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ABSTRACT

The study evaluated an Anthropology Curriculum Study Project course, "Patterns in Human History," used with high school students in a one year field test situation. Ethnographic and cognitive components of the curriculum were examined. The specific objective of the research was to examine the behavioral effects on students, teachers, and schools of the curriculum materials and to adapt the materials to student and teacher needs prior to dissemination of the curriculum. The methodology involved observing curriculum use among 1,200 tenth grade students in eight urban high schools in northern California, becoming knowledgeable about social organization patterns in a public high school, and evaluating cognitive learning among pupils using the curriculum. Evaluation of the ethnographic studies component focused on teacher and student psychological and cultural orientations, community context, student-teacher interaction, and responses of school personnel to innovative programs. Measurement of cognitive achievement among students who participated in the course centered on discussion of cognitive research strategies as they relate to learning complex concepts, processing social data, identifying status positions, and on applying research in these areas to the anthropology curriculum. Recommendations for curriculum improvement included that teachers be better prepared to deal with anthropology content and that ethnic studies be incorporated into the anthropology curriculum. It was concluded that anthropology course experiences increased student ability to draw inferences about societies from artifacts and written anecdotes and to process and apply ideas from anthropology to social realities. Appendices are included. (DB)

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REPORT

of the

ANTHROPOLOGY CURRICULUM STUDY PROJECT-RESEARCH PROGRAM

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ANTHROPOLOGY CURRICULUM STUDY PROJECT-RESEARCH REPORT

The simultaneous publication of a new course of curriculum materials and of a research report on the use of that course is an unusual occurrence. Only the complexities of publication contract negotiation and of publication itself could have produced the coincidence that Patterns in Human History, the Anthropology Curriculum Study Project course, and the report of the Anthropology Curriculum Study Project-Research Program would be published in the same year. At least two consequences followed from this fact: 1) the ACSP-RP staff had to cope with a pre-publication version of Patterns, which had not had a final editing and which had to be duplicated for use in the Research Program schools; 2) the advantage of this situation was the opportunity to use the experience of the ACSP-RP classes for making a number of changes in portions of the course that had not been previously tested.

The setting of the Research Program within the total work of ACSP is described in the ACSP Report (see Boggs, pp. 31 ff). The research herein reported was planned and carried out by the ACSP-RP staff: Dr. T. W. Parsons, Senior Research Consultant; Dr. Morton S. Tenenberg, Senior Associate; C. Will Ekhoff, Senior Assistant; Burma Haiblum, Junior Assistant; Margaret Schmidt, Secretary.

Malcolm Collier, Director ACSP

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PART ONE

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Chapter 1

Plans to add a research program to project curriculum development work were part of the ACSP proposal submitted to NSF in 1968. The research program, conceived by Fred Gearing, was intended to implement the "high fidelity, wide amplification" use of ACSP curriculum materials, notably of the one-semester course, Patterns in Human History. These efforts were conceived as action-research which would "bring together personnel having special research and other competencies to initiate . . . a set of research and other tasks" to examine the behavioral effects on students, teachers, and schools of the use of Patterns, and to produce adaptations of the course which would make it more useful within local variations in cultural diversity and in student and teacher characteristics.

The expectation was that this research program would be carried out in the eighteen months from January 1, 1969 to June 30, 1970. Several events, at several different points in that period of time, lead to a modification of the plan as originally conceived. The first of these was a spending ceiling which necessitated an across-the-board modification. Another was the fact that plans to "reproduce local adaptations were dropped in July, 1969 because of Gearing's resignation as ACSP Co-Director. Finally, and within the period of the research itself, local school disruptions (described in Chapter 9) lead to further curtailment notably, and regretably, in research into the effects of different teaching styles on the unfolding of the course.

A further source of distraction should be noted. Because of delays in the signing of the publication contract for Patterns, course materials were available to the research program staff only in mimeographed form,

and unassembled. As a result, the staff spent days facilitating the reproduction and distribution of the materials. The materials had yet to be given a "final" editing, a fact which did not make much difference with the student materials but did make a difference with the teaching plan which was much more difficult to follow in its mimeographed form than in the form finally used in the printed edition. It should also be recorded that information from the ACSP-Research Program staff helped significantly to reshape some of the lessons notably in Parts I and III.

Following on plans worked out during the spring and summer of 1969, Patterns in Human History was taught by sixteen credentialed teachers to approximately 1,200 tenth-grade pupils in eight senior high schools. Two of these schools are in Sunnydale,* California; the remaining six are located in Castlemont, California. The students involved exhibited an enormous range in initial capabilities and, as a group, were quite typical of pupil populations found in many large urban centers in America. Thus Patterns was not used by "select" groups of students, but rather with pupils representing a broad range of prior experience, ethnic backgrounds, and previously acquired skills and knowledge.

The sections which follow (1) Ethnographic Studies: "The Ethnography of an Ethnically Mixed School," and (2) Cognitive Studies: "The Cognitive Impact of the Course Upon Pupils," summarize the two major portions of ACSP-RP completed during the 1969-70 school year. Ethnographic Studies summarizes the research conducted at one project school during the whole 1969-70 school year and is one of the few studies of the social organization of a public school carried out by a trained ethnographer. This ethnographic

*Place names, school names, and names of school personnel, are fictitious.

study provides contextual data within which to interpret the cognitive studies. In addition, it provides important data on school organization, role dynamics, and social perception. The second section is a summary of research on pupils' cognitive learning during their study of Patterns in Spring, 1970. Data from both the cognitive and ethnographic studies provide significant insights into the impact of Patterns in Human History upon teachers and pupils.

Chapter 2

RESEARCH POPULATION

FIELD SITES

Two northern California urban school districts, Sunnydale and Castlemont, were selected for the ACSP-RP in the use of Patterns in Human History. Both school systems serve areas exhibiting wide variation in ethnic background and economic stability, insuring from the start that Patterns could be used in a variety of social settings during the research period. Furthermore, connections with each of these districts existed through previous associations of members of the ACSP-RP staff.

The Castlemont Unified School District was especially suited to the needs of the research staff. The school system draws from a large urban population which is both demographically and economically similar to the populations of large urban centers elsewhere in the United States. As in many other "inner city" urban centers, the majority of pupils enrolled in the Castlemont schools are classified as members of ethnic "minority" groups. In Castlemont, as elsewhere, the events of recent years have led to increasing participation of parents and parent pressure groups in the control and direction of the activities and programs of the school district. As a consequence, curriculum innovations such as Patterns must meet the learning needs of the pupils and also work within the ideological needs of all who participate in the school community.

Table 2.1

ETHNIC ENROLLMENT IN CASTLEMONT SENIOR HIGH SCHOOLS
October 1970

Ethnic identification of pupils	Ethnic enrollment in six senior high schools[1]												Total ethnic enrollment	
	C_1		C_2		C_3		C_4		C_5		C_6			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Spanish surname	141	5.8	240	17.6	2	0.2	254	10.9	243	14.3	92	3.8	1,057	8.8
Other White	60	2.5	299	21.9	4	0.5	703	30.0	189	11.2	1,830	74.8	3,244	27.0
Negro	2,213	91.2	751	55.1	863	99.2	909	38.8	1,062	62.6	375	15.3	6,768	56.4
Oriental	8	0.3	6	4.4	1	0.1	432	18.5	163	9.6	126	5.2	793	6.6
Indian	-	-	7	0.5	-	-	3	0.1	11	0.6	-	-	21	0.3
Other non-White	4	0.2	7	0.5	-	-	39	1.7	28	1.7	22	0.9	113	0.9
Total	2,426	100.0	1,364	100.0	870	100.0	2,340	100.0	1,696	100.0	2,445	100.0	12,008	100.0

1. C_1 = research school number 1 etc.

The socio-economic and political character of the Castlemont school population provided one set of reasons for selecting Castlemont as a research site. This selection was also influenced by the fact that the Castlemont Unified School District is sufficiently large to have developed the elaborated bureaucratic organizational structure characteristic of urban school systems but small enough to permit the ACSP-RP staff to carry out the research project without being immobilized by bureaucratic "red tape." Since educators in urban school systems are frequently heard to say that "bureaucratic red tape" is a major factor influencing the flow of decisions, personnel and material necessary to successfully implement new programs, the research staff concluded that Patterns should be field-tested in a large as well as middle-sized school organization.

The gross size of the Castlemont school organization is suggested by the following data: the Castlemont Unified School District enrolls approximately 64,000 students in grades K-12, quartered in ninety-two schools. The District maintains sixty-seven K-6 elementary schools, fifteen 7-9 junior high schools, eight 10-12 senior high schools, two opportunity-continuation high schools, one development center for handicapped minors, and sixteen child care centers. Included in the totals are special schools for the physically handicapped, the trainable mentally retarded and the deaf and hard-of-hearing.

Table 2.2

PUPIL ENROLLMENT IN CASTLEMONT PUBLIC SCHOOLS
October 1970

Ethnic identification of pupils	92 schools	
	No. pupils	%
Spanish surname	5,201	8.4
Other White	16,136	26.2
Negro	36,214	58.8
Oriental	3,139	5.1
Indian	344	0.6
Other non-White	552	0.9
Total enrollment	61,586	100.0

The Sunnydale Unified School District provided the ACSP-RP staff with an opportunity to implement Patterns in a medium-sized school district which, while exhibiting many of the characteristics of large urban school systems, also has many features characteristic of small suburban districts. Like most public school systems, the formal organizational structure of the district resembles that of any other bureaucracy with a highly elaborated, hierarchical role structure. At the district administration level, the assistant superintendent of secondary instruction and his staff are directly responsible for the operation of the high schools and they in turn work directly with the principals and their assistants in each of the three high schools within the district. Despite this well-defined, carefully articulated role structure, the Sunnydale Unified School District is small enough so that considerable direct communication is possible between members of the district administrative staff and persons at lower levels in both the certificated and classified staff structures at each of the local high schools. Although teachers and other staff members at the local school generally communicate upward through the established chain of command, they frequently take advantage of the opportunity to initiate direct contact with administrators at the top of the structure to discuss school-related matters. This situation was particularly advantageous to the ACSP-RP in that it allowed the staff to work in the schools on a daily basis with teachers, administrators, and pupils while at the same time permitting direct access to top level school administrative personnel whenever there was a need to discuss and/or resolve problems related to research activities.

The Sunnydale school system includes thirty elementary schools, six junior high schools, and three senior high schools. These schools are staffed by 1,631 certificated personnel who serve approximately 30,000 pupils. The ethnic and socio-economic characteristics of the Sunnydale pupil population closely parallel those of many cities of similar size. The pupil population of the senior high schools is demographically similar to those of school systems much larger in size. Inspection of Table 2.3 reveals that the demographic characteristics of the pupil population in school S_1 are much like those of schools in large urban centers. The pupil population in school S_2, however, is similar to that in many small cities and suburbs.

Table 2.3

ENROLLMENT FIGURES FOR SUNNYDALE UNIFIED SCHOOL DISTRICT
1970

Ethnic enrollment of pupils	Enrollment senior high schools[1]				Totals for all 39 schools in city	
	S_1		S_2			
	No.	%	No.	%	No.	%
Spanish surname	578	35.1	190	6.7	7,157	22.18
Other White	169	10.3	2,367	84.4	17,933	55.57
Negro	575	35.0	47	1.7	4,664	14.45
Oriental	165	10.0	161	5.7	1,201	3.72
Indian	5	.3	9	.3	109	.34
Other non-White	153	9.3	34	1.2	1,208	3.74
Total pupils	1,645	100.0	2,817	100.0	32,272	100.00

1. S_1 = research school number 1.
   S_2 = research school number 2.

Patterns in Human History was used in two of the three Sunnydale senior high schools. Of the two schools, S_1 was studied most intensively. All of the pupils in S_1 who enrolled in Patterns were given the full battery of cognitive and personality tests. Most also completed the sociometric instruments used to study socio-economic perceptions. In addition, S_1 was the school where the major ethnographic studies were conducted. S_1 was selected for intensive study because the ethnically mixed pupil population provided data which would speak to a broader range than would comparable data from the more homogeneous pupil population of S_2.

The intermediate size of the Sunnydale school system made it a particularly appropriate site for intensive study. The school population was large enough and diverse enough to permit testing Patterns under conditions similar to both larger and smaller systems. The bureaucratic organization of the district was large enough to allow for both field testing of the course and ethnographic research to produce data capable of interpretive generalization to elaborated bureaucratic school systems. Still, the Sunnydale organization was small enough to permit access by research staff to senior officials, either for purposes of research interview or for purposes of advice and assistance.[1] Although no serious problems ever did arise during the course of the implementation research, the unusual nature and comprehensiveness of the research procedures might possibly have activated unsuspected political, ideological, or personal forces which could have

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[1]Part Two, Chapter 5 and 6, provide the reader with a comprehensive review of the Sunnydale field site.

caused problems for both researchers and school personnel. As a matter of prudence the research staff endeavored to cultivate relationships with school and community leaders who could facilitate both data gathering and problem solving. That no problems ever did develop may well be due to these relationships as well as to role management activities in the schools themselves.

SELECTION OF RESEARCH POPULATION

The six Castlemont high schools and two Sunnydale high schools include two with a predominantly "white" middle- and upper-class student body, four exhibiting economically and ethnically "balanced" student populations, and two with predominantly "black" student composition (see Table 2.4).

Table 2.4

ETHNIC COMPOSITION OF IMPLEMENTATION SCHOOLS IN SUNNYDALE(S) AND CASTLEMONT(C)

Ethnic composition	Sunnydale schools		Castlemont schools						Total
	S_1	S_2	C_1	C_2	C_3	C_4	C_5	C_6	
Ethnically mixed*	X			X		X	X		4
Predominantly** "white"		X						X	2
Predominantly** "black"			X		X				2

*No ethnic group comprising more than 49% of the student population; at least three ethnic groups comprising a minimum each of 10% of the total student population.

**One ethnic group comprising at least 80% of the student body.

ESTABLISHING PROJECT AND CONTROL "POOLS"

Collectively, the students at the eight schools constituted a representative aggregate exhibiting a considerable range in social, economic, achievement, and personality characteristics found in urban settings of west coast USA. Ideally, the composition of a project group and a control group should have been determined by some stratified random selection process in which the chances of every tenth-grader at these eight schools being included in the project were equal to his chances of being designated as a control subject. Any plan even remotely approaching this ideal was completely unfeasible as it would have necessitated each school making considerable alterations in its normal scheduling procedures, something none could be expected to do in view of many complicated ramifications for scheduling other courses. Furthermore, both school districts were publicly committed to a policy of offering elective courses at all grade levels; their participation in ACSP-RP activities was predicated on the assumption that Patterns would be used as an alternative to a regular half-year world history course (Sunnydale) or as one of several electives for the other half of the tenth-grade year (Castlemont). Since tenth-grade students at seven of the eight project schools chose the ACSP course from among other alternatives, the possibility of random assignment was further preempted.

Intricacies related to the selection of project and control students also applied to the selection of project and control teachers. Further complications were introduced by the fact that the social studies department at each school had its own previously established procedures for determining

which teachers would teach which courses.

The plan adopted for identifying project and control students and teachers consisted of essentially two phases:

(a) First using, in the main, the customary practices of each school regarding the installation of new courses in the curriculum. The practises were not uniform. At one school, for instance, the members of the social studies department jointly determined the number of class sections and students that would take Patterns and the course was taught by the teachers who had initially evidenced a voluntary interest in teaching the course. At several other schools, in contrast, the number of project sections was determined by the number of students choosing to take the course from among other alternatives and the composition of project groups was determined by arbitrary division of these students into class sections; the teaching of the course was then assigned by the department chairman to a member or members of the social studies staff who then had the option of declining--an option not exercised by any teacher. This first phase of the plan resulted in the identification of approximately 1,100 project students in thirty-six class sections taught by sixteen project teachers.[2] Each student was considered as a primary data-producing unit, in contrast to using class sections as the primary data-producing units. The

[2]Two additional class sections, taught by student teachers, were not included in the conducted research.

1,100 students constituted a "pool" of project students which could be considered as a total group or sampled in random or stratified fashion for various sub-studies of the whole ACSP investigation.

(b) The second phase of the plan consisted of the identification of a "pool" of non-project students which could also be considered as a total group or sampled for various sub-studies. On the basis of limited information available immediately prior to the beginning of the Spring 1970 semester, a control "pool" of approximately 1,100 students in thirty-two non-ACSP-RP classes taught by twenty-two teachers was selected. The attempt was made to construct a group with parameters as similar as possible to those of the project "pool". For instance, the proportion of control classes from schools with ethnically mixed, predominantly "white", and predominantly "black" student population approximated the proportions exhibited by project classes; in schools where student "tracking" occurs, control classes were chosen from the same "tracks" as the ACSP classes. In most cases, control groups were selected in essentially random fashion from among those meeting the various criteria. In addition to the ones having to do with ethnic composition and "tracking these criteria included a professed willingness by the teacher to administer the necessary tests and the stipulation that no control teacher be teaching Patterns to any of his classes.

Table 2.5 summarizes the numbers of teachers, class sections, and students for the project and control "pools" by school, Table 2.6 by school district. Data from the various sub-studies of the research plan indicates that the procedures followed in selection phases (a) and (b) resulted in both "pools" of students exhibiting a broad spectrum of ethnic and socio-economic variables, previous background experiences, reading ability, initial course-related capabilities, personality configurations, and value orientations. In this sense, they were both representative of West coast urban school populations.

Table 2.5

SUMMARY OF INFORMATION REGARDING PROJECT AND CONTROL "POOLS" BY SCHOOLS

School	No. teachers		No. class sections		Approx. no. students	
	Project	Control	Project	Control	Project	Control
S_1	2	2	4	4	120	140
S_2	4	3	7	5	210	175
O_1	1	2	3	2	40	70
O_2	1	4	4	4	120	140
O_3	1	1	2	2	60	70
O_4	2	5	6	6	165	210
O_5	1	1	3	2	110	70
O_6	4	4	8	7	300	245
Total	16	22	36	32	1,125	1,120

Table 2.6

SUMMARY OF INFORMATION REGARDING PROJECT AND CONTROL "POOLS" BY SCHOOL DISTRICTS

	No. teachers		No. class sections		Approx. no. students	
	Project	Control	Project	Control	Project	Control
Sunnydale	6	5	11	9	330	315
Castlemont	10	17	25	23	795	805
Total	16	22	36	32	1,125	1,115

PART TWO

ETHNOGRAPHIC STUDIES

Chapter 3.

INTRODUCTION

The principal purposes of the ethnographic studies were 1) to provide the data on the structure and dynamics of the school that are needed to formulate effective curriculum implementation strategies and 2) to identify additional variables which significantly affect pupil attainment of the objectives expressed or implied in Patterns in Human History.

The manner in which teachers organize their own instructional behaviors and relate to pupils in the classroom is largely determined by their perceptions of the general characteristics, needs, and interests of pupils, and their perceptions of the teaching-learning roles. By the same token, the nature of student responses to the classroom learning experiences structured for them by the teacher depend upon pupil perceptions of their needs and interests, the relevance of the instruction offered and their perceptions of appropriate teacher-pupil role behavior. Thus, the degree to which teachers and pupils accept and support curricula and/or role innovations in the school is largely a function of the measure of congruence between their own psycho-cultural orientations and the nature of the changes desired and expected by the innovative agents and materials.

In recognition of these factors, a major objective of the ethnographic research was to map the general psycho-cultural orientations of both project and non-project teachers, trace the effects of these orientations upon pupils, and relate these orientations to elements

of the school as a social system. Within this context, special emphasis was placed upon discerning patterns of teacher beliefs and values, particularly as they relate to the nature and general characteristics of pupils in the school, the teaching-learning roles, and the curriculum structure. Additional observation and interview data were then analyzed to determine the implication of these orientations for structural transaction both in and outside of the classroom. The research staff anticipated that a thorough analysis of these ethnographic data would reveal the extent to which teacher perceptions of the teaching-learning roles are compatible with those expressed or implied in Patterns and that these findings would have implications of critical importance for future implementation.

At this juncture, it should be noted that as late as October, only four months prior to the spring, 1970, teaching of Patterns, the ACSP-RP staff intended to place special emphasis upon gathering data on the instruction styles of project teachers. According to these original plans, this data was to allow an assessment of the appropriateness of specific teaching styles to the learning objectives of the course and of the impact of teacher exposure to the course upon their own classroom teaching behaviors. Although a longitudinal study is the only appropriate means of assessing the long-range impact of the Patterns course upon the instructional behaviors of teachers, the research staff anticipated that sufficient data would be forthcoming to permit some speculation as to the degree to which the course affects teacher perceptions of the teaching-learning roles and the nature and extent of the role re-transaction between teachers and their pupils that could be expected to result as a consequence of these altered teacher perceptions. Unfortunately, even this modest objective had to be set aside. Because

of uncertainties created by the disruptions in the school in the spring (see Chapter 9), the school had closed abruptly. As is usual, no arrangements could be made during the summer when schools really are closed. It was not until the opening of school in the fall that the ACSP-RP staff learned that only two teachers at the ethnographic research site were participating in ACSP-RP, at which point, and for reasons set down in Chapter 9, no further expansion of teacher participation was possible.

The second major objective of the ethnographic research was to produce data that can be of use in devising implementation strategies that will facilitate teacher and [illegible]l acceptance of Patterns in large numbers of school systems and insure use of course material by teachers in ways consistent with the aims of Patterns. Consistent with this purpose, the research staff obtained data on the structure and dynamics of the school as a social system with special attention given to organizational responses to the ACSP-RP as an agency of intervention.

Within the context of this second objective, the adoption and implementation procedures at all levels in the school structure were meticulously monitored throughout the school year. A special effort was directed towards the mapping of role systems and communication networks as well as learning as much as possible about the formal and informal procedures normally employed by school personnel to adopt and implement new curricula. The data yielded by this research were then analyzed so as to identify those forces supporting the innovation as well as those stability-maintaining mechanisms that were operating to hamper effective implementation. Although research efforts were specifically directed towards obtaining sufficient socio-cultural

data on the school that would eventuate in the precipitation of significant conclusions about organizational responses to Patterns in particular, many of the findings have profound implications for curriculum innovation in general. It is expected that the summary of these findings which appear in this report will be of considerable utility to those wishing to introduce Patterns into other school systems.

In light of these general research purposes, a number of specific orienting questions were formulated prior to the investigation as background for planning the research. Each of these guiding questions focuses upon a range of phenomena that are most relevant to the two principal purposes of the ethnographic research, and although there are undoubtedly a number of other interesting questions that could be added to the list, the staff judged the following to be of greatest significance.

(1) What are the patterned teacher and pupil perceptions of the differential nature of school groups?

(2) What are the patterned teacher and pupil perceptions of both the teaching and learning roles?

(3) What are the implications of these particular psycho-cultural orientations among both pupils and teachers for structural transaction both in and outside of the classroom?

(4) What is the relation between teacher perceptions, particularly among members of the social studies department, of both the teaching and learning roles and the curriculum structure?

(5) What are the implications of these orientations for ACSP course implementation?

(6) What are the critical factors that can be expected to facilitate or impede the successful implementation of Patterns?

(7) What are the implications of the ethnographic data for curriculum innovations in general?

As all ethnographic data is contextual, the findings which bear upon each of the preceding questions can be expected to provide additional insights into other questions that one might be inclined to ask but which could not be explored fully by members of the ethnographic research team.

