A sophomore course in social psychology at the University of Oregon was designed around a project using the campus community as a laboratory. Class members formed groups to study the conditions and processes of social interaction affecting teaching and learning on the campus. The design of the course rested on the principles that students are always learning and that humans are always seeking freedom. Examples of the teacher's introduction of the course and projects undertaken by students are given. In class, focus was placed upon communication and coordination within the project groups and upon research methodology as necessary. Transition between the experimental class and the more traditional class was eased by giving explicit instructions about the final report and by using former students as consultants. A continuing evaluation of the course, both objectively and by student ratings, indicates the goals of enabling students to observe, to find new communication skills, and to transfer learning outside the classroom are met in such a laboratory approach. (KP)
Human beings learn during every waking moment. Learning is a process of changing one's mode of adaptation as the patterns in the environment change. Students of behavior are widely agreed that humans, above all other creatures, can form their own techniques of interacting with their environments. That is, they depend less than do other creatures on heredity to provide them with the best pattern. The first principle I used in designing the course in social psychology which I shall soon describe to you is that students do not have to be made to learn; they learn all the time.

Oddly enough, this principle -- that humans are always learning -- is a principle rarely emphasized in formal discussions of pedagogy, or in informal discussions, for that matter. If we believed that humans are always learning when they are awake, we would not say, "He just won't learn," or "He is stupid." We should be instructed by a fact we all know; namely, that an astonishing number of students learn so well how to perform the rituals of getting through courses that they graduate from college knowing almost no more subject matter than when they entered.

There is one other chief principle upon which my design for a course in social psychology rests. It is that humans are always seeking freedom; at least they do so when they do not need to be seeking food.
and shelter. You will recognize in this statement the Maslow hierarchy.

At any rate, I took it as given that large fractions of a university's student body in the United States, and all students at some time or other, will learn ways of dealing with teachers that will increase their freedoms rather than increase their restrictions.

In a way that seems very direct to me, this principle on freedom is a direct corollary of the principle on learning. When an organism learns, it is finding a new pattern of interaction between itself and its environment. The important feature in this description is that the new interaction must occur between this particular organism and this particular environment. It cannot occur between some teacher of that organism and the teacher's environment. Learning can result only from the unique interaction at a unique moment between a unique pairing of organism and environment. If it were not so, then the supposedly learning organism would be obeying a pattern given to it from without; it would not be testing the efficacy of the new pattern against its own environment — except in the sense that it would be accepting the teacher and the teaching situation as the total relevant environment. The organism would be adopting a given pattern just as if it had been given the pattern by its own heredity.

Thinking in this way, it seems to me to follow logically that a human is free when he is forming his own new ways of relating to his environment by exploring that environment from his own starting-point. He is not free when he must accept a mode of behaving from some person of power without acting on his own judgment of how well that mode of behaving fits with his world as he knows it. Conversely, if a human is always seeking to learn, then he is always seeking freedom, willy-nilly.

The principle of freedom, too, is hard to find, either in formal discussions of pedagogy or in the teachers' coffee room. An evidence of the rarity with which these two principles are voiced or purposely applied came to me immediately when I sought to apply them. These were the two topics that the students immediately wanted to know about at the beginning of the course. During the first weeks, their recurring questions
were to the effect of, "To what extent is what I want to learn acceptable to you?" and, "What are the limits of what we are permitted?" However, once the student's understood the new arena of action -- and by this I mean once they had some practice in acting in this arena -- they found these principles not too difficult to apply to their own behavior and they found the experience refreshing, almost to a man. In fact, one student-reviewer chose the word refreshing as part of the title of his review.

At our university, as at many others these days, the students have organized a corporation that functions to collect written evaluations from students coming to the end of their courses. A summary of the ratings from each course is published in a booklet which is sold to students as a guide to course offerings the next year. The discursive part of the report of the ratings from my course is past year reads as follows.

RUNKEL'S REFRESHING WRINKLE

(In this course,) no reading material is assigned. No exams are given. An independent research project is required.

Perhaps mystified, often excited, always stimulated, the class in general finds Dr. Runkel refreshing. Small group interpersonal-relations meetings have drawn raves, while the loosely-structured, informal lectures are highly praised for the emphasis on freedom of thought and liberal self-expression. The small-group discussions, while described as "pure Hell" and "very frustrating," are fervently cited, in the same breath, as "invaluable" and "extremely worthwhile" in learning to communicate and adjust in social situations. The main criticism
seems to be that there is insufficient time to follow discussions farther.

Many commend Runkel on his openness to suggestion and his willingness to answer questions or clarify particularly sticky points. There is great admiration and respect for Dr. Run elk personally and many think that "his style of teaching should be studied as a good example by other instructors."

