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Taking the Fun Out of Outfoxing the System



If the Paul Goodmans, the free universities, and the demands for more intellectual freedom for students influenced us, we were not aware of it when we started. Instead, our decision to try an experimental course grew more from our disaffection with traditional procedures than from any vision of a new approach to education. Our charge was a common one: to help some sixty Yale undergraduates learn something about the psychology of administration in one semester's time. Our initial reaction was as common: frustration that the classic format of large college classes—lectures, punctuated now and then by examinations—provides little opportunity for students to become meaningfully involved in a course. From the conversation which began then and continued over the next several weeks, we derived three insights which guided our attempt to restructure the course.

The first insight was that the usual dichotomy between large, impersonal classes and small, intimate classes is probably a false dis-



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—usually in the hope that smaller classes will result in more contact between students and faculty. It is commonly assumed that good discussions cannot take place with too many people present. But our experience was that discussions in small seminars often are just as dry, academic, and non-involving as those in larger groups. When asked why such discussions do not work, students often cite size as a factor: it seems that there are sometimes too many people present for a good discussion even in five-man seminars. We concluded that size itself probably is not the most important reason for the lack of meaningful interaction and involvement in large classes. More likely culprits, we felt, are the generally accepted rules of conduct, which specify what is and what is not appropriate behavior in the classroom. These rules place a high premium on grades and social approval—resulting in the fierce (but always genteel) competition so often observed among stu-

dents. They condemn any indication of personal or academic weakness, thus leading students to place first priority on defending their own ideas and behavior instead of on engaging in honest, mutually helpful activities. They dictate that personalities and emotions are out of bounds in academic discussions, thus denying students the opportunity to deal with the very problems which may be inhibiting successful classroom discussions. We felt that if we could find a way to organize our class so that these interpersonal issues could be addressed and dealt with effectively, the problem of size might disappear entirely.

Our second insight was that the content of our course could be used as a means of addressing just these issues. Among the topics often included in a course on the psychology of administration are leadership, communication, decision-making, motivation, and attitudechange. These phenomena-although usually ignored by students and faculty alike—are present in every classroom, and affect what takes place there. We resolved to use the research findings and scholarly literature available on these topics to help our students (and ourselves) understand the day-to-day operation of our own course. We expected that, by examining with the students the ways in which problems in the psychology of administration were affecting our class, we would be better able to confront and overcome the interpersonal issues which usually detract from the effectiveness of large classes. Another important payoff seemed likely to result from attention to process issues. As students actually experienced problems of leadership, communication, and so on, we hoped that the problem areas themselves would become more meaningful and important to them. This, we felt, could make their learning the course content much easier. Thus, our goal as instructors was to generate a spiral of increased awareness and understanding: we wanted to use classroom process as an important resource for learning the content of the course, while at the same time drawing on the scholarly content of the field to increase our competence in dealing with issues of process.

Finally, we came to feel an increasing reluctance to accept the dichotomies between academic and applied matters and between learning values and learning content. In the classroom, problems of values are handled ordinarily by conscientious attempts on the part of instructors to be vigorously objective, neutral, and value-free. Yet as we began to discuss issues of content—what we would teach, how it would be taught, and why it was worth teaching—it became clear that value choices were implicit in almost every decision we made about objective knowledge. We decided that it would be incongruent with reality and an active disservice to our students to refuse to make explicit the value problems which are inherent in our field of study and in our attempts to teach it.

The dichotomy between academic and applied affairs is usually avoided fairly easily by both eggheads and men of affairs: they avoid the problem simply by avoiding one another, and resorting instead to labels such as philistine or irrelevant, stupid or abstract, corrupt or cold. Even in courses such as ours, where the two worlds agree to meet, instructors frequently find themselves vacillating between presenting real-life case studies and presenting more general, abstract, and theoretical material. And, while students often are asked to get their hands dirty in a fieldwork course or a side job, these activities are rarely integrated with the academic curriculum. We concluded that we could not call a course in the psychology of administration successful unless we had at least attempted such an integration.

Traditional classroom procedures, which place the instructor on an elevated podium and large numbers of students in chairs bolted to the floor, clearly would not be conducive to achieving our goals. Therefore, we decided that much of the educational activity in the course would take place in small work groups of about eight members. These groups would be formed on the basis of common interests in particular content areas, and they would have tasks requiring close cooperation. The groups would develop and deliver to the class a presentation of material in their content areas—and be charged with making the presentations as innovative and involving as possible. They would design and carry out research projects relevant to their areas, and would use these projects to tie together theoretical and real-world concerns. Finally, they would be intimately involved in the evaluation of their own work, continuously, we hoped, throughout the semester. So that experiences and problems could be shared between groups and between the groups and ourselves, a steering committee would be formed, consisting of one member of each of the groups and ourselves. Thus, we would have a three-tiered organization (work groups, steering committee, and instructors) with all the problems of a real-life organization—which, of course, we would be.

Permeating the entire course would be a climate of openness

and collaboration. We wanted an organization in which students and instructors would feel just as free to talk about how the course was progressing as about intellectual or content issues. We wanted the students to have as much opportunity to make decisions about what we would do in the course and how we would do it as we ourselves would have. We wanted involvement and responsibility, and we thought we had designed an organization that would give us just what we wanted.