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Chapter 4

DESIGN OF THE ETHNOGRAPHIC RESEARCH

THEORETICAL PERCEPTIVES

The broad range of social phenomena of particular interest to the ACSP-RP staff required the formulation of a meta-level theoretical framework that could provide an orientation for viewing the school as a functioning system and facilitate the integration of these social phenomena into an understandable complex. The integrative theory outlined in this section was employed to guide the ethnographic research and to explain the dynamics and nature of the school as a system of behavior and how those systems of behavior relate to other systems within the society of which the school is a part. Consistent with the nature of the questions to be researched, this framework attempts to fully explicate the relation between personality structure, or the psychological orientations of individual members in the society, and social structure, or the observable patterns of group behavior.

Although the conceptual framework outlined in this chapter draws heavily upon the theoretical contributions of the transactional psychologists, the inclusive concepts and principles that guided the research and the interpretation of the field data are derived from a synthesis of a number of existent theories. One of the more critical concepts

is "cognitive map," or to use Anthony Wallace's term, "mazeway."[1] At any given stage of the human life cycle, each individual possesses his own "cognitive map" or that "...unique mental image of a complex system of objects, dynamically interrelated which includes the body in which the brain is housed....Its content consists of an extremely large number of assemblages, or cognitive residues of perception. It is...a true and more or less complete representation of the operating characteristics of a 'real' world." The range of phenomena represented in each human "mazeway," according to Wallace, is as follows:

(a) Values or the images of situations associated with pleasant or unpleasant feeling-tone. Wallace's typology of values includes positive organic values (images of situations in which the primary and secondary values of others are satisfied) and negative values (associated with pain, discomfort, anxiety).

(b) Objects or the images, with associations, of animate and inanimate objects. This includes those images of the characteristics of self and others acquired as the individual transacts with others in his socio-cultural milieu.

(c) Techniques or images of ways of manipulating objects in order to experience desired end-states or values.

In the model constructed by Wallace to explicate the relation between the individual and culture, the concept of "mazeway" is one of the most critical elements. The two dimensional model depicted in Figure 4.1

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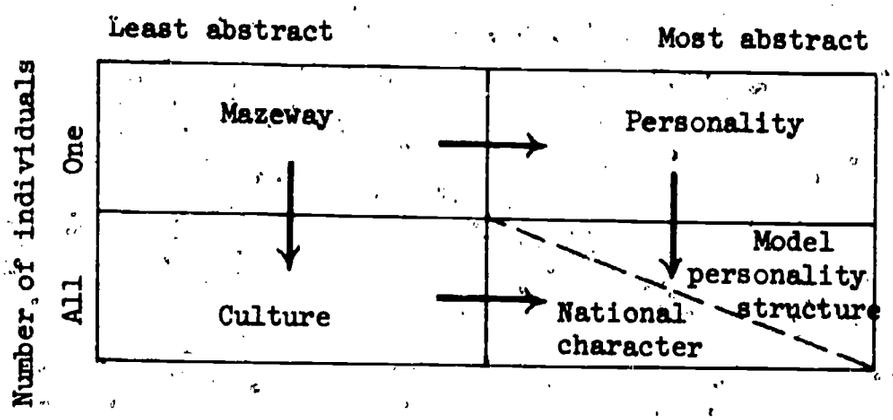
1. Wallace, Anthony F.C. Culture and Personality. New York: Random House, 1962. pp15-17.

reflects his conceptualization of these relations.

Figure 4.1

THE INDIVIDUAL AND CULTURE



To more fully explicate the routes and levels of abstraction in culture and personality terminology, Wallace notes the following:

(a) If one has derived an approximation to a complete description of one mazeway or one culture,

(b) abstractive operations, involving classification of content into fewer, broader categories, will yield descriptions of, respectively, personality, or national character.

(c) If one has derived an approximation to a complete description of one mazeway, or one personality,

(d) operations, involving addition of all individual cases to the pool of data, without altering the level of abstraction, will

yield descriptions of, respectively, culture, or model personality structure.

The array of meanings ascribed to experiences represented in the human "mazeway" is largely shaped by language. Through language members of the same cultural system can communicate with others about their common experiences and achieve a high degree of consensus as to the meaning of them. It is principally through these processes of verbal transaction that highly patterned cognitions and modes of psychological equivalencies in "mazeway" content may be referred to as the psycho-cultural system.

From the perspective of psychologically oriented anthropologists, cultures may be differentiated from one another on the basis of patterned psychological equivalence structures. These "mazeway" equivalents which characterize members of the same social system are seen as a function or consequence of people living together closely in time and space and of the extent to which they are afforded an opportunity to communicate with one another using their common language symbol system. From this theoretical perspective, the pattern of observable behaviors, or social structure, is viewed as the phenomenological expression of these underlying psychological orientations. To the extent that each individual organizes his own behavior in a manner which is consistent with his perceptions of group norms, we can say that his behavior is group oriented and that the resulting patterns of overt behavior among groups of individuals is that which we call social structure.

Among the more critical elements of the human "mazeway" is the structure of self conceptions possessed by each individual. Self conceptions are that system of referential meanings applied to self which the individual develops as he transacts with other humans as well as with his physical environment. The concept of self, as it is defined here, is not synonymous with the ordinary definition of the term by the more positivist oriented researchers who typically equate self with certain aspects of the individuals observable behavior; rather, self is viewed as an explanatory concept with a set of hypothetical properties. The rationale for the use of the concept in this manner is twofold. First, most behavioral scientists accept the fact that certain psychological processes precede the exhibition of overt behavior. It is postulated, for example, that each individual continually forms images of himself as he interacts with others in his environment and that the particular images of self intruding at a specific point in time significantly affect the organization of his own behavior in the given social situation. Secondly, the concept, when used as defined, has been shown empirically to be of considerable utility in understanding and predicting individual behavior.

Conceptions of self, like all other mazeway content, are acquired as each individual interacts with others in a multiplicity of dyadic role relationships. Through participation in a variety of interactive situations as one member of a paired role, the individual is able to continually validate, reinforce and/or redefine his own identity as a particular class or type of person. These multiple classifications of

persons, which the individual learns and applies to self and others, are more than just symbols of identity lexically encoded in the language; they also conjure up images of the proper kinds of relationships which are expected to prevail in a variety of social settings. By leaving a complex of classificatory schemes, and the appropriate behaviors which correspond to each category of person in a wide array of social contexts, individuals are able to mutually predict and comprehend the meanings of the behaviors of others.

Although it is generally recognized that self conceptions are multiple in character and are constantly shifting as the individual moves from one social context to another, a number of unresolved conceptual problems are reflected in much of the research literature. As Chad Gordon has observed,[2] many of these problems are derived from a lack of conceptual refinements that relate to the various forms in which the self may be conceived. For example, one individual in a specific situation may conceive of self and others with whom he is currently interacting in terms of categorical noun forms. According to Gordon, this is usually what is referred to when one speaks of the individual's role identification, or other ascribed characteristics such as one's ethnicity, sex, nationality, occupational role, etc. These various social role and type categorizations with which the individual identifies self are defined by Gordon as the social identities of the person. Simultaneously in the same context, or in another social situation, the same individual may conceive of self in terms of dimensional attributes. In the

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2. Gordon, Chad, The Self in Social Interaction, New York: John Wiley & Sons, Inc., 1968.

latter case the individual's self definitions or definitions applied to others are in terms of personality traits, interpersonal styles, or in other similar attributive terms.

While recognizing the merits of Gordon's contribution to self theory, one assumption underlying this conceptual framework is that although individuals do conceive of self in either one of the two forms, either jointly or separately, major social role categorizations, or what Gordon has termed social identities, have a more profound impact upon the organization of each individual's perceptions of self and others and thus ultimately upon his own expressive behavior. One fairly obvious reason for adopting this position is that the transacted behavioral prescriptions for each institutionalized role in the school structure are highly detailed and they are the principal determinates as to how the behaviors of those in the school are to be organized throughout most of the working day. Because these institutionalized social roles are so pivotal in terms of the organization of the school as a system of behavior each person in the school knows the precise position of his social role in the structure and the manner in which his role behavior is supposed to articulate with the role behavior of other persons in other roles at different levels of the structure.

In conjuction with this discussion, one additional ancillary theoretical point warrants further comment. We have already alluded to the fact that some social identities are more significant to the individual and consequently have a greater impact upon the structuring of ideas about the self. This observation leads to an important insight, namely, that each individual's structure of self-conceptions is cognitively or-

ganized in a hierarchical fashion and that those at the apex of this structure affect the organization of the individual's behavior frequently and in a wide array of social contexts. Other conceptions of self, though significant to some individuals in specific situational contexts, tend to be peripheral or subordinate elements in the individual's total gestalt of self conceptions.

The utility of the conceptual framework briefly outlined above assists one to more fully comprehend the school as a system of behavior by emphasizing the dynamic relationship between transacted psychological equivalencies and the relatively persistent forms of interactive behavior. Insofar as a major rationale for the ACSP ethnographic research was to yield data that can be of value in formulating effective implementation strategies, this conceptual model is especially appropriate because it tells us that existing structural arrangements and patterns of expressive behavior are the overt manifestations of mazeway content. Therefore, all efforts to manipulate, or otherwise intervene in, aspects of the school structure can be successful only to the extent that proposed changes can be easily integrated into the existing images of the world held by the actors.

RESEARCH PROCEDURES

To insure the systematization of the ethnographic research process, the general research strategies and procedures to be employed in the field were carefully mapped out during the summer months prior to the opening of the schools. In conjunction with these preparations, the investigator took the preliminary steps to establish his research role

and gain entry into Sunnydale High School, the ACSP-RP ethnographic research site. When the schools opened in the fall, the investigator utilized standard ethnographic field procedures to establish rapport with school personnel and to collect the data. Although observations and focused and standard stimulus interviews yielded the bulk of the data, a considerable amount of supplementary information was obtained from student, faculty and administration publications. Throughout the field experience, the data were systematized and subjected to preliminary analysis so as to allow continuous refinement of the research problems and the theoretical framework guiding the investigation. In the early phases of the research a coding manual was developed so that all data could be stored and then later retrieved by category for analysis (see Appendix A). This manual, in addition to its obvious function of facilitating the analysis of the data, was an invaluable aid in revealing existing gaps in the data while the field investigation was still in progress.

During the year prior to the ACSP-RP research, the Senior Research Consultant and top level school administrative personnel of the district in which the ethnographic research site is located met and reached general agreement as to the nature and scope of the ACSP-RP implementation and research activities. In order to formalize these earlier agreements and to discuss related matters of mutual concern, three members of the ACSP-RP staff met with the assistant superintendent in charge of secondary instruction a few weeks before the opening of the schools. At this meeting the members of the ACSP staff reiterated the general research objectives and discussed a few of the more significant research questions,

particularly those which related to the evaluation of Patterns. The nature of the cognitive data required to effectively assess the impact of the course upon the pupils was discussed at some length and those present reached general agreement as to the procedures to be employed in the collection of several different types of test data. During this initial phase of the meeting, the general purposes of the ethnographic research and the relation between the cognitive and ethnographic studies were reviewed with some attention given to the proposed ethnographic research strategies.

Subsequent to the discussion of the general research design those present turned their attention to a consideration of the roles in the school of two ACSP-RP staff members. To coordinate the implementation activities in the school at which the ethnographic research was done and to assist in the collection and processing of both cognitive and ethnographic data, the ACSP-RP arranged for the district to hire one of the RP staff members--a teacher with considerable research experience--on a released-time basis. Although the responsibility of the research staff member in connection with ACSP-RP had been stipulated in advance of employment, his duties and responsibilities both to the school and ACSP-RP were again restated and clarified at this meeting.

According to the terms of the agreement, he was to teach four of the five normal teaching periods during both the fall and spring semesters, the remainder of each school day being devoted to fulfillment of his responsibilities as a member of ACSP-RP staff. Since Patterns had not been scheduled for implementation until Spring, his principal duties during the first semester included the preparation of student and teacher

materials, making arrangements for the pre- and post-testing of students scheduled to enroll in Patterns, and providing general research assistance, particularly in terms of collecting the ethnographic data.

In the spring, his responsibilities, in addition to teaching two sections of Patterns, included the coordination of most ACSP-RP-related activities in the district. His specific duties were to handle the distribution and storage of all course materials, assist in data collection efforts and to act as a liaison person between the school system and the ACSP-RP office.

The second RP staff member, the principal investigator at the ethnographic research site, was to assume the role of teacher aide. This role for the investigator was selected for two principal reasons. Prior to the implementation of Patterns, teachers on the regular school staff had been informed that the investigator would be available to provide several forms of assistance, most of which conformed to the types of services normally rendered by teacher aides to ACSP-RP teachers. A second and more important reason was that the district administrative staff had recently been forced to contend with a multitude of intense political pressures both within the school itself and the community. In view of these pressures, most of which were connected with the explosive racial tensions at the research site, the district administrative staff preferred that the role for the investigator be formally defined as teacher aide and that his related research and implementation responsibilities be explained to others in conjunction with a description of his role duties as teacher aide.

At the request of the assistant superintendent the investigator's entry into the school was delayed until the second week of the fall semester. This request was made because the district administrative staff anticipated problems in opening the school due to the persisting racial tensions in the school and in the opinion of the assistant superintendent, it was advisable to postpone entry into the school until the ordinary daily routine of school activities had been established. Early during the second week of the new school term, the investigator scheduled a meeting with the school principal at the research site for the purpose of introducing himself to the local administrative staff and discussing his responsibilities as a member of the ACSP-RP staff. At this meeting the principal acknowledged that due to the events of the preceding year he had neither kept abreast of events as they related to the implementation of Patterns nor did he know much about the proposed activities of the ACSP-RP staff in the school. He did note, however, that it was his understanding that one teacher and a teacher aide, both of whom were affiliated with the ACSP-RP, would be working in the school. As to the nature of the responsibilities of the investigator, the principal admitted knowing only that he was to aid teachers using Patterns and to provide assistance in the ACSP-RP research and implementation activities.

At this first encounter with the principal and in subsequent meetings and discussions with certificated staff members in the school, the investigator let it be known that he had a number of unique responsibilities as a result of his connection with the ACSP-RP. Consistent

with district administrative interpretations of his role, the investigator heavily stressed his responsibilities to teachers using Patterns and although the specific nature of the ethnographic research was left unexplained, extreme forms of duplicity were avoided by making it clear to others that the investigator was to assist with all ACSP-RP related activities. Those who pursued the inquiry were informed that the ACSP-RP needed considerable data on the school and its pupils in order to adequately assess the impact of the course upon the pupils and the school and to devise future implementation strategies that would ensure attainment by pupils of the learning objectives of the course.

During the fall semester, the investigator provided considerable assistance to the ACSP-RP teachers assigned to teach a course entitled "Self and Society." The two purposes of this course were to teach students the concepts and analytic skills necessary to make a sociological analysis of the institutions of the community in which they live while at the same time collecting ethnographic data on the school from the other pupils enrolled. The investigator's role, as enacted and interpreted to others in connection with the "Self and Society" course, included the following duties:

(a) Reorganize material and data brought to the class by students and put into summary form for subsequent pupil use;

(b) Assist in collecting materials (census data, city and county planning commission reports, etc.) for use in class;

(c) Establish contacts with persons in the community with whom

students could meet and talk, e.g., city and county officials, chamber of commerce members, etc.;

(d) Make arrangements for pupils to use or visit certain public and private facilities, e.g., libraries, museum collections, etc.

In conjunction with these activities, the investigator provided assistance on a continuing basis in duplicating Patterns course materials and making necessary arrangements to facilitate the implementation of the course in the spring semester.

After the introduction of Patterns in the spring, the investigator provided various forms of assistance to the two Patterns teachers at the research site. His more important duties were to organize and secure materials for classroom use as directed by the teachers, assist with the preparation of laboratory exercises and problems, aid individual students and small groups in the classroom with selected lessons when requested by the teacher to do so, and finally, to help in the evaluation of pupil work.

Aside from the continuous opportunity afforded the investigator to participate in all school events, there were other advantages that accrued as a result of taking the role of teacher aide. The role of teacher aide in this particular school, as well as in others in the district, is structurally ambiguous. This is the result of the way in which the role has emerged and of the community groups and governmental agencies responsible for its creation. This structural ambiguity worked to the advantage of the researcher in that it allowed him to move freely in and around the school throughout the course of the day.

Despite many of the ambiguities of the role, teachers generally view aides as individuals who share the general orientations of teachers and thus they tend to be willing to accord them full participation in regular staff and other school-related activities.

DATA COLLECTION PROCEDURES

Prior to engaging in the field research, the investigator attempted to isolate and systematically manage those acute philosophical and methodological problems that impede one's ability to obtain a body of verifiable and replicable observational data. In the section which follows, a few of these more critical issues are explored and an explanation is offered as to the methods and/or procedures employed to cope with several of these more perplexing problems.

Direct observation, as the method is defined herein, refers to the perception of behavior or objects in the investigator's immediate environment which is later conceptualized and communicated to others. This definition itself alludes to the special philosophical and methodological problems that one will encounter unless he is fully cognizant of the impact of his own conceptual system upon that which he sees, hears and records. Ever since the highly discrepant reports by Robert Redfield and Oscar Lewis of the behavior of people in the same village, researchers who rely upon direct observational techniques have been acutely aware of the need to make explicit the conceptual framework which they utilized to guide them in their collection of data. The investigator was fully cognizant of the impossibility of eliminating the interpretative dimension from the direct observation of human behavior and thus took the appropriate steps to ensure that his orientation

towards the phenomena to be observed be made public. The framework explicated in an earlier section of this chapter and which is also implicit in the categories of the appended coding manual is intended to communicate the general theoretical orientations of the ACSP-RP staff members involved in the collection and analysis of the ethnographic data.

Although direct observation is an indispensible method in field studies, data yielded by this technique should be supplemented whenever possible by interview or other forms of indirect observational data. The problem with an overemphasis upon observation is that it frequently inhibits the ability of the investigator to learn much about the informant's psychological orientations and his cognitive processes which precede the observed overt behavior. This is a special problem when the complex of meanings which the actor associates with a particular act or sequence of acts is embedded in a matrix of other cultural events. As Kay and Metzer[3] have recently noted, an overemphasis upon observation ignores one or more of the following factors:

(a) The realization of some behavior of the subject may be an imperfect representation of the plan that motivated the behavior;

(b) The significant elements of an event are not necessarily contiguous in space and time;

(c) The stimuli which motivate some behavior of the subject have no easily observable perceptual coordinates;

(d) The behavior has a symbolic intent quite apart from the observable effects and it is often this symbolic intent which is the focus of the subject.

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3. Kay, Paul and Metzer, Duane, "On the Foundation of Ethnography," Manuscript, 1968 p. 6.

To insure that inferences from observational data corresponded to the meanings ascribed to the behaviors or events by the informant, interviews were conducted as soon as possible following the observation. This approach not only facilitated a more complete comprehension of the actor's orientation towards the event in question but it also helped to reveal discrepancies between the informant's descriptions of his behavior in the situation and his actual behavior as observed by the investigator. The transcript of an observation and the subsequent interview which appear below reveal the necessity for a combined observational interview procedure and typify these procedures as they were employed in the field research.

2-25-70

Toward the end of period 5A B. Galloway left the cafeteria and was walking down Tolman Hall, presumably on his way to his classroom. I had left the cafeteria a few seconds later than he and was hurrying to catch up with him as he proceeded down the hall. When about 30-40 feet in back of Galloway, he stopped in the middle of the hall and stood watching two black boys further down the hall pushing each other. Each was cursing the other and it appeared as if a fight was imminent. Within a few seconds I noticed that Galloway had turned left into the 40 wing rather than continuing down the hall. I proceeded down Tolman Hall and halted about 20 feet from the location of the disturbance. By that time Usher and Davidson (coaches) had come across the hall, intervened in the scuffle and begun to disperse the crowd that had formed. Both coaches talked with the two boys in the hall

and after a very brief conversation, each boy left the scene in a different direction.

From this observational data, the investigator inferred that the teacher observed had purposely avoided intervening in the disturbance and that his reluctance to do so probably resulted from a concern for his own personal safety. The opportunity to check the validity of these inferences arose one hour later when the investigator met the informant outside his room between the 5th and 6th periods.

Interviewer: "I noticed that you got a chance to see the two fellows pushing each other around today in Tolman Hall."

Teacher: "Oh, yeah. You saw it too, huh?"

Interviewer: "Part of it. I saw you stop and watch. It looked to me as if you were heading right into it."

Teacher: " I was. I was on my way back to my room."

Interviewer: "I was just wondering why you turned and went down the other hall."

Teacher: "You think I'm going to get involved in that? Not me. Not after what happened to Ben (teacher). Like Russ says, we've got $50,000 worth of vice-principals running around here and they're supposed to be in Tolman Hall. If they aren't going to do their job, why should I do mine?"

Interviewer: "Are teachers supposed to get involved in situations like that one?"

Teacher: "They're supposed to do what they can. But I've just about had it. You can see that not one of those administrators is doing his job. I'm not sticking my neck out alone."

Although the earlier inferences from the observational data were generally correct, the interview data indicates that this informant, even though obviously concerned about his own personal safety, is predisposed to intervene in disruptive situations. But as indicated by the data, this teacher was especially perturbed by what he perceived to be a lack of administrative leadership in the maintenance of pupil discipline and these perceptions were an equally important factor in his avoidance of the situation. This fact obviously would not have been ascertained had the investigator avoided eliciting verbal responses from the informant about his behavior in the situation.

Although role management problems precluded utilization of questionaires and formal interview schedules, the requisite degree of structure in the interviewing process was insured by the systematic use of focused and standard stimulus interview procedures. The primary function of the focused interview procedure is to facilitate the collection of categories of data from informants about situations or events in which they have participated or about which they have some knowledge or opinions. The first task of the researcher is to conduct a cursory analysis of the situation of interest, formulate a series of hypotheses about the event and then proceed to develop an interview guide which maps out the major areas of inquiry and categories of data that are

most relevant to his current line of inquiry. The interview itself is then focused on the subjective experiences of the informants in an effort to ascertain their definitions of the situation.

The following excerpt from an interview transcript illustrates the manner in which this procedure was used in the field. The subject of inquiry pertained to a recently adopted attendance policy by the district executive committee. The dual purposes of the following interview were to elicit the informants' perceptions of expected reactions of school personnel to the new and controversial attendance policy and to test the hypothesis that the rather firm statement on pupil suspensions would be very favorably received by teachers in the school because of the threat to teacher definitions of self posed by the large number of pupils regularly violating not only the established attendance policies but a multitude of other school rules as well. It should also be pointed out that both the nature and sequencing of the questions posed by the investigator during the following interview permitted all responses to be readily coded into the appropriate categories delineated in the coding manual.

Interviewer: "What do you think about the new attendance policy?"

Teacher: "I think it's good. I'll be surprised if it's ever put into action."

Interviewer: "Why do you say that?"

Teacher: "Well, it's a strict policy. We've been lenient for so long that I don't think everybody will just pull about face and use this one.

Interviewer: "Do you think we should try it?"

Teacher: "Oh, sure."

Interviewer: "How do you think teachers will react to it?"

Teacher: "I'm not sure. But my guess would be that a lot of teachers will like it, especially that suspension business. Most will enforce it, but then we've got a few teachers who just won't work with us on cracking down."

Interviewer: "You said that you think most teachers will support the new suspension policy. Why do you think that will be so?"

Teacher: "Well, it's gotten to the point where a lot of us just can't do our jobs. Elaine said that's why she's getting out. It's hard enough backing up every day trying to fill in those who were absent the day before. And then with all the trouble-makers we have it's just too much. I think that they should either start getting to school and to class on time or we should throw them out."