One student, reflecting the general attitude of overwhelming approval of anything Dr. Runkel says or does, adds somewhat hesitantly, "Phil Runkel ought to stop pacing — although it's probably useful."

Forty-three out of forty-four pollers recommend this course!! (to other students).

I must point out that I have never been a captivating lecturer. In previous years many raters have described me as rather disorganized and not very closely in touch with what students need. The report I have just read to you tends to talk about Runkel, but I think it is really reporting on reactions to a learning situation. I think the excitement students found in the learning situation rubbed off on me, in their minds. This gives me great pleasure, but it is not really relevant to our business here today. I think any dolt with a stubborn devotion to teaching can establish a learning situation like the one I established.

Up to now, I have been pretty abstract and vague. Let me ask you to imagine that you have signed up for the sophomore-level course
in social psychology and you walk into a room where there are 70, or 100, or even 200 other students also moderately curious about what is going to happen here. I shall try to give you a quick sketch of what does happen to you during the term.

The confrontation

At the first meeting of the course, the teacher explains that social psychology has to do with the interaction between people -- the ways that people go about working with one another, dealing with one another, loving one another, ignoring one another. The teacher says that one of the important communities of people within which we students find ourselves is the campus community, that we find ourselves in interaction with teachers and with our fellow students and with other people belonging to this campus. He says if we want to see the processes of social interaction in their natural state, we have only to look around us. Consequently, the teacher says, he is going to ask us to use the university campus and the people on it as a laboratory. He is going to ask us to observe some social processes that are taking place within this naturally-provided laboratory and he is going to ask us to make these observations systematically and to write a report on what we have seen. In particular, he says he wants us to look at conditions and processes of social interaction that have effects on the teaching and learning that take place on this campus.
The teacher says that the job of making observations and reporting on them takes a good deal of time and that it is really a larger task than any one person can do effectively. Consequently, he is asking us to work in groups where we can divide up the parts of the job and thus do a better job in the length of time we have. He is going to leave to us the task of forming groups in which we care to work and also the task of finding the particular projects we want to carry out within the general limits of studying social interactions on this campus that have effects on teaching and learning. He tells us that the whole job for the term is to decide upon a project, to carry out the collection of data, to interpret the data, and to write the report. There will be no examinations, no assigned readings, no formal lectures; the whole job will be the project.

The teacher says that there will be certain aids and helps available to us. For one thing, he says we will find that we have resources within ourselves that will enable us to help one another in projects. He says we will find out in our work groups that some students already have some skills or some knowledge that will help get the project completed. He says that to work in groups effectively requires certain interpersonal skills and he will give us some practice in some of these skills as the days go by. He says that he will give us a bibliography where we can get some information about some of the technicalities and methodology of collecting data. He is also including in the bibliography some readings that have to do with working in groups, with roles, and with similar matters that have to do with human coordination. He says he will be available at any time personally or via telephone. Finally, he says that this mode of carrying on a class is different from what we are accustomed to and therefore he has arranged to put us into contact with some people who have already been through this kind of course. In connection with this last point, he goes on to say that some of the students who were in this course last year have volunteered to help this year. He asks these people to stand up, and we see a dozen people scattered throughout the room rise. The teacher tells us that these are students from last year's class who will be acting as consultants during this year's course. They will attend the sections within which work groups will be formed. The consultants will be available in those sections to be made use of in any way we can.
think to make use of them. These students from last year are not going to be used as assistant teachers in any traditional way. That is, they are going to be available in any way a student from last year's course might be useful. He says they have learned something about working in groups and maybe that skill will help us when we meet that kind of problem.

The teacher next says that it may be difficult to see some of the processes on a university campus that affect teaching and learning, because we have been a part of these processes for so long that they seem very natural to us. Consequently, he will tell us about some of the conditions he sees. No doubt, he says, we will be able to think of more.

He begins by saying that the university collects students into classes in a way that tells the students they are worth very little of the professor's time. The figures from the University of Oregon for 1966-67 in the Department of Psychology show that each student in the average 3-hour lower-division psychology course gets approximately $16.90 spent on him in the form of the professor's salary during the term. If we think of the class as meeting three times a week or about 30 times during the term, that comes to about 56 cents per student per lesson in salary money. How much of a professor's time will 56 cents buy?

Next, the teacher claims that students come to a class with knowledge that goes largely unexploited. Professors rarely urge students to share their knowledge with each other. The professor reserves to himself the job of distributing knowledge. But in every class, between any two
students, there is something one knows that the other doesn't, and vice versa. But the usual arrangements prevent or discourage an interchange from taking place. In many classrooms, in fact, the seats for students are screwed to the floor, all facing toward the one spot in the front (?) of the rooms where the professor is fastened by the nails of custom. This tells the student that the only meaningful communication takes place between himself, individually, and the teacher — never between himself and other students, and never between the teacher and the students as a coordinated group.