But what, we finally asked ourselves, would we do if the students resisted our dream-plans? Our organization was obviously both too intricate and too well designed to be tampered with by a collection of students who knew little about either education or the psychology of administration. Then emerged the overwhelming discrepancy between what we were saying our values were and what we were actually doing. On the one hand, we were planning to tell the students that we wanted them to collaborate with us as equals in an educational experiment in which both they and we could learn; on the other, we planned to tell them exactly how this collaborative venture was going to operate. And we were worrying that they might resist. Eventually-after a good deal of frustration and a few thoughts of retreat—the same values which made our inconsistencies so uncomfortable dictated a strategy for their resolution. Rather than planning the best course possible and then carrying it out as an accomplished plan, we would have to be genuinely open to influence by our students—to the extent that we would be willing to abandon our initial plans entirely if need be. Our values were forcing us to relinquish exclusive ownership of our ideas and control over what happened to them. With some uneasiness, we began to loosen our grip on the course.

We eventually concluded that we would present our thinking to the students on the first day of class, along with a written proposal based on it. We would discuss with them as openly as we could the risks and values of our views, ask them to reflect on what was happening and write down their reactions, amendments, and counterproposals—and only then decide, as a group, whether our course should be experimental or traditional. Thus, our task for the first class meeting became one of helping the students to gain a sense of what had occurred between ourselves in the preceding weeks, so that they would become able to join in the decision-making effectively from then on.

We decided that this might be done efficiently by actually retracing in conversation the developmental history of the course. So, after briefly introducing ourselves, we role-played the way we happened to come upon the idea of an experimental course. We discussed the possibilities and problems of the course, and the differences which remained between us. Then we said, in effect, "This is where we are right now; would you like to join us?" They did, eagerly and vigorously. The discussion passed rather quickly from technical questions ("How will such and such be done?") to more central issues ("Do you think the work groups will really work if everybody knows that you are not going to assign their grades?"), and finally to attempts to express a sense of the direction of the experiment as a whole and the personal risks and possibilities which it implied. We experienced shock and exhilaration as we saw for the first time our abstract ideas, theories, and plans take shape in the real world. It looked as if the experiment was working.

In their subsequent written reactions, a great many students appeared to be personally caught up in their appraisals of the proposal—whether they were emphasizing potential benefits: "I am certainly willing to give it the old college try. I haven't really been moved in three dull years at Yale and it would be nice to know that the academic side of Yale wasn't totally wasted on me," or whether they were more keenly aware of the threats: "I feel that it is extremely unfair to use students as experimental subjects at the possible expense of their academic averages, or at the risk of their other courses suffering due to a disproportionate amount of work (however unintended) in Psychology 33a. And since any modified version of the original proposal would still be an experiment with similar hazards involved, I must cast my vote strongly for the traditional, but proven, lecture method of presentation."

Most students were eager to try the experimental course. Those reservations that were expressed tended to focus on three specific, important aspects of the proposed course.

First, questions were raised about the possible costs of using classroom process as an input to learning. Several students worried that by spending time examining process we would necessarily spend less time on the scholarly content—a trade-off that many would be hesitant to accept. One student put it this way: "I would like to see lectures form the basis of the course, because the knowledge which is

a base for further studies in administrative sciences and which the instructors have gained already, is to me more valuable and more central to the course than the group knowledge acquired."

The second aspect to attract considerable comment was the plan for work groups. Several students were concerned that problems of coordination and conflicting personalities might prevent the groups from functioning effectively. These problems were highlighted in the reactions of one student, who came up with some revealing recommendations to insure the success of the groups: "(1) Impose more order lest the groups waste (and I do think waste, since it is not end-directed behavior) much time in organizing to do their tasks. Set up a leadership structure which groups can change upon demonstrated desirability. (2) Spell out topics for classroom presentation from which groups can choose any fair means of choosing, since consensus is hardly foreseeable in most groups. (3) Set up procedures acceptable (to you) for deciding upon and allocating responsibility in group projects. All this must be most explicit."

The third aspect to cause concern was evaluation in general, and grading in particular. Considerable anxiety and distrust were evidenced about our proposal to share with students responsibility for determining final grades. After the novelty of the proposal had worn off, one student wrote: "Initially, excitement and unguarded acceptance were my reactions; the excitement I still feel for the course, but now my acceptance is guarded, essentially on one count. Student performance evaluation is my only worry. At the risk of appearing overly concerned with marks that are sent to the registrar, I do find myself a somewhat molded child of Yale's grading and recognition system. Viewing the proposal from that mold, my enthusiasm becomes tempered. The more that I think about it, the less I can accept the ability of the student groups to appraise the quality of their presentation and project."

Students were especially anxious about the form that participation in grading would take: did not the instructors' experience make them more objective? Would not some students be hurt if they were told by their peers why they were not evaluated favorably? Would not some students simply take the highest grade possible or downgrade others in order to look good by comparison? What would the instructors do if all members of a group did not do the work in the course—fail them? Surely the instructors were going to retain some kind of

veto on so obviously critical a part of the course as the assignment of grades.

Our reaction to the issue was that evaluation could be the first item on the agenda for the steering committee and that if the students were willing to proceed with the experiment on that basis, so were we. They were: after considerable discussion, the class voted almost unanimously for a slightly modified version of the original proposal.