Interviewer: "How do you think the administration views the new policy?"

Teacher: "Obviously, they like it since they put it into effect. But everybody will have to do his share including the deans."

Interviewer: "Do you think the deans will enforce it?"

Teacher: "Everybody would like to know that. They haven't done a very good job up to now, have they?"

Interviewer: "I've heard others say that. I wonder how the students will react."

Teacher: "That's a problem. The kids are so negative about it. I've heard a lot of grumbling and complaining from the kids. In fact yesterday a bunch of girls said that they just guessed that there wouldn't be anybody in school."

Interviewer: "What did they mean by that?"

Teacher: "I guess that a lot of kids would start getting suspended."

Interviewer: "Do you think that would really happen?"

Teacher: "Oh, I really doubt it. Once the kids found out that this policy was going to be enforced, they would start getting to class on time."

As can be seen from the data, the strategy employed was to first learn about the informant's perceptions of the new innovation and then to systematically elicit his views of the views of others in the school and how they could be expected to react towards the new policy.

STANDARD STIMULUS INTERVIEWS

The principal function of this procedure is to ensure maximum systematization and standardization of the interviewing process by asking informants to respond to the same or nearly identical stimuli. Ordinarily, when one employs this procedure a schedule of questions is pre-

pared well in advance of the interview and the interview itself is conducted under more formalized conditions, but due to role management problems, the investigator prepared a limited number of questions, usually written on 3 x 5 cards, that could be reviewed immediately prior to the interview. To some extent the use of this interview technique in this manner did reduce the degree of rigor and standardization of the interviewing process, although the data yielded from these interviews indicated that as a rule the stimuli to which the informants did respond was remarkably uniform. Furthermore, this type of interview, because it was used in a more flexible fashion, allowed the investigator to digress and probe additional points and thus ultimately comprehend the more elaborate patterns of thought and action as they pertained to the particular subject under scrutiny.

The set of preconstructed interview questions and a portion of an interview transcript that appear below illustrate this procedure as it was used in the field. In the example provided, the investigator was interested in learning more about teacher perceptions of the changes in the role structure of the school that had occurred in the past five years. This subject was one frequently discussed by teachers and the changes generally referred to were those which upset and were strenuously resisted or disapproved by a majority of teachers. To discern more about teacher perceptions of the nature of these changes and the various forces which initiated and sustained these innovations, the investigator structured the following questions, all of which were administered to informants in private or semi-private situation, about

changes in role structure at Sunnydale High in last five years:

(a) What are the major changes that have occurred?

(b) Who or what has been responsible?

1) Administration

2) Teachers

3) Pupils

(c) How do you feel about these changes?

(d) How do other teachers feel about these changes?

With this set of questions the investigator conducted interviews with fifty-six teachers over a two-month period. The sample protocol below typifies both the use of this procedure and the quality of the responses provided by Sunnydale informants.

Interviewer: "I have heard many teachers complain about many changes in the behavior and rules that apply to teachers, students and administrators in the last five years or so. What are some of these changes?"

Teacher: "The kids didn't run this school when I came here. Teachers used to have control over the kids and if they didn't shape up they got bounced right out. And that's the way it was."

Interviewer: "What has been responsible for these changes?"

Teacher: "When I came here we had a darned good principal. He disciplined the kids whenever they needed it. Now whenever I send a kid out of my class I have to be careful who I send them too. I always send them

to Peralta (Vice-Principal) if I can although Smith (Vice-Principal) will do something with them too. But I'll never send a kid to Curtis (Vice-Principal) again. I can't get any results. If a kid asks if it is ok to go to Curtis (Vice-Principal) I always tell them to see Peralta (Vice-Principal) first."

Interviewer: "To what extent has Mr. Cook (Principal) been responsible for these changes?"

Teacher: "Let me tell you something. When Mr. Cook (Principal) was Dean of Boys this place was run fine. He was the best Dean of Boys you could ask for. But when the former principal left and Mr. Cook (Principal) took over, things went down."

Interviewer: "Who else is responsible?"

Teacher: "It's not all Mr. Cook's (Principal) fault. There have been a lot of changes in the community and then the kids started making demands. Last year, for example, we had a fine Dean of Girls. She was fine and fair, but then when we had 'riots' the kids demanded that she be removed. So, the district administration gave in."

Interviewer: "What has been the role of teachers in all of this?"

Teacher: "Well, until recently this was a pretty stable faculty. We knew what we wanted and really worked for it. But then in the last few years people have been leaving. Some of the newer people that have come to

Sunnydale have been right in there encouraging the kids to make their demands. That doesn't do anything but make the problem worse. And as you know, this faculty is now split right down the middle so not much improvement is going to take place. There are some around here who think that if we just keep giving in to kids that we will resolve the problems, but you know that just isn't true."

Interviewer: "You said that the faculty was split down the middle. Are you saying that about half the faculty agrees with your position?"

Teacher: "Oh, no. There are a lot more than that. You've been here long enough to know that. It's just that we have a small group of teachers who make a lot of noise and push hard for what they want. I'd say that at least 3/4 or more of the faculty agree with me on this."

Interviewer: "What do you think needs to be done?"

Teacher: "The first thing we've got to do is get a new principal. Whoever the new man is he has got to get this place shaped up. You just can't run a school like this year in and year out. Unless discipline is restored we'll just continue to be babysitters."

Aside from the quality and quantity of the data yielded by this set of questions there was a remarkable similarity between the responses

given by this particular informant and the pattern of responses given by the overwhelming majority of other teachers with whom the same schedule of questions has been used. Furthermore, the protocols reveal that despite the relative informal conditions which typically prevailed during each interview, the investigator was remarkably successful in his efforts to present informants with a nearly uniform set of stimuli.

GROUP INTERVIEWS

A basically unstructural procedure commonly employed in field research is the group interview. This procedure proved to be specially appropriate for discerning ambiguity or conflicts with respect to group norms and values. Another advantage of the group interview was that it frequently yielded data on highly sensitive topics that informants were not as likely to openly discuss unless they were given sufficient peer group support. As a rule, group interviews were conducted at a variety of different places on the school grounds where teachers congregated during the course of the school day. In some instances the investigator purposely mapped a sequence of questions that he wished to pose prior to joining with a given group of individuals in a specific setting. Although it was frequently difficult, if not impossible, for the investigator to manage the content and flow of discussion in some situations, he was usually able to steer conversations in the direction of interest so as to elicit responses from informants on the question of interest.

Although the group interview proved to be a profitable procedure, not infrequently the validity of the data elicited from some informants was jeopardized by the group pressures operating to induce conformity.

This problem was particularly acute when one or more of the informants was in a position to influence the opinion of, or positions publicly taken by, others. When a situation of this nature occurred, the validity of the data obtained from some informants during the group interview was rechecked during an individual interview.

Although observations and interviews yielded the bulk of the ethnographic data, faculty bulletins, student and faculty publications, the school accreditation report and a variety of other school, city and county materials were valuable sources of supplementary data. A systematic effort was made to record the contents of these documents on a day by day basis, especially those announcements and all other vital information emanating from the mimeograph machines in the administrative offices.

DATA MANAGEMENT PROCEDURES

Following each observation and/or interview an attempt was made to reconstruct that which had been seen and heard. At times when it was not possible to complete the entire interview transcript immediately following the interview, the topics covered and the comments of informants were sketched out on note paper as soon as it was possible to do so. At the first opportunity these notes were used to reconstruct the interview or fully describe the observation. The bulk of these were then recorded on audiotape. Each time data were recorded on tape, the general description of the setting and the names of those persons observed or present during an interview were noted.

To provide for the systematic storage and retrieval of data collected in the field, a coding manual was devised (See Appendix C). The construction of this manual evolved in line with the theoretical framework which guided the research and consequently the categories of the manual reflect the nature of the data most relevant to the research questions posed by the ACSP-RP team.

All observational and interview data recorded on audiotape was subsequently transcribed onto unisort cards, form Y9, produced by the Burroughs Corporation. As much coding of the data was completed in the field so as to determine the quality and quantity of data that pertained to the various research questions of interest. The procedures employed to code and store all ethnographic data have been carefully delineated in the appended ACSP-RP coding manual.

Chapter 5

THE COMMUNITY CONTEXT

To many Pacific Coast dwellers in California, the great central valley of the state, with its relatively drab and undifferentiated landscape, is a place through which one hurriedly passes if one chooses to travel between the two great urban centers of the state by automobile. With its ribbon of asphalt and concrete, punctuated with small to medium sized nodes that are the cities and towns serving the surrounding agricultural communities, the stream of vehicular traffic north and south moves at a rapid, unending pace. To keep up with the changing times, and as if to spare non-valley dwellers even a temporary respite from their automobiles, the state highway division embarks upon its mandated surgical task of realigning the major north-south thoroughfare so as to shorten travel time.

Although "the Valley," as it is typically called by its residents, is generally quite uniform in terms of its geographic features and other characteristics of the landscape, residents of each valley community are quick to note that each community has its own distinctive agricultural and urban features. This is particularly true of Sunnydale, a community of approximately 100,000 population situated in the northern end of the Valley. It was in a school in this community that the ACSP-RP ethnographic research was conducted.

Sunnydale, like every other valley community, is situated upon land that appears to be as flat as the most carefully rolled and manicured putting green. But due to its location, there are a number of distinctive geographic features of the community that set it apart from most all others in the valley. Immediately to the west of the community, for example, lies "The Delta," a great expanse of especially fertile farm land created by the deposits of topsoil carried there by the major rivers that run from the high mountains in the east to the Pacific Ocean. This area is completely interlaced with water channels used for irrigating rice and a variety of truck crops, especially during the very hot months of summer.

This network of waterways also serves a multitude of recreational functions. Throughout the summer months, scores of water skiers create the characteristic water furrows that emanate from their skis as they race back and forth along the major tributaries. At public beaches and other suitable locations, large crowds dot the banks of the channels especially during the weekends. Here and there on the relatively undisturbed shallow spurs one may find fishermen sitting in small boats or resting beneath a pleasant shade tree as they patiently wait for the fish to bite.

To the north, east and south of the city the features of the landscape tend to be not unlike other locations in the north Central Valley area. Although a large variety of agricultural products are grown in the areas around Sunnydale, among the more eye-catching features of the landscape are the carefully pruned and tended vineyards.

Stretching as far as the eye can see in rows as straight as rolled steel I beams, the broad-leafed vines with their sagging bunches of dark colored grapes are a constant reminder of the warmth of the climate and the fertility of the soil. Interspersed among the grapes and other commonly grown crops such as rice, corn and alfalfa are the large orchards which produce a wide variety of fruits and nuts. Because of the cool, fog persistent winters punctuated with an occasional light freeze, a warm spring and a hot summer, these orchards yield some of the finest quality fruits and nuts in the country.

In the midst of this agricultural heartland lies Sunnydale, with its ever increasing urban sprawl reaching out like uncontrolled tentacles to engulf the surrounding countryside. As late as the early 1950's, community growth was contained within reasonably well-defined parameters but with the rapid growth of population in recent years, any semblance of order in planning, construction, and annexation has long since disappeared. Today many maps of the city look like incomplete patch quilts with the details of the unannexed plots of farm land or the location of other residential areas blotted out as if they didn't exist.

The demographic characteristics of Sunnydale tend to be much like those of other urban centers in the Central Valley of California. Although the census data reveal that slightly more than 9,900 Blacks, or approximately 10% of the population, live within the city limits it is rather difficult to get precise data on the population of other ethnic and racial groups in the community. This is because the breakdown of the 1967 special census data for the entire metropolitan area was on the basis of sex, race and age with no distinctions made on the

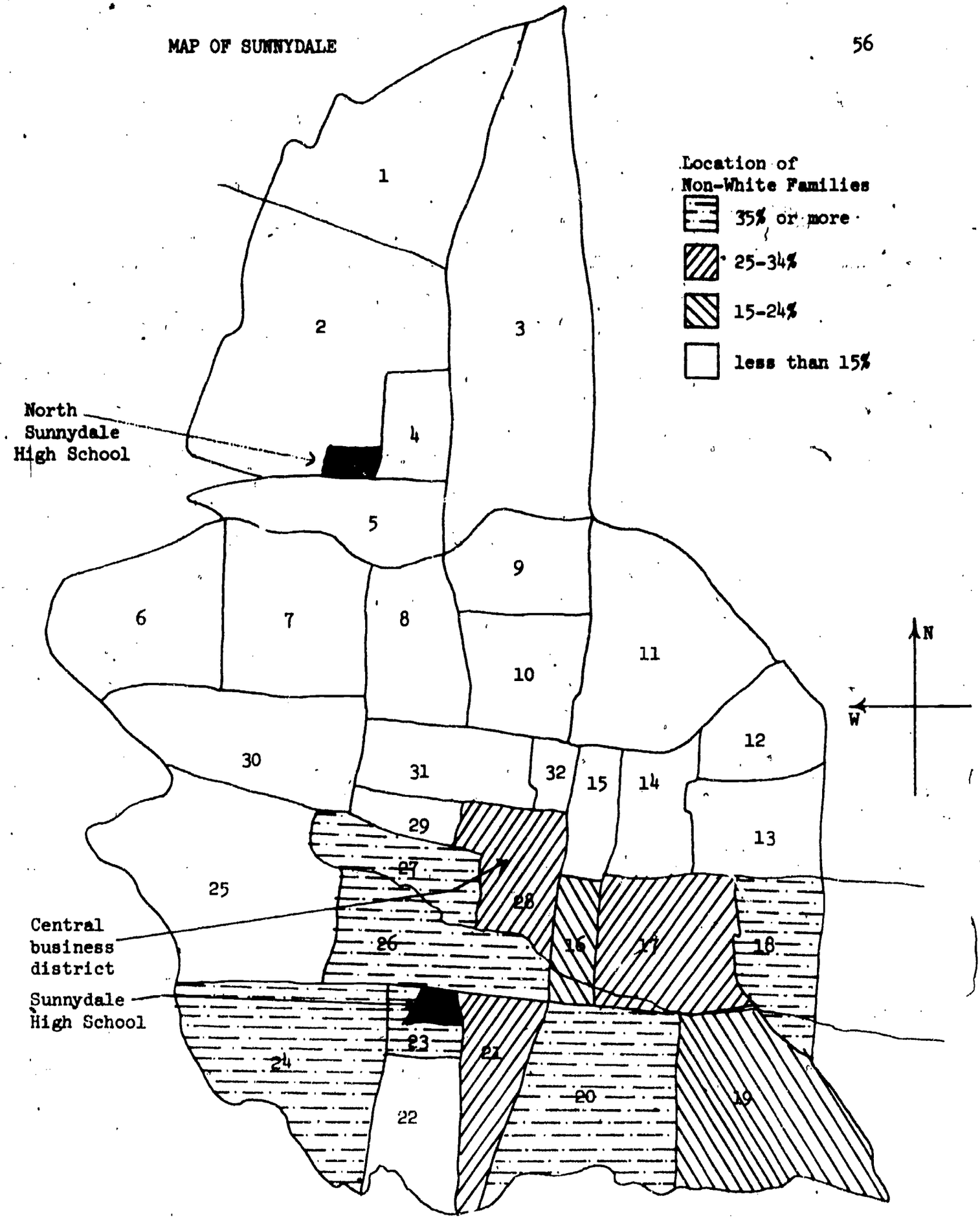
the basis of ethnicity or national origin. According to these special census data approximately 8,000 residents or slightly less than 10% of the total community population were identified as "other races," The percentage of this number that are Oriental cannot be accurately

determined on the basis of this data alone, however, a complete breakdown of the school district population by race and ethnicity suggests that about 6-7% of these 8,000 persons in the "other races" category are of Oriental descent. As the United States Census Bureau includes all persons of Latin descent in the "white" category and does not differentiate on the basis of Spanish surname, it is equally difficult to get a precise estimate of the number of individuals of Latin descent residing in the community. Again, however, school district data reveal that slightly over 6,700 pupils in the school system or about 20.8% of the population, have Spanish surnames.

It should be noted that since the boundaries of the Sunnydale Unified School District include many of the unincorporated suburban areas that are heavily populated by middle class whites, the Oriental and Latin population of the community itself is larger in terms of percentages than the above figure indicate. In view of these data, the general demographic picture of the city is that of a highly heterogeneous population with minority group members numbering between 35-40,000 of the 100,000 persons residing in the community.

A cursory glance at the map on the following page reveals that Sunnydale, like most other major American cities, is racially segregated. As late as 1960, several sections in the southern portion of the community were well balanced racially and ethnically but in recent

MAP OF SUNNYDALE



years there has been an accelerated out-migration of whites to the northern residential areas. There have been some minority families, particularly those of Oriental descent, who have moved north but generally there has been an increasing concentration of minority group members in the south and south central sections of the city since this migration began.

In recent years most residential development and community growth has been northward. The principal reasons for this directional growth has been the availability of farm lands for subdivision and the desire of investors to develop properties away from "the slough," the industrial sites, and the railroads that are located on the southern periphery of the city. That growth which has occurred in the south and east portions of the city has been irregular, extremely limited and usually undertaken with federal and state urban redevelopment monies. As a consequence of this retarded investment in the south and east, aging structures and a generally deteriorating environment have plagued these sections of the city. Single family growth has continued to move north, leaving the older dwellings in the south with higher net densities.

Even though greater numbers of whites lived in the southern portion of the community in years past, segregated neighborhoods have been deeply rooted in Sunnydale's history. Japanese and Chinese-Americans were heavily discriminated against since their early arrival in the 1800's and until the 1950's the Federal Housing Authority regarded all Orientals as a racial class not to be included in an otherwise "white" subdivision. Consequently, early settlement of the Oriental population

occurred in the central business section of the community, particularly in those blocks directly south of the main east-west thoroughfare in the heart of the city.

Since the early 1960's, after racial covenants had been outlawed and Orientals, especially the Japanese and Chinese, had become more affluent and better integrated into the business and professional communities, there has been some out migration of Oriental families to the suburbs. This outward migration is documented by the 5.4% drop in the community population of "other races" between the census of 1960 and the 1967 special census. On the basis of this data alone, it would appear that an increasing number of Orientals are becoming assimilated into the middle class suburbs of the community and although this is true to some extent, the school district data indicate that an overwhelming majority of Oriental residents still continue to reside in the central section of the community. In two elementary schools in the census tract arbitrarily numbered 28, for example, Oriental pupils constitute 22% of the pupil population in one school and 32% in the other.

In addition to the relatively large Japanese and Chinese-American population there is also a sizeable number of Filipinos residing in the community. A majority of Filipinos are older, single men who immigrated to the United States to seek agricultural work during and immediately following the Second World War. Those few who did bring their families with them also settled in the south central sections of the city along with other Oriental descendants.

According to the 1967 census, the 35% increase in the population of Blacks since 1960 was more than double that of any other racial or

ethnic group in the community. As can be seen from the map of the community, the majority of the Black population is concentrated around the southern periphery of the community in those areas with a predominance of substandard housing. Most all Black pupils of high school age in the district attend Sunnydale High, the site at which the ethnographic research was conducted.

Student demographic data obtained by the Unified School District that serves the city indicates that families with Spanish surnames tend to be somewhat more evenly distributed throughout the city than Blacks, although the overwhelming majority reside in the central and southern sections of the community. One interesting finding is that there is a relatively high degree of segregation of Spanish-speaking residents from the Black population even though both groups are concentrated in the south together. For example, in the census tracts that have been arbitrarily numbered 21, 22, 28, 16, and 17, the high percentage of Mexican pupils in the public schools is consistently higher than that for Black pupils. This also helps to explain why that tract numbered 22 is not shaded and why each of the other four tracts cited have a high "white" population relative to the other census tracts in the south Sunnydale community.

In most neighborhoods in the south Sunnydale community, except for those in which Blacks and Mexicans are approximately equal in numbers, strong avoidance patterns exist among the various ethnic groups. This is especially true in those census tracts to the south and east of the high school. The census tract numbered 20, for example, contains a very

high proportion of Blacks, many of whom reside in the public housing units located in the area. During several observations made at a small shopping center near this heavily Black populated housing project, the only non-Blacks seen were occasional shoppers who stopped to make a purchase at one of the liquor stores that dot the main north-south thoroughfare. In those areas directly east and south of the high school, on the other hand, large numbers of Mexicans can be observed shopping at local grocery markets and other businesses. Only a few Blacks can be seen in these areas especially in those business establishments along the state highway that runs east and west just north of the school site itself.

In general there is very little movement of the various racial and ethnic groups outside those areas in which they reside. Blacks and Mexican-Americans, for example, tend to avoid the large shopping centers in the northern section of the city despite the better buys that are usually available there. White residents, on the other hand, rarely shop in the central business district. Trips into this area are usually for the purpose of working at governmental offices or seeking assistance from the professional community, a majority of whom are still located in the central business sections of town.

Aside from the ethnic and racial heterogeneity of the community, some comments are warranted about the social and cultural differences of the "Anglo" or white population. During the 1930's depression and

in subsequent years, large numbers of white, unskilled and semi-skilled farm workers from the "dust bowl" areas of Texas, Oklahoma and other southwestern states migrated westward. Of those who made it to California, many settled in the Central Valley of California and found employment in the fields and in agriculturally related industries. In recent years, as the number of manufacturing and other unskilled or semi-skilled industrial occupations opened up, many of these migrants and their children filled these blue collar positions. Today a majority of these immigrants and their children constitute the lower middle income working class of Sunnydale and due to these economic as well as other cultural factors, most have concentrated in the unpretentious and inexpensive residential areas just beyond the eastern boundaries of the city. This area is referred to by community residents, including many of the inhabitants themselves, as "Okie Town."

The principal economic role of Sunnydale is that of middleman. Agricultural products produced in the outlying areas are purchased, canned, packed and then shipped through the local port facilities to other urban centers in the state and to the rest of the world. The location of the port at the western boundary of the community and the extensive cultivation throughout the Central Valley has also made Sunnydale a natural center for the distribution of agricultural machinery and equipment. The community is also a center for farm labor although the great majority of this labor is employed outside the area.

Although heavily dependent upon the agricultural industry for many jobs, the community and its environs are the site for several specialized

manufacturing plants providing materials for the area's mining, agriculture and construction industries. In addition to this rather limited number of manufacturers, Sunnydale is also a regional business, legal, professional and administrative center.

Compared to other cities in the state, Sunnydale has a disproportionate number of semi-skilled and unskilled workers in its work force, a majority of whom are Mexican and Black. This situation is partly due to historical circumstances that attracted large numbers of minority families to the community and to the fact that the community has been so heavily dependent upon agriculture. In recent years, agricultural work has become more highly automated and thus large numbers of once permanently employed workers have been displaced. This situation, along with the seasonal employment problem that has plagued the community for years, has resulted in an unusually high unemployment rate among Blacks and Mexicans. During 1964, for example, the community unemployment rate varied from a low of 3.9% in October to 11.3% in January. State Department of Employment figures indicate that in no month during 1970 did the percent of persons out of work reach the 11.3 figure of 1964, but the low figure throughout the entire year hovered at the 8% level. This unusually high unemployment and the poverty which it engenders has caused considerable consternation in the community, particularly in the Black ghettos. This rather dismal economic picture in the south Sunnydale community is one of the principal reasons why many members of the minority community complain that the white middle class dominated institutions of the city are unresponsive to the needs of the poor.

