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STRATEGY TRAINING: A NEW APPROACH TO GUIDANCE

PART I
The Theory and its Application

204-66

David A. Kolb

MASSACHUSETTS
INSTITUTE OF TECHNOLOGY
50 MEMORIAL DRIVE
CAMBRIDGE, MASSACHUSETTS 02139
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INTRODUCTION

The relatively short history of research on behavior change has been a remarkably agitated one. Therapists and other change agents with strong personal convictions about the effectiveness of their techniques have had strong doubts about the researchers' ability to measure changes they bring about. (e.g. Glover 1965, Kubie 1965, Zetzel 1965) Researchers, on the other hand, have been just as vocal in their doubts about the change agents' ability to produce any significant changes at all. (e.g. Eysenck 1965, Meehl 1965) As might be expected this state of affairs has lead to a confrontation between researchers and change agents which has produced much spirited debate, but few useful co-ordinated attacks on the common problem -- how to improve the effectiveness of therapeutic techniques.

Fortunately, however, there are some "linking pins", men like Jerome Frank, Lester Luborsky, and Carl Rogers who are experts as both researchers and change agents. Their conviction that research can eventually lead to increased therapeutic effectiveness has produced some remarkably well-executed research programs (e.g. Frank 1962, Luborsky 1962, Rogers and Dymond 1954)

In this research we tried to follow the example of these "linking pins". Our goal was to create a behavior change program and a theoretical model of behavior change which had change goals objective enough to be assessed and "therapeutic" techniques precise enough to be measured. With this approach we felt that we would not only be able to say whether our program produced significant changes but we might also be able to specify what therapeutic themes were related to these changes.

The change program itself was a one semester ninth grade guidance course designed to teach concepts of game analysis and strategy in the
classroom. There are both fortuitous and deliberate reasons for choosing this program. The content of the course stemmed from a desire to test the game theory model of behavior change formulated by Leary (1962).

The decision to use ninth grade students was in large measure due to my previous experience in running a similar achievement motivation training course for under achieving boys of about this age group. (Kolb 1965) The use of a "normal" sample of the student population stemmed from a desire to see whether the techniques that worked with under-achieving boys could be useful to achieving boys and girls.

The choice of method was complicated. We were sensitive to the great need for school guidance programs and the great shortage of professionally trained guidance counsellors. If our program could be effectively taught by a regular classroom teacher, it would be potentially useful in lightening the work load of guidance personnel since regular teachers could teach guidance to large numbers in a classroom, leaving guidance counselors free to work with more difficult cases. We were encouraged to choose this didactic method by its successful employment in the achievement motivation training programs of McClelland and his co-workers (McClelland 1965).

The report of the guidance course (which we called the Strategy Training Program [STP]) and its effects on the students when they became juniors in high school a year and a half later will proceed as follows: Chapter one focuses on the theoretical content of the STP. Chapter two includes a description of the setting of the course and the content of the course sessions. Chapter three outlines the experimental design used to assess the STP. In the remaining chapter (4-9) the results of the assessment will be reported. A preview of these chapters is included at the end of Chapter three.
CHAPTER I

Strategy Training and the Game Model

Antecedents of the Strategy Training Program

Since its inception early in this century, the guidance movement in America has found increasing acceptance of its conviction that educational institutions must not only teach a student fundamental skills, but must also take some responsibility for helping the student to integrate this knowledge into a meaningful future life and career for himself. Yet, as might be expected, there is great difference of opinion about how this conviction should be carried into action.

The phrase "helping the student to integrate this knowledge into a meaningful future life and career for himself" was my own statement of the goal of guidance. Behind this very general statement there are in the minds of counselors, a wide variety of criteria which would test the success of a guidance program.

Patterson, in a recent American Educational Research Association issue on Guidance (April 1963) suggests some of these criteria for success. These include satisfaction, adjustment, reduction in dropouts, increase in high school graduates going to college, improvements in grades, reduction in underachievement, the selection of a vocational objective, stability of vocational choice, stability in employment, salary level, and salary increase. For each of these criteria one can find opponents as well as advocates. Patterson points out that many of these criteria were selected because they were measurable. He then suggests that "the development of the potentialities of the individual through self actuali-
zation seems to be generally accepted as the objective of guidance and counseling services, though it is often lost in the desire to use a tangible, objective criterion. Inherent in this objective is the development of an adequate self concept. This includes awareness and understanding of one's self and attitudes, the development of attitudes of self-esteem and self-respect, the achievement of independence and self-direction, and the ability to take responsibility for oneself and for one's decisions and actions." (p.218-19)

The divergence of opinion on the goals of guidance has its complement in the differing techniques of guidance. Yet if we start with an historical perspective, I think, we find some important developmental themes. Starting with Parsons (Choosing a Vocation) who is credited with having begun the guidance movement in 1908, the technique of guidance was defined as matching job and client characteristics. From this Parsons argued that reason and happiness as well as social productivity would follow. The Parsonian counselor was a collector and dispenser of information, often a psychometrician, always a direct advisor. He was a teacher about the job or school market, and an expert in his knowledge of the test data pertaining to his client. He was convinced of the accuracy and utility of his information, and dispensed it quitlessly. No doubt most counselors continue to function in much the same way today, and doubtless, too, a large segment of the public demands such a service. The National Committee for Support of the Public Schools described the ideal counselor role thus:

The counselor confers with (the student) regarding possible careers...supplies college catalogues.... he also gives information about major occupational requirements and trends.
Yet, opponents of Parsonian counseling assert:

1. There is no sound theory underlying existing practices...

2. ...there is no justification for the separate practice of vocational guidance

3. ...all of vocational guidance rests on an invalid assumption...there is no such thing as a single, early wise, intellectual vocational choice.

4. ...the most widely used guidance practices defeat rather than implement the aim of helping the student.

5. today's actualities necessitate new views and new approaches.

(Barry and Wolf, 1962 p.184-5)

Such a new approach as Barry and Wolf sought was found in the applied self-concept theories of Carl Rogers and his followers. They maintained that one major cause of psychic malfunctioning is a conviction of inadequacy and worthlessness. Feeling thus, a person will act precisely in accordance with his self-image, i.e. inadequately. It is not for lack of information that vocational decisions are unduly postponed, but rather for lack of self respect and an expectation of failure. Thus, a modern counselor, properly trained in self-concept theory and client-centered practice would attempt merely to "set the stage": to create an atmosphere in which a decision could be made wisely because reinforcement is positive and risk is low. He would neither supply information nor provide training.

Another new approach emerged from the work of B.F. Skinner. His operant conditioning which proved effective in animal laboratories has found its way into counseling.
"Under appropriate environmental conditions, which men can create, almost anyone can be motivated to do anything." (Meyerson and Michael 1962, p.401)

At yet another pole are those, represented most eloquently by Shoben, who see guidance as an inseparable part of the educational experience. The **raison d'etre** of guidance, according to Shoben, is not college placement, testing, or acceptance, but training the young to lead "the examined life", an aim which he and Socrates share for our schools.

"The examined life is one in which values are constantly being made articulate, subjected to criticism, and revised in the light of experience and thought."

(Shoben 1962, p. 436)

Shoben talks of the creation of a total school milieu that will allow for both teachers and counselors to become character models for the student by fostering considerable faculty-student contact on informal levels. A school of this sort would be a veritable academic community: its values and purposes would permeate the atmosphere. The counselor in such a setting would function as a "human feedback mechanism by which the impact of the school is assessed and made available for the consideration of its official personnel (and as) a catalyst for the clarification of the character of the school as a community and as a source of appropriate models for developing youngsters." (p.440)

From a slightly different tack, Wrenn (1962), commissioned by the American Personnel and Guidance Association to look carefully at the potential contributions of guidance to a "changing world", stressed the decision facilitating concerns of the counselor. In contrast to Parsonial tradition, Wrenn makes it clear that he does not view career choice as a single rational event. He views it rather as a "process extending over
the years...." and feels therefore that the student should be "helped to make a series of choices as he becomes increasingly realistic about himself and the occupational world" (p. 109). Yet, how to help seems unclear. Making information available would seem ineffective. Providing an accepting low-risk milieu would seem only a partial and somewhat tangential answer. Directing choices would seem distasteful and necessarily inaccurate, since at no point in one's life is enough data available to make wise long-term decisions. Despite these questions that are left hanging, Wrenn's desire to raise them is in itself noteworthy, as is his skill in placing the role of the counselor in a larger cultural framework.

Super, whose book, The Psychology of Careers (1957) had much to do with promoting a view of career choice as developmental in nature, thinks of decision making very much in strategic terms. He talks of the "guidance of development". In this process, choices or decisions must be made, but they are often choices of what to try in order to prepare for the making of later choices. Thus, his is a model of long-range goals, ultimate strategies, interim goals and tactics.

Super talks, too, in terms of probabilities:

"Guidance will consist, in part, of helping the client or student to understand both the fact of probability and the characteristics of that which is probable." (p. 159)

Implicit here is a notion central to the present research, namely that what can be taught by a guidance specialist is something about the nature of choice, the ability to make quasi-scientific assessments both of the self and of the field. The counselor then, can instruct unreservedly in a solid content area -- decision making -- without affecting directly the nature of the decisions which are ultimately arrived at. He can teach the student to be an expert in collecting and appraising relevant data.
Of all the writers in the guidance area, Tiedeman and Field (1962) seem to have come closest to the thinking implicit in the present research. Going beyond Super, Tiedeman feels that the central responsibility of the guidance counselor is the teaching of goal-directed, purposeful behavior. He suggests that "there can be instruction for goal setting and pursuit. There can be supervision of goal setting and pursuit." Thus, Tiedeman views the counselor as an instructor -- an appropriate enough role within an academic setting, one would think -- but nonetheless a specialist. He would train children to function in a manner consonant with their purposes. This, of course, would seem to imply that these purposes would have to be made specific, and that appropriate behavior patterns would have to be arrived at consciously. He would teach the techniques helpful for development in a complex civilization, but would leave the particular direction of the development in the hands of the student. Tiedeman puts it this way:

"The goal of guidance is not the specific place that a person occupies in the social order; rather its goal is both the placing with children of responsibility for being and the development of their confidence in becoming. (p. 492)

This rather hurried trip through the history of guidance has, been hope, sufficient to point up the important lines of development. Without doing too much injustice to the dissenters (most notably the Skinnerian counselors) we might summarize these developments in two major themes:

1. Self-acceptance and self awareness. Roger's emphasis on client-centered counseling and Shoben's emphasis on the "examined life" stress the importance of the counselor's role in the self actualization of the student.
2. **Researching and Decision-making.** Wren, Super, and Tiedeman all stress the importance of the counselor's role in teaching the techniques of decision-making and gathering data about oneself and one's world.

As will be seen in the following sections these themes form a major foundation for the guidance program tested in this research -- the Strategy Training Program. We will have occasion later to evaluate their effectiveness.

**The Research Role**

Man, says George Kelly (1955) is a scientist -- his natural inclination is to create constructs of the world which will help him predict and control his environment. Being in essential agreement with Kelly's premise, we, in the Strategy Training Program (STP) attempted to create a curriculum which would improve students' "scientific abilities. In other words we wanted to teach students strategies which would enable them to better understand their world and to better control the course of their own lives. We see two important aspects of such a program.