So, in a glow of consensus and enthusiasm, the experiment began. To provide a common background and language for the class to build upon, we were to give a series of content presentations during the first quarter of the semester. We worked hard preparing the lectures, organizing huge resource reading lists for the groups, bustling around making sure nothing was going wrong. Things did seem to be progressing smoothly. Our lectures, while not particularly innovative, were well attended. Apparently contrary to many students' fears, the work groups were not reporting significant problems in getting organized and underway. The steering committee was hard at work devising a procedure for evaluating student performance—although progress on this problem was hard to discern.

We attributed the confusion and uneasiness that surrounded our discussions of grading to the students' anxiety about being evaluated. But we did not come to understand the full extent of that anxiety until, late in the term, we were told about the secret agenda which the students had brought to one of the steering committee meetings.

Early in the semester, Yale College changed from a numerical grading system to a system of four categories: honors, high pass, pass, fail. The students on the steering committee found opportunity in this change: they conspired to railroad the instructors into accepting a grade of "high pass" for all students in the course, in effect solving the evaluation problem by doing away with evaluation. Any resistance to the proposal by us was to be repudiated as a betrayal of our announced decision to share responsibility; the students apparently surmised that they would have us caught in the net of our own stated values. The plan was unintentionally disrupted, however, when we agreed to consider a common grade as a possible solution—but argued against it on the basis that it eliminated the challenge of learning from honest, collaborative evaluation. Some students reported, in relating the incident to us later, that it was at this point that they really began to believe that we were serious about what we had been saying. Our im-

passe on the evaluation issue finally broke when the work group studying motivation proposed to study motivation, including student reactions to evaluation, in the course itself. This proposal made possible and, in fact, encouraged the development and use of a variety of evaluation procedures.

It was agreed that the midterm examination would cover only the introductory, content lectures. Each student would write for one hour on a choice of questions, hand his examination to another student for twenty minutes of written criticism, and then assign himself a grade with written justification in the final ten minutes. We would collect, read, and comment on each examination, and add our view of the grade earned. The student could then compare his own perceptions of his performance with both those of his classmate and those of the instructors. How this evaluative information would be used was left to the work groups themselves. The eight groups settled on a variety of procedures, ranging from one group which assigned all responsibility for evaluation to the instructors, to one which reverted to assigning each student a common grade at the outset. While the various schemes were anything but uniform across groups, they seemed likely to encourage students to exchange their ideas and experiences about evaluation, and we were happy with them.

With the plans for evaluation taken care of, the class settled into something of a routine. The eight work groups were presumably preparing for their classroom presentations, and our lectures continued to be unexceptional. Everyone was looking forward to the first class period after the midterm, when the first work group would make its presentation. The topic was to be Leadership.

The classroom was nearly full for the presentation—the best attendance since the early days of the semester. Members of the leader-ship group were scurrying around the front of the room making last-minute preparations. The first member of the group went to the lectern, made some comments about the topic in general, and announced that since there was so much material available, the group had decided that the maximum amount of information could be gotten across if each group member gave a short lecture on a subtopic in the area. And so the parade began. Student after student read his notes in a competent, machine-gun fashion. A tremendous amount of information was dispensed. Pages and pages of notes were taken.

When the class ended, the students left dazed, disappointed, and hostile.

The reason for the hostility was revealed at the next meeting of the steering committee. The students felt that the leadership group had reneged on its mandate to be innovative and to excite the rest of the class about the content area. Instead, the group had out-professored the professors. Everyone agreed that in the future more creativity should be used in designing the presentations.

The next two groups did try to be more creative. One used a tape-recorded speech by Winston Churchill to demonstrate a technique of attitude change; the other used elaborate colored-chalk diagrams to illustrate aspects of organizational structure. But the basic format was unchanged: scholarly literature was reviewed and summarized in a series of short lectures by group members. The instructors had planned to use the class session following each group presentation to fill in any gaps in the literature left by the groups. Since the literature was being reviewed so comprehensively by the groups, there were few gaps to fill. Instead, we were able to use our classes for relatively leisurely reviews of particular issues, theories, or practices in the content areas.

Students soon became disillusioned about the course as a whole. When there had been rough spots earlier in the semester, we all had our anticipation of the really experimental part of the course to help pull us along. Now the experimental part of the course was here, and we were seeing how invalid our earlier expectations had been. The growing discontent and apathy, coupled with the knowledge that grades no longer depended on the students' coming to class, led to a sharp drop in attendance. The course clearly was getting out of hand. What had gone wrong?

We could not bring ourselves to blame the students. Yale undergraduates are as bright and as creative as any in the country. If the course was failing, it seemed likely that much of the fault must lie with its structure—or with our way of implementing it. Finally, we were jolted into realizing something that, in retrospect, seems so obvious. Once again what we were claiming to value simply did not fit with what we were doing. We were saying: "Be creative. Innovate. Don't be constrained by the usual lecture format. Get the class to experience what you have to say; make it exciting, involving." And

all the while, whenever one of us was at the lectern, the traditional lecture-discussion format prevailed. We were asking the students to do something we could not or would not do; we were providing them with verbal instructions, but no model. And we had the gall to be disappointed that they had not succeeded where we had failed.