This querulousness of leaders within the minority community in regard to the responsiveness of local institutions to the needs of residents in south Sunnydale has recently begun to have an impact upon the political structures of the entire community. For a number of years the city government, for example, has been controlled by a group of five councilmen, each of whom represents one district within the community but who is elected by the citizenry at large. This structural arrangement has allowed city council candidates to be elected as representatives from the south Sunnydale districts largely by the votes of the more numerous middle class citizenry, most of whom reside in the northern sections of the city. This situation, along with the heretofore negligible participation in community affairs by South Sunnydale residents, has made it possible for the professional and business elite of the city to retain nearly complete control over those political structures that exercise administrative and coercive powers over the community.

The increased militancy in the Black and Mexican communities has not fundamentally affected the power relations within the community as yet, although recent organizational and electoral efforts by several minority groups suggest that some changes in the political structures may occur within the immediate future. After the 1969 city council election, for example, minority groups stepped up their attack against the city charter provision that stipulates that city councilmen are to be elected from the community at large. Although many officials in local government have contended that the election of councilmen by districts

would be tantamount to a return to corrupt ward politics, some newly elected officials from the middle class suburbs have recently given support to these proposed changes by minority leaders.

The only major political unit within the community that has had significant minority representation on its governing board is the local Unified School District. Recently, the only Black member of the board failed to seek re-election, allegedly because other school board candidates who were expected to be elected strongly opposed a school desegregation plan that the board of which he was a member had previously adopted. The only other board member of minority extraction, a Mexican-American, was elected with considerable white middle class backing allegedly because his own personal orientations tended to parallel those of his constituency. Other than this limited minority representation on the school board, all other community political structures are dominated by white middle class professional and business leaders of the community.

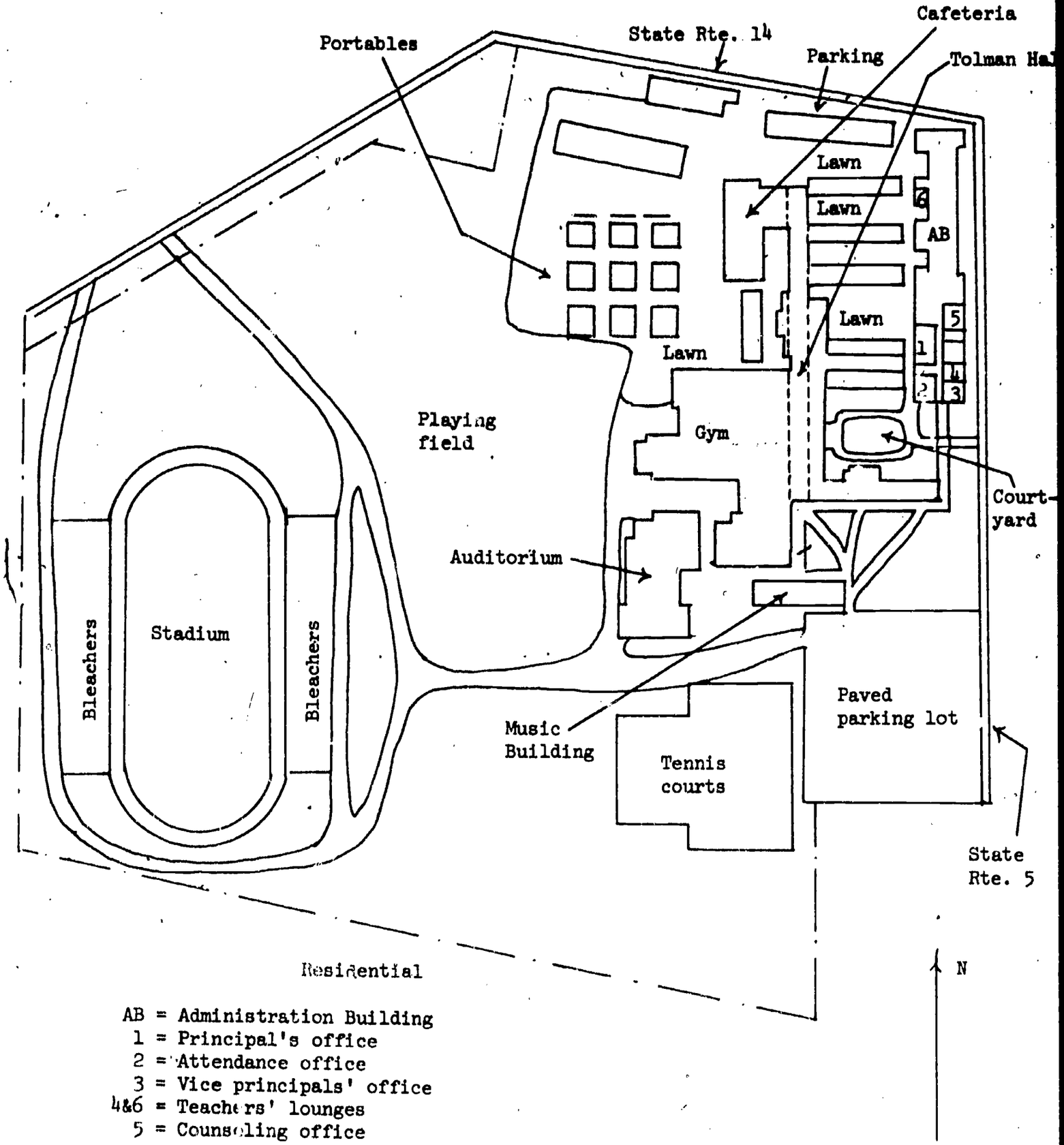
Chapter 6

THE SCHOOL SETTING

Sunnydale High School, the ACSP-RP ethnographic research site, is located in the south central section of the community. The school itself is bordered on the north and east by two major state highways, each of which carries such an inordinate amount of heavy traffic that the noise generated by this intense activity makes the site a decidedly unappealing location for a public school. Around the southern and southwestern perimeters of the school is a modest, yet well-kept, residential area populated by many families whose high-school-aged children attend Sunnydale High. Another broad but less traveled street at the northwest corner of the property separates the school from several parcels of land that are only partially developed. These tracts of land, sparsely dotted by a few homes and commercial establishments that deal principally in agricultural machinery, are all that lie between the school and the great expanse of "delta" farmland to the west.

The school plant itself, originally constructed in 1942, is built upon a 40-acre plot of land. As the map of the school on the following page illustrates, a majority of the classroom facilities are located in the northeast corner of the property within 100 yards or so of the intersection of the two state routes. The main entrance to the school is located on the eastern side of the building which runs parallel to State Route 5.

SUNNYDALE HIGH SCHOOL



AB = Administration Building
1 = Principal's office
2 = Attendance office
3 = Vice principals' office
4&6 = Teachers' lounges
5 = Counseling office

The southern end of this administration building, as it is typically called, houses all administrative and counseling facilities, the remaining space being utilized by the business department. As one passes through the main entrance to the school, the office of the principal and his staff is directly ahead at the end of the short hallway. The attendance office is situated in a large room in the southwest corner of the building and the rather cramped facilities of the vice principals' offices are directly across the hall in the southeast corner. The largest and most frequently used teachers' lounge is wedged between the offices of the vice principals on one side and a displaced typing classroom on the other. Most of the counseling facilities are located across the entry way along the eastern side of the building. Aside from the modest-sized reception area, rarely of sufficient room to accommodate pupils trying to enter, the entire counseling complex is an array of cubicles, barely large enough to accommodate one counselor and his counselee.

In addition to the classrooms of the business department, a second teachers' lounge is tucked in a small niche near an entrance to the northwest corner of the administration building. This smaller lounge, although used as an eating facility by a sizeable number of the faculty, is shared during the school day by those relatively few teachers who do utilize their preparation periods to prepare lesson plans, correct or evaluate pupil work, or attend to other classroom-related matters.

To the west of the administration building, and connected to it by a series of walkways, are five classroom buildings. This complex houses a majority of the academic departments, each of which has been purposely

assigned to a specific section within each classroom wing. The southernmost wing, for example, with the exception of one homemaking classroom located in the northwest corner of the building, and an art classroom adjacent to it, has been set aside for use by the social studies department.

The hallways or covered walkways that lead past or through each of these classroom wings opens into Tolman Hall, an unusually long corridor of perhaps 100 yards in length with a very high ceiling. The walls on each side of this enormous hallway are lined with literally hundreds of metal lockers in which students store their books and personal belongings. Tolman Hall is a favorite place for students to meet and converse with their friends before school and during passing periods, especially on those days when the weather is too poor for students to be outside. Because of its size, poor acoustics, and the large number of students that regularly congregate in the area, Tolman Hall is usually quite noisy. It is, as all persons in the school readily acknowledge, the place where one may find the action.

The northwest corner of the school property houses the cafeteria, shop facilities, and a number of portable classroom buildings. The cafeteria complex, most frequently entered from the northwest corner of Tolman Hall, contains eating facilities for both teachers and students. In keeping with custom, both food distribution and dining facilities are completely segregated with teachers receiving not only better cafeteria service but a wider menu selection as well. The shop facilities are northwest of the cafeteria, housed in buildings that are parallel to State Route 14. Directly south of

the shop buildings and west of the cafeteria are the temporary classrooms, or the "portables" as they are called. Most teachers who occupy these facilities feel quite privileged not only because the portables offer the only air-conditioned relief from the occasionally hot days of late spring and early fall, but also because they are of sufficient distance away from the noise and frequent disruptions that emanate from Tolman Hall.

The school gymnasium and the physical education dressing facilities are located toward the southern end of Tolman Hall adjacent to the playing fields which occupy the great expanse of land between the gym and the street which borders the school on the northwest. The school football stadium is located in the southwest corner of the school. In the last few years a new modern scoreboard and several hundred new seats have been added to this facility.

Unlike the parking facility adjacent to State Route 14, the parking lot in the southeast corner of the school may be used by students as well as by the faculty. This lot, with its gate irregularly guarded by a student attendant, is officially off-limits to students during the regular school day, but once school lets out, there are usually dozens of students loitering in the area talking with friends. According to local school and police authorities, drugs are regularly peddled to students in this particular lot by "outsiders" who frequently drive onto school grounds after the closing of school each day.

With the exception of the area adjacent to the gym and music buildings, the large plot of grass separating the parking lot from the classroom building

to the west as well as the courtyard in front of the school are rarely used by students. On occasion a few students may be observed eating their lunches in the courtyard, but as a rule these areas are ignored by students as places in which to meet and converse with friends either before, during, or after school.

It is within the confines of these physical facilities that approximately 1,650 Sunnydale High pupils receive their formal education. Insofar as the age and sex structure of the Sunnydale student body is concerned, the composition of the school population is quite comparable to most public high schools. Table 6.1, for example, indicates that the tenth grade, or sophomore class, is the largest numerically, with each succeeding grade level having fewer students. This larger sophomore class enrollment can be attributed to the greater number of junior and senior students who are of legal age to drop out of school. Sunnydale High also has special programs for the physically and educationally handicapped. Of the seventy-two pupils assigned to these special programs, a majority are enrolled in the mentally retarded program, the rest being assigned to the special classes for those students with speech and hearing difficulties.

Table 6.1

SUNNYDALE STUDENT BODY ENROLLMENT AS OF OCTOBER 31, 1970

Grade level	Boys	Girls	Total
Tenth grade	311	278	589
Eleventh grade	241	285	526
Twelfth grade	243	231	474
Special program for handicapped	46	26	72
Continuation classes	13	5	18
Total	854	825	1,679

In addition to the regular and special education programs, Sunnydale has established an "opportunity" class for those pupils experiencing problems in social adjustment. Most of the students assigned to this class have had poor attendance records although in recent years a number of students who have posed severe discipline problems for teachers have been enrolled in this class. This latter innovation is a result of the district continuation school, the facility at which those pupils suspended from the regular school program are educated, exceeding its legal maximum enrollment. Thus, some pupils who would ordinarily be assigned to the regular continuation school have been placed, much to the consternation of many faculty members, in the "opportunity" class located on the Sunnydale school grounds.

Although the racial and ethnic composition of the Sunnydale student body has been highly heterogeneous for several years, school population data compiled by the district administrative staff suggests that the already disproportionate numbers of Black and other non-white students at the school will continue to grow in the immediate future. Table 6.2, for example, which reflects changes in the racial and ethnic composition of the Sunnydale student body over a period of only two years, indicates that the number of Black and other non-white pupils has increased considerably. Although the number and percent of Mexican students has remained relatively constant over this two-year period, there has been a sharp decrease in the number of white and Oriental students, most of whom are moving to the suburbs in the north with their parents. It is also interesting to note that since 1965, the percent of the Sunnydale student body that is Black has increased from 24% to 35.8%.

Table 6.2

ETHNIC AND RACIAL COMPOSITION OF SUNNYDALE HIGH SCHOOL STUDENT BODY

Racial or ethnic group	Percent as of December 2, 1968	Percent as of October 21, 1970	Net change (percent)
Spanish surname	35.3	35.1	-0.2
Other White	11.1	10.3	-0.8
Negro	33.8	35.8	+2.0
Oriental	10.8	10.0	-0.8
American Indian	0.2	0.3	-0.1
Other non-White	8.8	9.3	+0.5

Over the past few years, as the more affluent white population moves northward, leaving Sunnydale with a growing percentage of minority pupils, there has been a decrease in the socio-economic position of families who send their children to the school. As can be seen from Table 6.3, the median family income of Sunnydale High students is only $4,748 per year, slightly more than $2,500 per year less than their northern suburban school counterparts. Furthermore, the average level of educational attainment of Sunnydale parents is a full four years below that of parents who send their children to North Sunnydale High.

Table 6.3

SOCIO-ECONOMIC CHARACTERISTICS OF FAMILIES WITH CHILDREN ATTENDING SUNNYDALE AND NORTH SUNNYDALE SENIOR HIGH SCHOOLS

	Median family income	Families under $2,000 per year		Median sch. yrs. completed	% Housing delapidated or deteriorating	% Students on AFDC	% families rec'g public assistance
		No.	%				
Sunnydale High	$4,748	1,469	18	8.1	10.0	36.3	24.0
North Sunnydale High	7,254	635	4	12.2	0.4	2.9	1.0

Academic and scholastic aptitude test data compiled by the district director of research reveals that Sunnydale pupils score well below the norms on nearly every standardized test administered to high school pupils in the district. Despite a drop in measured academic achievement and scholastic potential of Sunnydale pupils over the past few years, the number of students going on to college has not decreased. Although there has been a slight drop in the number of students enrolling in the local junior college, an increasing number of pupils are applying and gaining entrance to the state university and state colleges. Table 6.4 shows that there was nearly a four-fold increase in one year in the number of Sunnydale pupils enrolling in the state university and twice as many students entering the state colleges. This significant increase is largely a result of renewed efforts among groups within the South Sunnydale community to get capable minority pupils into college institutions, and of an aggressive educational opportunity program operated by the various colleges and universities within the state. On the basis of data available to counselors toward the end of the 1969-70 school year, there is sufficient

Table 6.4

NUMBER OF SUNNYDALE GRADUATES ENTERING COLLEGIATE INSTITUTIONS

Institution	1966-67	1967-68	1968-69	Totals
State university	4	7	27	38
State colleges*	5	4	8	17
Other 4-year colleges*	2	2	3	7
Junior colleges	243	214	217	674
Total entering	254	227	255	736
Percent of graduating class	63	52	55	56

*Data incomplete

evidence to indicate that an even greater percentage of Sunnydale students will pursue a college education if Educational Opportunity Program funds continue to be readily available.

To carry out the instructional program at Sunnydale High, a total of eighty-seven professional staff members have been assigned to the school. The breakdown of the certificated staff by assignment and sex is given in Table 6.5. Although the student population has increased only slightly over the past five years, the administrative staff has doubled and the number of teachers increased by nearly one-third. The principal reason for the

Table 6.5

ASSIGNMENTS OF SUNNYDALE CERTIFICATED PERSONNEL
(Reported in full-time equivalents) 1969-70

Assignments	Men	Women	Total
Administration	4.0	.8	4.8
Regular instruction	40.3	27.3	67.6
Supervision (including any released time for department heads)	.4	.2	.6
Counseling	3.8	1.8	5.6
Health services*			
Testing	.2		.2
Student activities			
Instructional materials			
Other non-teaching assignments	2.0		2.0
Home teaching			
Special teachers for handicapped students	2.0	2.0	4.0
Other (librarian, 1.0; continuation, 1.0)			
Totals	54.7	32.1	86.8

*Nurses' time supplied by local health district (.5).

sizeable increase in the number of certificated staff members can be attributed to a desire on the part of the district administration to maintain control over an increasingly militant student population, many of whom have consistently pressured for a number of changes in school structures. Another explicit reason often cited for the increase in teachers is the perceived need to further reduce class size, thereby improving the quality of instruction offered to pupils. As a result of adding more teachers to the staff, by October 1969 class size at Sunnydale High was twenty-seven pupils, or approximately five per class fewer than in North Sunnydale High.

The age and racial composition of the faculty has been significantly affected by this recent enlargement of the certificated staff. Since 1965, for example, approximately 50% of all new teachers assigned to Sunnydale High are in the 20-35 age bracket. This increase in the number of younger teachers is also the principal reason why the average level of educational attainment among the certificated staff has dropped slightly in recent years.

The significant increase in the number of minority certificated staff, especially in the administrative and counseling categories, can be attributed to a conscious effort on the part of the district administration to obtain a better racial and ethnic balance in all professional roles. In recent years, nearly every new counselor and administrator assigned to Sunnydale has been of minority extraction, and although there has been a concerted effort to attract more minority teachers as well, the data in Table 6.6 indicate only nominal success in these efforts. As of 1969, for example, 84% of all teachers were White, 6.5% were Black and only 5% were of Latin

descent. In recent years, the district administration has pursued a policy of hiring former Sunnydale High students as teachers for the purpose of motivating Sunnydale High pupils to go on to college. This policy

Table 6.6

ETHNIC AND RACIAL COMPOSITION OF SUNNYDALE HIGH CERTIFICATED STAFF

Racial or ethnic group	Administrators	Counselors	Teachers (All other certificated staff)	All certificated staff	
				Number	Percent of total
White	2	2	64	68	78.2
Spanish surname	1	1	4	6	6.9
Negro	2	3	5	10	11.5
Oriental			2	2	2.3
Other non-White			1	1	1.1
Total	5	6	76	87	100.0

has been quite successful as attested by the fact that three members of the Social Studies Department alone are former Sunnydale pupils.

In addition to the professional staff, Sunnydale has a classified staff of thirty-six persons, fairly evenly distributed between clerical, food service, and maintenance functions. Table 6.7 reports these various job classifications and the number of individuals assigned to each. For each of these three fairly autonomous occupational roles, there is a supervisor who coordinates the activities and evaluates the performance of his subordinates. Each supervisor reports directly to the principal who, in turn, may pass on to the supervisor instructions that pertain to various tasks

for his staff to perform.

Table 6.7

THE SUNNYDALE CLASSIFIED STAFF
(Assignments reported in full-time equivalents)

Classification	Men	Women	To
Clerical		11	11
Custodial and gardening	11	.75	11.75
Teacher aides			
Cafeteria		11	11
Maintenance	1		1
Traffic deputy	1		1
Totals	13	22.75	35.75

Because of the nature of the school structure and the dissimilarities in the role duties of the classified and certificated staff, there is very little interaction between teachers and those who provide other institutional service functions. With the exception of the secretaries and clerks in the administration and atttndance offices firmly established avoidance patterns exist between the classified and certificated staff, and a majority of teachers know the names of only a few persons in non-teaching roles.

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Chapter 7

PSYCHO-CULTURAL ORIENTATIONS OF SCHOOL PERSONNEL

The preceding descriptions of the school and of the community in which the school operates provide broad clues to the general characteristics of the psycho-cultural orientations of community residents. The specific task in this section is to map out the general personality/cultural orientations of school personnel and to compare the beliefs of different school groups. Once these are outlined, the stage will have been set for an analysis of the manner in which these underlying orientations are manifested in the relationships between groups within the school.

The manner in which men relate to others in cultural institutions depends largely on their conceptions of nature, of the place of various groups in it, and of the desirable and non-desirable as they relate to both man and his environment. In this study, several dimensions of the belief/value and personality orientations of teachers, administrators and pupils were considered relevant and studied in depth. Of special interest were beliefs about people differentiated by age, race, ethnicity, inherent abilities and social role; beliefs about teaching and learning processes, and finally, beliefs about specific aspects of the school curriculum and role structures. Both ethnographic and psychological test data were collected. Consistent with these research goals, all explicit and manifestly implicit statements of pupil and teacher

beliefs were coded into the appropriate categories (delineated in the coding manual) and later retrieved for analysis.

BELIEF/VALUE ORIENTATION OF PUPILS

Analysis of the ethnographic data clearly reveals that pupils have a highly elaborated structure of beliefs about general characteristics of Sunnydale students. Although the student body itself is highly heterogeneous in its racial and ethnic complexion, many pupil beliefs cut across racial and ethnic lines. Table 7.1 delineates those perceived characteristics of Sunnydale pupils.

In general, Sunnydale pupils believe the student body to be highly segregated on the basis of race and ethnicity and, although intra-group relations tend to be sufficiently amiable, they perceive the existence of considerable inter-group hostility. Many pupils express the view that inter-group friction ought to diminish and that the various minority racial and ethnic groups should, as they say, "get it together," On the other hand, Sunnydale pupils of minority extraction insist that they should organize themselves to effectively advance the interests and maintain the cultural integrity of their own racial or ethnic group. These collective efforts are perceived as requiring at least some minimal degree of participation and cooperation of all in-group members and it is generally believed that pressures must be applied to those who threaten the viability and cohesiveness of their own group. Among Black pupils these views were commonly expressed in conjunction with complaints about one of the Black vice-principals, whose behavior was perceived as detrimental to the interests of Black students. Two examples, one of graffiti in a boys' washroom and the other of comments

Table 7.1

INHERENT AND BEHAVIORAL CHARACTERISTICS
OF SUNNYDALE PUPILS AS PERCEIVED BY PUPILS

Characteristics	Number of Students Mentioning (N = 107)
Too much fighting; don't get along good, no respect for different kids; Vikes (Sunnydale pupils) just like Vikings -- always at each other's throats; too many punks, bullies.	43
Want good education; want to do well in school; desire to get into college, get ahead, succeed in school work.	36
Kids don't mix; not integrated; races stick together; school cut up by race; blacks stay by themselves; don't want other kids in ethnic clubs; don't want integration; pressure to stay in own group.	32
Come to school to meet friends; participate in clubs (Business, GAA, Afro-American, Zee, etc.)	27
Deliberately break rules; always disobey regulations; kids always: smoking in halls, cutting class, crap shooting in restrooms and Tolman Hall, standing around parking lot.	27
Friendly kids, good kids, interesting student body, like to meet kids of different cultures, get it together good.	27
Dislike school, don't care about what happens in school, better things to do than come to school.	23
Disrespect or dislike teachers; give teachers trouble; stab you (teachers) in back if they had a chance, can't stand the faculty.	22
Come to school for sports, like athletic program, dig track, good athletes.	19
Don't want to participate in (or don't care about): legislature, student government, "Vike" activities, school activities, clubs.	16
School spirit dead, no pride in school.	16
Want to end division between races, integrate, stop polarization.	11
Want something for nothing, no ambition, won't work for what they want; lazy, all mouth and no action; just want to do "their own thing."	11
Have pride in school, think Sunnydale is best, like school.	11
Trashy, make cafeteria look like pigpen; make Tolman Hall look like dump, dirty kids, write all over the walls.	10

related by the vice-principal, suggest the frequency and force with which these convictions are expressed: On one of the walls someone, in all probability a student, had written "B_____ is an oreo." This derogatory reference to the vice-principal implied that although she has black skin she thinks and acts like a white. Above this statement, someone else had penciled in the words "trator (sic) to Black people," with an arrow pointing back to the name of the administrator. Adjacent to both remarks, and obviously intended to apply to those written previously, "right on" had been inscribed with a black felt pen. Finally, an obscene remark had been scribbled at the bottom. This comment underscores the contempt expressed by many Black pupils toward Blacks who are believed to be a threat to the unity of the group.

