pollution—he may come up with a creative solution to at least part of the problem. He may discover, for example, that a particular industrial plant might be able to treat its sewage in an economically feasible manner that would lessen the pollution of the River.

In the third stage, when our hypothetical student is ready to present his ideas, he will offer more than mere correctness: having acquired sensitivity to facts and creativity in discovering new areas for exploration, he will have something considered and worthwhile to say, relating several themes. Thus, after exploring the pollution of the Hudson River he will now be able to make an intelligent, humanistically oriented presentation of a problem which subsumes such questions as regional water supply, health, aquatic recreational facilities, industrial processes and their waste products, the ecology of river organisms, and the chemistry of polluted water. Such a presentation as this—however his teacher encourages him to develop it—obviously goes far beyond the conventional term paper at the end of a short course in composition. It is, indeed, not the same kind of thing at all. Not only does it presuppose two earlier stages in the student's orientation to knowledge; it also assumes that he has some purpose in the way he presents his material which will serve as the organizing principle informing it. It is even not inconceivable that an extreme pessimist might decide the only answer was to let the Hudson River rot in its own filth.

Finally, in the fourth stage, our student will learn how to systematize what he has acquired into a broad structure. What this will be depends to a very large extent on his character as it has developed to this point. Possibly the structure he develops will be something related to industry or its problems: he may be a potential candidate for some School of Business Administration. Or he may be an incipient scientist, who will systematize all he has learned into an ecological or chemical pattern. Or conceivably he may be a budding sociologist, and organize the problem in terms of a sociological structure. And of course there
are many other possibilities, not discounting ones less academically oriented than any of these. An extreme egocentric might simply work out an aquatic recreational program for himself which carefully avoided anything to do with the Hudson River. The point, however, is that at the least the student has acquired some useful arts in the acquisition and dissemination of knowledge which will assist him in coping with his own problems.

How the teacher will handle his various students during each of these stages it would be presumptuous for me to say. Every good teacher has his own bag of tricks; some work with one teacher, some with another. Not only that: any experienced teacher knows that classes develop group personalities: a technique for establishing rapport with one group may meet only indifference or hostility from another. Consequently the teacher, within the broad outlines I have suggested, must be extremely flexible. I wish only to remind him that what I have outlined is fundamentally a humanistic program, that it is sequential, and that it is a means to an end: the development of a disciplined attitude toward knowledge.

If these four stages are followed, in this sequence, in a genuinely interdisciplinary program of study—whatever it is called administratively—the result will tend, insofar as education can influence it, toward the formation of a certain type of character in our students. They will be open-minded, creative, articulate, and purposive. They will know how to recover and interpret facts, how to work creatively on a problem they have explored, how to present their ideas in orderly and meaningful fashion, and how to explore the systems which underlie and relate them. And those students who continue with a specialized education will be ready to make reasoned and responsible choices among studies in the natural sciences, or in man and his society, or in the products of his various arts. At this point, of course, new and more specific ends and means must once again be set up.

The program outlined here, although it seems modest, is not easy. It lacks the whimsy of Mark Hopkins' log and the slogans of "up against the ivy wall," and it resists the reduction of students to mass-produced automata. It demands discrimination, hard work, purposive curricular organization, and constant care against falling into the trap of a too rigid pattern. Yet its development would help restore the greenery to the groves of academe. The ends which education can achieve are not unlimited. The particular one outlined here is both more precise and more realistic than the wholesale transformation—or destruction—of society envisaged in some quarters as the proper end of education.