First, it is important to learn methods for systematic observation of oneself and one's environment, i.e. techniques of self-research which can increase self-objectivity. Nearly all personality theorists recognize the importance of self-objectivity as a criterion of mental health; and identify forces in the personality structure which work against its attainment. For example, Hall and Lindsey (1957), in describing one of the key concepts of Harry Stack Sullivan's theory, the self-system, say: The self system as the guardian of one's security tends to become isolated from
the rest of the personality it excludes information that is incongruous with its present organization and fails to profit from experience. Since the self guards the person from anxiety, it is held in high esteem and is protected from criticism. As the self-system grows in complexity and independence, it prevents the person from making objective judgments of his own behavior and it glosses over obvious contradictions between what the person really is and what his self-esteem says he is. (p. 139)

It is against these forces in the personality that self-research strategies must contend. Individuals must learn to accept new experiences, and be willing to modify their styles of performance and self-image as a result of them. Rogers (1961) describes one aspect of this process: "Clients seem to move toward more openly being a process, a fluidity, a changing. They are not disturbed to find that they are not the same from day to day, that they do not always hold the same feelings toward a given experience or person, that they are not always consistent. They are in flux, and seem more content to continue in this flowing current. The striving for conclusions and end-states seems to diminish." (p. 171)

To be effective strategies for increasing self-objectivity must have three qualities: 1) they must be objective in the sense that they can provide the techniques for rational, realistic assessment of self and environment; 2) they must be systematic and ritualistic so that anxiety created by increasing self disconfirmation will not be able to cause distortion or cessation of the inquiry; and 3) they must be personally valid, suggested changes in self-image being acceptable to the individual. In this light, seeking psychotherapy may be seen as a strategy for increasing self-objectivity. The individual seeks out a professional person for an objective view of his problems, the therapist presents him with a more
or less ritualized interpersonal situation for the assessment of his personality, and the patient accepts the therapist as having superior insight, clearer logic, and/or an impressive aura. Kolb, Winter and Berlew (1966) have recently used a different type of "systematic feedback ritual" to aid individuals in self-initiated behavior change projects. This technique encourages the individual to commit himself to a scientific self-research project on the problem in question. Since the study is carefully designed to be scientific and objective, the individual is discouraged from "biasing" his research, and is therefore somewhat bound to accept the conclusions of the study.

The STP is designed to encourage students to try self-research projects as a means of systematically collecting and interpreting data as the basis for decision. An individual adopting such a project is motivated to approach problems in his own life as a systematic and rational a fashion as possible, thus assuring the likelihood of an optimal decision. In the absence of any motivation to be systematic one remains caught in his problem because of distortions in observation or interpretation which preclude solution. For example a student and his parents may argue about the efficiency of the way in which the student spends his homework time. The student, feeling that he is being unjustly perceived by his parents, tends to attend more to the useful pastimes while his parents, in their zeal to prove their point, often emphasize the periods of time during which the boy or girl was daydreaming or playing. Under these conditions a student's self-research project might be to systematically record how he spends his time and to discuss with his parents the categories of effective usage of time. This leads to confrontation, and in many cases to a resolution of the problem. We have
seen students who have undertaken such a research project discuss their data with a somewhat surprised and at the same time sheepish expression; reactions which suggest that the student has experienced some insight into himself and his relationships.

The Game Model

The second aspect of the STP is the teaching of a heuristic model for understanding the behavior of individuals in social settings. In designing the STP we sought a means by which the data and concepts of social psychology (e.g. roles, norms, rituals, motivation) could be taught in a way that would be personally meaningful to students. We also wanted to convey some other ideas like the usefulness of rational analysis and the importance of proactive as opposed to reactive modes of being. In addition we sought a model with flexible units of analysis. In fulfilling this criterion we were confronted by no small task. After all, it is not difficult to imagine a problem for which the units would be as large as life and death or, at the other end of the continuum, a problem concerning fine muscle motor skills in which the appropriate unit would be a single muscle movement. Thus our model must be adaptable to a wide range of problems.

It was a paper by Timothy Leary called "How to Change Behavior" (1962) which suggested a solution to our problems. In this paper he suggested that behavior sequences might "usefully be considered as game sequences." After describing in some detail the exquisitely precise nature of the game of American baseball, he says "Those who wish to measure, summarize, predict, and change human behavior could do worse than model themselves after this so-called "game". (p. 52) Leary holds that the failure to understand the game nature of behavior leads to confusion and eventually to helplessness.
The following quotation drawn from his manuscript in preparation provides a more specific definition of the game model:

"The moving of men is not a random phenomenon. Men move through space-time in highly systematized sequences for which summary labels are provided by the culture. The highly systematized sequences of movements in time-space we call games.

All of the language which describes behavior can be classified under the heading of a cultural game. Thus when we record on film or ploygraph thousands of movements by a young man during a two minute sequence on a sunny afternoon in June, we can summarize the mass of records by saying 'that's Mickey Mantle striking out on a low pitch'.

We summarize movements in space-time in terms of cultural games.

A game is a sequence of behavior with ten specifying characteristics: role, rule, ritual, goal, language, values, strategies, recurrent sequences of movements, characteristic space-time locations, and mythic content."

Leary's game model seemed to meet our requirements of a heuristic model for understanding behavior. In addition the game concept seemed to be one which students could grasp and would find intuitively appealing.

Our next task was to spell out the details of Leary's conceptual model and to decide what about the game model was important to teach the students. To do this we first surveyed how others have used the "game" concept. The results of this survey are reported in the next section. Then, in the section entitled, "The Game Attitude" we spell out those aspects of the game model which we wanted to communicate in the STP.

Origins of the Game Model

The use of game analogy has been prevalent in the writings of social psychologists for some time, and it is currently seeing an even wider use in such diverse areas as politics, economics, management training, education, military tactics and psychological counseling. One of the first social
psychologists to give this notion prominence was G.H. Mead. Szasz (1961) describes Mead's theory as follows:

Mead considered games as paradigmatic of social situations. Accordingly, they were of greatest significance in his theory of human behavior which regarded men as essentially a role-taking animal. Playing a game presupposes that each player is able to take the role of all the other players...The spirit of the game -- that is, the belief that the social game (of living) is worth playing -- Mead described as the "generalized other". Although this is not a particularly well chosen term, the idea to which it refers is significant. "The organized community as social group which gives to the individual his unity of self may be called 'the generalized other'. The attitudes of the generalized other is the attitude of the whole community. Thus, for example, in the case of such a social group as a baseball team, the team is the generalized other insofar as it enters -- as an organized process or social activity -- into the experience of any one of the individual members of it." The social situation in which a person lives constitutes the team on which he plays and is, accordingly, of the utmost importance in determining who he is and how he acts. (p. 224)

Irving Goffman, a student and follower of Mead, has developed his own "game model", and has used it to analyze the social structure of asylums and the goals and strategies of doctors, patients, and ward personnel (1961a). In addition, he has found in this model a powerful tool for understanding the complex strategies of interpersonal dynamics. (1961b).

Having found the game analogy useful in analyzing the relationship of the individual to his social context, still another group of scientists saw in the game analogy a method for improving the rational selection of strategies, and thereby the effectiveness of individual performance. The classic work in this field is Von Neuman and Morgenstern's Theory of Games and Economic Behavior (1944). In this work, Von Neuman, a mathematician, outlined the strategies whereby an individual could always win the maximum in a two-person zero-sum (pure conflict) game. His work opened the door to a whole new approach to the study of human social behavior. Building
on his rather simple models, researchers in the following two decades expanded Von Neuman's theory to situations involving more than two people, where moves may be simultaneous, where only imperfect information may be available, and where both players may not act in completely rational fashion. In short, research has come closer and closer to approximating real situations. (Cf. Schelling 1960)

As a result, the theory has been increasingly applied in other fields: Daniel Ellsberg has analyzed the practice of blackmail in game-theory terms (1959); in political science, Anatol Rapoport (1960), and Arthur Burns (1959) have applied this method of analysis to arms race problems. Schelling (1960) has discussed programs for disarmament, and Glenn Snyder (1961) has considered the strategy of deterrence; in the field of business, Ralph Cassidy (1957) has studied a taxicab rate war. Finally, in social psychology, Elton McNeil (1961) has discussed the interactions of a group of aggressive children at a therapeutic center in terms of the concepts of game theory, and Thibaut and Kelley (1959) have considered power and dependence in this framework.

The most recent use of game theory, and the one which is most closely related to our approach is the use of game situations to model real life situations for the purpose of training. Games thus constructed provide a well-defined, realistic, but psychologically safe situation where men can try out new ways of thinking and behaving. They have proven useful in training managers and administrators, military leaders, diplomats under-achieving high school students, and others requiring complex skills (Benson 1962, Kibbe, Croft, and Nanus 1961, Sprowls 1962, Kolb 1965). Finally, existentialist thought has contributed to the game model, if not to game analysis per se. In fact, most existentialists who use the game
analogy usually do so in a pessimistic and derogatory manner implying that life is just a game; proclaiming meaninglessness -- as in Pirandello's *The Rules of the Game*, or Beckett's *End-game*. In addition to, perhaps despite this cynical trend, the existentialists have been the most explicit in formulating a value system which is consistent with active, effective game play. One aspect of "play" games which make them fun is that players have the freedom to choose among alternative strategies, and they are responsible for the implications of these choices in terms of both their actions and their obedience to the rules. Chess would be little fun if all the pieces could be moved like pawns -- or if your opponent chose to break the rules and move his pawns like Queens. So it is in real-life games. The failure to accept the responsibility of free choice and action can lead to withdrawal, apathy, and despair. (Fromm 1941)

Existential theory has been quite explicit in stating that man is not only the source of his actions but that he is, in fact, "condemned to be free" and to control his being by making choices. Carl Rogers has pointed out that the existentialists speak of man "as though choice constituted the core of his existence." (1961a, p. 90). Kierkegaard described this "dizziness of freedom," and asserted that man must choose in "fear and trembling" (Kaufmann 1956). Completely surrounded by uncertainty, man nevertheless decides. Paul Tillich has said that man becomes truly human only at the moment of decision (May 1961). Perhaps Jean-Paul Sartre has taken the most extreme position in denying all essences and asserting that man is his choice. Tillich has interpreted Sartre as saying that there is "no essential nature of man, except in one point -- that he can make of himself what he wants." (1952, p. 150)
Likewise, the existentialists are equally explicit in emphasizing man's responsibility. Sartre says, "Man being condemned to be free carries the weight of the whole world on his shoulders; he is responsible for the world and for himself as a way of being (1957, p. 57) ...the peculiar character of human reality is that it is without excuse" (p. 55). Even in refusing to make choices, we have made a choice. "To make myself passive in the world, to refuse to act upon things and upon others is still to choose myself, and suicide is one mode among others of being-in-the-world." (p. 57)

The Game Attitude

We now ask; What about the game model is useful in a guidance program? What attitude are we trying to impart when we teach the techniques of game analysis to young people? Shoben suggested an answer when he pointed out that the role of guidance is not to impart any particular set of values but rather to facilitate the self-examined life -- to provide the individual with the techniques and the stimulus to reflection and self-examination. The goal of guidance is to increase powers of active, rational choice and control, and, from the individual's point of view, to broaden the scope of possible choices, of possible modes of being. Szasz describes this goal in game analysis terms:

...it seems apparent that much of what goes by the names of "growing up," being sophisticated, getting treated by "psychoanalysis" (and other methods as well) are processes having one significant feature in common: The person learns and is taught that the rules of the game -- and the very game itself -- by which he has been playing are not necessarily the same as those used by others around him. He thus learns that others may not be interested in the game, they prefer some modification of the rules. Thus, unless a person finds others to play his own game, according to his own rules -- or wishes and is able to coerce others to accept life on his terms -- he has a choice among three basic alternatives.
One is to submit to the other's person coercive rules and accept the masochistic-submissive posture offered.

The second alternative is increasingly to renounce socially shared activities and to withdraw into certain relatively idiosyncratic games. Such activities may be labeled scientific, artistic, religious, neurotic, or psychotic, depending on various generally poorly defined criteria....

The third alternative to the basic life problem sketched above lies in becoming aware of one's own games, as well as those of others, and in trying to compromise among them. This is an arduous undertaking which often can be, at best, only partially successful. Its main reward lies in guaranteeing the integrity and dignity of one's self and of all others with whom one interacts.

(Szasz 1961, p.240)

It is the third alternative which the STP attempts to encourage.