Several weeks later the investigator was interviewing a teacher about the manner in which he intended to use an attitudinal test when the Black administrator referred to in the graffiti sat down nearby. A few minutes later, she intervened in the interview as follows:

Teacher: What you do is give this to both White and Black kids. You see here (pointing to a notation at the top of the test) that this is designed for Negroes.

Administrator: (intervening in the discussion) I don't like the way you said that.

Teacher: What did I say?

Administrator: It sounded like you said "nigras".

Teacher: Oh, no. I didn't mean that if that's the way it sounded. We were just reading the form to be filled out by Blacks.

Administrator: Well, I'm a Negro. (Preparing to leave the room) You know what the kids say about me. I'm white on

the inside and black on the outside.

Didn't you know that?

Interviewer: Have any students actually told you that?

Administrator: I've had kids tell me that right to my face. There's nothing I can do about it because they don't care if they get suspended anyway.

These observations reveal the frequency with which minority students in general, and Black students in particular, express the belief that members of minority groups, whether teachers or students, ought to work together to facilitate the cohesiveness of their minority identity and sub-culture.

According to teacher reports, Mexican-Americans rarely discussed any need to foster ethnic pride or to actively work to reinforce and perpetuate Mexican cultural patterns. In recent years, however, the Brown Beret movement and the unionization efforts of California farm workers, a large percentage of whom are of Latin descent, have profoundly affected Mexican pupil attitudes towards their own ethnic identity. This change of heart in the Mexican pupils at Sunnydale was frequently expressed as the school year progressed, particularly during the preparations by the Latin-American club for the Cinco de Mayo celebration. Several of the more militant Mexican-American pupils felt that the club had not done enough to assert its members' Mexican identity. An interview with one of these students -- held just a week before the celebration -- suggests their attitudes:

Interviewer: Why do you want to take them down? (Club posters hung in Tolman Hall)

Student: We're not really against the thing. We just don't want people referring to us as Latins that's all.

Interviewer: What is wrong with the term "Latin"?

Student: Look, most all of the kids here are Chicanos. That's what we are. Practically none of the kids came from anywhere else besides Mexico, or at least their parents did.

Interviewer: How do the other Chicano kids feel about being called Chicano?

Student: It doesn't matter to most of them except maybe _____ and _____. It's just that teachers have called Mexicans Latins and so that's what the club is called (Latin-American). We all agree anyway that Chicano culture shouldn't be put down but we just want to be called what we really are, Chicanos.

As a consequence of these beliefs about the differential nature of man, the uniqueness of the minority cultural experiences and the need to reassert and reinforce one's own sub-cultural identity, Sunnydale pupils believe that educational experiences must be tailored to meet their own unique needs and interests. An analysis of the data compiled for Tables 7.2 and 7.3 makes it clear that pupils believe the curriculum that has served the needs of middle class, predominantly white, suburban schools is not relevant to tneir needs. And they feel efforts to impose an irrelevant curriculum on pupils will lead to increased friction in teacher-

Table 7.2

INHERENT AND BEHAVIORAL CHARACTERISTICS OF THE

CERTIFICATED STAFF AS PERCEIVED BY SUNNYDALE PUPILS

Characteristics	Number of Students Mentioning (N = 122)
Too strict on tardies and attendance. Enforce unfair tardy policy.	56
Bad relationships with kids, don't understand kids (minority) don't care about and can't get along with students. Not sympathetic, don't communicate with kids; try to dominate minority kids.	55
Boring teachers, teaching bad, need to do things differently, won't try out new ideas, always telling kids the way it is.	39
"Blue-slip" for everything, too hard on discipline; give too many suspensions, throw kids out for nothing.	34
Poor V-P (Black-female); doesn't like kids; "Traitor" to blacks; too strict, does what higher ups tell her; hated by kids; whitey's woman.	29
Good teachers (science, social studies, coaches, Self-in-Society, English); nice teachers (younger); want to help out kids.	26
Enforce silly, stupid, dumb rules (dress length, policy on pants, staying out of parking lot, eating in halls or class, etc.)	17
Give too much homework, teachers expect too much from kids, want us to work every night.	17
Not strict enough; let kids get away with everything; pushed around by kids; afraid to crack down on troublemakers.	15
Teachers don't care about or support student activities; don't like student clubs (BSU).	12
Need more Black, Chicano teachers, administrators, counselors, downtown (central district office).	12
Treat kids like they are stupid, dumb, don't respect kids.	10
Favoritism by deans (Black-male); favors Blacks, always "livin" with Black kids.	9
Need new principal, get rid of principal.	9
Afraid of kids, scared to stop fights, "rumbles".	9

Table 7.3

PUPIL BELIEFS ABOUT SCHOOL CURRICULUM STRUCTURE

Characteristics	Number of Students Mentioning (N = 106)
Too many uninteresting classes; boring classes. Classes put kids to sleep.	68
Should have better, more interesting or new class activities; do things outside of school not just inside; should have more fun things to do or work on; need more variety in class.	59
Need new courses (Black psychology, psychology, speed reading, computer programming, sociology); should have more courses like: speech, senior biology, self-in-society, Black studies, Brown studies.	56
Good athletic program; football, track program best around; good GAA (Girls' Athletic Association); best sports program in Valley.	49
Materials, books or magazines uninteresting, out of date or too old; need better movies, new movies.	47
Interesting or good classes (includes all references to courses except physical education, team sports, speech)	42
Lunch periods too short; not enough time to see friends, eat.	38
Bad language department; change way languages are taught; worst or most boring classes in school.	38
Boring homework; nobody does assignments; stupid assignments.	28
Need more emphasis upon: minority culture; Blacks and/or Browns; Black literature; community study.	17
Interesting speech class; best speech teacher in the league; class open to everybody; good speech program.	15
Too many kids left out of sports; coaches cut down squads too much; bad eligibility rules; sports program just for good athletes.	15
Get rid of grouping; classes should be mixed; shouldn't separate out the fast and slow kids.	13

pupil relationships. A few responses from classroom interview will illustrate these points:

Interviewer: Well, if the students are tired of all the disruption in Tolman Hall, why don't they do something about it?

Student 1: Man, there's nothing you can do about it. There's too many kids who want to burn this place down. You should have been here last year. The whole place nearly went up.

Interviewer: What's the problem?

Student 2: Kids can't stand this place. Too many teachers here just want their own thing. Never mind what the kids want. This year I got Mrs. Jones for English and she let us read Cleaver, James Baldwin, Malcolm X and stuff like that. But you know what happened? One day I had Soul on Ice in Mr. Martin's class and he says he don't think the book's approved. That's what I mean. Just more shuck is what a lot of teachers want to give us.

Student 3: (interrupting) Not everybody. Some kids ain't down on all teachers. Like when Mr. Myers got it in the face. Everybody was sorry because he's one of the best teachers in the school.

Student 2: I didn't say all teachers, Adelle.

Interviewer: Do you think that most students agree with these views?

Student 4: Most.

Student 1: Not everybody. There's some kids that would stab you in the back if they got a chance. Not only that.

Student 1: Twelve years of this and then no job. Why shouldn't they be mad?

Interviewer: How do each of you as individuals feel about the courses that are offered?

Student 5: They're pretty good. We got part of what we wanted last year. We just need better teachers.

Student : Yeah, get some younger teachers and some more Blacks and Chicanos -- not just in the office. Teachers is the problem.

Interviewer: Are you saying that the basic problem is due to the teachers rather than the courses that you can take?

Student 6: Well, we got ethnic studies now but we need more electives like maybe Black and Chicano psychology. Most of the trouble though is between kids and the teachers. There's lot of bad blood around here about that. Kids don't like the way they teach -- at least some of them.

Aside from these comments, there is a wealth of additional data to illustrate the pervasive belief among students that teachers are generally unsympathetic to their educational needs and interests and that many of the educational experiences structured for them are not suited for Sunnydale pupils. In the student section of the recently completed school accreditation report, for example, one of the questions asked the twelve student representatives on the committee pertained to those things about the school that pupils believed needed to be changed. Of the twenty-two responses recorded, four different students mentioned that the foreign language department needed to alter its course offerings.

Although the specific changes desired by pupils were not delineated in the report, one Mexican girl's comment on her Spanish class suggests its place in the problem of a "relevant" curriculum: "It's my hardest class. I can speak Spanish but Mr. Williams makes us learn it differently. We don't talk like that but he thinks we have to learn it his way. I know that a lot of kids don't know how to write it so they don't do so good in class but he treats everybody like they're dumb. Nobody else talks the way he does so why should we have to learn everything all over?"

As one might expect, these pupils' beliefs about teachers and school are intimately related to the belief that the white middle class in America attempts to dominate Black and Chicano cultures. The view is frequently expressed, for example, that whites make few attempts to understand either the cultural heritage of minority groups or the contribution that each has made to American culture. There is considerable ethnographic data to indicate the pervasiveness of these beliefs, but within the context of this report, perhaps the most interesting illustrative data was provided by one of the ACSP teachers immediately following a presentation of one of the lessons in PATTERNS:

Teacher: I had a trying experience this morning the second hour. We were on the status and role lesson. I projected the acetate showing the policeman on the screen and several of the Black kids started yelling "pig."

Interviewer: What finally happened?

Teacher: This one girl went into a tirade about whitey pushing Black people around; about Williams (Black city council

Teacher: candidate) not getting elected and all this other stuff. Then I asked her what she had done to help him get elected and she couldn't say anything. Finally, one Mexican boy said, "I'm sick of hearing all of this stuff about whitey" and he walked out. I also got tired of listening to her and I told her to sit down and shut up. Nevertheless the whole episode was a trying experience.

Interviewer: Have other Black kids expressed similar views?

Teacher: Oh, sure. But it's the first time I had to cope with this kind of situation in my class. We did have some students saying this kind of thing last year too.

Interviewer: Do you mean during the spring disorders?

Teacher: Yes. There are many kids who feel this way but I hope I don't encounter this kind of situation again.

The configuration of pupil beliefs about school structures and school groups has been summarized in Table 7.4. These data indicate that Sunnydale pupils perceive the school system as responding inappropriately to their educational needs. Furthermore, they perceive the student body itself to be conflict ridden because of the sharp cleavage between the various racial and ethnic groups, and although they view this friction as undesirable, they persist in expressing the belief that members of each minority group must band together to reassert their racial or ethnic identities and to pressure institutional structures to respond appropriately to their perceived needs and interests.

In order to obtain data that would permit an analysis of pupil values, three psychological inventories were administered to Sunnydale pupils.

Table 7.4

SUMMARY OF FINDINGS: PATTERNS OF PUPIL BELIEFS

Beliefs about Pupils	Beliefs about Teachers and Administrators	Beliefs about School Curriculum Structure
Segregate selves by race or ethnicity	Unsympathetic to educational needs of Sunnydale students, especially minorities	Inadequate in following respects:
Want more emphasis upon minority sub-culture in school curriculum	Offer uninteresting and/or irrelevant educational experiences	Uninteresting or irrelevant courses; not enough active pupil participation; insufficient number of course offerings, especially electives
Adequate pupil rapport within groups; much intergroup conflict	Try to dominate pupils via harsh and unjust disciplinary practices	Unique educational experiences required for minority pupils
Want to achieve; get good education	Don't try to achieve harmonious teacher-pupil relationships	Need more emphasis upon minority pupils
View educational experiences offered by teachers as irrelevant	Good teachers limited in number	School athletic and speech programs provide meaningful educational experiences
Come to school mainly to: meet friends; participate in sports and clubs		Language department, in particular, needs changing
Don't get along with certificated staff		
Do not participate in student government		
Little respect for Sunnydale or for school property		

As the design of the cognitive studies called for establishing correlations between certain cognitive and non-cognitive (i.e., SES, personality traits, etc.) variables, these inventories were administered to students in conjunction with a battery of other tests that were related directly to the evaluation of the PATTERNS course. Each of the three inventories, the Gordon Survey of Personal Values (SPV), the Gordon Survey of Interpersonal Values (SIV) and the California Personality Inventory (CPI) were administered to all project pupils at Sunnydale High School. Pupils enrolled in the PATTERNS course in the suburban school across town also took these tests along with selected classes of pupils at other implementation sites in the second urban school district.

A few remarks about the population sample and problems associated with the administration of the various inventories to Sunnydale pupils must be made before the belief/value and personality data are presented and interpreted. On the answer forms that corresponded to each of the three inventories, pupils were provided space in which to indicate both their student ID number and sex. In addition to a breakdown of the data by sex, the research staff also wanted to be able to sort each protocol by school, teacher and the race or ethnicity of each pupil. Indicating the school and teacher of each pupil on the answer forms posed no controversy or problem; however, the department chairman at Sunnydale strenuously objected to a request by the research staff that pupils be asked to identify their race or ethnicity. Acutely aware of the racial tensions in the school and of the hostilities expressed by some of the more militant minority pupils towards standardized tests, he felt that a request of this nature might trigger undue conflicts. In view of the firmness

of his plea, the ACSP research staff decided against appealing the decision and, consequently, was unable to obtain this highly desired information. It is rather difficult to say how representative the sample was of the entire Sunnydale student body. There is some data to indicate, however, that students enrolled in the course were more achievement-oriented and better adjusted to school than other sophomore students who opted for the regular world history course or ethnic studies. Although all four classes were heterogeneous in terms of the racial and ethnic backgrounds of pupils, Orientals were disproportionately represented while Blacks were under represented.

The Gordon Survey of Personal Values[1]

One's values determine the relative importance the individual ascribes to various activities and, often, govern his approach to the problems of everyday living. The Gordon Survey of Personal Values was selected for administration to pupils. The six values measured by this particular inventory are Practical Mindedness (P), Achievement (A), Variety (V), Decisiveness (D), Orderliness (O), and Goal Orientation (G).

The SPV consists of thirty sets of three statements each. As the subject reads each of the three statements in one triad, he selects the one statement that represents what is least important to him and the one statement that represents what is most important to him. These choices the individual records on an answer sheet that can be either machine or hand scored. Both the administration of the SPV and the scoring of each protocol corresponded to the standardized procedures prescribed in the SPV manual.

The scales in the SPV are interpreted in terms of the items contained in them as determined by factor analytic methods. The scales for the

1. Gordon, Leonard V. Manual for Survey of Personal Values. Chicago: Science Research Associates, 1967.

six personal values are defined by what the highest scoring individuals value. Low scoring individuals simply don't value what is defined by each of the scales. The definitions of the six scales are as follows:

P - Practical Mindedness: To always get one's money's worth, to take good care of one's possessions, to get full use out of one's possessions, to do things that will pay off, to be very careful with one's money.

A - Achievement: To work on difficult problems, to have a challenging job to tackle, to strive to accomplish something significant, to set the highest standards of accomplishment for oneself, to do an outstanding job in anything that one tries.

V - Variety: To do things that are new and different, to have a variety of experiences, to be able to travel a great deal, to go to strange or unusual places, to experience an element of danger.

D - Decisiveness: To have strong and firm convictions, to make decisions quickly, to always come directly to the point, to make one's position on matters very clear, to come to a decision and stick to it.

O - Orderliness: To have well-organized work habits, to keep things in their proper place, to be a very orderly person, to follow a systematic approach in doing things, to do things according to a schedule.

G - Goal Orientation: To have a definite goal toward which to work, to stick to a problem until it is solved, to direct one's efforts toward clear-cut objectives, to know precisely where one is headed, to keep one's goals clearly in mind.

It should be noted that the interpretation of the value data obtained from Sunnydale pupils is made by reference to regional norms established for high school male and female students and to the norms established for pupils at other participating project schools. Table 7.5 depicts the mean scores for both male and females in the regional sample and indicates the differences from the established mean scores for pupils enrolled in the PATTERNS course at Sunnydale High.

Among the more striking features of the Personal Value profiles for Sunnydale males (reflected in the score configurations in Table 7.6, the summary of findings) are the consistently above norm scores on those core values that have characterized traditional middle class American culture. The relatively high scores on Achievement (A) and Goal Orientation (G), for example, indicate that societal and familial institutions have succeeded in inculcating critical values ordinarily associated with the traditional "work ethic." Another particularly interesting relationship appears between the especially high score on Orderliness (O) and the very low score on Variety (V). These data suggest that the independence and freedom associated with Variety are perceived as threats to one's personal security and achievement. These scores, in view of the moderately high scores on Achievement (A) and Goal Orientation (G), tend support to the hypothesis that, among Sunnydale males, the popular adolescent adage "Do your own thing" is highly restricted in meaning and that the behavior

Table 7.5

GORDON SURVEY OF PERSONAL VALUES

Differences from High School Regional Means

Variable	P	A	V	D	O	G
Male Regional Mean Scores	14.5	16.6	14.6	14.5	12.7	16.7
Males Sunnydale	+.9	+1.0	-2.7	-.5	+3.8	+.8
Female Regional Mean Scores	13.9	14.8	16.4	15.1	12.6	16.9
Females Sunnydale	+1.8	+.7	-2.6	-2.7	+4.7	+.9

Table 7.6

SUMMARY OF SURVEY OF PERSONAL VALUE FINDINGS FOR SUNNYDALE MALES BASED ON AN ANALYSIS OF THE INTERACTIONS AMONG SELECTED SCALES

Score Configurations*				Interpretation
Very High	Moderately High	Moderately Low	Very Low	
	A,G			Moderately high value placed on achievement; a desire to get ahead indicates effectiveness of institutions of society in instilling core values that have characterized the American middle class
O			V	Idiosyncratic behaviors perceived as incompatible with attainment of personal and/or group goals. Indicates very high value upon personal security. The systematization of the individual's behavior, presumably according to prevailing group norms, viewed as requisite to the achievement of aims set for self.
O	P			High value upon an orderly, pragmatic, very cautious approach to the problems confronting the individual.
	O	D		Quick decision making entails unnecessary risks that may pose serious threats to one's own personal security. A cautious, discreet approach, more highly valued; such behavior perceived as enhancing one's ability to cope with, and maintain at least some minimum degree of control over one's environment.

*Meanings assigned to the column headings in Tables 6 - 9 are as follows:
Very high = mean raw scores of Sunnydale pupils +2.5 to +5.0 above established means.
Moderately high = mean raw scores 0 to +2.5 above established means.
Moderately low = mean raw scores 0 to -2.5 below established means.
Very low = mean raw scores -2.5 to -5.0 below established means.

one exhibits while striving to attain personal goals must fall within well-defined peer group or sub-cultural parameters.

The scores on Decisiveness (D), Practical Mindedness (P), and Orderliness (O) lend support to the preceding hypothesis and suggest that Sunnydale males view their world as a potentially threatening, unstable place in which to live. The above norm scores on Practical Mindedness (P) and Orderliness (O), for example, indicate that high value is placed on a cautious, systematized and pragmatic approach to getting things done. And the ordinarily unexpected negative correlation between the scores on Decisiveness (D) and Achievement (A) is very logical if one believes that an aggressive, firm approach to decision-making is likely to result in incorrect judgements that may have disastrous personal consequences.

When the value profile of Sunnydale females is compared with that of Sunnydale males, a number of striking resemblances can be observed. For example, female scores on Achievement (A) and Goal Orientation (G) are also slightly above regional norms and the relationships between the scores on Orderliness (O), Goal Orientation (G), Achievement (A) and Variety (V) of Sunnydale males applies to Sunnydale females as well (Table 7.7). It can be noted, however, that Sunnydale females scored considerably below the norm on Decisiveness (D) and well above the norm on Practical Mindedness (P) and Orderliness (O). These two scores indicate an extraordinary concern about personal security; the females seem to value an even more careful, methodical approach to daily problems than do their male counterparts.

A review of the SPV data presented in Tables 7.6 and 7.7 suggests that several core American values continue to be embraced by both Sunnydale

Table 7.7

SUMMARY OF SURVEY OF PERSONAL VALUE FINDINGS FOR SUNNYDALE FEMALES BASED ON AN ANALYSIS OF THE INTERACTION AMONG SELECTED SCALES

Score Configurations*				Interpretation
Very High	Moderately High	Moderately Low	Very Low	
	A,G			Same as interpretation as given for Sunnydale males.
O			V	Same interpretation as given for Sunnydale males
O	P			Females value an even more cautious, pragmatic approach to daily problems than do Sunnydale males. Suggests a very great concern about one's personal security and the maintenance of control over one's personal property and other aspects of the environment.
O	A,P		D	Very low value on an aggressive, firm approach to decision making; such behavior perceived as highly threatening to personal security and to the attainment of goals set for self.

*See Table 7.6 for meanings assigned to column headings.

males and females. These data also indicate that, to the extent that a "do your own thing" orientation exists among Sunnydale pupils, the culturally defined parameters for individual behavior are quite restricted. Finally, the firm decision-making orientation ordinarily associated with high value on Achievement does not exist among Sunnydale pupils, indicating that a careful, meticulous, sometimes vacillating approach to problem solving is highly valued for the protection it seems to offer.

The Gordon Survey of Interpersonal Values[2]

This instrument is specifically designed to measure six values, all of which involve the individual's relationships to other people or their relationships to him: Support (S), Conformity (C), Recognition (R), Independence (I), Benevolence (B), and Leadership (L).

The SIV, like the SPV, contains thirty sets of three statements each. The subject reads each of the three statements in one triad and then selects the one statement that represents what is most important to him and the one statement that represents what is least important to him. The same procedures were employed to administer and score the SIV as were used with the SPV.

The definitions of the six scales are as follows:

S - Support: Being treated with understanding, receiving encouragement from other people, being treated with kindness and consideration.

C - Conformity: Doing what is socially correct, following regulations closely, doing what is accepted and proper, being a conformist.

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2. Gordon, Leonard V. Manual for Survey of Interpersonal Values. Chicago: Science Research Associates, 1960

R - Recognition: Being looked up to and admired, being considered important, attracting favorable notice, achieving recognition.

I - Independence: Having the right to do whatever one wants to do, being free to make one's own decisions, being able to do things in one's own way.

B - Benevolence: Doing things for other people, sharing with others, helping the unfortunate, being generous.

L - Leadership: Being in charge of other people, having authority over others, being in a position of leadership or power.

The most striking feature of the interpersonal value profile for Sunnydale males is the "spiking" or the elevated scores on Conformity (C) and Benevolence (B) and the low to very low scores on all other scales. This indicates that unusually high value is placed upon group solidarity and conformity to group expectations, thus supporting the data presented earlier (pp 87-90). Note that the score (Table 7.8) on Independence (I) is below the established norm for college males. This score, as indicated by the interpretations in Table 7.9, reinforces the conclusion that Sunnydale males value amiable relationships with others in the groups to which they belong and that the exhibition of highly independent behavior is viewed as potentially threatening to these groups. Table 7.9 also indicates that Sunnydale males place little value on Recognition (R) and Leadership (L). These low scores again suggest that the maintenance of group solidarity is highly valued and that the behavior frequently associated with high Recognition and Leadership is perceived as potentially threatening to the viability of the group.