Posthaste we abandoned our assumptions about what activities are and are not appropriate for college classrooms, and came up with what one student later characterized as a series of "academic happenings." At the next class meeting (when we were to respond to the student presentation on organizational structure) we sent groups of students out of the classroom to interview various administrators, including a priest, the chairman of a university department, and a supervisor of secretarial services. We armed the students with questions about how different ways of designing organizations affect people's actions within them. On returning to the classroom, students compared notes and attempted to integrate the information they had collected.

Another week we imported a number of trained observers to consult with the work groups. The groups spent the class period focusing on members' problems in working together rather than on their actual tasks. Another time we asked the students to monitor various aspects of a live conversation between a boss and a subordinate (actually, one of us and his secretary). These data were then used to try to understand better the literature on communication in organizations. As we had hoped, the students also began to loosen up in their presentations. One group asked the class to indicate on a questionnaire what kind of work group they would compose in order to make a certain decision. These choices then were discussed in relation to the literature on group effectiveness. Another group had one of its members assume the role of a staff-researcher in an organization. He attempted to sell some line managers (the class) on the usefulness of a new approach to client relationships. The group then used this episode to discuss problems of organizational change. A third group, focusing on decision-making, played parts of tape-recorded interviews they had conducted with stock brokers regarding how decisions are made under conditions of high uncertainty.

Some students began to regain their earlier involvement and enthusiasm. One traced the history of his reactions to the course as follows:

I was skeptical from the very beginning about the chances for success in a venture of this sort, but started out resolved to make the most of it. But later I joined the great mass and turned the course into a gut. In the last two weeks I have come to regret that turn of events, and in the course of working on the group project have finally set to work and am getting something out of the course. It is late in the term for such a change; I must honestly admit that I have missed a hell of a lot. In the last two weeks, however, I have gained a perception of excitement and interest that was missing the whole rest of the term. . . . The students who took the gut route will probably regret it just as I did, and that in itself is of the utmost importance in the educational process.

Other students reported similar reactions. The course had seemed massive and difficult to move; suddenly it seemed to move itself. Disenchantment and apathy seemed to have become transformed into initiative and responsibility. We talked with students and tried to analyze what was going on to try to learn the reasons for the striking change. To our surprise and fascination, it appeared that the reasons were quite different for various students. Aspects of the course that effectively "turned on" some students "turned off" others; and many students apparently still had not been reached at all.

For some the innovative use of class time caused the change. One student reported:

. . . two experiences in the course point the way, though. One was with the outside observer in the group. Being observed by someone sensitive to the real issues going on was somehow intensely involving. The other was the conversation between Dick and Wendy [the secretary] when I was listening as intently as I had ever listened, and hearing and seeing new things that I would never have noticed before. Somehow the educational process needs to be structured so that it is as involving as it can be, so that it reaches out and asks the student for help in finding answers, in achieving understanding, insight.

Another did not find the experimental classes helpful: ". . . the key

factor in a presentation became how differently it was done rather than what it said. Just seeing a presentation and getting a reading list gives you no place to start to organize thoughts on a particular subject." Some students saw the system of evaluation and the process of grade-assignment as causing the change:

When the grading system went out my idea of becoming a successful grade-grubber went with it. I began to have to think about whether I was being a successful student—and to realize that the responsibility for this lay solely with myself. Your course was one of the primary instruments of discovery. And I think it was invaluable to me, in letting me discover things about myself as a student and person. In ten or twenty years I'll remember almost nothing from the dozen or so psychology courses I've taken. But I'll always remember the course that let me—even forced me—to see myself, student and person, the good and the bad.

The evaluation process appeared to have a particularly strong impact on members of two of the work groups. These groups distinguished themselves by being the only ones unable to agree upon and successfully complete term projects by the end of the semester. Members of both groups felt the bitterness of the failure, tried to cope with it, and in the coping seemed to learn something significant. The topic of one of these groups was Organizational Change. After several aborted attempts to begin a term project—and with the end of the semester only a few weeks away—members of the group invited the instructors to a meeting to "talk about the project." At that time the instructors were to be subjected to subtle attempts to change their attitudes about the course itself, and their plans for the course in future years. Thus, an actual change project would have been carried out, and the requirements met. So, in ignorance of their plans, we accepted an invitation to a group meeting. We listened for an hour or so to what seemed to be some general discussion about the course, and finally suggested that perhaps we could take up whatever agenda had prompted the group members to invite us. It took quite a bit of explaining before we understood that in fact the agenda had just been completed, and that the nature of that agenda was the execution of the group's term project. When we finally recovered our "cool," we

helped the group do a post-mortem on the session. Together we identified several major problems: (1) we had already been predisposed to listen to what they had to say—thus, their assumption that our listening indicated the success of the procedures was not very convincing; (2) there had been no particular preplanned strategy for change; and (3) the project had been so hastily and incompletely planned that not even all of the group members present were aware that "this was it."

Some of the group members came to suspect (although they previously had been unaware of it) that an important motive for making such a desperate attempt at a project might have been to assuage their feelings of guilt about the group's obvious failure. The group decided that it had been fooling itself as much as it had been trying to fool us with the project, and set out to undertake a more ambitious effort to effect a change within Yale College—even though the plans would extend beyond the end of the semester and they would not get credit for it from us. This attempt also did not reach fruition. But many of the students did apparently achieve a better capability to deal with failure, and at the final evaluation session which was held later, the members agreed that they had failed on the project and deserved to be evaluated as failing.