The student is given this same message by the fact that the university arranges for the members of every class to be dispersed at the end of the hour. After a group meets in a classroom, that group scatters and the students must re-assort themselves for the next class, for lunch, for coffee, for quartering, for everything. This very effectively discourages the students from discussing with one another any thoughts that were stirred up by the class. Since it is possible to arrange matters otherwise, this arrangement (or disarrangement) makes it clear to students that we prefer them to turn their minds to academic matters only when in the presence of a professor.

Talking about himself and other professors, the teacher continues: We thrust upon the students precepts that we do not believe ourselves. We tell students, he says, that they are being forced to take prescribed courses because they need to have a well-rounded education. We tell
them that they will some day value the broad education we have laid out for them. Papa knows best. But it is obvious to undergraduates that we ourselves value our specialty almost to the complete exclusion of well-roundedness. We teach only within our specialties. If we have to say something not in a specialty, we disclaim any soundness of knowledge. We sneer at teachers who mix one subject with another. It is very difficult, for example, to recruit teachers for a division of general studies or even for an honors college.

We tell the students that the reason we put so many restrictions on undergraduates is that they are not yet mature; when they get to graduate school they can be allowed more freedom, because they will then be imbued with so much more wisdom about controlling their own behavior.

If this is true, then one would think that graduate students would need less time from teachers than undergraduates — that the learning of undergraduates would require much more guidance and supervision from faculty than the learning of graduates. But here are the actual figures on professorial time allotted to various levels of students as measured by the money paid to professors in our Department of Psychology for the time they spent teaching courses at these various levels during 1966-67:

<table>
<thead>
<tr>
<th>Level</th>
<th>Lower Division</th>
<th>Upper Division</th>
<th>Graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>16.90</td>
<td>30.60</td>
<td>133.50</td>
</tr>
<tr>
<td>per student</td>
<td>.56</td>
<td>1.02</td>
<td>4.45</td>
</tr>
<tr>
<td>per 3-hour</td>
<td>1.33</td>
<td>2.06</td>
<td>6.65</td>
</tr>
<tr>
<td>course</td>
<td>per lesson if 30 lessons</td>
<td>per lesson if 10 lessons</td>
<td></td>
</tr>
</tbody>
</table>
Summing up, the teacher says:

We tell you that you are unimportant. What you deserve from a professor is a hundredth or one two-hundredth of three hours a week of his time. \(\sqrt{\text{So unimportant is the matter of how much attention you get that we do not even bother to assess whether our attentions to you are producing any results.}}\)

You are uninformed or unintelligent. We do not ask you to contribute your knowledge of the world or of your own needs to the pool of resources at the university. \(\sqrt{\text{We do not arrange communication channels so that you can do so. Your opinions are more a nuisance than a help. When we perceive a problem in managing the affairs of the university, we do not invite you to the early deliberations. When you perceive a problem, we do not ask you to work on it. After the faculty comes to a decision, you are allowed to comment in the student newspaper or through some committee.}}\)

You are untrustworthy. Only the faculty can be trusted to decide whether you do or do not know something, when you are ready for a new idea, when you should come to class, how long it should take you to learn something, whether your achievements are admirable, etc.

You are not individuals; you are a mass of something to be processed. It is not worth while to arrange campus life to make use of the moments when each individual is ready for his own next step.

\(\sqrt{\text{Though human communication is a two-way thing between unique individuals, this does not apply to students. We treat students as if they were all uniformly ignorant. Though every professor hates to be treated as a stereotype, he does not act as if students have similar feelings.}}\)

After one or two more similar remarks, the first day's meeting comes to an end.
Getting attention

I have given a very brief sketch of what I say to the students on the first day and some of the freedoms and restrictions I describe to them. There are two important demands that fill the air on the first day of any course, and these demands have a special poignancy for a teacher who seeks to offer a freer academic life to students.

One demand upon the experimental teacher is that he move the attention of the students beyond the teacher and the rewards and punishments the teacher has at his command. To do this, it is not sufficient to tell the students that they should look beyond the teacher and seek rewards of their own shaping in the tasks to be done. From long practice, all students do with such admonitions is copy them in their notebooks. The best technique I have found is to say something on the first day that shows that one's own attention has gone beyond the matter of rewards and punishments. To show this, I have chosen to describe to the students the relations between faculty and students that make me ashamed.

The second demand from the students is, "How does this course touch my life?" The teacher must offer a bridge to a world that is relevant for students. If the teacher wishes students to look to him for help, it seems obvious to me that he should offer to help them work at a task that is important to them.