Table 7.8

GORDON SURVEY OF INTERPERSONAL VALUES

Differences from College Mean Scores

Variable	S	C	R	I	B	L
College Male Mean Scores	14.9	12.3	12.4	19.3	13.6	17.3
Males Sunnydale	-.8	+4.7	-1.4	-.7	+3.5	-2.2
College Female Mean Scores	17.8	14.2	12.1	16.2	18.4	11.4
Females Sunnydale	- 0	+3.1	-.3	+1.3	+3.4	+.9

Table 7.9

SUMMARY OF SURVEY OF INTERPERSONAL VALUE FINDINGS FOR SUNNYDALE MALES BASED ON AN ANALYSIS OF THE INTERACTION AMONG SELECTED SCALES

Score Configurations*				Interpretation
Very High	Moderately High	Moderately Low	Very Low	
C,B				Unusually high value upon conformity to group expectations; considerable emphasis upon maintaining amiable relationships among members of the same group; reflects a great concern for personal security.
C		I		The freedom to do as one pleases valued only to the extent that the individual's behavioral predispositions are compatible with group norms.
B		S		Greater value upon making personal contributions to others and to groups of which one is a member rather than receiving something for self.
		R,L		Reflects the rather high value placed upon maintaining a low individual profile within groups. This is consistent with the high value placed upon conformity and the great concern about personal security.
C,B		I,L		Aggressive, self-assertive behaviors ordinarily associated with leadership perceived as threatening to the viability and cohesiveness of the group.

*See Table 7.6 for meanings assigned to column headings.

In a number of important respects, the Interpersonal value profile for Sunnydale females closely corresponds to the profile for Sunnydale males. Table 7.10 summarizes the findings for Sunnydale females and points out the differences between males and females.

By observing the correlations for Sunnydale males in Table 7.11, it can be seen that the strongest negative correlation is between Variety on the SPV and Conformity on the SIV. This strong negative correlation confirms the interpretation that Sunnydale males place much greater value on group cohesiveness and compliance with group norms than on the individualistic orientations that often characterize persons who seek out new or unusual experiences.

Ordinarily, Leadership has been found to be highly correlated with Achievement and both these values are usually negatively correlated with Practical Mindedness, Orderliness, and Conformity. But among Sunnydale males these relationships are reversed. This tends to confirm the interpretation that Sunnydale males see the world as a rather unstable, personally threatening place; which, in turn, accounts for the high value placed upon group solidarity, a low in-group profile, and non-aggressive leadership.

Sunnydale females, if anything, are even more security conscious and, therefore, value an even more pragmatic and cautious approach to their problems.

Pupil Value Profile Based on Ethnographic Data

Although a thorough analysis of all ethnographic value data has not been completed, the values delineated in Table 7.12 are among those which seem most positively or negatively held by pupils.

Table 7.10

SUMMARY OF SURVEY OF INTERPERSONAL VALUE FINDINGS FOR SUNNYDALE FEMALES BASED ON AN ANALYSIS OF THE INTERACTION AMONG SELECTED SCALES

Score Configurations*				Interpretation
Very High	Moderately High	Moderately Low	Very Low	
C,B				High value upon conformity to social norms. Greater stress among females upon warm, charitable interpersonal relationships among members of group.
C	I			Higher value upon independence from group constraints than among males. Lower score on conformity suggests that females are not quite as concerned about personal security as are Sunnydale males.
B		S		Same interpretation as given for Sunnydale males
C	L,I	R		Compliance with group norms highly valued but females are more predisposed than males to attract attention to self and exert leadership within and independence from those groups to which they belong.

*See Table 7.6 for meanings assigned to column headings.

Table 7.11

CORRELATIONS BETWEEN VALUE SCORES FROM THE SPV AND THE SIV

	P	A	V	D	O	G
Support (S)	.19**	-.20**	.04	-.06	-.01	.04
Conformity (C)	.05	-.15**	-.51**	-.13	.45**	.42**
Recognition (R)	.07	-.08	.13	-.06	-.01	-.04
Independence (I)	-.07	.03	.33**	.21**	-.32**	-.25**
Benevolence (B)	-.13	.05	-.02	.08	.02	-.04
Leadership (L)	-.16**	.32**	.06	.01	-.11	-.12

Note: In the Table the following significant symbols are used: * .05 level
** .01 level

Table 7.12

SUMMARY OF FINDINGS: PUPIL VALUE PROFILE

	From Statements about Pupils	From Statements about Certificated Staff	From Statements about School Curriculum
POSITIVE	Harmonious relations with others	Sympathetic, understanding teachers	Athletic achievement
	Togetherness	Harmonious student-teacher relations	Practical, useful, down-to-earth courses
	Group Loyalty	Cooperativeness	Pupil participation
	Obedience	Leadership	Racial/ethnic group cohesiveness, solidarity, sense of identity
	Security	Impartial treatment	
	Agreeableness	Encouragement and support from teachers	Achievement
	Ambition; achievement		
	Integration		
	Neatness, cleanliness		
NEGATIVE	Independence	Insensitive, unsympathetic teachers	High intellectual activity
	Autonomy	Favoritism	Teacher dominance of classroom
	Disorderliness, dirty	Aloof, uncommunicative teachers	Limited pupil involvement
	Factionalism	Unfairness	Abstract, erudite, intangible courses and course work
	Conflict between pupils	Unapproachable teachers	
	Apathetic		
	Divisiveness		

In general, the value profile constructed from the ethnographic data is quite similar to the profile revealed by the Gordon Personal and Interpersonal Value inventories. A few features, however, warrant additional comment. Although one might infer from the test data that Sunnydale pupils place moderately high value on academic achievement, the ethnographic data reveals that when pupils express a desire to achieve they generally refer explicitly to athletic rather than scholarly accomplishments. With the exception of Orientals, most pupils place considerably less value on achievement in courses requiring abstract thought or which do not seem to have any immediate and direct application to everyday problems.

Pupil statements about their peers also underscore the extremely high value placed on the maintenance of racial and ethnic group solidarity. This finding is entirely consistent with the pervasive belief among minority pupils that the various racial and ethnic minorities must forge themselves into effective political units to exert greater control over the school and community structures that influence their daily lives.

The California Personality Inventory

CPI data was desired to complement the Gordon and ethnographic value data and to allow more elaborated descriptions of the modal personality orientations of pupils. The CPI is an appropriate instrument for this purpose because it is designed to be used by normal subjects rather than those with severe problems of personal or interpersonal adjustment. The various scales, devised to yield descriptions of broad personal and social relevance, focus on personality factors that are positive and generally recognized as important for social living.

The CPI is a self-administered instrument containing 480 items that yield eighteen standard scores, one for each of the variables grouped under four more inclusive categories. Each scale covers one important facet of interpersonal psychology and, taken together, they are intended to provide a comprehensive description of the individual from a social interaction perspective. The CPI is designed to take about 45 minutes, although several pupils at Sunnydale with poor reading skills were unable to complete all items in the test in the 50 minute period alloted. The validity of those protocols which were partially incomplete was not significantly affected, however, because the last dozen test items are included only for the ease of scoring. Scales measured by the CPI are as follows:

Class I: Measure of Poise, Ascendancy, and Self-assurance

1. Do Dominance
2. Cs Capacity for Status
3. Sy Sociability
4. Sp Social Pressure
5. Sa Self-acceptance
6. Wb Sense of Well-being

Class II: Measures of Socialization, Maturity, and Responsibility

7. Re Responsibility
8. So Socialization
9. Sc Self-control
10. To Tolerance
11. Gi Good Impression
12. Cm Communality

Class III: Measures of Achievement Potential and Intellectual Efficiency

13. Ac Achievement via Conformance
14. Ai Achievement via Independence
15. Ie Intellectual Efficiency

Class IV: Measures of Intellectual and Interest Modes

16. Py Psychological-mindedness
17. Fx Flexibility
18. Fe Femininity

A description of the purpose o each scale together with the personality traits ordinarily associated with both high and low scorers on each appears in Table 7.13. The data yielded by the CPI, like that obtained from the two Gordon instruments, is interpreted by reference to established mean scores for both male and female high school samples.

Table 7.14 reveals consistently low scores on all scales with relatively little clear-cut differentiation among the first three classes of variables. These low scores, particularly on the Class II variables, indicate that Sunnydale males are experiencing considerable difficulty in adjusting to the requirements of everyday living. The profile suggests that they tend to be a rebellious, impulsive, opinionated group of young men, lacking the tolerance, resourcefulness, self-control and trusting out-look that are considered prerequisites to successful societal adjustment. The elevated scores on Sa and Py variables suggest that the rebellious, self-seeking tendencies characteristic of Sunnydale males are most likely to be expressed in aggressive verbal behavior.

The below norm scores for all three scales in Class III indicate that, to the extent Sunnydale males are inclined to strive to attain goals, limited intellectual efficiency truncates their efforts. The lack of a strong academic orientation and the retarded academic skills indicated by these low scores suggest that Sunnydale males are having considerable difficulty achieving even the minimum academic standards set by the school.

Aside from the interpretations given to various score configurations in Table 7.15, this entire configuration of low scores underlines the conclusion that Sunnydale males perceive their world as inherently hostile. In fact, the score furthest below the norm is on that scale that measures the individual's degree of disillusionment and self-doubt. This particularly

Table 7.13

THE CALIFORNIA PERSONALITY INVENTORY

High Scorers Tend to be seen as	Scale and Purpose	Low Scorers Tend to be seen as
CLASS I: MEASURES OF POISE, ASCENDANCY, AND SELF-ASSURANCE		
Aggressive, confident, persistent, and planful, as being persuasive and verbally fluent, as self-reliant and independent; and as having leadership potential and initiative	1. Do (Dominance) To assess factors of leadership ability, dominance, persistence, and social initiative	Retiring, inhibited, commonplace, indifferent, silent and unassuming; as being slow in thought and action; as avoiding situations of tension and decision; and as lacking in self-confidence
Ambitious, active, forceful, insightful, resourceful, and versatile; as being ascendant and self-seeking; effective in communication; and as having personal scope and breadth of interests	2. Cs (Capacity for Status) To serve as an index of an individual's capacity for status (not his actual or achieved status). The scale attempts to measure the personal qualities and attributes which underlie and lead to status	Apathetic, shy, conventionally dull, mild, simple, and slow; as being stereotyped in thinking; restricted in outlook and interests; and as being uneasy in new or unfamiliar social situations
Outgoing, enterprising, and ingenious; as being competitive and forward; and as original and fluent in thought	3. Sy (Sociability) To identify persons of outgoing, sociable, participative temperaments	Awkward, conventional, quiet, submissive, and unassuming, as being detached and passive in attitude; and as being suggestible and overly influenced by others' reactions and opinions
Clever, enthusiastic, imaginative, quick, informal, spontaneous, and talkative; as being active and vigorous; and as having an expressive, ebullient nature	4. Sp (Social Presence) To assess factors such as poise, spontaneity, and self-confidence in personal and social interaction	Deliberate, moderate, patient, self-restrained, and simple; as vacillating and uncertain in decision; and as being literal and unoriginal in thinking and judging
Intelligent, outspoken, sharp-witted, demanding, aggressive, and self-centered; as being persuasive and verbally fluent; and as possessing self-confidence and self-assurance	5. Sa (Self-acceptance) To assess factors such as sense of personal worth, self-acceptance, and capacity for independent thinking and action	Methodical, conservative, dependable, conventional, easy-going, and quiet; as self-abasing and given to feelings of guilt and self-blame; and as being passive in action and narrow in interests
Energetic, enterprising, alert, ambitious, versatile; as being productive, active; as valuing work and effort for its own	6. Wb (Sense of Well-being) To identify persons who minimize their worries and complaints, and who are relatively free from self-doubt and disillusionment	Unambitious, leisurely, awkward, cautious, apathetic, and conventional; as being self-defensive and apologetic; constricted in thought and action

High Scorers Tend to be seen as	Scale and Purpose	Low Scorers Tend to be seen as
CLASS II: MEASURES OF SOCIALIZATION, MATURITY, AND RESPONSIBILITY		
Planful, responsible, thorough, progressive, capable, dignified, independent; as being conscientious and dependable, resourceful and efficient; as alert to ethical and moral issues	7. Re (Responsibility) To identify persons of conscientious, responsible, and dependable disposition and temperament	Immature, moody, lazy, awkward, changeable, disbelieving; as being influenced by personal bias, spite, dogmatism; and as under-controlled and impulsive in behavior
Serious, honest, industrious, modest, obliging, sincere, and steady; as being conscientious and responsible; as being self-denying and conforming	8. So (Socialization) To indicate the degree of social maturity, integrity, and rectitude which the individual has attained	Defensive, demanding, opinionated, resentful, stubborn, head-strong, rebellious, undependable; as being guileful and deceitful in dealing with others; and as given to excess, exhibition, and ostentation in their behavior
Calm, patient, practical, slow, self-denying, inhibited, thoughtful, deliberate; as being strict and thorough in their own work and in their expectation for others; and as being honest and conscientious	9. Sc (Self-control) To assess the degree and adequacy of self-regulation and freedom from impulsivity and self-centeredness	Impulsive, shrewd, excitable, irritable, self-centered, uninhibited; as being aggressive and assertive; as overemphasizing personal pleasure and self-gain
Enterprising, informal, quick, tolerant, clear-thinking, resourceful; as being intellectually able and verbally fluent; and as having broad and varied interests	10. To (Tolerance) To identify persons with permissive, accepting, and non-judgemental social beliefs and attitudes	Suspicious, narrow, aloof, wary, retiring; as being passive and overly judgemental in attitude; and as disbelieving and distrustful in personal and social outlook
Co-operative, enterprising, outgoing, sociable, warm, helpful; as being concerned with making a good impression; as being diligent and persistent	11. Gi (Good Impression) To identify persons capable of creating a favorable impression, and who are concerned about how others react to them	Inhibited, cautious, shrewd, wary, aloof, resentful; as being cool and distant in their relationships with others; as being self-centered and too little concerned with the needs and wants of others
Dependable, moderate, tactful, reliable, sincere, patient, steady, realistic; as being honest and conscientious; as having common sense and good judgement	12. Cm (Communality) To indicate the degree to which an individual's reactions and responses correspond to the modal ("common") pattern established for the inventory	Impatient, changeable, complicated, imaginative, disorderly, nervous, restless, confused; as being guileful and deceitful; inattentive and forgetful; and as having internal conflicts and problems

High Scorers Tend to be seen as	Scale and Purpose	Low Scorers Tend to be seen as
CLASS III: MEASURES OF ACHIEVEMENT POTENTIAL AND INTELLECTUAL EFFICIENCY		
Capable, co-operative, efficient, organized, responsible, stable, sincere; as being persistent and industrious; and as valuing intellectual activity and intellectual achievement	13. Ac (Achievement via conformity) To identify those factors of interest and motivation which facilitate achievement in any setting where conformance is a positive behavior.	Coarse, stubborn, aloof, awkward, insecure, opinionated; as easily disorganized under stress or pressures to conform; as pessimistic about their occupational futures
Mature, forceful, strong, dominant, demanding, and foresighted; as being independent and self-reliant; as having superior intellectual ability and judgement	14. Ai (Achievement via independence) To identify those factors of interest and motivation which facilitate achievement in any setting where autonomy and independence are positive behaviors	Inhibited, anxious, cautious, dissatisfied, dull, wary; as being submissive and compliant before authority; as lacking in self-insight and self-understanding
Efficient, clear-thinking, capable, intelligent, progressive, planful, thorough, resourceful; as being alert, and well-informed; as placing a high value on cognitive and intellectual matters	15. Ie (Intellectual efficiency) To indicate the degree of personal and intellectual efficiency which the individual has attained	Cautious, confused, easygoing, defensive, shallow, unambitious; as being conventional and stereotyped in thinking; lacking in self-direction and self-discipline
CLASS IV: MEASURES OF INTELLECTUAL AND INTEREST MODES		
Observant, spontaneous, quick, perceptive, talkativt, resourceful, changeable; as being verbally fluent and socially ascendant; as being rebellious toward rules, restrictions	16. Py (Psychological-mindedness) To measure the degree to which the individual is interested in, and responsive to, the inner needs, motives, and experiences of others	Apathetic, peaceable, serious, cautious, unassuming; as being slow and deliberate in tempo; as being overly conforming and conventional
Insightful, informal, adventurous, confident, humorous, rebellious, idealistic, assertive, and egoistic; as being sarcastic and cynical; as highly concerned with personal pleasure and diversion	17. Fx (Flexibility) To indicate the degree of flexibility and adaptability of a person's thinking and social behavior	Deliberate, cautious, worrying, industrious, guarded, mannerly, methodical, rigid; as being formal and pedantic in thought; as being overly deferential to authority, custom, tradition
Appreciative, patient, helpful, gentle, moderate; respectful, sympathetic	18. Fe (Femininity) To assess the masculinity or femininity of interests. (High scores indicate more feminine interests, etc)	Outgoing, hard-headed, ambitious, masculine, robust, restless; manipulative and opportunistic; blunt and direct; impatient

Table 7.14

CALIFORNIA PERSONALITY INVENTORY
Differences from Means
(Mean Raw Scores)

Variable	Do	Cs	Sy	Sp	Sa	Wb	Re	So	To
High School Male Mean Scores (N = 3.572)	23.2	15.3	21.5	32.7	18.7	33.5	26.7	36.2	17.8
Males									
Sunnydale (N = 60)	-.9	-1.2	-.6	-.2	+.3	-4.9	-4.2	-4.0	-4.0
North Sunnydale (N = 82)	-.9	-1.0	-.1	+1.5	+1.0	-3.1	-4.5	-4.4	-1.6
High School Female Mean Scores (N = 4.056)	23.7	16.0	21.4	31.1	18.9	34.6	30.0	39.4	18.7
Females									
Sunnydale (N = 36)	-3.0	-2.7	-1.9	-.9	-1.1	-5.3	-4.3	-3.8	-4.2
North Sunnydale (N = 82)	-1.5	-.9	+.4	+1.7	+.5	-3.6	-4.3	-4.6	-1.2

Table 7.14 (cont'd)

CALIFORNIA PERSONALITY INVENTORY
Differences from Means
(Mean Raw Scores)

Variable	Sc	Gi	Cm	Ac	Ai	Ic	Py	Fx	Fe
High School Male Mean Scores (N = 3.572)	25.3	15.1	25.2	22.3	14.6	33.6	9.2	9.1	15.4
Males									
Sunnydale (N = 60)	-2.1	-2.8	-2.2	-1.5	-1.0	-3.8	+.4	-1.4	+1.0
North Sunnydale (N = 82)	-3.6	-2.9	-1.6	-1.6	+.4	-2.5	+1.0	+.1	-.1
High School Female Mean Scores (N = 4.056	27.6	15.7	26.1	24.1	15.5	34.4	8.7	8.9	24.1
Females									
Sunnydale (N = 36)	-3.2	-2.2	-1.2	-1.6	-1.1	-3.7	-.4	+.4	-.7
North Sunnydale (N = 82)	-3.6	-3.6	-.8	-2.4	+1.3	-1.7	+.7	+.7	-.1

low score, the lack of balance between intellectual drive, social skills, responsibility and maturity, and the rather uninspiring characteristics of all other aspects of the profile suggest that Sunnydale males are confronted with a number of formidable problems in their efforts to adjust to American society.

The modal personality profile for Sunnydale females (see Table 7.16) generally is marked by the same characteristics as the Sunnydale male profile, although there are some significant differences. The specially low scores on all Class I scales indicate that Sunnydale females are even more lacking in the personal confidence and other social skills required for optimal interpersonal adjustment. These scores suggest a much greater degree of passivity than among Sunnydale males, and indicate that they are much less inclined to openly rebel or exhibit the aggressive behaviors that characterize their male counterparts. The lower score on Py in Class III underscores the more apathetic and peaceable nature of the girls as contrasted with the openly rebellious, impulsive inclinations of Sunnydale males.

Summary and Conclusions

The test and ethnographic data presented above, therefore, indicates that the Sunnydale pupil (a) finds himself in a hostile environment, particularly in the school; (b) lacks the personal and interpersonal skills to cope with this environment; or, at least, lacks those skills which would allow him to succeed in traditionally defined ways; (c) values achievement in those areas (athletics and "practical" as opposed to "academic" courses) in which he is most able to succeed; and (d) sees group solidarity as a means to both personal security and the achievement of structural change.

Table 7.15

SUMMARY OF SUNNYDALE MALE PERSONALITY ORIENTATIONS BASED ON AN ANALYSIS OF THE INTERACTION AMONG SCALES IN EACH CLASS OF VARIABLES IN THE CPI

Score Configurations*				Interpretation
Very High	Moderately High	Moderately Low	Very Low	
				Class I: Measures of Poise, Ascendancy and Self-Assurance
	Sa	Do, Cs, Sy, Sp	Wb	Generally lacking in the social skills and personal qualities requisite to leadership and status. Males are unusually cautious, self-defensive, restricted in outlook and interests. Their impaired social skills are manifest in their predisposition to exhibit outspoken, demanding, aggressive, self-seeking behaviors.
				Class II: Measures of Socialization, Maturity and Responsibility
		Cm	Re, So, Sc, To, Gi	Very deficient in the area of responsibility and interpersonal maturity. Data suggests that they are highly rebellious, demanding, intolerant and impulsive -- orientations which are characteristic of individuals experiencing considerable social friction and difficulty in adjusting to role expectations. Very low scores on all but one scale indicate that Sunnydale males exercise limited control over self.
				Class III: Measures of Achievement Potential and Intellectual Efficiency
		Ac, Ai	Ie	Academic achievement well below it's proper level; generally rejecting of academic and intellectual pursuits. To the extent that Sunnydale males are motivated to achieve, their grossly impaired intellectual functioning impedes their efforts to successfully do so.

Table 7.15 (cont'd)

Score Configurations*				Interpretation
Very High	Moderately High	Moderately Low	Very Low	
	Py, Fe	Fx		Class IV: Measures of Intellectual and Interest Modes Generally self-assertive, verbally aggressive and rebellious towards rules, restrictions and constraints, yet lacking the capacity and/or inclination to be highly manipulative in dealing with others. Quite rigid and constricted in thought.

* See Table 7.6 -- Gordon material.

Table 7.16

SUMMARY OF SUNNYDALE FEMALE PERSONALITY ORIENTATIONS BASED ON AN ANALYSIS OF THE INTERACTION AMONG SCALES IN EACH CLASS OF VARIABLES IN THE CPI

Score Configurations*				Interpretation
Very High	Moderately High	Moderately Low	Very Low	
				Class I: Measures of Poise, Ascendancy, and Self-Assurance
		Sy,Sp,Sa	Do,Cs, Wb	Very withdrawn, inhibited, unresponsive and afflicted by considerable self-doubt. Generally unambitious, cautious, self-defensive and apologetic. They are inclined to be much less self-assertive, aggressive and outspoken than are Sunnydale males.
				Class II: Measures of Socialization, Maturity and Responsibility
		Gi,Cm	Re,So, Sc,To	This configuration of extremely low scores suggests that Sunnydale females are experiencing the same critical problems in making satisfactory social adjustment as their male counterparts. These data indicate that females are inclined to be as equally rebellious and impulsive as males, however, the lower scores on Sa, Do and Cs in Class I and Py in Class III reveal that females are not as predisposed as Sunnydale males to overtly express their rebellious inclinations.
				Class III: Measures of Achievement Potential and Intellectual Efficiency
		Ai,Ac	Ie	Same interpretation as given for Sunnydale males
				Class IV: Measures of Intellectual and Interest Modes
	Fx	Py,Fe		

BELIEF/VALUE ORIENTATIONS OF THE CERTIFICATED STAFF

As a general rule, there is a higher degree of consistency in the beliefs about school personnel and school structures among the certificated staff than among Sunnydale students. This can be attributed mainly to the similarity in socialization and educational experiences of the professional staff and the close spatial proximity that allows for frequent interaction.