Perhaps the most serious criticism which could be leveled at the teaching of the game model is that it easily lends itself to the interpretation that life is just a game, and therefore is not serious or meaningful. Indeed, we have already seen how some existentialists have used the analogy of life as a game to convey their message of cynicism and meaningfulness. Two points need to be made in order to avoid this interpretation. First, the game model is attempting to make no metaphysical statements about human nature, society or man's relation to the universe. It is not saying that life is a game, implying that our temporal existence is made up of an artificially (i.e. humanly) contrived set of conventions where values are important only in the context in which they are created (the cultural relativist position). Nor is it saying that life is just a game, with the added connotation that because values are created in a human context they can have no absolute or divine quality, and are therefore meaningless. Rather, we are trying to provide a model, or theoretical structure, with which the
individual can come to understand better his social context and his relation to it, hopefully leaving him free to choose his own theology. The game model is an analogy -- not a description of reality. Another possible criticism is that such a training program based on game analysis will lead students to intellectualize about their problems rather than emotionally experience (and thus resolve) them. It is our hypothesis, however, that the confrontation by a student of inconsistencies in his own behavior will elicit emotions linked to the problem. In these cases the problem-linked emotions, which are usually negative, will be counteracted by those positive emotions which are engendered by the student's realization that he, as a result of his increased awareness and new skills, is able to do something about the problem himself.

Similarly, it could be argued that the same model tends to increase the distance or remoteness a student feels from his own daily life. The game model is, after all, designed to increase the student's ability to be an observer of his own behavior. Won't this make him feel detached from himself? To avoid this problem we try to communicate an important distinction to the students -- while it is important to be detached and tentative about one's concepts of a given life situation, it is equally important to be committed to and involved in the experience of that situation. If students understand this idea; then they should not feel isolated from their experience. Having discussed some of the problems of the game model, let us now proceed to the positive attributes of game analysis.

The Time/Space Limitations of Game Activity One of the most important aspects of the game model is that it provides criteria for clearly defining the boundaries of the diverse and separable activities in which
we all engage. A distinctive characteristic of games is that their activity is confined within definite time/space limits. A baseball game is played on a baseball diamond for nine innings. A chess game is played on a chess-board until checkmate occurs. The significance for the individual in modern society, of clearly defined and psychologically separated activities, should be obvious. We are all required in the course of our daily lives to play many different roles, to participate in many different situations. Each of these situations demands from us some performance and the utilization of certain skills. Correspondingly, each situation defines certain activities and attitudes as irrelevant. Just as it makes no sense to score a touchdown in a baseball game, so is it equally unreasonable to let anger from a fight with the wife in the morning carry over to our subordinates on the job; or for that matter, let preoccupation with work problems block full participation and involvement with wife and family. Goffman (1961b) has shown how the failure to obey these "rules of irrelevance" disrupts and destroys social interactions.

One of the most prevalent syndromes in the student community is the student who, with little or no awareness, is simultaneously playing two games which have conflicting goals (e.g., the game of "getting good grades" and the game of "being popular with the gang".)

Separability of the Player from the Role and Game A second attribute of the game model somewhat related to the first, is that the player has, to some extent, the freedom to choose the roles and games he will play. There is never any confusion about the fact that he is a person playing a role in a game, and not the role itself. In Monopoly we are never anvil or locomotive. These are symbols which mark our position. Yet in real life, there are many who solve the question of identity by avoiding the multi-
plcity of roles which face them, fashioning their identity from a favorite, or simply a frequently presented role. There are the ones that Szasz says choose "increasingly to renounce socially shared activities and to withdraw into certain relatively idiosyncratic games".

We must add, however, that we are not here espousing the values of "normal adjustment". The question is not whether a person is able to encompass a large amount of roles. The important thing is that the individual be aware that there are possibilities for being other than the particular role he happens to be playing; or to put it another way, he should feel that who he is constitutes more than just the sum of his current behaviors.

The importance of this point is nowhere more dramatically illustrated than in the person who is "caught in his role". Take the under-achieving student who through the constant jibing of parents and teacher takes for himself the role definition of the "lazy" person. Though there are clear disadvantages to this role, the student can easily become quite attached to it for several reasons. First, the role has inherent within it the passive-aggressive strategies for getting back at the teachers and parents who label him thus, as well as gaining their attention on an emotional level. Secondly, it can earn for him a measure of esteem from his peers who will admire his ability to "play it cool". And finally, it is likely to be the only role offered to him. Those with whom we associate eventually get together to agree on our diagnosis. Other possible definitions like "creative student who finds school boring" are soon eliminated. The subtle process by which we bind others into a fixed role, denying them any identity outside of it, has recently been demonstrated in research by Richard Alpert (unpublished). He recorded the classroom conversations
of teachers with their students. When he analyzed the content of these conversations according to whether the teacher liked the students or not, marked differences were noticed in the strategies of reward and punishment used. When the teacher liked the student, she tended to reward that student as a person ("You are a good boy, Johnny") and punish specific behaviors ("There is a mistake on this paper"). For students she disliked the pattern was reversed -- punishing the whole child and rewarding specific behaviors. Knowing this, it is not surprising that in Alpert's sample, students whom the teacher liked had better grade averages than students whom the teacher disliked.

**Reciprocal Roles** A third aspect of the game model is the interchangable and reciprocal nature of roles. As we have seen, one of the reasons that G.H. Mead gave to the game analogy such prominence in his social psychology was that playing a game presupposes that each player is capable of taking the role of all the other players -- a central notion in his theory of the socially acquired identity. A football quarterback cannot be effective unless he is able psychologically to take the role of his team members, to understand how each man's performance effects and alters the team goal on the upcoming plays. In addition, he must be able to do the same with the members of the opposite team, to anticipate their moves and their changing goals. The need to develop this type of sensitivity in a specialized society is obvious.

But there is a less obvious, though perhaps more important point to be made. The fact that our selves are defined by the reciprocal role relationships in which we participate has some important consequences for self-change and personal growth. We are dominant only because we have friends and associates who are submissive, dependent because there
are those on whom we can depend. The result is that one need not accept his current self-image as fixed. The dominant leader in a group of more dominant peers becomes submissive; the dependent person suddenly surrounded by those who depend on him, after a period of floundering, discovers the independent resources within himself. Indeed, with every friend, we present a different face, a different self. Laurence Durrell captures his process aptly in his *Alexandria Quartet*. Jay Haley (1963) has described how redefinitions of the reciprocal role relationship can be effective strategies in family psychotherapy.

This conception of role relationships has important implications for the role of the teacher of the game model. The uniqueness of this role can perhaps be highlighted best by contrasting it with the change agent in psychoanalysis. Freud was a doctor: his training had been in the medical profession and the people from whom he developed his theory were patients, many of whom came to him with physical complaints. The model of change which he knew best was the medical doctor-patient relationship. The patient comes to the doctor with some problem, and the doctor diagnosis it and prescribes some treatment. The patient is not expected, or even allowed, to suggest his own diagnosis or possible treatment alternatives. The doctor is the expert: he alone possesses the knowledge of the theory and the techniques to cure the patient. By cooperating and submitting to the doctor's will, the patient will be cured. Furthermore, the theory of personality he developed, though it was to explain the development of both sick and normal people, was thought to be useful only in helping the sick. It was designed to aid those whose functioning was impaired, and its prescriptions were of little use to normal people who wished to increase their effectiveness. Developed as
it was on the ill, the theory tended to emphasize the pathological, leaving little room for the creative and productive aspects of human personality.

The situation is different for the change agent in the game model. His role is comparable to that of a coach. Rather than have the student look to him for answers, the two of them together look at the game situation, attempting to analyze and make the best move. The coach attempts to help the student understand the theory of the game strategy, and encourage him to use it himself in "game play." There is no emphasis on sickness or abnormality, only on understanding and playing one's game better.

Anselm Strauss describes the "coaching" process this way,

"It is as if there were a kind of moratorium during which effort is great, but during which both sides ceremonically ignore negative performances. Of course, such a moratorium and such make-believe run all through to coaching process, perhaps particularly during new phases in cycles of learning, when the person is particularly sensitive to criticism and must be encouraged and must encourage himself to chance endeavors."

(Strauss, 1964, p.415)

Rules -- Obligatory Through Mutual Consent  "Mature conscience begins when the child's sympathy and insight get to work so that he sees a purpose -- other than pleasing his parents -- behind restraint and ideals. It continues when he discriminates the effects of his actions on everyone who is affected by them, judging his acts accordingly and freeing himself from blind literal obedience to a code."  (White 1956, p. 198) Robert White outlines the ideal of moral conduct thus. True moral and ethical behavior does not mean blind obedience to the authoritarian decree of law or other social rules; nor does it imply passive compliance in the letter of the law. Rather it is creative participation in ordering social
behavior based on the realization that rules acquire their obligatory character through mutual consent. The creation of a game is the analogue of this activity.

Piaget (1932), more than any other theorist, has spelled out the rule-following aspect of the game model. In his developmental research on children, he has outlined three stages in the child's growth to a mature rule-following attitude.

The first stage, which runs from birth to age two, is a purely individualistic stage during which the child becomes aware of regularities in his environment, in the manner in which his parents treat him and in the development of behavioral rituals which afford him kinesthetic pleasure. The regularities constitute a set of primitive motor rules for the child. During the second stage, from age three to nine, the child begins to imitate others, and at this point he considers game rules to be sacred and inviolable; he is "saturated" with adult rules. "His universe is dominated by the idea that things are as they ought to be, that everyone's actions conform to laws that are both physical and moral, in a word, that there is a Universal Order." (1932, p.83) The child perceives rules as emanating from his all-knowing father, and considers them obligatory and coercive. Furthermore, his relationship with his father is one of unilateral respect; the moral rules which he follows are external to his conscience and reside in his father, and thus he cannot relate on a mutual basis with his father, since doing so would require that father and child both hold independent, reciprocally related moral codes. It is not until the third stage, which begins at about age ten, that the child can internalize his own sense of morality, become autonomous and participate on a cooperative basis. With cooperation will come a share in control, and the illusion
of an external ruling source of authority will disappear: "He no longer
thinks that everything has been arranged for the best in the past and that
the only way of avoiding trouble is by religiously respecting the established
order." (p. 57) Rules are non-coercive regulations, outcomes of free
decisions, created through mutual consent, and completely alterable.

The goal of teaching game analysis is to aid the individual in the
transition from the second to the third stage, a transition which is rarely
complete, notably in highly authoritarian individuals. The jurist Jerome
Frank (1930) has noted that many lawyers and judges tend to give law a
second-stage quality -- creating the impression that the law is fixed and
certain. Piaget points out that parents themselves work to keep the child
in the second stage: "Whereas, given sufficient liberty of action, the
child will spontaneously emerge from his egocentrism and tend with his
whole being toward cooperation, the adult most of the time acts in such
a way as to strengthen egocentrism in its double aspect, intellectual and
moral." (1932, p. 188)

Games as Proactive, Rational and Goal-Directed A fifth characteristic
of the game attitude is that game theory concerns itself with the
active attainment of goals, as opposed to the reactive theoretical emphasis
of behaviorism and psychoanalysis (Allport 1960). The very nature of the
game carries the implication of winning and attaining a goal. If man could
do nothing but react, games of the type we speak of would be impossible.
In addition to emphasizing active strategy, the game model stresses the
importance of a clearly defined goal, and of accurate recording of progress
toward it (score-keeping). In a recent paper on motivation change, McClelland
(1964) gives two propositions related to the setting of goals and recording
progress, citing psychological literature to support them. They say:

1) The more an individual **commits himself to achieving concrete goals** in life related to the newly formed motive, the more the motive is likely to influence his future thoughts and actions.

2) The more an individual **keeps a record of his progress toward achieving goals** to which he is committed, the more the newly formed motive is likely to influence his future thoughts and actions.

   (p. 329: italics added)

Finally, it should be noted in this connection that the game model assumes that man is basically rational -- as opposed to the Freudian, who maintain that he is irrational, and behaviorists who take him to have no mind at all. Thomas Schelling has been most explicit in defense of this assumption:

The advantage of cultivating the area of strategy for theoretical development is...that the assumption of rational behavior is a productive one.