There is no doubt that the questions of what might be learned at a university, and of how it might be learned, are burning questions for an important fraction of students. There is no doubt, either, that
relations between students and faculty comprise a locus of great frustration and great yearning for a great many students. Both these pressing problems are interlaced with conflicts, both between persons and inside persons; as a consequence, reactions to these features of campus life can be strongly motivating.

In brief, presenting these problems of campus life to the students as materials in a social laboratory makes a rich stock of experimental material available. Furthermore, motivation to learn more about these materials is built in, since the student is himself, to some degree, a part of those materials.

There are further useful results of telling the students about the hindrances to learning thrown in their path by the university. There is, for example, the motivating effect of the increased feeling of power on the part of the students. Most of them come to class unaware of most of the ways their minds and social relations are curbed, caged, and coerced by the rules and customs of the university. They are surprised when these conditions are displayed to them, and the more surprised because in telling them about these conditions I am putting power into their hands. I am reducing my own power and increasing theirs. I am betraying, as you might say, the secrets of the professors' lodge. But the chief function of this manner of opening the course is simply to get their attention.

I have been mentioning projects produced by the students. Perhaps it will help you to imagine what these are like if I read to you some titles of this past year's projects. Here are six of the thirteen done this past winter:
Do freshman women on first academic probation alter their study habits and recreational activities?

Experimental evaluation of the advisory system at the University of Oregon.

Effects of seating configurations in classrooms.

Effects of small group interactions on learning in classrooms.

The relation between norms in living units and the grade-point-averages earned by residents in those units.

Assessment of the academic learning that takes place in campus gathering places outside classrooms.

The learning activity

I have tried to provide a realm of learning for the student in which the criteria for making progress can be provided from some source other than the teacher. In the case of investigating actual conditions on an actual campus, a very important criterion for progress is provided by the exterior facts themselves. People do not need to be told by the teacher whether their work group has agreed upon a plan, whether the several members of the group are doing what they agreed to do, or whether the data the group had planned to collect has indeed been collected. In fact, many of the kinds of information necessary for a work group to obtain are impossible for the teacher to provide. The members of the work group must obtain this information from their own activity or from each other.

Finally, it comes as a considerable revelation to many that even though the teacher may be an expert on the abstract principles of social psychology, he is not an expert on the processes actually
taking place within the actual group within which the actual student is trying to work here-and-now. The members of that group themselves must become to a considerable degree experts about each other and their inter-relations if they are to do a competent job of their project. They are the only ones with whom they can check to ascertain their degree of success in learning about each other. This fact helps a great deal in enabling the students to learn the proper realm of the teacher's expertness.

Indeed, my goal for the students is not that they should acquire the knowledge that is now mine, not that they should read what I have read, not that they should be able to say what I can say. Consequently, I have administered no examinations and I have assigned or required no readings. The only formal requirement has been the report on the project. My goal for the students is that they should see new happenings in the world about them, bring new skills to bear on their interaction with that world, and add new criteria to their judgments of their place in that world. Even the report on the project, then, must be adapted more to the demands of that outer world than to my convenience. I have made it clear, consequently, that the report is due when the requirements of the project permit it to be completed. Many reports have come in after the official close of the term.

The important features of this design for learning are as follows. (1) Compared to traditional methods, this design greatly increases the amount of feedback concerning his progress and the quality of his
work the student can get immediately from portions of the environment important to him. (2) This design makes use of the principle of cognitive complexity or readiness, enabling the student to begin by engaging himself with those social processes most visible to him. (3) This design maximizes the initiative of the student in using the teacher as a resource and minimizes the initiative of the teacher in impressing his own ways of doing things on the students. (4) This design makes use of the principle of cognitive balance or consonance, giving the student and the teacher, too! strongly ego-involving experiences for which he must seek satisfying explanations, driven not by the external threat of the grade, but by his own nature.

**Area of freedom**

Every social interaction, of course, limits freedom to the extent that the participants focus their attention on each other and seek to coordinate their actions. Drawing upon the fact that the students have enrolled in the university and in this course, and have thereby made an implicit promise to accept at least a certain amount of restriction from me, I did draw a boundary around a certain area of free movement. One firm part of the boundary was that I insisted that the projects of the students be directed to the facts in the environment, not to statements in books or lectures. More precisely, I insisted that the projects deal with the here-and-now, not with things at some other time.
or some other place. And, of course, books can only deal with some other time and some other place.

Second, I have required that the narrative of the projects and their outcomes be reported to me in written form. Ideally, I would prefer that the reports be circulated to everyone in the class. So far, I have not been able to discover how to do this with the money and machinery at my disposal. However, the students have been made aware to some extent of what was going on in other work groups during the term through the oral reports of progress occasionally made in class.