The high degree of patterning in the belief systems of teachers is clearly revealed by the data obtained on the perceived characteristics of students belonging to the various racial and ethnic groups in the Sunnydale student body. For example, there is nearly universal accord as to the defining attributes of Oriental pupils (see Table 7.17).

In general, Oriental pupils are believed to be highly achievement oriented, to possess unsurpassed intellectual and leadership capabilities, and to be dependable, cooperative and highly receptive to the educational experiences offered by the school. These attributes of Oriental pupils are thought to be developed as a result of socialization and cultural experiences unique to the Japanese and Chinese-American communities; nearly every faculty member made explicit reference to the nature of the oriental family structure and sanctions believed to be applied to Oriental pupils who do poorly in school. The following exerpt from an interview with one of the counselors typifies this configuration of beliefs.

Counselor: The kid is a high achiever and he was getting worried about his grade in Mr. Jones' class. This boy is an Oriental fellow and he really wants to get those grades.

Table 7.17

INHERENT AND BEHAVIORAL CHARACTERISTICS OF ORIENTAL PUPILS AS PERCEIVED BY THE CERTIFICATED STAFF

Characteristics	Number of Certificated Staff Mentioning (N = 64)
Want to get ahead, achievement oriented, want best jobs, will be professionals	53
Get good grades, do well in school	42
Hard workers, try hard, never quit working, work fast	22
Smart, high intelligence, very capable, can do college work	21
Parents check up on kids, concerned about their children, parents get after their kids	17
Dependable, very responsible, reliable, stable	16
Interested in school, like school	11
Independent, can get things done by themselves	11
Good family background	11
High leadership ability, can run school by themselves, good leaders	9
Want recognition, like to be looked up to	7
Always does what teacher wants, submissive, passive	6
Good attendance, never cut class	6
Participate in school activities, join clubs	6
Dependent upon teachers, want teacher guidance	4
Shrewd, smart operators	3
Immature, haven't grown up	3
Like to be by themselves, stay with their own group	3
Wear neat and clean clothes, always properly dressed	3

Interviewer: Does that tend to be true of Oriental kids in general?

Counselor: Oh, yes. These Chinese parents really get after their kids to do well in school. If they get A's and B's that's OK, but if they drop to C's their parents are after them.

Interviewer: How well do Oriental pupils actually perform in class?

Counselor: They all get the push to succeed in school. The kids are all interested, do their work and get it done right. Just give them an assignment and it'll get done.

Interviewer: Have you talked to many Oriental parents?

Counselor: Sure, I have. They check up on their kids. I'll tell you something else too. If these kids don't make it in school they'll hear not only from their parents but their relatives too. These kids are under pressure.

Interviewer: How do the Black and Mexican kids do relative to the Chinese and other Oriental students?

Counselor: In terms of academic achievement they don't do well but they don't have their parents behind them.

Another prevalent, yet quietly expressed belief is that the intellectual capabilities of Oriental pupils surpass those of all other Sunnydale pupils. The caution with which this belief is expressed is due to the acute awareness among faculty members of the racial sensitivities of pupils and to the possibility of being labelled racist if one openly discusses perceived differences between the various racial and ethnic groups. The following discussion typifies both the pervasiveness of these beliefs and the general conversational context in which they are articulated:

Teacher: (intervening in a discussion during the noon lunch hour) John, I don't think anybody is against measures being taken to bring certain schools up to standards or to provide scholarships. But, let's face it. A kid who really wants an education here can get it. All I'm saying is that we shouldn't be pushing kids at Sunnydale into college. They just don't have the ability to do it.

Interviewer: Are there many kids who do have the ability?

Teacher: Sure there are some. But last year over 30% went and you know these kids got over $400,000 in scholarships. It's really no use sending a lot of them either. They just aren't prepared.

Interviewer: Which kids are prepared and capable of going on?

Teacher: Well, until last year about 10% of the student body went on to college and, most of them were Oriental students. That's about the per cent that is capable of doing college work.

Interviewer: Are there any Blacks and Mexicans capable of going to college?

Teacher: Some, but not many. They just don't have it, that's all, and it's a real disservice to keep pushing them to go.

This teacher went on to explain how he would prefer to restructure the curriculum to place greater emphasis on vocational arts - an instructional program he perceived as better suited to the intellectual capabilities of most Sunnydale students.

The general characteristics ascribed to Negro pupils by teachers are the obverse of those imputed to Orientals. As Table 7.18 indicates, they

perceive Black pupils to be impulsive, self-seeking individuals unable to discipline themselves to attain academic and economic success. Negroes are perceived as unresponsive to teacher efforts and generally predisposed to make demands instead of acquiring the knowledge or skills required to attain their goals. Teachers generally believe that the qualities ascribed to Negro pupils are a consequence of either limited inherent capabilities or cultural deprivation. The following exerpt suggests these beliefs:

Teacher: You haven't read anything by Susan Langer, have you?

Interviewer: I can't recall that I have.

Teacher : Well, I was looking at something she wrote last night. She sure is good. She was talking about people who don't read or think. She's right. People are getting more stupid.

Interviewer: You really think so?

Teacher: Sure, you know that early in this year I tried to get my students interested in the historical literature that was partially responsible for the development of our basic freedoms but I couldn't do it. I tried to get them to read Thomas Paine's comments about basic human freedoms and Ben Franklin but they wouldn't do it. They aren't interested in really thinking about these kinds of things. They just want to spout off. It's been that way for a couple of years now. Do you know that for the last 13 years I've been teaching underprivileged Blacks. One thing that anybody in my position can see is that the

Table 7.18

INHERENT AND BEHAVIORAL CHARACTERISTICS OF NEGRO PUPILS AS PERCEIVED BY THE CERTIFICATED STAFF

Characteristics	Number of Certificated Staff Mentioning (N = 67)
Troublemakers, uncooperative, discipline problems, disruptive, disobedient, rebellious	59
Always making demands, insist that they get their way, give ultimatums	40
Disrespectful towards teachers, dislike teachers, suspicious of teachers, treat teachers like cops	26
Militant, becoming militant, getting pushy	24
Poor attendance, always tardy, cut class, don't come to school	20
Educationally retarded or handicapped, behind academically	17
Ignore school affairs, don't participate in student activities, won't support the student body	16
Culturally deprived, underprivileged	16
Only care for sports, like athletics, come to school for sports	14
Boisterous, noisy, spout off, loud mouths	10
Never do assignments, avoid work, don't want to learn	9
Look for fights; always at necks of Mexicans, want to settle everything with fists	8
Victims of discrimination and racism, have been put down, haven't had a chance	7
Irresponsible, not very dependable	7
Poor family background, bad home life	7
Not interested in school, hate school	7
Don't want to integrate; want to keep to themselves	7
Wear flashy clothes, "far out" dressers	6
Immature, children	5
Want to learn, desire to do well in school	5

Teacher: (cont'd) older generation of Negroes - I mean the ones who went to school years ago and are now middle aged, some of them were good students and really could think. There weren't too many but at least we had some really good students who did read and think about these things. But now you can't get kids to think about Paine. Black kids now are interested in making noise.

Interviewer: What do you think accounts for this change?

Teacher: It's really hard to say.

Interviewer: Have you heard any Blacks complain about not having the freedoms that Paine talked about?

Teacher: Of course not. They haven't even thought about them. If they did they would be able to express their ideas about them. They can't even do that. Do you know that a lot of these Black kids graduate from here without even knowing how to write a sentence? I mean that,

The perceived underprivileged nature of Negro pupils is particularly significant because the factors which contribute to this deprivation are believed to be ones over which teachers have little control. For example, many teachers believe that Negro pupils have inadequate role models in the home and that there is a general lack of adequate community and parental support for a sound educational program. These situations are perceived to impede teacher efforts to educate Negro and other minority pupils:

Teacher 1: (reading from papers he was grading) Listen to this, "Mr. myself, I think..." That's what this kid wrote. Isn't that something?

Interviewer: Which student wrote that?

Teacher 1: Just another one of my Black kids.

Teacher 2: What are we doing about teaching this me and I stuff?

Teacher 1: There isn't anything we can do. We just can't overcome these kids' family backgrounds. We're here at school trying to teach the kids one thing and then they go home and do another. We just don't have the kids with us long enough to overcome it.

Interviewer: Are you saying that there is nothing you as teachers can do?

Teacher 1: That's right. We don't get the support from parents and they're not going to learn outside of school.

Teacher 2: You know, I've found that this language thing has an effect on us. We find ourselves talking the way the kids do.

Teacher 1: I know it. The kids are actually dragging us down rather than us bringing them up.

Interviewer: What do you mean by that?

Teacher 1: I mean that we should be teaching these kids how to read and speak right. But instead they have greater influence on us. There's just not a hell of a lot we can do about it either.

A smaller group of teachers, however, see themselves as capable of providing educational leadership for the "culturally deprived" because of their strong affinity for Blacks. These teachers tend to see themselves as Liberal, idealistic persons more concerned with helping to educate deprived pupils than with the maintenance of "law-n-order" in the

school. Although this group tends to be more optimistic about the educational progress of Black pupils, they too are beset by doubts about their ultimate success:

Interviewer: I understand that you might be leaving next year if the district cuts back on the teaching staff. Do you want to return next year?

Teacher: Yes, I do. I like it here.

Interviewer: Do you mean in Sunnydale or at Sunnydale High.

Teacher: At Sunnydale High.

Interviewer: That's interesting. I've heard many teachers say that they don't. Why do you want to stay?

Teacher: I can get along well here because I have a feeling for Negroes. I used to go to a college that was in a ghetto area back in New Jersey. We didn't have any Negroes in our school but I used to do things out in the community.

Interviewer: What kinds of things did you do?

Teacher: Well, over Thanksgiving we took baskets of food to people. At Christmas we'd have a party on the campus and would invite a lot of the poorer kids in the community to attend. I didn't have a lot of money myself then so I could appreciate it more.

Interviewer: Do you get along well with the Black students here?

Teacher: Pretty well. The kids need lots of help here though. That's why I explain everything very carefully and go real slow. You know I teach math and you would be surprised how little the kids know.

Interviewer: How do you feel about your success in teaching here?

Teacher: OK, but I also realize that there are limits to what we can do. I have a lot of sympathy for them though and I take everything step by step so they don't get lost.

Aside from illustrating a pattern of teacher beliefs about Negro pupils, this conversation is particularly instructive because it provides insight into her personality and that of others who express similar views. She perceives that Negro pupils need her because she understands their problems and knows what to do about them. On the other hand, it could be said that she needs to instruct Negro pupils.

As Table 7.19 indicates, Mexican pupils are considered similarly uninterested in school, continually absent, lacking adequate parental support, academically retarded and generally deprived and underprivileged in nature. Mexican pupils however are perceived to be less impulsive, aggressive, demanding and rebellious than Negro pupils. But as the school year progressed, an increasing number of teachers began to describe Mexican pupils in these terms, particularly when they began to see growing numbers of Mexican pupils join or lend support to militant Chicano organizations.

Another pervasive belief among teachers, one that has profound social structural implications, is that the Mexican-American sub-culture is relatively intact, isolated from Anglo culture, and constantly reinforced by close contacts with relatives in Mexico and with migratory farm workers. Although these perceptions lead teachers to believe that efforts to intervene in the habitual behaviors of Mexican pupils are likely to meet with limited success, most feel that Mexican-Americans ought to try to learn the customs and acquire the cultural orientations that characterize the

Table 7.19

INHERENT AND BEHAVIORAL CHARACTERISTICS OF MEXICAN-AMERICAN PUPILS AS PERCEIVED BY THE CERTIFICATED STAFF

Characteristics	Number of Certificated Staff Mentioning (N = 60)
Always absent, never come to class, cut school, poor attendance	46
Poor readers, academically retarded, can't read, far behind in school work, poor academic skills	33
Language problems, speak poor English or Spanish, have trouble communicating	27
Parents don't push kids, parents see no value in school, no parent support for kids	22
Culturally retarded; backward, underprivileged, deprived	21
Dislike school, don't participate, could care less about school	19
Cause trouble for teachers, rebel against teachers, uncooperative, discipline problems	19
Never complete assignments, do little work in school	19
Becoming more militant, support Brown Berets, make demands, pushing for changes	13
Won't give up their culture, don't want to change, close ties to Mexico, want to keep family traditions	12
Respect the teacher, polite, good kids, well mannered	12
Docile, quiet, do what they are told	8
Slow learners, not very sharp, incapable	8
Strict parents, kids follow orders of parents, father dominates	6
Big families, lots of kids	5
Smart, sharp, could do well in school	5
Lazy, "manana" attitude, always take their own time	4
Lousy parents, poor family background	3
Stick together, won't mix with other kids	3

white middle class in America. These teachers feel that Mexican residents have voluntarily chosen to become citizens of the United States and therefore should not insist that American institutions be adjusted to perpetuate Mexican-American cultural patterns:

Interviewer: (To teacher of ESL[1]) I've heard that the district might crop or cut back the ESL program at the high school level. Is that true?

Teacher 1: I've heard that too. But I don't think they know where they are going to cut back yet. It would be stupid if they did.

Interviewer: Why do you say that?

Teacher 1: There are just too many kids around here that can't speak English. Most of them are Mexican but then there are Orientals that the kids call FOB's, you know, fresh off the boat.

Teacher 2: You know, speaking of this language thing, did you see where this legislator is trying to encourage Mexican people to sign up to vote even though they can't speak English?

Interviewer: I've heard about that. What do you think about it?

Teacher 2: I just don't buy it. That's why we have ESL anyway.

Interviewer: What do you think, Mike?

Teacher 3: Fred's right. For Christ's sake, I mean if these kids are going to come up here they ought to learn English. If I went to live in Mexico, I wouldn't start telling Mexicans to speak English.

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1. English as a Second Language

Teacher 4: Yea, but look, a lot of these kids learn Spanish first from their parents. They speak it at home and then come to school. Sure, we ought to help them learn English, but after all, we shouldn't tell them that they have to live just like us. Did you ever hear of the Treaty of Guadalupe?

Teacher 5: You can't wind back history, Charlie. That's just like the Indians are trying to do. If the kids want to get along in the world now they just have to adjust.

Interviewer: What should the school be doing to help these kids adjust?

Teacher 5: Like Fred said it would be stupid to throw out ESL. We have to help them get along in this society.

Teacher 1: Another thing too is that a lot of kids have come here from Mexico in the last 30-40 years. They didn't have to come. If the kids don't want to learn English then they shouldn't graduate or vote. What other country lets people come in and start telling them what to do?

Whereas a majority of Sunnydale teachers believe that Mexican pupils ought to be more responsive to change, a small group of faculty members believe that the schools should help Mexican pupils reinforce their ethnic identity. In their view, teachers should recognize that Mexican pupils are culturally different and that they - and school administrators - ought to learn more about Mexican and Black culture, discern what the people in the community want from the schools, and then adjust the curriculum accordingly. They are convinced that, although Mexican pupils are "good kids",

they lack the organizational and leadership skills required to bring about the changes they desire. A principal role of teachers in Sunnydale, as they see it, is to help pupils acquire and fully develop these skills and leadership abilities.

Substantial data on teacher and administrator perceptions of their own roles was collected and this data, presented in Table 7.20, testifies to the overriding concern among teachers that teacher dominance in the teacher-pupil role system be maintained. The school administrative staff is perceived as highly ineffective in maintaining the stability of this system because they are lax on pupil discipline, fail to fulfill their own supervisory responsibilities and, in general, lack the leadership qualities that are essential to ensure a smooth educational operation. Of the five top school administrators, only one is believed to have attained even a modicum of success in maintaining proper pupil discipline. Although administrators are most frequently singled out for criticism, most teachers perceive that many of their peers also fail to exert adequate control over disruptive pupils. This perceived negligence frequently is cited as a principal reason for what many teachers believe to be a continuous state of discord between segments of the faculty.

In terms of the ACSP research aims, those findings which bear upon teacher perceptions of their roles and of the teaching-learning processes are of critical importance. As Table 7.20 makes clear, teachers see themselves as experts in their respective fields. As professionals with specialized skills and knowledge, they believe that they should have a pivotal role in decision-making about all respects of the school. Thus they perceive their training to have prepared them to: (a) participate in the selection, deve-

lopment and implementation of curriculum; (b) assume full control over their classrooms; (c) evaluate the progress of pupils; and (d) participate in the selection and evaluation of all professional school personnel.

It is interesting to not that, while teachers share an elaborated professional ideology, their self-conceptions as members of specialized academic communities have more profound effects on their attitudes towards teaching. Although constrained by State Department of Education and local mandates about what and how they must teach, teachers perceive themselves to be relatively free to interpret assignments as they see fit. And the content which they select to transmit and their prescriptions for their own teaching behavior generally are consistent with this view of themselves as representatives of specific disciplines.

The following exerpt illustrates these points:

Interviewer: Who decides what the teaching assignments will be for members of the social studies department?

Teacher: We usually work that out by ourselves although Mr. Cook (principal) actually makes the assignments. Everybody has their own specialty so we try to arrange it so that each person is teaching something he knows about.

Interviewer: Are you saying that some teachers are assigned to teach subjects they know nothing about?

Teacher: I wouldn't say that exactly. But you know this business about some teachers not knowing enough about what they are supposed to be teaching just goes to prove that teachers teach whatever they want to. At the Senior level, for

Table 7.20

INHERENT AND BEHAVIORAL CHARACTERISTICS OF ADMINISTRATORS AND TEACHERS AS PERCEIVED BY THE CERTIFICATED STAFF

Characteristics	Number of Certificated Staff Mentioning (N = 67)
Teacher Beliefs about School Administrators	
Weak administration, lax discipline, give in to kids; cave into BSU, militant Chicanos, etc; won't throw out the "dirty 100", can't control kids	63
Don't do their jobs; never in halls, don't want to supervise, never where they are supposed to be	62
No leadership; administration doesn't know what rules are; won't define rules; vacillate	46
Administration won't back teachers; give teachers no support; not dependable; won't help teachers; don't give a damn about teachers	44
Vice-Principal (Black - male) won't discipline, does nothing about school problems; too weak; ineffective	38
Administration resists changes, wants status quo, won't try to deal with problems, won't support changes - especially curriculum	24
Good 10th grade dean (Black - female); shapes up kids; tries to do good job, effective, a "loner" in the administration	18
Weak district administration; let parents push around; overrule the school deans; appoint people to positions on basis of color	16
Teacher Beliefs about Teachers	
Some teachers lax on discipline; too lenient; don't give enough "blue slips", give in to students; too permissive	42
Teachers are experts in their fields; know what should be taught; should decide what should be taught, how subjects are taught; select courses	36

Union teachers are more militant; fight for teacher pay, better teacher benefits	36
Much conflict between teachers; between teachers and deans; faculty divided; don't agree with one another	33
Teachers are professionals and thus should: have more say in running schools; have voice in teacher and administrator assignments, bargain with board, etc.	31
Have limited control over pupils because of: pupil family background; court rulings; nature of Sunnydale pupils, their past experience	28
Union teachers intolerant, won't reason with others, act unprofessional, support demands of kids, down on administrators	22
Don't demand enough from kids; expect too little from pupils; should push kids harder; should make pupils work	18
Should teach in own fields - not their "minors"; teach what they are capable of teaching	16
CTA teachers weak; won't stand up for their rights; no backbone	16
Should communicate with kids; find out what's on the kids' minds; keep ear to ground	14
Departments too clannish; coaches keep to themselves; no (or little) communication between departments; reading teachers apart from rest of English teachers	14
Can best assess pupil abilities; know what kids can do, can't do	12
Always in the dark; don't know what they are supposed to do; don't know rules	11
Coaches support athletes who cause trouble, want teachers to leave athletes alone; let kids get away with everything	11
Teachers like old school marms; don't stick up for their rights; always pushed around; won't organize	9

Teacher: (cont'd) example, we are supposed to teach them a lot about government and just a little economics. But I just decided that it was about time that our kids at Sunnydale learn a little bit about the system before they start tearing it down. So, what I am doing essentially is giving them a complete course in comparative economics. It's worked out pretty well, too.

Interviewer: You said that teachers teach what they want to teach. Aren't there some legal restrictions?

Teacher: Sure there are. But you know good and well what happens when the teacher gets into the classroom. He interprets the requirements the way he wants to. Besides, who's going to check on him?

Interviewer: What do you think accounts for the manner in which teachers interpret the requirements?

Teacher: Oh, that varies but most always teachers have had certain kinds of training. That's what's important to them. For example, I've had training in economics and have learned a lot through working on my own investment accounts. I think the kids can learn something from me about this. You'd be surprised how many of our kids know practically nothing about our system.

Interviewer: Do those of you in the social studies department reach agreement on what you will teach?

Teacher: Sure we do. There has to be some parallels and continuity but again, the teacher has a lot of leeway.

The other nine teachers in the social studies department support the findings that these self-conceptions profoundly affect their choice of subject matters. Of these, six stated explicitly that they were either history or government teachers and that as such they ought to transmit content from these areas as they have been traditionally defined. Only two expressed the view that concepts and analytic skills used by scholars in a variety of social science disciplines ought to be integrated into the existing curriculum. These two teachers thought of themselves as interdisciplinarians and, as one might expect, they were among those teachers highly receptive to curriculum innovations like that developed by the ACSP.

Whereas a majority of Sunnydale students consider the school curriculum inadequate, the certificated staff is reasonably convinced that the curriculum compares favorably with other schools in the district. There are several inconsistencies however (Table 7.21). The existing curriculum, for example, places a heavy emphasis upon academic or college preparatory subjects. Given the achievement/academic orientations of teachers in general it is not surprising that they perceive the existing curriculum to be satisfactory. Their belief that the school district spends too much money upon sports programs is consistent with this orientation. It is interesting, however, to note the belief shared by many that a college preparatory curriculum is not suited for a majority of Sunnydale pupils. These teachers feel that the school should take the appropriate steps to revitalize and expand the vocational arts program to better meet the perceived needs of Sunnydale pupils.

Teachers have a highly consistent set of beliefs about the teaching-learning processes (see Table 7.22). In general, they believe that learning is facilitated when the teachers are dominant in the teacher-pupil role system. This dominance implies that the teacher selects, organizes, and presents information to the pupils, who, in turn, consume the material as presented by the teacher. Because Sunnydale pupils are perceived as resistant to learning, teachers believe they must exercise their authority to ensure that pupils complete their assignments. This point of view is illustrated by one teacher's comments:

Interviewer: I've heard some teachers say that Sunnydale pupils don't really want to learn. Do you think that's true?

Teacher: I would say that that's true for quite a few kids. For example, this morning I had this idiot in class just sitting there with his notebook open looking out the window, while I was lecturing. I asked him why he wasn't writing and he just sat there and looked at me. That makes me so damned mad when a kid won't answer.

Interviewer: Some of the students in Mr. Gibb's class told me that this is a typical student response to lectures. Is that true?

Teacher: Not in my class it isn't. I'm here to teach, not babysit. But then you often hear that from kids who are in classes where the teachers let them run wild.

Interviewer: You said that some teachers let the kids run wild. What do you mean by that?