   (1960, p.4)

But Schelling goes even further than this, suggesting that we should re-examine our concept of rational behavior. Behavior that at first glance seems irrational may, in fact, be quite rational when viewed in context. Anthropology gives countless examples of this phenomenon. Is it not possible by the same token, that the "mentally ill" individual is using some rational strategy to gain his goals". Schelling--"Even among the emotionally unbalanced, among the certified 'irrationals' there is often observed an intuitive appreciation of the principles of strategy....
I am told that inmates of mental hospitals often seem to cultivate, deliberately or instinctively, value systems that make them less susceptible to disciplinary threats and more capable of exercising coercion themselves." (p.17)

This is not to say that people do not make mistakes and moves which appear irrational. Clearly, in a particular situation, some strategies are better than others. If in football, a team punts on the first down we might be tempted to call the quarterback irrational; but it would seem more fruitful to examine the move as a possible error in strategy, and to search for new strategies to replace it. It may conceivably turn out that when examined in the context of the game being played that this was the best possible move, e.g., the team had the ball on its own one yard line in pouring rain.

Meta-Games And Interpersonal Relations As we have pointed out, awareness of the game and the fact that one is playing with a definite role is perhaps the most important variable in the game model. One can find numerous instances in social games where two or more people are involved in a highly structured game although none of the players is aware of the game aspect, i.e., all the players are "caught" in the game. From this endpoint one can move along the continuum and find other instances in which one of the players is aware although the other players may not be. Finally, one arrives at the other end at which all players in the game are aware of the game in which they are involved.

Assuming that we ourselves are aware, how do we communicate this awareness to others, in such a way that there is shared understanding of the enterprise in which we are involved? The most obvious way is to talk about it. By doing this, we are actually entering into another
"meta" game, that of communication about the game, with the other players. For example, in the game of tennis, two players who are deeply immersed in the highly competitive game may nonetheless at some point or other comment about "what a great day it is for playing tennis," or "we ought to get this kind of exercise more often," or "your serve is improving." All of these communications are outside of the limited game of tennis and are part of the larger game of "two friends playing tennis together."

The players, of course, could then comment about this meta-game, and so forth ad infinitum. The point to be made, however, is that it is possible to share awareness of a game with other players in it through entering into a new meta-game.

One often observes another pattern of social interaction which would seem to indicate shared awareness on the part of the players, but may in fact not be that at all. This pattern involves two or more players who participate in a variety of games with one another, moving comfortably from role to role with little apparent difficulty. A husband and wife may be sharing a great many games: they move easily into their various roles with little or no confusion. Observing this intricate and flexible behavior, it is difficult to imagine that they are not both fully aware of the light-footed manner in which they shift from role to role and game to game. And yet, their entire interaction is part and parcel of "the marriage game." Thus, the fact that two people participate in a number of games, which we consider horizontal to one another, may, but need not necessarily, reflect awareness.

That shared awareness may exist through these various role relationships suggests at once methods of training for increased game effectiveness. By involving students in meta-games in which their own games are the object of consideration, they are led to a game awareness which
they are in a position to share with one another. The game coach is after all a teacher, and they are students in the education game. If the game coach then discusses with them the entire teacher-student game in which they are all participants, he has created a meta-game in which they are all sharing the awareness of the teacher-student game.

We cannot emphasize enough the significance of shared game awareness. Through it, we are able to see more clearly that we are actually involved with others in a primarily collaborative fashion, even though the games in which we are involved may be competitive.

Once conscious of the games which compose their lives, students can see more accurately the myriad complex rituals in which they participate with one another. The positive feelings which such an awareness can engender do much to counteract the often negative feelings which participation may arouse. This emotional counterbalancing helps students to achieve greater tolerance and flexibility in what are essentially necessary but unpleasant game encounters.

Behavior Change in the Game Model -- Strategy Training

In the game model, behavior change efforts center around improving strategies. Strategy refers to actions initiated by the individual to improve his game position. As we have mentioned it is a heuristic concept used to summarize the actions of individuals in a given context of analysis. A strategy can be as molecular as a smile in a two-person relationship or as molar as a visit to the Midwest in an election campaign. Thus, the definition of a particular strategy is determined not only by the acts of the individual but also by the context in which these acts are performed.

From the point of view of learning, the acquisition of a strategy has two aspects. The first aspect is skill in strategy performance.
This refers to the ability to perform the behaviors required to execute the strategy with dexterity and internal timing. The second aspect is appropriateness in strategy performance. This aspect refers to the ability to choose the correct strategy in a situation and implies such abilities as flexibility, a wide range of strategies, and the ability to analyze accurately strategy skills and situations.

Within the strategy paradigm, effectiveness is defined by how well the individual attains his goals and is mediated by the individual's choice and performance of strategies (including his strategies for choosing and defining goals). In a given context, effectiveness is increased by increasing the skill (in execution) and appropriateness (in selection) of strategies which are most effective for attaining goals in that context. Thus, in the present research we seek to teach personal strategies which are most effective in aiding the ninth grade student attain his goals in a context in which he finds himself, namely in the school preparing himself for high school, college, and career.

**Strategy Training and Achievement Motivation Training** While we have already indicated in the introduction some of the procedural differences between the STP and the achievement motivation training program (AMTP) conducted by Kolb (1965); it may be useful at this point to indicate theoretical differences between the STP and the McClelland program for developing achievement motivation (1965). The key to these differences lies in the terms "motivation" and "strategy". Achievement training is concerned with creating the desire for excellence in its clients. As such, a great portion of the program is concerned with setting new goals and acquiring new values. One of the major aims of the AMTP is to convince its clients that the pursuit of excellence is a worthwhile goal for them.
The STP attempts to avoid the ethical problems of not allowing the individual to choose his own goals. In the STP students are told that they choose the goals; all that the STP teachers will teach is the strategies to get to these goals.

In actual practice this means that the STP students are not taught how to think like people with high achievement as were the members of Kolb's AMTP (1965). STP students are encouraged to set their own goals and to use achievement strategies (e.g. personal responsibility, moderate risk taking, and use of feedback, Mclelland 1961) as well as others to attain these goals. The AMTP on the other hand attempts to teach both achievement strategies and achievement goals.

From the results of the STP we hope to learn whether achievement strategy training without achievement goal training can improve academic achievement as well as Kolb's AMTP. (This, of course, will not be an experimental test in the strict sense because there are other important differences between AMTP and the STP.)

**Strategies Taught in the STP** In this last section we attempt to summarize the main theoretical themes of the STP by outlining seven strategies which the course attempts to teach students. As will be seen in the next chapters, teacher ratings of these strategies in addition to another unstructured measure will be the major means by which we assess how well students learned these strategies.

The first three strategies represent extended definitions of the achievement strategies just described. The last four represent strategies previously believed to be related to success in school.
1. Risk-taking and decision making. The importance of choice and
decision making in personality development has been emphasized by
many theorists. Erikson (1962) emphasizes the importance of active
self-determining choice in the formation of identity. Super (1957)
emphasizes the importance of decision-making ability in career
development. Existentialists such as Sartre (1957) contend that
the very essence of man's nature is that he is not only able to
choose but that he is forced to choose. Modern guidance theorists
(Tiedeman and Field 1962) are defining guidance more and more in
terms of training for personal decision-making. Decision-making
ability in the present research is defined and taught in the con-
text of elementary mathematical models for weighing alternatives,
measuring risks, and assessing utilities. (Bross 1953)

2. Self-research and use of feedback. Closely related to the process
of weighing and choosing among alternatives is the process of
gathering information for choice. The basic elements of this strategy
are those of scientific inquiry; hypothesis testing and theory building.
While the decision-making strategies are deductive, the self-research
strategies are inductive. The approach used is a modification of
George Kelly's role construct theory (1955). Students are encouraged
to see themselves as researchers of their own behavior and behavior
settings, to see their self concept and their concept of the world
as theories which are subject to empirical confirmation or dis-confir-
mation. In addition to teaching techniques of self-research, the
training course teaches, through use of the game model, the elementary
techniques of social psychological analysis in terms of roles, rules,
strategies, and goals.
3. Personal responsibility. This strategy is defined by the research on achievement motivation as the individual's attempt to define and organize life situations in such a way that the outcome of these situations are shaped by the individual himself rather than by others or by chance. It is especially relevant to the young person entering adolescence. For as Erikson (1962) points out, as the child in early adolescence becomes aware of his separateness from the environment and consequently aware of the environmental-social pressures which are controlling him, he wants to rebel, to begin to control the environment. The young adolescent presses to move from the world of "I have to" to the world of "I want to". This distinction is taught using role playing to compare active control strategies with passive-submissive strategies.

4. Involvement. The strategy of involvement is closely related to one of Bruner's conditions for creativity -- i.e., freedom to be dominated by the object. (1962) It implies a commitment to a choice once it is made. Once in a situation the individual responds to the demands of the situation, giving up extra-situational thoughts and anxious "distancing" responses. In interpersonal relations this may be being aware of others' changing feelings, listening to others' thoughts rather than projecting one's own. In problem-solving this means becoming involved in the task to the point of feeling the problem as in Gordon's synectics approach to creativity (Bruner 1962). In learning the strategy is closely related to curiosity or self-motivated learning. Moore (Moore and Anderson 1959) emphasizes this strategy in his autotelic approach to teaching reading and writing to very young children in situations especially designed to produce high involvement.
5. Creating behavior alternatives. This strategy is related to Guilford's divergent thinking ability (1962) and is defined as the ability to create a large number of behavior alternatives to a situation whether it be interpersonal, academic, or vocational. This strategy roughly is equivalent to the "breaking set" concept of creativity research or the "green light stage" of brainstorming, (Osborn 1957). Training for this strategy follows the brainstorming model and that of forced free-association (Maltzman 1960a, 1960b)

6. Persistence. The strategy of persistence was emphasized as the compliment of creating behavior alternatives in problem solving. In solving any problem the individual must constantly be choosing between the alternatives of thinking up a new way or trying just a little harder with the old approach. Training centers about the use of research and involvement strategies in choosing between the alternative of persistence or creating new alternatives.

7. Tolerance of ambiguity. This strategy emphasizes the importance of an anti-authoritarian, eclectic approach to life situations and the ability to act effectively in uncertain circumstances. Barron 1963 has shown that the ability to tolerate and even enjoy uncertainty and ambiguity is characteristic of the creative person. Henry and Schlien (1958) have found that the ability to tolerate ambiguity in one's own thinking is related to psychological health and adjustment.
CHAPTER 2

The Strategy Training Program

Having described some of the theoretical antecedents of the Strategy Training Program, we now proceed to a description of the actual content of the training program. Before doing this, however, it may be useful to describe the setting in which this research was done.

We were fortunate to have the full cooperation of the Newton Public Schools in the planning and implementation of our project. The Strategy Training classes were conducted at the Weeks Junior High School in Newton, Massachusetts, a suburb of Boston. The schedule of the English-Social Studies-Guidance (ESG) teachers at Weeks Jr. High allots eleven periods a week to each of the two sections taught by that teacher. Usually, five periods are spent on English and five on social studies. Some ESG teachers coordinate the English and social studies course of studies, treating them more as a core program; others completely separate the two disciplines.

In any case, no matter what the arrangement of English and social studies curricula, the eleventh period each week may, at the teacher's discretion, be used for group guidance. This is not to say that group guidance, in any formal sense, is common. But each year, the guidance office helps a few ESG teachers to carry out the group guidance sessions. The usual procedure is to split the sections by sex once a week, and to carry on a discussion with a male or female teacher, or guidance counselor, on problems of interest to the group. No texts are used; there is no single model of behavior taught. The group guidance sessions are seen by the students as an opportunity to let off steam, to gripe, complain
and argue. Occasionally, they involve problem-solving discussion, but usually the approach to the problem is general, partly because of the reservations most junior high school students have about exposing their specific difficulties in front of their classmates.

Even if there were enough time for guidance counselors to initiate and cooperate in group guidance sessions with all students, relatively few of the ESG teachers would request their help. At Weeks, group guidance is optional, and most ESG teachers prefer either not to have group guidance at all, or to carry out their own sessions without the aid of the guidance office.