The other group which had not completed a project also was initially unable to accept and deal with its failure, but attempted to cope with the difficulty in a different way. The group held an evaluation session, without the instructors, at which strong pressures developed for a grade of high pass for all members. If the decision had been unanimous, that would have been the final grade submitted to the registrar, since this group had decided earlier that it would determine the marks for each member. Two members, however, resisted the pressure: one stoutly maintained that he deserved no more than a pass, if that; one, the steering committee representative, felt that he might have earned honors. Attempts to override these objections failed, and the group members asked one of us to meet with them to help resolve their difficulty in reaching a consensus.

In the ensuing discussion, there was little examination of the basis for deciding on a common grade of high pass, virtually no mention of the fact that a project had not been completed, and a great deal of defensiveness expressed about the proposed common grade. The instructor's attempts to explore the reasoning behind the evalua-

tion met with attacks on grading in general and assertions that the group had learned much which could not be measured. Eventually, the group began to realize that it was demanding conformity on this issue despite the lack of unanimity precisely because the members were highly uncertain and anxious about how well they had done. With this insight, the demand for conformity diminished, and there was a period of mutual exploration of the members' real—and predominantly negative—feelings about the group's performance as a work team. Later, members of the group evaluated themselves individually, and talked together at some length about their views. Many of the group members ultimately did award themselves high passes (partly on the basis of these final discussions, which some saw as a major breakthrough from which significant learning had taken place), and others placed themselves in the pass category. The pressures for uniformity had vanished.

These examples suggest the complexity of criteria for evaluating student performance in the course, and the level of anxiety surrounding the issue. The early anxieties of the students about evaluation were, it appears, generally well founded; however, they also could be worked through, with learning as a frequent outcome.

There seemed to be one additional aspect of the course which, for some students, led to a revitalization toward the end of the semester. This was a change in the standard rules of procedure or norms according to which groups worked. Many of the groups began the semester by operating according to a set of strong-but assumed and implicit—procedural norms. Probably the most powerful, the most antieducational, and the least noticeable of these was that the group should not openly discuss its own procedure—the motives and goals of its members, and their problems in working together to accomplish the task. A second commonly accepted norm prescribed that competent group behavior required competition among members and intellectualization of issues rather than genuinely collaborative, exploring, and personally revealing behavior; behaviors which might suggest low competence or any weakness, intellectual or personal, were actively suppressed. These two norms in effect placed all the factors which affected the creativity and productivity of the group outside the bounds of permissible group discussion. As individuals and groups broke through these previously unseen rules and strategies (and not all groups did), they often experienced the same exhilaration and sense of discovery that characterized other students' reactions to the experimental classes or to the process of evaluation. For example: "After a great deal of frustration with group meetings, I began to ask myself questions about group behavior and norms. By asking these questions, by viewing myself critically in group situations, and by accepting comments made by others, I really began to learn about myself and how I behave in group situations. It is one of the most meaningful experiences I've had during three years at Yale."

When this kind of breakthrough did not occur, the group experience was, more often than not, disappointing: "I was very disappointed with our group, and, not being a great crusader, made no effort to do anything about it. My failing, no excuses offered. The group meetings were a farce; the group project was not taken nearly so seriously as it ought to have been. The attitude of 'let's prepare the damn outline and get it over with' predominated."

While this student was willing to take responsibility for the failure of his group, so must we. We had expected that the excitement of working together on an academic project, coupled with our announced availability as consultants if problems should arise, would ensure the success of most groups. This was, it now appears, unrealistic. The same prohibitions against discussion of group problems that limited the effectiveness of some groups also prevented them from asking us for help. The result was, for some students, a feeling that we had abandoned them: "The groups were left on their own too much. Because of the aimlessness of the group I found I had nowhere to channel my desire to do work in the field. As a result my enthusiasm dissipated in this vacuum." Another put it this way:

The whole thing is really quite frightening, for we are expected to get together with strangers and dredge some knowledge out of a vacuum and present it to the class. We would hopefully discover for ourselves how we could work most efficiently. But because we started from almost complete ignorance and without much sense of direction, we felt that an advisor might have been assigned to the group in its early stages, or that an instructor might have sat in on some group meetings, although we realize that he was always there for the asking.

As students summarized their overall feelings about the course and their learning at the end of the semester, some suggested that the lack of direction for the groups, highlighted by the student cited above, might be characteristic of the course as a whole:

This course has obviously been one of experimentation, but the essence of an experiment is control over the experiment itself and that is where this course has failed. Furthermore, an experiment such as this must deal with reality, and here it has also failed. In an experiment such as this it is of paramount importance to recognize the hard core reality that a situation was created which easily could be taken advantage of.

On the other hand, many students were able to take advantage of the freedom provided by the experiment in a way which allowed them to try out a new kind of learning. One student, while admitting that he had not picked up much content, considered it a fair price to pay for gaining awareness:

I don't think I got very much content out of this course. The presentations were, on the whole, not very challenging or exciting, and after the first three or four I didn't feel like I was missing very much by not going to class. Where the course was a success for me was in producing a new awareness of myself and my relations with others, and how little I really knew or noticed what was going on. My feeling is that I achieved only the barest beginnings in this respect, but enough to make me want to go on and explore more. . . . Throughout the semester, though, it seems to have been the discussions of the difficulties and failures of the course which have been most successful in breaking through to some awareness of what was happening beneath, above, or beyond the content, the specific tasks, which enables one to predict more reliably or envision more completely the consequences of any action, any change.