Finally, the project had to be limited to the financial resources available. Some of these resources have been provided by the students themselves. In a couple of cases I have obtained a hundred dollars or so from granting agencies within the university. The financial limitations in one or two instances have hurt the possibilities for very worthwhile projects. I hope that some day our campuses will be persuaded that the social sciences need money for laboratory expenses as badly as do the physical sciences.

Some tools for research

I have now described the chief principles that I believe I have used in organizing these courses in social psychology and the chief ways the courses were organized to carry out these principles. There remain some ideas I think very helpful in putting these forms into effect. Some of these ideas I think of as providing the students with tools for their research on the campus; other ideas I think of as ways of enabling the students to make the transition from traditional classwork to the sort of situation I have put them into. I shall turn first to some tools for research that I offer to the students.
Manpower. Getting facts by observation in any quantity requires more manpower than one student can spare during a typical term. Consequently, I have insisted that students form themselves into work teams. This has typically proceeded as follows. Students come to the course already enrolled in one of a number of sections, about 15 to 20 students per section. These sections meet separately twice a week as well as meeting with the total class (and with me) twice a week. At the beginning of the term, the first task within a section of 15 or 20 students is to generate ideas for possible projects and then to separate into smaller work groups, each work group undertaking a project. I find that groups running from four people to about six or seven can learn to work together and produce a worth-while project in the space of an academic quarter or a little more.

Coordination. If a work group is to produce an adequate project, the members must learn to work effectively together. This fact provides most of the motivation and most of the material (that is, empirical facts) through which the students learn the subject matter of social psychology during the term. This fact motivates the students both to observe the social processes in which they are participating and to turn to readings or to class discussions to find better ways of explaining to themselves what they see happening.

This natural process of experiencing something and then explaining it to oneself suggests another pedagogical principle. Don't try to teach a student some ideas about something and then expect him to act on those ideas. Instead, let him act on something important to him and then expect him to think about those actions.

Furthermore, since interpersonal skills are not hereditary, I have taken time to conduct special exercises at the meetings of the total class to teach the students some communicative skills that will
enable them to work with each other efficiently. These skills include
listening (that is, paraphrasing), describing behavior objectively,
checking perceptions of the intended communications of others, and
helping pairs of others to communicate with each other.

**Technical and methodological information.** The students quickly
find that making observations and recording data are not the simple
processes they imagine at the outset. They quickly ask for information
about how to write questionnaires and interviews, how to design samples,
how to think about the ways that data are connected to conclusions, and
the like. At this point, they typically ask for advice and typically
assign one or more of their members within a work group to study up on
these matters.

I have taken great pains to make myself
easily reachable. I do this by telling the students the location of my
office and giving them my office and home telephone numbers on the first
day of the course; by staying a few minutes after class on any pretext;
and by inviting students, when they raise complicated questions in class,
to continue the conversation with me at such-and-such a time outside of
class. I think that making a specific appointment with a student in
the hearing of the class helps a great deal to convince the students
that you really mean it.

**Making the transition**

The transition from the standard teacher-dominated lecture to
a learning situation characterized by a high degree of freedom of choice
is an experience new and frightening to a great many students; the ambiguity
is found to be great. Ambiguity as to sources of reward and punishment is,
of course, a situation that increases anxiety; and anxiety, in turn reduces
the range and scope of attention. Furthermore, anxiety tends to focus the
narrowed range of attention upon those elements of the environment that the individual perceives as most relevant to the immediate task. In the case of the college classroom, almost every student perceives the teacher as most relevant to the delivery of rewards and punishments. Consequently, the kind of teaching I prefer requires a very low level of anxiety rather than a high level. To reduce anxiety, one must reduce ambiguity and threat, enabling students to feel confident that they can locate reliably the sources and conditions of reward and punishment. I shall mention below some steps toward this end.

The matter of making the transition from the old to the new and enabling students to do this with as little fear as possible is a matter on which many teachers stumble when they try out new ways of teaching. It is almost inevitable that anyone violating the traditional methods will find, during his first trial, that he has stirred up some serious fears within at least some of his students. Consequently, no experiment should be judged as a success or failure in the first year. The experimenting teacher should give himself at least two consecutive years before he reaches a confident conclusion about the outcomes of his particular kind of experiment.