For the most part, ESG teachers at Weeks feel that they carry out their role as "guidance teachers" by the individual contacts they have with their students. They see their two sections eleven times a week, and their homeroom section even more often. They hold the cumulative records of both sections; they run the meetings of teachers of the two sections; they coordinate information from other teachers for parent conferences; they (most often) initiate parent conferences; they are primarily responsible for referring individual pupils who need counseling to the guidance office. In addition, ninth-grade ESG teachers have a particularly time-consuming responsibility in the placement of the students of their two sections in appropriate courses and curricula in the high school.

In short, most ESG teachers feel that their "G" role is primarily fulfilled in the day-to-day contacts, counseling, advice, and conferences, which take up a considerable amount of time, and demand an intimate knowledge of each student and his record. Most frankly feel that group guidance "bull sessions", as they are often characterized by students and teachers
alike, are aimless and pointless. It is also possible that teachers trained in the organized impartation of English and Social Studies are simply ill at ease in a classroom situation which is relative undirected, and has no discernable content. The style of present group guidance is alien to their pedagogical habits -- no text, no homework, no grades, no stated purpose other than "guidance" or "talking it out." The students, too, react negatively or passively, and rarely see the purpose of the sessions. These student reactions to group guidance contrast with the often enthusiastic reactions of students who are individually referred to the guidance office for counseling.

Outline of the Strategy Training Program

The STP was designed specifically for the ESG curriculum at the Junior High School. It was hoped that the STP would supply a viable and attractive alternative to the group guidance approach which most ESG teachers felt uncomfortable with. The program was designed to fill the once-a-week "C" component of the ESG course. Specifically, it was conducted once a week for one semester in two ninth grade sections (hereafter referred to as 316 x a "fast" section and 316 M, an average class), by the regular ESG teacher of the sections, whom we trained to conduct the course.

The course curriculum was designed to approximate as closely as possible the "normal" didactic classroom situation. The regular teacher taught the course, which was held in the same classroom, with the same sort of arrangement of desks, and with attention to the same rules of classroom behavior as were followed in English and Social Studies periods. Although there was no single text book, we mimeographed study materials
and collected homework. The major differences were the unusual material studied, and the presence of a microphone, tape recorder, and one psychologist at each session. Another difference from normal classroom procedure was the absence of grades. Students received no grade for their participation in the course, although their homework was evaluated and returned to them with written comments. In addition two graded English compositions were assigned on Strategy Training Topics.

The Strategy Training Program was described to the students as a series of lessons in game theory. While the inherent academic interest of the material to be discussed was emphasized the major emphasis was laid on the usefulness of the strategies to be learned for increasing individual effectiveness. Students, in short, felt that this was some "new kind of guidance".

A brief syllabus of the course sessions is presented in Table 2-1.
<table>
<thead>
<tr>
<th>class session</th>
<th>Themes of class discussion</th>
<th>homework</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to game theory, decision making, strategy analysis; definition of terms: role, rule, goal, strategy, game.</td>
<td>Dictionary and common sense definitions of some of the terms introduced in class.</td>
</tr>
<tr>
<td>2</td>
<td>Analysis in game terms of a literary situation which does not seem to lend itself readily to such an analysis: &quot;Many Moons&quot; by James Thurber.</td>
<td>Verbatim notes of a real interpersonal situation, and an attempt at analysis.</td>
</tr>
<tr>
<td>3</td>
<td>Movie about a classroom: &quot;If These Were Your Children&quot;. Discussion about a boy in the film who was obviously having a hard time because of the role in which he was &quot;caught&quot;</td>
<td>Write a dialogue of an interpersonal situation where someone is trying to attain a goal. Analyze his strategies.</td>
</tr>
<tr>
<td>4</td>
<td>Game analysis of Lord of the Flies, by William Golding, with focus on rules.</td>
<td>Paper on personal goals, long- and short-range.</td>
</tr>
<tr>
<td>5</td>
<td>More Lord of the Flies: focus on roles, strategy, goals, goal conflicts, ranking goals, researching.</td>
<td>Observe a classroom and specify the roles which are played. Analyze effective and ineffective strategies.</td>
</tr>
<tr>
<td>6</td>
<td>Realistic goal-setting: level of aspiration test. (Risk v. expected gain, the role of self concept)</td>
<td>Report a dialogue between family members using or not using good strategy.</td>
</tr>
<tr>
<td>7</td>
<td>Strategy analysis based on homework assignments after session 6.</td>
<td>Write three imaginary dialogues, varying strategy.</td>
</tr>
<tr>
<td>8</td>
<td>Discussion about self-initiating v. conforming behavior.</td>
<td>None</td>
</tr>
<tr>
<td>9</td>
<td>Discussion of interviewing. The decision-making process.</td>
<td>Prepare interview questions</td>
</tr>
<tr>
<td>10</td>
<td>Interview with Mr. Bailey about his vocational choice.</td>
<td>Analytic report of the interview.</td>
</tr>
<tr>
<td>11</td>
<td>Breaking set, brainstorming.</td>
<td>None.</td>
</tr>
<tr>
<td>12</td>
<td>Need of flexibility, the possibility of change. Course Evaluation.</td>
<td>None.</td>
</tr>
</tbody>
</table>
The following pages include extensive descriptions of each class unit, along with transcribed dialogues of the actual sessions. In describing the sessions, we have followed a procedure of combining the two class sessions held on each topic. If the procedure used with the two sections was different, we have indicated the differences. The sources of the dialogues directly quoted are indicated at the beginning of each selection. The "T" is in most cases the ESG teacher, but the visiting psychologist is identified thus also. In the dialogues, we have identified the students as "S1","S2" etc. In a few cases, when it seemed warranted, we have used "B" for boy, and "G" for female student.

Our purpose in providing partial transcriptions of the dialogues in each session is to indicate the material covered by each session, to give a sense of the level of approach, and to reproduce some of the more interesting responses of students and teacher. It should be noted that our training techniques were by no means final polished products. After each session we were painfully aware of many things we could have done to improve the lesson. In some cases we have indicated these ideas in the descriptions of the sessions. On the other hand, we did not feel that any session completely failed to reach its objective. The course described below should be seen as a first rough attempt at teaching the theoretical themes described in the first chapter.

Session I: Introduction to Game Theory: Discussion of Rules, Goals and Game.

Teaching Materials: none. (A board game or a filmed game of any sort could be used)
The introductory session was planned to arouse interest in game theory, and to erect some operational definitions of game terms, especially "rules," "goals," and "game" itself.

In the first class (316X), a general discussion ensued from a definition of "rules." The students immediately started discussing football rules and penalties, but gradually began to use game terms to describe situations like home and school, etc. There was some resistance to applying "game" to other than spectator sports. Most, however, accepted the idea (still very generally stated) that game theory provides a model that is useful for the discussion of many varieties of interpersonal behavior.

(316X)

T If you follow the rules, rules must imply something more than just penalties for not following. What about following the rules?

S1 Let's say in football, for example. If you don't get any penalties all through the game, you might win the game just by following the rules.

S2 But following the rules isn't going to get you any score.

S3 There's no reward for playing a good game.

T Are there any games where you get an extra reward for not being penalized at all?

S4 Yes, there are... well, like you're good at the dinner table, so you get an extra dessert.

S5 But, that's not a game--where's the game?

S4 Sure it is -- trying for desserts.

T If your goal is getting an extra dessert, then it may be considered a game.

S3 No, but eating's a necessity, not a game; you're not playing....

S2 What about getting a reward if you break the rules? What about if you're a basketball player and you're told if you make sure your team doesn't win you can get $100?
We were talking about playing according to the rules, and now Michael comes along and says, 'Aren't there situations in which you're rewarded for not playing according to the rules...'

Yes, but if they catch him, he stands to lose. It'll ruin his whole sports career.

Then what you're saying is that the risks involved are enormous.

Let's get game defined now, and apply it to situations that may seem a little un-gamelike at first. What is a "game"?

Rivalry between people

A set of rules to go by

It's action that is seen by other people

There are spectators involved?

Not necessarily.

You don't need spectators, but they can see it -- like you say that a person's job or the way he feels toward another person is a game you can't see....

Is a game necessarily fun?

It doesn't have to be, like I was reading about the Russian athletes that may have to be in the Olympics because they're good at something, but they may not enjoy it.

There has to be fun involved -- either for the spectator or the players.

Yes, no....etc.

The fun thing about games is frequently talked about. But do you know that world leaders, when they talk about foreign policy frequently talk about game strategy? They talk about world policy -- which isn't fun; it's enormously dangerous -- as a "game". Can you think of a recent situation that can be thought of immediately in game terms?

The last question led to a brief discussion of the strategies of dealing with Cuba, and American goals vis-a-vis Russia. "Game" was never finally defined, but it was used to describe several situations (football, the dinner table, basketball, a man's job, international politics).
In the other class (316M), we used an analogy between the board game of Monopoly and the ninth grade. Most of the discussion was about goals and sub-goals, with some about the chance element in the "ninth-grade game" compared to the rolling of dice in Monopoly.

* * *

T Let's take Monopoly and the ninth grade. How are they alike?

S1 You're working for a goal.

S2 You have to think a lot.

(5 minutes of discussion)

S5 Since Monopoly's only a game, it doesn't really matter much anyway. But in school if you want an A at the cost of someone getting a B, you don't feel very sorry, but you aren't going home to cry about it.

T The issue of competition, you're saying, is different because Monopoly doesn't matter, but in school it matters a great deal -- is that the difference?

T What about working for a goal?

S6 Well, getting good grades.

S7 Getting into a good college.

S8 And helping your friends, loyalty to your friends....

S9 Well, there is actually one ultimate goal, and you have to sub-group the others.... (...) The difference between them is how much hangs on your decision. I mean, in Monopoly, the choice is between Boardwalk and Park Place for a million dollars of play money, whereas if you decide whether to go to Harvard or Pumpernickel College or something, it really matters.

T Basically the two games are similar perhaps in complexity of decision, but it's the long-range importance that makes the difference.

The session ended with a lively discussion of rules, after one of the psychologists inadvertently called the teacher by his first name, and a student observed that he had broken a rule of the school-game!
Homework assignment: 1) define rules, strategy, game.
2) read James Thurber's "Many Moons."

* * *

Session 2: Definitions "Role"

Teaching materials: "Many Moons" by James Thurber

* * *

We planned to spend several sessions concentrating on one term at a time -- e.g., "role", then "strategy", then "rule," etc. In each session, we planned to focus on one term, but use the other terms fairly freely, as we discussed the teaching materials chosen for the session. Rather than teach the game model in itself in vacuo, we hoped that the terms would become familiar and comfortable through continual application in familiar situations. We also decided to start with literary situations to move eventually into game analysis of situations experienced and reported by the students.

"Many Moons" had been assigned as homework after the first session, but the students had obviously not read it carefully. Therefore, we had them all read it silently at the beginning of the second session. Parenthetically, the homework throughout the course was perfunctorily done, despite constant admonitions. The problem of assigning homework in a non-credit course is substantial. In both sections, the girls were far more conscientious in finishing out-of-class assignments, and far less vocal in class.
"Many Moons" is a fairy tale about a sick princess who demands the moon if she is to get well. The king summons his court dignitaries one-by-one, and demands their help. The royal chamberlain, the royal wizard, and the royal mathematician all appear, promising faithful service and failing to produce the moon. Finally, the court jester is called. The king asks him to play some sad music. The jester asks what is wrong. When the king tells him, he finds a clever way of getting "the moon" for the princess, who is thereupon cured.

In analyzing the story, we discussed the similarities among the first three court dignitaries; then we contrasted their behavior with the jester's.

T  OK, how about the court jester, what does he do?
S1 He does just what he is asked to -- he gets the little girl better.
T  Is he asked to?
S2 No, the jester says, "What can I do for you, your Majesty?" and he says "Nobody can do anything."
T  Why is it that the king has been able to ask the first three guys to get the princess better?
S3 Cause they're the high guys.
T  And what does high guys mean?
S4 They've got more brains.
S5 That they can do anything.
T  But what does the king expect of the jester?
A11 Nothing
T  No, not exactly.
A11 Entertainment
T       Yes. What does he say? He says, "Play me Melancholy Baby" -- that's his role, huh?