The confusing factor again and again seemed to be that suddenly, somehow, students' feelings and images of themselves had become entangled in what, until then, had been a mechanical, objective, externalized process. I felt so guilty [about not working in the course], that I even tried to do a little independent reading. I failed miserably. Thus, everything seemed to point to the fact that I had deluded myself about my motivation; it was just a manifestation of my pseudo-intellect. Everything (my lack of traditional study, the implicit communications of the instructors, etc.)' seemed to say this. After a thorough (I think) reexamination of my position though, here's what I have to say in reply: I don't care what you say (or what I say). I am motivated in this subject—I spend more time thinking about it, and applying it to my everyday life than any other subject.

Such intermingling of the self, the emotions, and the intellect led to questions—hard questions, about what education is really for, and about what criteria really ought to be used to assess the success of a course and a student's performance in it.

Could negative feelings, such as being shaken, bored, or uncomfortable, be counted as positively valuable? "I have felt uncomfortable throughout the course—bored at times, annoyed at times. I feel shaken, and I also feel that the course has been the most valuable course I've taken here at Yale. But I'm not sure that I can describe or point specifically to what I've learned from the course." Could pleasurable effort really count as work? "The course is a gut. Those who don't want to work, don't have to. Those who do want to work find it easy and pleasurable."

What could be a measure of performance when one's level of aspiration begins to shoot so high that there is no possibility of success? "I suppose I should start by saying that I feel somewhat guilty about my performance in this course; not because of the lack of effort I have put into it, but rather because I have made so little of something that I am very much interested in and have a strong desire to learn about. It is an inwardly derived feeling, which because I must account for it myself is all the harder to take."

Could one call himself successful in the course if he came to see his failures more clearly—and if he came to doubt his potency to effect changes in the "real world" in the bargain?

In a way I am bitterly disappointed because what happened has been so much less than what I told myself I was going to

do, that I feel I have not lived up to my promises. I wanted to try the change, but having to operate in the university system with four other goaded, tested courses kept me from reaching out and experimenting. I dislike yet value this course for this very reason, because it has shown me how very powerful the system is within which I am operating. Value because it is new knowledge; dislike because I shun the feelings of powerlessness, of weakness that I feel in the face of such a system, of the great difficulty of changing even the Yale University set-up that students might be more free. How much less chance, I find myself feeling, is there for a liberal philosophy hoping to have an effect on the events of the world, or on the U.S. Government.

Other students reinforced this last writer's view that large educational systems, such as Yale, are powerful and inertia-ridden. The larger system was seen as communicating potent expectations and pressures for high levels of intellectual performance; grades were seen as the lever by which the system enforced these prescriptions by controlling the options open to students in the future. One may respond to these pressures, or may try to beat the system; but he certainly ought to think twice about tampering with his future by experimenting within it. One student commented on how alien such experimentation was to him:

To my mind, the major reason for this lack of experimentation is that we (the students) are totally unaccustomed to experimentation in learning. It is important to note that we have been dealing with conventional techniques for thirteen years or more. It is hard to suddenly drop the guidelines set for us by these techniques and strike out on our own. I personally have not outgrown the spoonfeeding type of learning yet, which to be sure is unfortunate, but inescapable at this time.

Another described how the system may prevent involvement: "Whenever I thought of working for the internal rewards in this course, there was always something to do for an external reward that seemed more immediate. Occasionally I even had the feeling that I would like to

do something for this course but I was afraid I would get very involved and neglect the other courses so I just did not start anything for this course." A third student described the cynicism which students use to defend themselves from involvement in a system that appears to punish involvement:

. . . in this system a 75 on thirty minutes' work is far better than a 90 earned by five hours' work, even though the difference of four and one-half hours was spent in totally useless activity. Therefore, most Yale students devote their rare intelligence to defeating the system rather than achieving within it. The majority in Ad. Sci. Psych. 33a then looked on the course as an opportunity to get something for nothing, which is the overall tragedy of academics at Yale.

It has frequently been suggested that juvenile delinquents and minority group children often find that the safest ways of becoming involved are in beating the system. The foregoing comments, as well as the following one, suggest that university students play much the same game for much the same reasons, except that, on the whole, they are probably less overtly disrespectful and more successful.

The view of learning as a means rather than an end pervades the campus much more than instructors of any course seem to realize. And asking a student to become interested in a course is actually an insult to his ability to beat the system to get a grade in a course without actually learning anything from it. By not requiring anything [in this course], the instructors took the fun out of trying to outfox the system. There were two basic types of response to this. One was the one the instructors wanted-interested students willing to gamble to see what they actually could learn if they tried; and those who treated the course in the same manner they treated all their others-something to be gotten through with as little effort as possible. What could have been done to alter this situation I do not know. But if I can come up with any solution I will be glad to suggest it because this course has given me a much different outlook on studying and learning in general, and I think that most everyone could have benefited from a similar

experience if only they had not been so closed to the opportunity.

As teachers, we find ourselves as overwhelmed by the apparent contradictions in trying to assess the success of the course as the students did when they tried to evaluate their individual performances. Thus, perhaps the best way to summarize our feelings is simply to discuss the learning we, the instructors, experienced in the course, and the conclusions we reached as a result of it.