Grading. I have written instructions as explicit as I can make them for the manner of writing the project report. The instructions limit themselves to the form and organization of the report. In general, the outline is very much like the outline used in scientific reports to professional journals, although certain points are elaborated and other points touched on only lightly. Finally, the outline calls for a narrative of the life of the work group producing the report. Here I have required that any principle of interpersonal interaction mentioned be accompanied by a citation to some reading. I do not require that even one principle be mentioned. I only require that if a principle is mentioned, it be accompanied by a citation.
Throughout the design for the course, I have tried to design the conditions so that it would be next to impossible for a student to follow directions without learning something useful about human interaction. The requirement of a citation to literature if a psychological principle is enunciated is an example of this technique. Among the thirteen projects produced by last year's class, there was only one that did not cite literature. And every one that cited literature did it appropriately. Not a single report showed the characteristics of being "padded." In fact, every report was spare in its references. The important point is that every report turned to a psychological principle when discussing difficulties the group encountered within its own functioning, and they connected these principles to relevant passages in some book. Furthermore, no two reports cited the passages. In other words, every group but the one (which, by the way, encountered no serious difficulties) had apparently turned to books to help them understand some experiences they had undergone, and had, in my judgment, reached a very useful level of understanding as a result.

I announce at the beginning of the course that every project-report that follows directions will receive at least a C grade, and this regardless of the quality of the report. Of course, I try to write directions for the report and design an arena for learning such that if the directions are followed, no one can avoid learning something worthwhile. The fact of the matter is that last year I found I could in good conscience award every last project an A grade.

Consultation and help. As I have said before, I try to make myself available to the students. A good number of students talk to me about their emotional problems in adapting to the new style. However, students much more often make use of the consultants for this purpose. I shall describe the consultants in the next section.

Use the important reference groups. Probably the most effective way of reducing the anxiety students have in meeting an experimental class is to give them evidence, difficult to reject, that other students have surmounted this challenge in the past. But of course, it is not enough for the teacher to claim that this evidence exists; students are accustomed
to being suspicious of claims that teachers make about their courses. The evidence must come from some other source than the teacher.

As a matter of fact, it is easy to provide this kind of evidence from a source other than the teacher. Before opening the course this past year, I invited certain members of the previous year's class to act as consultants to this year's class and to study with me the development of the work groups in the class as they went about carrying out their projects. For helping with the class in this way, the previous year's students received academic credit in reading and conference or in research. One result of the work of the consultants is a scientific paper on group development that will be submitted for publication.

Twenty-two students, about half of those I invited, volunteered to act as consultants for the course conducted during the winter term last year. Of these, sixteen were still available when the opening of the course rolled round. On the first day of the course, I announced the availability of these students and asked them to stand so that everyone could witness their presence. At any meeting of a section of 15 to 20 students, two of these consultants were available, and they continued to be available throughout the term. These consultants were the living and breathing evidence, within arm's reach, that students could live out a term with Runkel and not suffer any serious wounds. In fact, these consultants were among the most enthusiastic members of the previous year's class; they did a great deal to get the new class off on what I naturally consider to be the right foot.
Obviously, to students looking for a reliable judgment about a course, the important reference group is not teachers and particularly not the teacher of that class himself; the important reference group is one's fellow students who have taken the course from that teacher in the recent past. Obviously, the most powerful way to induct students into a new course is to let other students do it; and this is what I did.

It is important to note that I did not use my students from the previous year as assistant teachers. I explicitly announced to the new class that neither I nor the consultants were claiming the consultants to be experts in social psychology; the consultants would not undertake to be substitutes for me in any sense. They had their own special role and one that I could not possibly perform. They were there precisely because they had been through this course as students themselves and could therefore give reliable information about some of the things that could happen from the student's viewpoint and about some of the things that students could do about the things that could happen. I presented the consultants as persons who already knew there was not one best way to get through this course; rather, each work group had to find its own best way. Perhaps these consultants could help the work groups find their own way through the course.

My goals

Goals are visions held by human beings, not by courses or institutions. Each student has his own goals and each teacher does also. I had these goals:

Observing. To enable students to learn how to observe human behavior: (a) through data-gathering in projects and (b) through the more-or-less formal exercises in communication.

Valuing the new methods. To enable students to perceive differently the social processes within which they live and to find profit in using the new ways of seeing. More fully, the goal was to help the students to find profit in the new ways of perceiving and in the new communicative skills.
Transferring learning outside the classroom. To enable students to believe that the subject-matter of the course has relevance outside the classroom. This has been my chief goal for many years.

Evidence

My evidence concerning outcomes is not well organized. I am still in the process of collecting data — in fact, I am still in the process of obtaining money to enable me to collect data! In the meantime, certain events have occurred that seem to me evidence that I have moved a great distance toward my goals. I have already mentioned the students who volunteer to act as consultants the following year. Since there is evidence that the students in the course do not judge it to be easier than average, I conclude that the volunteers expect to profit beyond mere academic credit from another term of working with the project groups, helping them develop their group skills and their projects.