*       *       *

T       The third term you have on your sheet of definitions is role, right? What's the role of the lord high chamberlain?
S5      The wise man, the steward who can get things.
T       What is the role of the wizard?
S6      He makes things appear.
T       Right, so if the chamberlain can't go and get it or send for it, the wizard can pull a genie out of a bottle who can produce it. How about the mathematician?
S5      He can figure out the formula.
T       This is always "role", see? This is what the role of these guys is... how about the jester?
A11     Well, he just plays his lute and fools around ..., He's the guy that just makes everyone happy... He's the clown....
T       And this is the role the king expects him to play -- does he play this role?
A11     No.
T       What does he do?
S       He does the impossible.

*       *       *

T       If we say we define the "role" of these characters in this way, what are we saying about the idea of role? What is "role" defined in this way?
S7      Their job.
T       Not quite....
S8      What's expected of them.
T       What people expect of them. Good. I expect you all to be students -- that's your role to me, ok? Your parents expect you to be daughters and sons -- that's your role to them....
Let's talk about "goal" now -- last on your list. What's the goal of the lord chamberlain?

S8 To satisfy the king.

T Yes. Is there another goal? Why did he try to cover up what he couldn't do?

S 'Cause he couldn't do it and he didn't want the king to realize that.

T So he wants security then?

S9 That's his strategy.

T Yes, his strategy is to evade by giving this long list of other accomplishments, but what's his real goal all along?

All Not to be fired -- to keep his job.

T The royal wizard?

All Same thing

T Mathematician?

All Same thing

* * *

The session ended with a discussion of goals in relation to the "school game" -- in particular, the use of rules as a means of accomplishing goals more satisfactorily. By the end of the second session, we had produced fairly good operational definitions of role, rules, goal, and we had touched on strategy.

Homework assignment: Choose a sample of your behavior with your parents or friends. Analyze this behavior, paying especial attention to the strategy that enables you to attain your goals.

* * *
Session 3: Definitions "Role" and "Strategy"

* * *

Teaching Materials: 16 mm. movie, "If These Were Your Children," Newton Public Schools.

For the first half of the third session, we returned to the concept of role. We felt that the homework assignment had indicated a rather naive understanding of role. The students seemed to willing to define the roles of the characters in their domestic dramas as simply "Mother" or "Sister". For instance, "Mother" means little to the outside reader since he has no idea of the past behavior of this particular mother, and thus, what he may expect of her. Part of the problem arose from our choice of teaching materials: "Many Moons" is a relatively simple short story with deliberately stereotyped characters, except of course the jester who is interesting precisely because he is the only character capable of breaking out of the stereotypes expectations of the reader.

We tried to convey through discussion of the homework, two elaborations of the concept of role. First, "Mother" without any attributes (kind, mean, bright...) is meaningless as a description of role. Secondly, it is a great mistake to define any individual in terms of any single role he plays, or simply as the composite of all his roles. The individual has infinite capacity for change, from role to role.

This course was originally designed to teach flexibility in role -- to show that atypical, unexpected reactions that deny the stereotypes are often necessary and best. We used the homework to illustrate the neces-
sity of describing role more accurately and fully, and return to this subject the next session.

The second half of the third session was devoted to a movie about school-room behavior. A discussion of one child in the movie, David, led into our first good discussion of the strategies children use to reach their goals.

(316X)

T What was the major role that David seemed to be playing in that class?

All Well, he was the fat kid... a careless boy...uncoordinated... a jerk....

S1 An intelligent boy, and no good at sports. He had the capability, but he just didn't try.

T That is his role in relation to the teacher. What do you think his role is from the point of view of his friends? If this kid were now older and were in this classroom, what kind of role would he be playing here?

S2 He is in this classroom.

S3 (rather fat and uncoordinated) You're dead!

T ... How would you treat him? What would you expect him to be?

S4 Well, I don't know right now, but when I was in 4th grade, there was a person almost like this. He wasn't chubby, but he acted like this. His parents were rich and he always got his way. And whenever anything didn't go his way at school he'd knock over somebody else's project if it were better than his own, and if somebody beat him in a race -- one time I beat him in a race and he kicked me in the shins for it... In sports if his team lost, he'd have a tantrum, and once he tore his shirt up....

T What you describe might be termed "cry-baby" or "spoiled brat".... These are all ways of describing role. So now, what can you say about David? You said he was class bully; what else can you say?

S5 All this stuff you're talking about, it really doesn't describe role -- it's more like the strategy he uses. His basic role is just being a student, a fat student....
T  How do you mean?

S5  Well, if he's just a fat student, every fat student has a goal, right?

All  What?

S5  To get attention. And his role is the same thing as his strategy -- to get mad.

T  No, his role isn't the same thing as his strategy. We're talking about three things now: strategy, role, and goal. His goal is to get attention; his strategy is to whack the kids; but his role isn't that at all -- it's more general. Think of it in these terms: what is it that the other people expect of him? That's the fastest way to understand it. That is, if you're talking about a mother, for instance, you say: What is it that I expect her to be? That doesn't mean what she is consistently, because people do vary; but, for example, Ted -- the kid you were talking about... you'd expect him to be someone who was a poor sport if the occasion ever arose, on the basis of his past performance.

* * *

Homework: Similar to last session, but a dialogue was to be produced (not simply a behavior sample) with a chart describing the role, goal, and strategy of each participant.

Session 4: Definitions "Rules"

Teaching Materials: Lord of the Flies by William Golding

* * *

We continued teaching the game model indirectly, by concentrating on one of the game terms in discussing teaching materials. In the fourth session, we discussed "rules," using a novel which the class had been studying in the English and Social Studies class sessions. Again, we tried to encourage the use of all the game terms, even "strategy," which had been inadequately defined to this point. But we centered on "rules," moving toward an operational definition and the reason for rules.
With the 316M section, we started immediately with a general question, "Why do we have rules?" Since we were also studying the United States Constitution, one student immediately quoted the Preamble, and there was some general agreement that rules are related directly to goals. We digressed at length on the inevitability of rules and law and order -- questioning whether the impulse of most of the boys in Lord of the Flies to set up a government of sorts was believable. The students very readily identified with the boys in this novel, and they speculated about their own behavior under similar circumstances.

Eventually, we found that the general discussion about the necessity/inevitability of rules needed illustration. What, after all, were the "rules" in Lord of the Flies? We examined the first few chapters closely for rules, explicit or implicit. The discussion of reasons for rules became much more fruitful.

* * *

(316M)

T Jack says, "We'll have rules, lots and lots of them..." Are there any reasons for these rules?

S1 They thought that if they worked together they could be rescued.

T What can we call the idea of rescue in this context?

S2 Survival.

T It's something they're moving towards, is that right...?

All A goal... it's a goal. (Teacher writes "goal" on board.)

S3 What's the game?

T What is the game? The game is being on an island -- maybe the game is life....

S4 It's staying alive.
T What does Jack say when he cuts out and leaves Ralph and the other. What does he say?

Students Oh... Ah... "I won't play with you guys anymore."

* * *

T Let me take you back: what reasons do you see for making these rules?

S5 I think it was to keep them together 'cause they'd have to depend on each other. They didn't have to, but they did a lot....

S6 They did because they had rules.

T What kind of rules are made?

S1 The choir has to obey Jack.

S2 P. 29 -- Lifting the conch means order.

T Actually, there are a couple of rules related to the conch -- what does the conch come to mean?

S2 Silence, and the person speaking at the meeting has to hold it.

T a) silence, b) indication of speaker... (lists on board).

S3 They use it to call meetings.

T c) call meetings....

* * *

The session ended with an unanswered question: "How can you tell whether a rules is good or not?"

S5 It seems to me that everybody is -- well, you just keep up with the written laws, well the written laws reflect the moral laws.

T OK, then, we have realized already -- and some of you have mentioned that we have categories of laws. We have written ones, in the sense that they are stated explicitly -- "stated", we might say. Then, we have another kind that are kind of vague -- we might say "procedural" rules... (...) Then you mentioned another kind, Ken....

S5 A moral code.
(writes on the board "a moral law") And I might add to this a fourth kind of law that you all overlooked in your papers -- this moral law we sometimes think of as rule by good, or by reason perhaps. Then, there's something connected with reason here, for most of us. Then there is another set of rules that is followed later in the book: rule by strength or violence. Most of you seem to think that what happens when Jack takes over is that anarchy or chaos of some kind imposes itself, because all of the reasonable laws are lost. My own feeling is that a new group of rules are set up based on Jack's strength or influence.

The final discussion moved easily into the complex but inescapable relationship between rules and goals. The summary came back to the reason for rules.

May I stop you now, and ask you if you can pull something together out of all this mess (indicates product of class discussion on board)? Some of these I would not accept as "rules", stated or unstated -- for instance, this one about physical limitations is not a "rule", but simply a condition of their life. The same goes for the isolation of the island -- that is in terms of the theory, what is called "the playground," The playground has certain limitations. But can you arrive at any general definition of "rules" from the rest of these things? What do these things share?

They are restrictions of the group.

Good. There is a restrictive sense. Is this arbitrary restriction -- for no purpose at all? What are restrictions placed on people for normally?

In order to preserve things.

Am I correct then to say "in order that goals may be sought? That is, once the goals are decided upon, you make certain restrictions so that the goals can be more readily attained.

Then rules are made to live together.

To live together, which is a goal: security is a goal, safety is a goal, happiness, tranquillity, the domestic peace -- you know, the whole bit of the Preamble -- "in order to form..."how does it go?

Rumblings of "We the people..." etc.

Here are some goals, in fact -- "to form a more perfect union, to establish justive, ensure domestic tranquillity, provide for the common defense, promote the general welfare and secure the blessings of liberty to ourselves and our posterity, we do make these rules of conduct...."
Session 5: Definitions: Strategy, Researching, Breaking Set, Ranking

Teaching Materials: Lord of the Flies (last two chapters)

* * *

This "fifth" session is a description of three class periods, rather than the normal two. In the 316M section, we spent two periods discussing the same materials, since some points raised in the first period were not adequately covered by the end of the period. But the teaching materials were the same for all three periods, and we have placed them together for that reason.

We started the session by discussing the incident at the end of Lord of the Flies, in which Ralph leads a futile expedition to Castle Rock to recover Piggy's glasses. We were trying to indicate that Ralph used a particular strategy, to identify that strategy, and question its efficacy. By this time, we had studied the book several weeks; Ralph's goals and the goals of the group were clear, we knew the rules, and Ralph's behavior could be fairly well predicted. We knew about his role as peaceful mediator and caller of assemblies. A discussion about the optional strategies available to Ralph led into "breaking set" and even eventually into "researching."

* * *
T If Ralph hadn't gone, could he have attained his goal?

All Yes, No,...etc.

T Could they have? -- How?

S1 They could have rubbed two sticks together.

S2 Have you ever tried to make a fire by rubbing two sticks together?!!

S3 There probably could have been another way of getting fire...

All (general mumble)

(...)

T Let's look back at pp. 208 and 209. Bonny's point is interesting because I too immediately thought the rubbing two sticks together is silly, it doesn't work. But in fact there must be other alternatives; what would be another alternative?

S4 Raid Jack's camp.

S5 They could have asked politely for either the glasses or a fire.

T Do they consider these alternatives before acting?

S6 They do everything hastily -- they didn't think about anything.

S7 They're so mad because Jack stole the glasses that they can't think of anything else.

T Look at p. 209 -- Piggy unveiling to Ralph, "At night in darkness they stole our fire; they stole it. We'd have given them fire if they asked." Now, they didn't steal the fire, incidentally -- they stole Piggy's glasses.

S7 It's the same thing.

T It's not the same thing, and that's the point. They think the glasses are fire without thinking, as Bonny did, that there could be other ways of getting fire short of getting the glasses back. Peaceable means, devious means, means of force, means of collaboration...other means than going up there with the conch and saying, Give Piggy his glasses back.