Clearly we were too optimistic at the beginning of the course about the ability of our students to respond to the wide-open opportunity for self-directed learning we tried to provide. Yale undergraduates—and probably most other college students in the country —generally are not ready to use intellectual freedom effectively in an environment which demands self-control. The difference between many students' initial reactions to our proposal and their often bleak assessments of their performance at the end of the semester suggests that this discovery was just as much a surprise to them as it was to us. Perhaps we should not have been so surprised. For most of their lives, college students have been in schools which rely on external incentives -grades, praise, even punishment-to provide the motivation for academic achievement. In retrospect, we can think of no reason why students reared in such organizations should have developed the capability to respond to a course in which the rewards for performance had to be almost entirely internal. Just because students say they want intellectual freedom and self-direction—and just because we say we want to give it to them—is no reason to presume either that they know how to use it once they get it, or that we know how to teach its use.

We learned that we did not and do not have a sound educational strategy for helping students develop the capability for self-directed learning. What we did, in effect, was encourage the students to jump into the water, and then provide encouragement by calling out "Swim! Swim!" from the shore. The effect was a period of considerable turmoil, out of which significant learning emerged for some students. One of us feels that such turmoil—accompanied by constant self-examination and evaluation—is the only presently viable way for an individual to develop meaningful self-direction in education. He believes that the wisdom which would be necessary to help students

move gradually from external direction to internal direction currently is not available. The other writer is more optimistic. He feels that it may be possible now to develop and apply procedures for weaning a student away from dependence on external incentives and standards in learning situations—perhaps by providing students with a series of educational tasks which demand (and reward) increasing levels of personal responsibility and control.

Despite our procedural fumbling—or perhaps in part because of it—some students clearly were significantly affected by the course. As a result of the course, some began to take on full responsibility for their own lives, and came to repudiate things "out there" and beyond control as the causes of joy and suffering and learning. This move, spoken about by philosophers, theologians, and Jungian psychologists, appeared to occur to some extent for some of our students. With an increasing awareness of the effects which the larger system was having on them came a denial of the legitimacy of such control, suggested by phrases such as "Nevertheless, I must account for it myself," or "The responsibility for my failure lay solely with me." The impact which such a change can have on one's life was revealed by one student who came to one of us almost in tears near the end of the semester. "For three years," he said, "I've been blaming Yale for my lack of involvement and commitment and my poor performance. Now I realize that that has been a cop-out, that it was me who accepted the way I was being controlled by the system and the other students, and that I really didn't have the courage to risk fighting it." It is hard for us to imagine how even the most skeptical of our colleagues and students could deny that this represents learning of the first magnitude.

We found that our greatest impact on the students came not so much from what we said or from what we asked them to do as from the way we ourselves behaved. We had expected that by eliminating our control of grades we would reduce the influence we would have on student behavior. If anything, the reverse was true. With grade-enforced rules no longer relevant, the students apparently began to look to us as models of appropriate academic behavior. When we used classroom time for lecturing, they did the same; when we became innovative in our presentations, so did they; when we began to look at the process of the course as a source of data for learning about administration, they began to look at process in their work groups to try to make them more effective. Although we observed the modeling

effect with considerable interest throughout the course, we did not use it as a resource for learning nearly as much as we might have. Numerous educational strategists have suggested the potency of modeling in learning situations. If students see new behaviors and new approaches to education working for others, they can try them on themselves relatively easily; if new or desired behaviors are both unknown to them and hidden from them (as when we were merely telling the students to make their presentations innovative), one can hardly expect much really new ground to be broken. What was most shocking to us was how blind we were to the impact which our behavior was having on the students as the course progressed.

Finally, we came to agree with the students that our course was significantly counter to the Yale educational system, and that for this reason it suffered to some degree. Throughout the course, we tried to emphasize simultaneous analysis and awareness at two levels: both behavior and values, both information and evaluation, both content and process. In this sense, the course may have been a more encompassing, self-conscious social system than the university as a whole: the course encouraged high involvement and high awareness simultaneously, while the students' (and our) view of the university is that it operates so as to encourage neither.

From such a perspective, it is tempting to conclude that all the failures of the course can be subsumed under its successes, because we were developing a system which had the self-consciousness and responsibility to identify its failures and work through them; students could and did leave the system—both behaviorally and psychologically—if they found it not to their liking, and could do so without fear of punishment; and many of the failures of the course appeared to be direct consequences of the unintended and implicit, but nonetheless potent, hostility of the larger system to active educational experimentation. The implication of this view is that the remedy for the failures of the course lies not in any fundamental changes in the course but rather in doing more of the same. This conclusion was drawn by one of the students:

... a thought I just had which may give you a little moral support, or whatever, is that the one thing that is hurting you more than anything else is that you are carrying on an experimental class while the rest of Yale is not, thus the temptation to let 33a hold the proverbial bag. I wish only that all

my courses were held in this way and sincerely believe that to the extent that it is failing—to that extent (or more) should you try even harder next time.