Another source of evidence lies quite outside the class itself. At our university as at many others nowadays, many students are actively proposing new modes of collaboration between students and faculty, new ways of managing campus affairs, and new contents for courses. In respect to these innovations originated by students, I find myself being sought out as a consultant. Since most of the students who come to me to discuss ways of working through problems in these undertakings are not people who have been students in my social psychology class, I can only conclude that my students have been telling others that the work of the class had direct relevance to their lives outside the classroom.
There is also rich evidence in the ways the project groups go about their tasks. However, this evidence is largely anecdotal and there is not time even to begin the narrative here.

The three sorts of evidence I have mentioned so far -- the volunteering to help with next year's course, the requests from non-class-members for help with their undertakings, and the manner in which the task groups do their work -- these three sorts of evidence are informal in the sense that it is not easy to count instances. Beyond these three sorts of evidence, however, there are available some more systematic bodies of data. I shall describe them now, in the belief that most teachers will find them relevant to the general question of the usefulness of this kind of teaching.

**Grades in later courses.** Every teacher of an experimental course feels open to the charge that his students will fall behind in the academic competition for grades. Checking the registrar's records for the term following the close of my course, I found that grades in later courses, including psychology courses, were as good on the part of my students as on the part of students who had enrolled with other teachers under the same course number.

**Test on a group task.** In a dissertation just completed, Daniel Langmeyer assessed the performance of a number of three-person groups on a task making use of a rectangular peg-board about two-and-a-half feet square. The task for the groups was to discover which holes in the peg-board would allow pegs to be inserted and which would not, and
thereby to infer the pattern built into the peg-board. The nature of this task was such that it could be completed by one dominant person who rejected the help of the other two, or it could be completed through making use of the coordinated abilities of all three persons. Langmeyer used three different kinds of groups. In one series of groups, all three members of each group were college students reporting no previous training in group process. All three were strangers and none was given any legitimate status as a leader. I shall call these groups the "leaderless groups." A second series of groups was drawn from my class in social psychology. In each group, one was one of the consultants who had been helping the students in one section of my course. The other two were students from the section being helped by that consultant. In other words, all three persons were known to each other and one person had established a special status of leadership in respect to the other two. A third series of groups was drawn from the faculties of a number of public schools in a suburb of a large West-Coast city. I shall speak of these groups as the "faculty groups."

After each group had completed the peg-board task, Langmeyer asked the members of the groups a number of questions about their experience. These questions revealed some interesting differences among the three types of groups. One question asked each person the extent to which he had felt left out of the problem-solving process. The members of the leaderless groups most often felt left out, and the members of the groups from my class least often felt left out.
Langmeyer also asked participants whether their own questions during the task had brought responses from other participants or had been ignored, cut off, or otherwise not given an adequate response. Members of groups from my class rated one another as being more responsive than did members of the other two types of groups. I cannot claim that I predicted these two outcomes in advance, but I feel that I would have predicted them had I taken the occasion to do so.

I was not surprised by the next outcome, either. When members of the groups drawn from my class were asked whether they felt satisfied with the methods by which their group went about the task, those groups reporting less satisfaction with the method of work were also significantly more often those that reported the greater feelings of having been left out of the process; but this association of feelings was not found among the members of the other two types of groups. In other words, in the other two types of groups, members did not seem to feel, in any systematic pattern, that their having been left out of the problem-solving process was a reason for feeling dissatisfied with the method of proceeding. This result seems to argue that the students in my class, compared to students who had not had my course and to some non-student groups composed of teachers and principals, were more ready to relate their feelings of satisfaction to a feature of the group process. And, of course, the awareness of group processes like this, and a serious concern for them, was something I deliberately tried to foster in my course.
Langmeyer found a number of other interesting relations between satisfaction and other variables. One of these was the relation between the score achieved on the peg-board task and the feeling of satisfaction with that score. The correlation between these two variables was near zero among the groups drawn from my class, whereas among the other types of groups the better scores showed significant positive correlations with higher satisfaction. Apparently, a high score accounted for some of the satisfactions found in group's performance among leaderless groups and faculty groups, but the score itself was apparently prized in no systematic way among my students. I find this a bit surprising, but I find some pleasure in it. Perhaps some light is cast on sources of satisfaction for the students in my class by the next two findings.

Langmeyer asked the members of the groups the extent to which decisions were made by one person aggressively or through sharing the responsibility throughout the group. Among the groups drawn from my class, the members expressed more satisfaction with the score they had achieved when they also reported that decisions had been shared and the resources of all members utilized. This relation did not hold among the other two types of groups. Again, satisfaction was associated with perception of a particular group process among the groups from my class but not among the groups of the other two types.