(...)
have done what Ralph almost does, 4) fight for them. Under each strategy, the should assess what they know about all the possibilities involved -- for instance, under the strategy of stealing them, they have to do research and figure out whether it's possible, whether they have enough strength, whether it's worth it to steal them, or whether they can find another way.

(...) 

So you see, they don't try to assess, they don't try to research, they don't investigate the alternatives.

S8 They should know by this time that Jack is beyond reasoning with. There actually is not much sense to the way Ralph goes about this....

T What Ray says is a good summing up. They still think they have to play the rules that have proven themselves not to work. Look at p. 221. They base their strategy on rules that no longer pertain.

* * *

Homework: Think of a situation in which your strategy failed to help you attain your goal. Write it out briefly, suggesting optional strategies that might have been more effective.

We started the second period in 316M with the concept of "goal conflict." The students were able to think of several situations in which their goals were in conflict with other people's goals. Since we were trying to show the direct relationship between choice of strategy and goals, the incident at the end of Lord of the Flies, in which Ralph and Piggy virtually signed their own death warrant by their strategy, was applicable. The class quickly saw the difficulty of judicious choice of alternatives in a situation of high tension.

* * *

T Let's move from talking about strategy again today to looking at the possible goals that were operating. What were the goals that Ralph and Piggy had operating as they advanced upon Castle Rock.

S1 First thing is that they wanted the glasses, then they also wanted fire, and then if they got the glasses and the fire, they have some sort of prestige over Jack and his tribe.
All (general discussion) -- so that they could be rescued... it was all for that... etc.

S2 But really, they wanted to be rescued. That's the first goal -- it comes before...

S3 That was Ralph's first thought.

T All right, is there any possibility, just looking at these goals, that people can rank goals?

S4 Oh, yeah....

T ...establish some sort of hierarchy, some kind of ladder, some kind of top-bottom arrangement among the goals -- long-range, short-range... What would be a long-range goal here?

All Rescue.

T Ok, and which would be the shortest?

All Glasses

T On the other hand, is it possible to attain the long-range goal without the short-range one?

All Yes... No... Yes... No... etc.

S5 They need the glasses to make a fire.

T Do they? Do they? You're hung up on the same thing they were, and you were just criticizing Ralph for -- you were just telling me that Piggy should have been on the ball enought to realize...

S5 Ohhh.... you can make your own fire...?

T Well? You said there was a possibility.

* * *

The session ended with a discussion of Ralph's unwillingness to use violent or devious strategies to accomplish his goal of rescue. We speculated that his goal of a peaceful, assembly-rulled existence was actually pre-eminent.

Homework: Analysis of classroom behavior. Describe roles of two individuals and their goals.
Session 6: Level of Aspiration Test -- Realistic Goal Setting

Teaching Materials: Level of Aspiration Test.

* * *

Starting with the sixth session, we tried to move in on the problems of the students, hoping to show them the applicability of the same game model to situations they faced themselves. Our plan had been to start with literary situations, and move gradually away from them, coming closer and closer to the students' problems. We were by no means completely successful. The students often resisted the game terminology when applied to themselves. We did find some relatively effective discussion techniques however.

We spent some time at the beginning of the sixth session discussing a problem of a popular member of one of the sections. The day before, after losing an important tennis match, he had thrown away his racket in disgust, and loudly quit the team. He came to the ESG teacher the next day, admitted his foolishness, and asked how he could get back on the team. The teacher deferred his reply until the guidance session, in hope that the class would collaborate. The discussion, the first in which there was any real attempt to apply the game model to a situation confronting a member of the class, was fairly successful. The students enjoyed playing strategists, and some came up with fruitful suggestions. Part of the trouble with this approach is that the individual must be willing to discuss his own problem with the class as a whole. The teacher can build up a "library" of situations to provide student-made teaching materials, and these can be used when the potential "threatening" material
is out-of-date enough to provide relative objectivity. Another difficulty is that the problem, as presented to the students, must first tell enough about the people involved to allow some validity in predictions of their behavior; and secondly, be of the sort that permits several real options. The latter condition is especially necessary if the students are to be trained to present and evaluate a wide range of strategies.

(316X)

T  No, it's nothing terrible -- go ahead and tell them.
S1  I got so mad, I said, "I quit!" and now I want to know how I can get back on the tennis team.
T  Now, you want to be on the tennis team, right? Goal?
S1  Yes
T  You want, however, to win as often as possible in most games, which is true in any sport, and really in most games. However, you had various strategies short of quitting if you lose a match -- you picked the ultimate strategy.
S2  How can he get back?
T  Well, that's up to him.
S3  It won't do the tennis team any good! (laughter)
T  If he really wants to get back, he could adopt a strategy of losing face, and saying, "I'm sorry I was a fool -- that was a stupid thing to say, and I was in the heat of the moment..." and all that.

How else could he do it? Let's say he has another goal, and that is "face."

*  *  *

Some other options, none completely satisfactory, were suggested, including one that he simply "turn up at practice as if he had never quit, and pretend nothing happened."
The Level of Aspiration Test was not very satisfactory, partly because it demanded more careful analysis than we had allocated time for. In the test, the students repeat a simple manual task -- in this case, drawing a wavy line through a row of dots without touching them. They are timed by stop-watch, and classroom conditions are similar to usual testing conditions. After five tries, they compute their mean scores, and are told that the standard mean is substantially higher: they have done C work at best. They try five more times, and then they are told that the previous means were a hoax -- actually, they had been doing B work. They repeat the task five more times.

The procedure is somewhat more elaborate, since before each trial the student is asked to estimate his performance in the next trial. Discussion centered around the effects of stressful conditions for performance, competition for grades, achievement motivation, and goal-setting behavior. These could have been divided further.

**Homework:** Reproduce a dialogue between you and a member of your family in which you either used, or failed to use, good strategy.

* * *

**Session 7: Discussion of Student-Produced Dialogues**

**Teaching Materials:** Two dialogues of boys asking their mothers to go out for the evening.

* * *

In this session, we came upon a most useful method for involving the students in discussion of student-produced problems. Gradually, we
were shifting the material for discussion to problems and situations that were common to them. To this end, most of the homework assignments were to produce short dialogues or descriptions of behavior. We decided to use two similar dialogues for the seventh session, and planned a modified role-playing situations. The two dialogues follow.

Contrasting Outcomes to Two Similar Game Situations

I

Boy  Mom, I have to go to Herbie's Thursday to do a report, so I'll miss my music lesson.

Ma  No, Steve, that's out of the question. I've paid for your lessons and you'll have to go. Can't you go to his house on another day?

Boy  No, Mom, this is the only day I can go over there because he's doing something else the rest of the week. Even though it's a short report, it's going to count a third of our mark for this term. Please, Mom?

Ma  No, it's still out of the question.

Boy  But, Mom, you're being so unreasonable -- why can't I go? Please, Mom, please let me go or I'll never get my report in. I won't be out very much if I just miss one little music lesson -- please?

Ma  I've said all I intend to. The matter is closed.

II

Boy  I'm going to a party tonight.

Mom  You can't -- it's too dangerous to go out tonight. The roads are very icy and I need help in straightening up all the magazines and stuff in the basement.

Boy  You know I've been looking forward to this party for two weeks.

Mom  Don't tell me you don't have any homework?

Boy  I don't have much at all, and I can help you straighten out the basement and do the little homework I have tomorrow.

Mom  If you do go out tonight, you won't be able to go out for the next three Saturday nights.
Boy: That isn't being very fair.

Mom: Fair or not, those are the conditions. Also, don't expect a ride to or from the party from me.

Boy: I'm afraid I'm going to go tonight anyway.

Mom: Go ahead, but don't forget what I said.

Both dialogues were produced by boys in 316X, and we altered names and circumstances slightly. After reading the dialogues aloud, the teacher asked the students to characterize the mother's role. Almost immediately, the boy who had written the dialogue became involved in the discussion, but his classmates did not realize it was his own situation. Thus much of the discussion involved analysis of Boy 1 and Mother 1, with Boy 1 analyzing his own behavior along with the teacher and his classmates. The anonymity was especially fortunate, because it obviated the usual self-conscious giggling approach to similar situations, and allowed Bl to discuss himself and his relationship with his mother quite freely.

(316X)

T: What words would you use to characterize the Mother's role?

S1: Stubborn.

T: What else?

S2: She's the type that doesn't want to get involved. She just says, "That's it" and that's it.

T: Why is that to her advantage?

S3: Maybe she knows she'll give in eventually, and she doesn't want to.

B1: I get the idea that, um.... that... well, the boy just wants to do the report that he has to, and the mother, the mother says No, you can't.

T: Let's look to see what goals there might be working here....
S4  Well, the mother's goal is just to make it so that he won't have
a chance to reason it out with her.

T  Is that a goal in itself? or is it a strategy?

S4  Well, she doesn't want him to go -- that's her goal.

(...)  How would you describe the role relationship of the boy and his
mother in the two dialogues?

S5  Well, the kid is on the defensive in the first one; but in the
second dialogue, the kid says, "I'm gonna do this no matter what
you say."

T  If you were to use a word to characterize the strategy of the boy
in the first dialogue, what would it be?

S5  I guess he's weak.

T  Weak?

S5  On the defensive.

T  On the defensive, weak... That satisfies you all? keeping in mind
of course, that it is in this relationship -- that this isn't a
general characterization of him -- but that in this conflict situ-
ation where they have different goals going, this boy has an ine-
fective kind of strategy.

S5  It wasn't well thought out.

B1  In this situation, the boy has to be casual rather than planning
it out.

T  Would he have been smart to have planned it out a bit? (...) What
alternative strategies does he have? First, let's characterize the
strategy he did use.

All  He begged.

T  OK, he pleaded -- he had a pleading strategy which you characterized
earlier as defensive, weak, because we associate the wheedling tones
of "Ah, come on Mom..." with relative weakness. If we keep in mind
the particular role of this mother, what other strategies could this
boy have used?

S6  He could sneak out...

S7  Or go to his father.

T  But do you think that would have been effective?

(general comment)
As it stands, what she says is "Absolutely not," but he may have some chance with the father.

Then you would see the father's role in this situation as more lenient...

(general comments)

(Discussion with Boy 1 participating, with mother's primary role compared to father's in children's decisions.)

Boy 2, of course, had taken exactly the opposite strategy with his mother; obviously the roles were completely reversed. Since Bl had participated so fully up to this point, the teacher decided to have him play this radically different role, and paired him with a sharp-tongued inventive girl. She played Mother 1, and he played Boy 2. The class still did not know that Boy 1 was Bl. His attempt to shift roles, to come on stronger and less apologetically, was only partly successful.

* * *

What would happen if we kept the same Mother, and put Boy 2 in the Boy 1 dialogue? Let's try it. Mary, you play the first Mother, and John (Bl), you do Boy 2, only in the Boy 1 situation. You'll have to make it up -- ok, now, just pretend you're Boy 2.

John: "Mom, I'm afraid I'll have to miss my music lesson because I have to do an important report over at Herbie's."

All No! No! "I'm going to..." etc. (all the students try to tell him how they think he should play it.)

T Leave him alone!

John: "I'm going over to Herbie's because I have to do an important report."

Mary: "Isn't that just too bad. You're staying home whether you like it or no." (class giggles) "You're staying home for your music lesson no matter what you think."

John: "No, Mom, I can't. This is a very important report" (pleading voice).
All: No! Be stronger, etc. (noise)

T: You must keep quiet if you want to hear....

John: "No, Mom, I can't -- this is a very important report, and I have to go, and I'm going." (very matter-of-fact voice) (class cheers)

Mary: "Who says? You do? Well, I say you have to stay home and that's all there is to it."

John: "What will you do if I go?"

Mary: "If you do go? I'll call Herbie's Mother and tell her to send you right home." (laughs)

John: (slight pleading note reenters) "Well, I'm sorry, but then we'll just meet somewhere else."

Mary: "You'll just have to forget the report -- I'm sure there's another time you can do it anyway. You can do it in the afternoon after five."

John: "I'm going, and I don't care what you say." (very strong)

(Class applauds at John's forcefulness!)