The conclusion is not so inescapable for the instructors. It seems clear that the course missed about one-third of its students almost completely. Can we be so crass that we virtually ignore those individuals who cannot or do not respond to what we offer? Do we not have an obligation to help those students who are not ready to accept opportunities for self-directed and self-rewarded learning as well as those who are? Should we tell them more forcefully and less trustfully at the outset that the course we teach is less likely to meet their present needs than most of the other courses available? Or perhaps it is impossible to reach such students as long as we remain in a system which offers potent rewards for conformity to external learning requirements. Rather than offer more experimental courses, perhaps we should be devoting our energies toward making direct changes in the larger system so that it encourages more experimentation.

Whatever our next step may be in the practice of teaching, we are also led to speculate on the possible theoretical connections among some of these learnings. These speculations are touched off by three memories. One memory is of the instructors' shock when we recognized the incongruencies between our values and our behaviors, first in the transition between planning and implementing the course, and later when we had fallen into the lecture pattern while exhorting our students to try something new. These creative shocks had tremendous impact on the development of the course, and led us to adopt a much freer form of thinking together, almost free-associating in an effort to gain new perspectives on the tasks we were planning.

The other two memories are of student comments about failure. One related to the course: "It seems to have been the discussions of the difficulties and failures of the course which have been most successful in breaking through to some awareness of what was happening beneath, above, or beyond the content, the specific tasks, the specific goals." One related to the student himself: "In a way I am bitterly disappointed because what happened has been so much less than what I told myself I was going to do, that I feel I have not lived up to my promises."

While the shock of incongruency and failure may not be the best way to learn how to do things, it may be an inevitable part of

learning who we are. One cannot say one has learned how to make a shoe until one has made it right-been successful. We overlook the fact that an important aspect of getting it right is learning to identify errors. Identifying errors is relatively easy in trying on a shoe. (Most of us can easily recognize when the shoe does not fit.) But what is an error in making ourselves? Is it an error even to say that we make ourselves? Is it perhaps more appropriate to say we discover ourselves? We are not sure. An easy way of avoiding this problem is to assume we know who we are, take on some role in front of others, and try to conceal our uncertainties. Being by and large unimaginative, we tend to dream up rather limited roles for ourselves; so limited, in fact, that we often find ourselves unable to relate to a given person or situation quite as we wanted. We can easily avoid seeing this shortcoming, too, by blaming external necessities for our problems. Gradually these roles and external necessities, rather than our search for some more genuine sense of identity and authenticity, come to direct our behavior. Different people may find this life either predominantly painful or predominantly pleasurable, but at least the pain can be blamed on someone else. As long as one lives in systems with lots of external controls, this explanation can be very plausible.

The effect which this process has on cutting us off from our inner lives and from one another's inner experience is shielded from our view by our way of cutting ourselves off: We simply lose awareness of our deeper thoughts, feelings, and sensations except on rare occasions, and then they can be dismissed as not making sense when compared with our daily way of life.

Our course shifted almost all the tangible responsibility for what happened to the shoulders of each student. As the quotations suggest, many students found it difficult to blame the environment for what happened to them because their own responsibility was so clear. Nor could the course easily be called a gut, since its requirements were not merely low but virtually and explicitly nonexistent except as the student saw fit to challenge himself. As the students began to assume responsibility for their own behavior, they began to see that they were not the independent, self-controlled, self-directed people they had pretended to themselves to be. In fact, they felt many external pressures, were unsure what they wanted to do, and found themselves not living up to their promises, just as we, the instructors, found it difficult to do what we said we wanted to do.

In this context, it is not difficult to understand why our course

was less productively self-directive than deeply self-exploratory. None of us was in touch with a self that we would trust, or that had the ability, to direct us. Nor did we know how to learn, discover, become, or make such a self. Most courses provide axioms, methods, and careful definitions of the problems, asking us to learn by closing in on some solution. Suddenly we found ourselves in a situation in which such convergent, purely cognitive learning was manifestly inadequate. Instead, our learning required our opening to an enlarged awareness of our own and of one another's experiencing and only then beginning to discriminate the conditions of, and standards for, such enlarged awareness.

An openness to failure and the causes of failure seemed an important way in our course of enlarging our awareness. The exact dynamics of this openness to failure are not obvious, but the course illustrated several aspects of it. One aspect which seemed to minimize defensiveness at failure was that persons and groups initiated their own evaluations. This was not the case at the end of the semester when the instructors insisted that groups devise some form of evaluation, and it was necessary to overcome considerable defensiveness before our efforts produced greater awareness. A second aspect of openness to failure seemed to be a willingness to appropriate responsibility for one's part in causing the failure. Only in such cases did failure lead to greater awareness of one's relationship with things and people outside oneself. A third aspect of openness to failure seemed to be that failure came to cause suffering rather than pain—that is, failure would be felt personally as a lack of right relationship (to oneself, one's group, one's work, or one's teaching), which called for a new effort of understanding, rather than impersonally as a bothersome, external irritant which should be avoided if at all possible. Openness to failure may seem an unpleasant way to have to learn, and certainly it is not the only aspect of learning. But it may be a necessary aspect of learning and a particularly crucial one to recognize in the case of selfknowledge, since most social modes of presenting ourselves emphasize finished and polished self-possessedness.

Such theoretical and practical problems are, we feel, central both to classroom teaching and to large-scale educational planning. The concrete experience of our course helped us formulate them more clearly for ourselves; if through our writing about the course they have come alive for others, perhaps our conclusions can be, not the end, but the beginning of a new experiment.