Langmeyer rated the amount of control over the group's activity exerted by each group member. He was then able to assess the degree to which the activity of each group was dominated by some one member. Comparing domination by one member with satisfaction in the group regardless whether satisfaction with score or satisfaction with the method of problem-solving the group used, Langmeyer found, among the faculty groups, that the members significantly expressed dissatisfaction when domination by one person was strong. On the other hand, among the groups drawn from my class, the group members significantly expressed satisfaction when they also reported dominance by one person to be strong. The leaderless groups fell between the other two.
I find this outcome especially gratifying. My interpretation of it is that being dominated by one person had very different meanings in the faculty groups, on the one hand, and in my groups, on the other. In the faculty groups, being dominated was felt as a restriction of freedom -- but was not interpreted this way by the groups from my class. My argument here is as follows. The faculty groups were each composed of two teachers and their principal. When a group was dominated by someone, it was most always the principal. The members of the group, I would theorize, looked upon the status pattern in the group as impressed by the structure of society, as being more or less permanent, and as having strong involvements with ego -- that is, each member would tend to interpret his place in this status-system as having meaning concerning the kind of person he was. According to one of my basic postulates, then, most members of these groups (sometimes even including the principal) would find the domination to be an unpleasant restriction of freedom.

The groups from my class, on the other hand, had found the opportunity to face problems of authority and domination within their groups and had already worked through this problem, reaching a productive mode of dealing with it. Hence, they looked upon domination by one member during this task as a temporary domination established by consensus for the purpose of solving the problem at hand. They did not look upon this domination as representing a permanent status impressed upon them by society.
A final finding in this family of findings was the correlation between the score achieved and the experimenter's rating of the solution having been dominated by one person. In the groups drawn from my class, there was no correlation between these two variables. However, in the other two types of groups, the groups showing poorer scores were also to a significant degree the groups reporting the solution to have been dominated by one person. This result, too, argues that the groups of the other two types had not yet made their peace with authority.

In all, there seemed to be much more attention on the part of the groups drawn from my class to the processes taking place during the performance of the task than in the other two kinds of groups.

Student ratings. Finally, I can report some actual means and distributions of ratings of the course made by my students at the end of last year's course in comparison to the means and ranges of ratings given to courses throughout the university.

One item on which students rated the course was, "How satisfied are you with the probable long-range value of this course for you?"

Over 60 percent of my students gave ratings in answer to this question that were higher than the mean throughout the university on this item. Another way to report this datum is as follows. Students answered this item about being satisfied with the long-range value of the course by choosing one of seven points on a scale of answers with labels ranging from "extremely dissatisfied" to "extremely satisfied." The mean rating of all courses throughout the university that term was two-tenths of one of these intervals below "satisfied:" the mean rating my students gave my course was two-tenths of an interval below "very satisfied."
Another item was, "Encourages independent thinking." On this item, 96% of my students rated the course higher than the university mean. Stated alternatively, the university mean on a five-point scale was four-tenths of an interval above the mid-point, labelled "average." The mean rating by my students was two-tenths of an interval below the top-most point, labelled "outstanding."

Another statistic was composed by combining three items: (1) making personal help available, (2) taking a personal interest in the progress of the class, and (3) showing respect for the questions and opinions of the student. On this scale the results were similar to those for independent thinking. Ninety-seven percent of my students rated the course higher than the mean rating students throughout the university gave their courses. The university mean on this scale was two-tenths of an interval below the label "above average." The mean among my students was two-tenths of a point below the top-most point labelled "outstanding."

A final statistic was one on difficulty. This was compounded of two items. One asked how difficult the assigned readings were to understand or interpret; the possible answers ranged over five points from "very easy" to "very difficult." The other item asked how many hours a week the student spent studying for the course; the possible answers ranged on a five-point scale from zero-to-two hours per week to over eight hours. The university mean on this difficulty scale was four-tenths of an interval from the mid-point of the scale toward the "easy" end of the scale. The mean rating by the students was two-tenths
of an interval more difficult than the university mean. I should remind you that this rating occurred despite the fact that I made no requirements concerning reading, studying, or attendance. Nevertheless, in respect to reading and time spent, the average feeling of difficulty in my class was a little greater than in the university as a whole.

Faculty judgment of projects. Finally, I have an informal report on the quality of the projects. Near the end of the term I made up a newsletter to the students describing all the projects. I sent copies to all the students and, in addition, I sent copies to about ten of my colleagues in the Psychology Department. Although I had not requested replies, three of the ten took occasion to say that the projects seemed unusually worth while. The head of the department read one project report in its entirety and urged me to make more information about the course available to other faculty members.