* * *

An interesting thing about this technique for exploration of student problems was the extent of class participation in the role-playing. The teacher had a very hard time trying to keep the kibitzers from dominating the improvisations. That B1 became directly involved was fortunate, but not necessary to the technique, and clearly became at least academically aware of the possibility of changing role and strategy.

Homework: Produce three dialogues in which two boys argue about smoking. One of the boys is trying to persuade the other to have his first cigarette. Give the second boy three strategies to defeat the first.

* * *
Session 8: Self-initiated behavior v. Conformity to Others' Expectations

Teaching Materials: none

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This was the first session of the course in which we did not use teaching materials of some sort (novel, short story, dialogues, etc.) Our change of pace was largely dictated by our desire to discuss a new but related topic. We had been struck by the conformity of students -- their unwillingness to make decisions or initiate behaviors that were counter to the spirit of the group. The hesitation about unusual behavior or statements was evident in classroom discussions, and in the accounts of incidents they reported in their homework.

The game model demands thought and actions that run counter to the social determinism implicit in statements like, 'Why talk about smoking? If you're going to smoke, you'll smoke anyway.' Game theory assumes the capacity to behave rationally, actively, and voluntarily in most situations. We felt that students were all too willing to accept a passive, non-participating role in most of their decision-making. In this context, encouraging them to become better "gamesters" was saying in effect, Think about what you want (goals). Then think about how you can get it (strategies). Be willing, at the very least, to see that you should set your sights realistically, decide what goals are most important to you, and see that there are many, many routes to the things which you value.

In this session, we attempted to transmit some of this feeling of self-initiated behavior by discussing the areas of conformity and taboo in the classroom. We talked about willingness to display athletic prowess
contrasted with hiding academic ability. We discussed dress, manners, and dating behavior.

But the discussion was too general and diffused. The teacher was uncomfortable with the undirected format and the lack of defined goals. Our apparent failure to convince the students that self-initiated behavior was desirable was at least a hint to them of possible new directions.

**Homework:** none.

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**Session 9: Preparation for Interview on Decision-Making**

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**Teaching Materials:** none.

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We decided to invite a young salesman to be interviewed by both sections. Some six years before, he had made a choice between continuing in a career in journalism and entering a business field. Since much of our discussion had related to decision making, we felt that an interview by all the members of the class, couched in game terms, might be a useful device to indicate the great number of factors in any decision. We pre-interviewed the salesman, more to see if the decision he had made had the kind of components that would lend themselves readily to game analysis than to prepare him in any way.

The session before the interview was devoted to explaining the reason for the interview. The students were assigned a composition which would be counted in their English grade. In this composition, they were to report the interview, discussing why the salesman had made his decision
and how he had gone about making it. We initially insisted that they use game terminology in asking the questions. Unfortunately, during the interview itself, we did not enforce this ground rule, and the papers suffered as a result.

The 316X class started with a general discussion of decision making, how it entails goal-setting, self-appraisal, consideration of options, etc. We moved into the filed of vocation options. At the end of the period the teacher announced the forthcoming interview.

The 316M class was more successful. For one thing, we announced the next week's interview immediately, and this provided a purpose and focus for the discussion. Also, the session moved from the general to the more concrete, ending by a spontaneous mock-interview of one of the students by the teacher. This section, perhaps because of the better preparation, interviewed more successfully the next week.

(316M)

T Can anyone tell me about a decision he made recently that was fairly complicated, and how you decided to make it?

S1 Curriculum choice

T OK, you all went through this. Somebody tell me how one could go through this decision making. Let me impress upon you what we've been trying to get at -- that is that everyone makes decisions all the time. The question is whether or not you make a real choice in any direction.

S2 OK, say you want to be a doctor....

T There's a long-range goal. Let's make it even longer: why do you want to be a doctor?

S2 Money, satisfaction.

S3 Money comes first.
Money then -- that's the longest, the farthest goal you can think of? That's the best thing, the furthest thing? -- I'm asking.

I'm not saying that.

I want to be a doctor because I want to move around.

You have a goal then -- to move around.

Moving around being a doctor?

I want to join the Peace Corps.

What is your goal there?

You won't make much money!

Travelling.

Just to travel? But you could travel and make more money than in the Peace Corps....

I'm not going there for money -- I just want to travel.

Just to travel? Then why not just travel? You don't have to become a doctor or join the Peace Corps in order just to travel.

But they need guys -- like over in Africa or some place like that.

If you want to travel, "Join the Air Force!"

You can go to Africa.

Yeah, but he wants to help people in Africa.

Ah, forget the "help people" bit ... he didn't say anything about helping people in Africa.

I want to help and travel.

Why do you want to help?

Ummmmmm, it's, it's psychological, I guess.

How is it psychological?

It interests me.

OK, well, we've found quite a few goals hidden in there. (Teacher recapitulates and tells of own motives for travelling without being a doctor in the Peace Corps)

But you travelled for different reasons. You travelled because you wanted to see. I want to travel because I want to help.
All right -- that's exactly the point. I'm saying that our goals were different.

Discussion of S2's several goals continued, and they were eventually arranged into a hierarchy.

**Homework:** Prepare questions that you will ask of the interviewee, keeping in mind that you are looking for the*why* and *how* of his decision.

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**Session 10: Interview of Mr. Bailey**

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**Teaching Materials:** Mr. Bailey

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In this session, the class conducted a group interview of a successful sales executive. Mr. Bailey had decided to enter business some seven years before, upon completion of college and fulfillment of his military service. Previous to that, he had worked for several newspapers, starting in his teens as a copy boy.

We suggested that the class try to find the reasons that led Mr. Bailey to decide for a business career, and against the continuation of his potential career in journalism. We had chosen Mr. Bailey because we knew that he had proceeded methodically and thoroughly to research his options at the time of the decision. In a pre-interview, we had found him able to articulate his goals, and willing to describe his decision-making quite frankly.
The class was to ask such questions as would make clear the motivations behind Mr. Bailey's decision. At first, we insisted that the questions be couched in game terminology, but the class seemed unwilling to use the terms consistently.

316X asked good questions that began to reveal Mr. Bailey's motivations. They were, however, weak in following up their questions, in pushing him to reveal more than his apparent reasons. And they were unwilling to move on to the second part of the assignment: to get information that would help them describe the "how" of his decision between business and journalism -- how he went about making the choice.

The 316M session which followed was more successful. Mr. Bailey had a better feel of the classroom by now, and he was willing to be more expansive. The 316M class used game terminology more frequently.

(316M)

Mr. Bailey recognizes first student.

S1 Are you married?

Mr. B Yes.

S2 Do you enjoy travelling?

Mr. B. Yes.

S3 Do you accept defeat?

Mr. B. I have -- not too graciously or gracefully always.

S3 I mean, do you take defeat?

Mr. B. You have to take defeat, but I'm not a good loser.

S4 What kind of temperament do you have?

Mr. B. I'd say volatile, with some restraint.

S5 How did you go about making your decision to become a salesman?
Mr. B. Well, that should take the rest of this period!

S6 Do you like money?

Mr. B. I have an interest in money, not an overwhelming interest.

S7 Would you rather be paid on a commission or a salary?

Mr. B. I can only answer that by saying that I have always been paid on salary.

S8 Was your main goal to become a salesman or a journalist?

Mr. B. My initial interest had always been in journalism.

S9 So, in other words, you just took this job as a salesman as something to keep you going?

Mr. B. No, no. My decision to go into business as opposed to journalism was one that was made after a lot of soul-searching. I decided at a particular point in my life that newspaper work was not for me. Then I had to decide what was for me.

S10 In other words, your goal in life is to be the head of something?

Mr. B. I suppose you could put it that way. I'd like to run something.

S10 (using game terms again) What's your strategy to reach your goal of running a good business? I mean, how are you going to become head of the company?

(...)

S10 If you don't become head of your company, will you feel you have reached your goals?

Mr. B. I may have to adjust my goals.

S10 Do you have any other goals?

Mr. B. Yes, I do -- yes, I'd like to have a family, children... I'd like to make some basic decisions, some of which I've already made, about religious or theological considerations in life -- that kind of thing.

S11 You'll continue in this field until you reach your goal, but if you don't reach it, then you wouldn't have reached your main goal?

Mr. B. That is only if you feel a vocation goal is the main goal in life. I don't myself. It's a very important one and very often a decision you make in a vocation affects these other goals.

(...
When you entered your last year of college and you decided that you would go into sales, did you have ideas of starting there -- I mean was this temporary?

Mr. B. That's very good -- sales is only an avenue by which I wanted to arrive at a position of administrative authority -- in other words, what I was trained in college to do.

You could call it a strategy if you want -- a sub-goal or strategy to arrive at what you want in the long-run.

* * *

Homework: Composition on the reasons for Mr. Bailey's decision and the way he went about making it.

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Sessions 11 and 12: Brainstorming and Breaking-Set

Teaching Materials: students' problems

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The last two sessions were intended to introduce the concepts of brainstorming and breaking-set as methods for problem solving. The students were encouraged to bring up their own problems, and to discuss these problems with the class, using these techniques and game strategy in general.

One boy had recently had a run-in with a teacher. Both teacher and boy had lost their tempers, and now the boy was anxious to find some way of apologizing to the teacher without losing face.

What would you do?

I guess I'd apologize.
T  How would you do it? Would you just walk right up and say I'm sorry?

S1  No, I'd try to explain to him why I did what I did.

S3  Would this kid get into trouble if he didn't go back and apologize?

T  No

S3  Then I wouldn't do a thing.

T  Why?

S3  Because if the kid didn't like this teacher and everything, I wouldn't go apologize -- I'd just leave well enough alone.

S4  But I think that if you apologize it shows that you are the bigger man.

(...)

T  This also depends on the relationship involved. For example, suppose this guy is an eight grader and it was important because he might get this teacher next year in class. Would that matter to you?

S5  If he's the kind of teacher who's going to grab hold of a kid and shake him, he's going to be a lousy teacher to get on the bad side of....

S6  Yeah, but by next year he'd have forgotten all about it. So I wouldn't apologize for that reason.

(...)

T  What I'd like you to notice here is what happens as we go through the analysis of these things. When a whole group of people puts its mind to work on a problem -- what happens is that they provide a lot of options that these guys didn't have on hand. That is, they couldn't stay cool about it... they were too involved in it. And second, they didn't have the advantage of asking for a lot of people's opinions.

You see, it's something like the horse in A Tree Grows in Brooklyn -- you know, he wears blinders. This is a good way of thinking about it. When we're involved in most any situation, we tend to wear blinders. Do you know why the horse wears blinders?

S7  Then he can only see straight ahead.

T  Right. If he can only see straight ahead, he won't be tempted to take the other routes, you see. There are a lot of situations where people use this bliners technique. (... ) This is how a lot of
training is done... And I suggest that part of the difficulty we encounter at any age is to learn to get our hands out, to get the blinders off and to find new ways of doing things, solving problems.

And this is the major thing we're after in this course. If we can get nothing else across, we hope to show you that it's important to find new options for behavior. There was an example of this in the first story you read. What was the example?

S8 Oh, she wanted the moon.

T Yes -- what was the example of removing the blinders?

S8 To get the moon -- a small one.

S9 They finally went up and asked her if...

T Who's "They"?

S9 The Joker.

T Right. He thought of a new and ingenious way of solving the problem that no one had thought of before. Everyone had been so stuck in his own little way of looking at the world that they hadn't thought that there was a way to make the Princess just as happy and to solve the problem.

What's an example in Lord of the Flies?

S10 The glasses -- they thought they could only make a fire with the glasses.

(...) 

T This is just what we're talking about in situations outside of literature -- options, a kind of flexibility, a kind of looking for a new way. Sometimes when you take the blinders off, you see that there's a route that goes around, but it's faster or safer, or surer, etc. -- you may have to go around the problem to solve it. Sometimes when you take the blinders off, you realize that you can go straight through the problem -- all you needed was to see the right direction.

This, then, is the Strategy Training Program. We now turn to the plan for assessing its effects on the course members.