Teacher: There's just no organization, that's all. A few of the teachers simply don't teach a thing. That's why I have

everything put together for the kids before class even starts. What I do is start the period by giving a lecture and from there we go into a discussion. By giving them a short lecture all of them can talk about what they have learned. That way nobody is left out. You have to remember that one problem that every teacher faces at this school is the poor reading ability of the students. I don't think that it's very profitable to let the kids spend a lot of time reading for this very reason. Besides, if I did that we just couldn't finish the course. As it turns out, we usually don't finish anyway, but I think that it's important that we cover as much ground as possible.

Although the beliefs expressed here are predominant, a very small group of teachers, most of whom see themselves as liberal, progressive types, perceive the traditional dominant role the classroom teacher as antithetical to key principles of learning. In their view the teacher must provide sufficient structure to the classroom learning environment to ensure proper conceptual development. On the other hand, they feel that the student, rather than assume the passive role of consumer, must actively participate in a series of carefully sequenced learning activities. These learning activities, they feel, should take place both in the classroom and out in the community. The following remarks illustrate these views.

Interviewer: What changes would you make in the school if you had the opportunity?

Teacher: ...We would like to see greater flexibility in scheduling to permit a cluster type arrangement. This way a student who is primarily interested in science could be associated with a particular area of

the school and could have greater freedom in budgeting his time so as to study different subjects. Another thing I'd do is to get those kids who have been thrown out of here repeatedly involved. Get them set up somewhere on campus and perhaps get them involved in school and community projects that are of interest to them. All of the kids in this school would be interested in this kind of thing and there is no reason why it can't be done.

Interviewers: What would teachers do differently?

Teacher: That's where the problem lies. Most people here are so used to handing out worksheets and lecturing to the kids that it would be difficult for many of them to adjust to anything different. Even many of the kids wouldn't know what to do. They're always looking for the answers and trying to guess what the teacher is going to ask next.

The summary of findings on the structure of teacher beliefs is presented in Table 7.23. Taken together, this data suggests that Sunnydale teachers see themselves as engaged in a continuous struggle to educate restive and generally unresponsive pupils. The ability of the teacher to adequately educate, or otherwise intervene in the habitual behavior patterns of Sunnydale pupils is believed to be quite limited because of a multitude of opposing factors external to the school over which teachers have little control. In general, pupil learning is believed to be facilitated by a teacher-dominated teacher-pupil role system. With the exception of Oriental students, Sunnydale pupils are perceived as threatening the stability of the existing structure of relationships in the school. Thus, teachers believe that they, as well as the administrative staff, must reassert their rightful authority over pupils

to ensure the maintenance of school role structures.

TEACHER VALUE PROFILE BASED ON ETHNOGRAPHIC DATA

The teacher value profile (Table 7.24) is based upon a preliminary analysis of the ethnographic data used to map out the belief systems of Sunnydale teachers. Those values listed in Table 7.24 are among those which are more positively and negatively held by teachers. As with the analysis of pupil value data, the strength of these values was determined by noting the desired severity of the sanctions and by evaluating the degree of striving toward attaining or maintaining events, objects, or states.

The two most interesting features of this profile are the extremely high value placed by teachers upon pupil compliance and submissiveness and an achievement/academic orientation. Although there would appear to be some incongruity between these two values, one must bear in mind teacher definitions of an academic/achievement orientation. Implicit in teacher definitions of academic achievement is the conception of the pupil as a passive agent, who consumes teacher-presented information, rather than an active participant who collects his own data, formulates and tests hypotheses, wrestles with and, on occasion, openly challenges the ideas of both his teachers and peers.

Table 7.23

SUMMARY OF FINDINGS: PATTERNS OF TEACHER BELIEFS

Beliefs about pupils and their differential nature

Beliefs about Oriental pupils

- Achievement oriented; high intellectual capabilities.
- Dependable, cooperative.
- Excellent leaders.
- Interested in school; highly responsive.

Beliefs about Negro pupils

- Rebellious, demanding, impulsive, militant.
- Disrespectful towards teachers.
- Academically retarded.
- Unresponsive to teacher efforts to educate.
- "Culturally deprived"; disorganized home life.

Beliefs about Mexican pupils

- Disinterested in school; see little value in education.
- Poor attendance; habitually tardy.
- "Culturally deprived" or backward; close ties to Mexican culture; isolated from "American" culture.
- Poor academic skills; educationally retarded.
- Language problems.

Beliefs about teachers and school administrators

Beliefs about school administrators

- Weak, ineffective.
- Fail to perform role duties.
- Lax supervision of pupils.
- Lack leadership qualities.
- Do not back teachers.

Beliefs about teachers

- Maintain insufficient control over pupil behavior.
- Engaged in struggle to educate restive, unresponsive pupils.
- Limits to teacher abilities to educate; factors external to school impede teacher efforts.
- Professionals.
- Experts in their respective fields.
- Should have much control over school role and curriculum structures.

Beliefs about school and curriculum structure

- Adequate school curriculum; offer courses of high quality.
- Need more emphasis on vocational education.
- College prep curriculum not suited to most Sunnydale pupils.
- Deteriorating standards; drop due to achievement levels and potential of pupils.
- Over-emphasis upon athletics.

Beliefs about teaching-learning processes

- Regular school attendance prerequisite to learning.
- Much teacher structure essential.
- Teacher should select, organize, and present information to pupils.
- Pupils learn best by consuming teacher-presented information.
- Pupils resist learning therefore, teacher must pressure and manipulate.
- Small class size needed to facilitate teacher control; increase teacher-pupil contact.
- Learning a step-by-step process; pupils must be separated for instructional purposes by ability.

Table 7.24

SUMMARY OF FINDINGS: TEACHER VALUE PROFILE

	From statements about pupils	From statements about certificated staff	From statements about curriculum and teaching-learning processes
Positive	Compliance; cooperativeness. Achievement/academic orientation. High intellectual capabilities. Punctuality. Leadership potential. Pupil participation in school offices. Ability to communicate.	Dynamic leadership. Firmness; decisiveness. Professional status. Independence. Dependability. Resourcefulness; ability to manipulate.	Achievement/academic orientation (rigorous academic program. High achievement and intellectual capabilities. Compliance. Ability to work alone. Efficiency. Orderliness. Intellectual activity.
Negative	Non-compliance; uncooperativeness Lack of ambition or desire to achieve. Tardiness. Limited intellectual capabilities. Unresponsiveness. Excessive dependance upon teacher.	Permissiveness. Indecisiveness. Vacillation. Irresolutions. Passivity among teachers. Faculty disunity. Apathy.	Lack of achievement orientation. Limited intellectual capabilities. Noncompliance. Excessive dependence upon teacher. Inefficiency.

Chapter 8

THE STRUCTURE OF INTERACTION PATTERNS

Chapter 7 has shown that both teacher and pupils have elaborate beliefs about the different ethnic and social groups. These shared images and expectations result in adaptive responses that constitute the norms governing social relationships in the school. This chapter will describe patterns of interaction between school groups and explore the mechanisms that maintain these patterns.

INTERACTION PATTERNS BETWEEN PUPILS

Sunnydale High School is "integrated (all major racial and ethnic groups of the community are represented), yet ethnicity is the single most important structural principal governing pupil-pupil interaction. Membership in cliques, clubs and organizations, and classroom seating arrangements are determined largely by race or ethnicity.

In those classrooms where the teacher assigns pupil seating the room takes on the appearance of a truly integrated setting. Where pupils have been allowed to select their own seats, however, the familiar cultural pattern of firm racial and ethnic cleavage appears. Figure 8-1 and Appendix B, for example, indicate this clustering. It is also interesting to note the position of each group in relation to the front of the classroom. Oriental pupils, for example, nearly always are found towards the front while Black pupils seem to prefer the back of the room. Mexican pupils tend to be more evenly distributed through the room, but as the charts reveal they also segregate themselves from students of other racial and ethnic origins.

Figure 8-1

SEATING ARRANGEMENTS IN CLASSROOM IN WHICH PUPILS SELECTED THE SEATS OF THEIR CHOICE*

Driver Education

(front)

M M O W W
B O M M M
B O - M -
- - B B -
B - B M M
- - B B M

World History 10

(front)

M O O B B
M M W W -
B - - W B
B M M M M
B - - M -
- - - M -

U.S. History

(front)

M - W O
M O W B
O O - B
- B W B
B B B (?)
B - M M
- - - M

English 10

(front)

- W M -
M B M -
M B W O
B B O O
B - B -
- B M M M
- - - - M

*Symbols used in this appendix denote the race or ethnicity of pupils: M = Mexican; W = White; B = Black; O = Orientals (includes Filipinos); (?) = race or ethnicity uncertain.

Consistent with their belief that unique educational experiences are required to meet minority needs, pupils sort themselves out for certain types of instruction on the basis of race or ethnicity. This became clear when ACSP-RP staff visited tenth-grade driver education classes to encourage pupils to enroll in the Patterns course. Two of these sections were comprised entirely of pupils who had chosen to take ethnic studies in the spring. In these classes (later to become Black Studies), all pupils were Black with the exception of three Mexican girls who sat together in the corner of one class (see seating chart in Appendix B). Only these girls opted for the Patterns course, thereby insuring 100 percent Black composition of the Black Studies course for the spring.

Theoretically, enrollment in the ethnic studies program is open to all Sunnydale students, but as the director of curriculum and guidance acknowledges, peer group pressure operates to insure the racial and ethnic homogeneity of these courses.

Interviewer: I was wondering whether the ethnic studies program is open to all students in the school.

Vice principal: Of course, they have to be. Any kid that wants to sign up can take it

Interviewer: I noticed that in the two Black Studies courses that we visited all but three pupils in both classes are Black. Furthermore, the three Mexican girls chose to take the Patterns course.

Vice principal: Well, that's a Black Studies course. The kids know that. I'm not surprised that that happened.

Interviewer: Do you have any idea why only Black kids sign up for Black Studies and Mexican students for Brown Studies.

Vice principal: You know how the kids are. They get together and talk about who's going to take this course and who's going to take that.

So, they try to get in the same class with their friends. In this case, some of the Black kids get together and just decide to enroll. They know that this course is new and was designed for them. So, we have Black Studies for the Black kids and Brown Studies for the Mexican kids.

Interviewer: Do the counselors encourage just Black kids to take Black Studies and Mexican kids to take Brown Studies?

Vice principal: No. As I said, we just started these courses this fall, and we went to the junior high schools and asked who wanted to take what. The kids decided themselves after they talked with their friends.

Sunnydale pupils resort to similar forms of mechanisms to insure the ethnic homogeneity of the various school-sponsored ethnic clubs. School regulations forbid student organizations to deny membership on the basis of race, ethnicity, religion, or national origin, however, pupils in ethnic clubs, and the Afro-American organization, in particular, try to circumvent these formally established rules. In general, Sunnydale pupils do not try to gain entry to an ethnic club unless they are of the same racial or ethnic origins but on occasion some students do challenge these informally established criteria for club membership. In such instances, conflict usually results. One spring afternoon, for example, a few non-Black pupils, who considered themselves to be members of the Afro-American club, showed up for yearbook pictures with other Black club members. The result, described the following day by the club sponsor, illustrates how pupils maintain the sharp ethnic and racial cleavages that characterize Sunnydale.

Interviewer: What happened?

Sponsor: The kids in the Afro-American club had their pictures taken today. But when kids started showing up some of the Black kids told the

non-Black kids to leave. Then it all started. Some of the Black kids started arguing among themselves as to whether the non-Blacks were to have their pictures taken with the group. John and another kid were really going at it.

Interviewer: What was John's position?

Sponsor: He wanted the other kids to be included but the others didn't. I felt sorry for Janice and the other kids. We went to my room and had a conference about the whole thing.

Interviewer: Who was at the meeting?

Sponsor: Just me and the kids. I was the only white face at the table. I told the kids that if they didn't want non-Blacks in the club the least they could do would be give back the dues money that the other kids had paid. But, they wouldn't listen. I couldn't reason with them. When they get it in their mind that they are going to do something you can't talk about it with them reasonably.

Interviewer: What reason did the kids give for excluding the non-Black students?

Sponsor: They think that the club should be only for Blacks and that the other kids can have their own club if they want to. They just didn't want the others.

Interviewer: You mentioned that some of the Black kids gave support to the non-Black kids. How did these kids feel about it?

Sponsor: Well, you know John. He thinks its good that each group has its own club but that there is no reason to kick out the others. John's pretty bright and he knows that that is just racism in reverse.

Interviewer: Do you know how many kids took the position that non-Blacks should be excluded?

Sponsor: It's really hard to say although there were quite a few. I'm sure that there were some who agreed but who just didn't say anything.

The importance of ethnicity also is evident in the composition of clique groups. Although there are many mixed friendships on campus, especially

between Orientals and whites, membership in most is restricted by race or ethnicity. There also is considerable cohesion between groups of the same background and these groups tend to congregate in specific areas of the school. Before the opening of school, for example, groups of Blacks gather in the central areas of Tolman Hall. Groups of Mexicans, on the other hand, meet at the northern end of the hall and in adjacent wings. These patterns of segregation also exist in the cafeteria during the lunch hour, in the parking lots before and after school, and at other gathering places near the campus.

Although amiable relationships exist between some students of differing racial and ethnic backgrounds, particularly among those limited number of students who actively participate in student government and other school sponsored programs, inter racial and ethnic group strife is pervasive on the Sunnydale campus One indication of the frequency and intensity of these inter-ethnic and racial confrontations is contained within the student section of the recently completed school accreditation report. In answer to one of the questions on the student survey that dealt with the weaknesses or undesirable qualities of Sunnydale students, 86 pupils in a sample of 461 gave a response. Of the 86 responses--grouped into 17 categories--44 pertained to dissension among Sunnydale students and 25 made explicit reference to inter racial or ethnic friction. Observations of pupil behavior outside the classroom revealed that while altercations are not always between pupils of differing racial or ethnic origins, this pupil recognized patter of inter-group strife predominates. Of the 19 observations of physical assaults or heated verbal exchanges between students in Tolman Hall, for example, 13 involved pupils of different racial and ethnic backgrounds. Interestingly

enough, in the 6 other disruptive incidents involving pupils of the same race or ethnicity, all were Black males.

Teachers and administrators readily admit that it is often exceedingly difficult for them to discern the root causes of physical confrontations between Sunnydale students. Nevertheless, several observational and interview data indicate that inter racial or ethnic conflicts frequently arise when individual students violate normative student expectations that fraternization be confined to members of ones own racial or ethnic group. In view of the pervasive student belief about the importance of reinforcing students' ethnic or racial identities and maintaining ethnic group solidarity, this group norm is really not too surprising. As a general rule, gossip and other mild forms of sanctioning are sufficient to ensure pupil compliance with these expectations although other more stringent control mechanisms frequently are employed. The following incident, observed by the investigator, amply illustrates the point. One afternoon, during the break between periods 5 and 6, one Black boy and two light skinned Mexican girls, one of whom had her arm around the waist of the boy, were walking down Tolman hall together. As the three students turned to enter one of the classroom wings, one of the three Black boys leaning against the wall murmured "spic lover." This derogatory term for Mexicans, infrequently used by Sunnydale students yet still commonly heard in the American Southwest, was apparently intended to reprove the behavior of the Black boy. The Black student and his Mexican girl friends either did not hear or ignored this first remark but when one of the other Black boys made a second comment, the Black boy walking with the two girls turned, took several steps forward, uttered a few obscene replies, and then asked all three boys standing along the wall if they wanted to

"do something about it." As one of the three boys began to step forward, both Mexican girls intervened and began pushing their friend down the hall.

While physical strife between Sunnydale females is much less frequent than among males, that which does occur tends to be equally violent and highly passionate. Because Sunnydale girls traditionally have made advance preparations for their confrontations by wearing slacks or jeans to school, the administration implemented a rigid policy which prohibited girls from wearing slacks or pants of any kind. With the advent of pant suits and similar popular clothing styles, Sunnydale girls began to bitterly attack this policy, and so, by Spring, the school administration relented and did permit the wearing of "dress" slacks. Subsequent to this policy change, several girls took advantage of the new ruling and began wearing what both teachers and students termed "casual" slacks and jeans. True to the predictions of many staff members, a disproportionate number of those girls violating the spirit of the new policy became involved, at one time or another, in fights with other girls.

INTERACTION PATTERNS BETWEEN PUPILS AND CERTIFICATED STAFF

In the past few years there has been a proliferation of accounts by former teachers and others about ways in which teachers regiment pupils and truncate their intellectual development. In general, the ethnographic data collected here confirms these accounts. Teachers continue to maintain their strict dominance over the classroom, for example, despite increasing evidence that sheer dissemination of information does very little to contribute to their pupils' development. Table 8-1 clearly reveals that teacher lectures, "explanations" or "talks" displace almost all other classroom activities. When the high percentages for lectures are added to those for individual assignments and films it can be seen that during 70-80 percent of their class time pupils function as passive agents who are supposed to consume teacher-presented information. Most of the remaining time is spent in what teachers term classroom discussions. Both the observational and interview data discloses, however, that most class "discussions" turn out to be question-answer sessions--the teacher asking the questions, the pupil repeating information given out earlier.

Table 8.1

FREQUENCY DISTRIBUTION OF VARIOUS TYPES OF CLASSROOM INSTRUCTIONAL ACTIVITIES ORGANIZED BY TEACHERS IN THE SOCIAL STUDIES DEPARTMENT

	Approximate percentage of time allotted to each classroom instructional activity				
Informant number*	Lectures/ explanations	Individual assignment (reading, writing, research, etc.)	Class discussions	Individual or group reports	Group activites (committee work, etc.)
00/12	50	25	10	5	Less than 1
00/13*	30	30	15	5	5
00/14	40	20	20	5	Less than 1
01/00	30	30	20	5	Less than 1
01/01	40	20	20	5	5
01/02*	10	10	30	10	25
01/03*	30	20	20	5	Less than 1
01/04	40	30	10	5	Less than 1
01/05**					
01/06*	0	30	10	Less than 1	Less than 1
01/07	20	20	30	5	10

	Films	Use of library	Debates	Speakers	Field trips
00/12	10	Less than 1		Less than 1	
00/13	10	5			
00/14	10	5	Less than 1	Less than 1	
01/00	15	Less than 1		Less than 1	
01/01	10	Less than 1		Less than 1	
01/02*	10	5	Less than 1	Less than 1	

Table 8.1 (cont.)

Informant number	Films	Use of library	Debates	Speakers	Field trips
01/03*	10	5		Less than 1	
01/04	10	5		Less than 1	
01/05**					
01/06*	15	5		Less than 1	
01/07*	10	5	Less than 1	Less than 1	

*Informant numbers followed by an asterisk indicates that the interview data from teachers were supplemented by three or more observations of their classroom teaching by the investigator.

**ACSP staff member

The students' adaptive responses to the classroom activities organized by teachers are indicated in Table 8.2. Since a majority of the Sunnydale student body are Mexican and Black and, as the data in Chapter 7 discloses, they in particular are disenchanted by and generally predisposed to harshly criticize and/or rebel against the educational experiences offered to them, one might expect teacher-pupil conflict in the classroom to be persistent and severe. As a result of their school experiences, however, Sunnydale students are fully cognizant of the teachers' classroom dominance--and of the consequences for those who openly challenge teachers or administrators. Consequently, as table 8.2 clearly reveals, students, rather than resorting to continuous disruptive behavior, communicate their scorn in other ways: large numbers of students are very late to class and many never do arrive; those who do attend, more often than not, are sullen, withdrawn and submissive. In fact, the most frequent teacher complaint about the classroom behavior of pupils--apart from lamentations about the lack of punctuality- is that students are unresponsive and do as little work as possible. The following exception may be cited as evidence to prove the rule.

Teacher: I don't know what's wrong but I've sure had a good day. I even enjoyed my classes for a change.

Interviewer: What happened?

Teacher: Well, in this one class, I was telling the kids about the different integration proposals that they have been working on in Washington. So, when I finally got to the freedom of choice plan, this kid pops up and says "That don't work, Mr. Ishii." Man, I about fell out of my chair. Here's this kid sitting there as usual looking at me as if he's half asleep. And then he comes out with that! At least some of them were paying attention for a change.

TABLE 8.2

Student Classroom Behaviors

Percent of Classroom Teachers Mentioning (N=46)	Behaviors
50% or more	Tardy to class
	Unresponsive; sit and do nothing or as little as possible
	Do not pay attention
	Fail to participate in discussions or class activities
25% - 50%	Will not answer questions or reply to teachers
	Show effects of taking drugs ("reds," "uppers," "downers," etc.)
	Work slowly
	Fail to do or complete assignments
	Daydream, look or stare out windows
	Do not follow instructions; do the wrong thing
	Read magazines, Hi-Lite (school newspaper) or other non-class related material
	Do only what is required of them
10% - 25%	Restless; never "settle down"
	Disruptive; non-compliant; uncooperative
	Do sloppy or unsatisfactory work
	Disrespectful behavior
	Fight or argue amongst themselves
	Act militant; espouse ideology of militant groups
	Challenge word of teachers; won't accept or challenge teacher statements
	Talk with friends
	Make up or look for excuses to get out of class
	Won't salute flag
	Do satisfactory or good work in class
	Act smart or like they know something
	Pass notes among themselves; communicate with one another clandestinely
	Do other course work in class
	Bring forged (or phoney) admit slips to class

Interviewer: Do you mean that they usually don't pay attention?

Teacher: Most of the time they just sit there and stare at me. If you ask them a question they'll say "I don't understand the question" or something like that. That's why I just about went through the floor when this kid said that this morning.

It should be noted at this juncture that Table 8.2 depicts the modal pattern of Sunnydale student classroom behavior rather than an ethnic or racial pattern. While it is true that there are some variations in the classroom behavior patterns among students of different ethnic and racial origins, the conclusions previously drawn from these data apply to all Sunnydale groups. For example, the data summary sheets, from which Table 8.2 has been derived, reveal that even though Sunnydale students tend to be non-responsive and passive, a disproportionate number of them who do engage in disruptive, non-compliant classroom behavior are Blacks. Of the 9 teachers, on the other hand, who mentioned that Sunnydale students generally do satisfactory work in class, 5 went on to make additional statements about the diligence of and the high quality of work done by Oriental students.

Although generally passive in the classroom, heated student outbursts occur not infrequently when teachers touch upon issues that are highly sensitive among minority students. During the school year, several teachers reported incidents

in which they were verbally assaulted by pupils because of something that they had said. The following illustrative data typifies the nature of these teacher-pupil confrontations in the classroom.

Interviewer: Mr. Gibbs told me this morning that you've been having some trouble with some of your students.

Teacher: That's right. I haven't told you about that, have I? Well, I'll tell you what happened. The other day, in my third period class, I got into a debate with a few kids about saluting the flag. I told this one militant kid that the flag is a symbol for democracy, equality, and a lot of other things. I asked him if he agreed and he didn't have anything to say. Then, I told him that if he didn't love it (meaning, presumably, the U.S.) he should leave it. The kid got all excited and asked if I was suggesting that all Mexicans go back where they came from. I told him "No" but that if one didn't like what the flag stood for then he ought to get out of the U.S. The kid I was speaking to in class left and went and told some of the other kids in one of the Chicano clubs that I said that all Mexicans ought to go back to Mexico. Well, that gave the kids an excuse to start something.

Interviewer: What has happened since then?

Teacher: Well, Curtis (Vice Principal) saw me this morning and said that the word had gotten out into the community. I have already told CTA (California Teachers Association) about it and they told me not to worry about it, to go home and relax, and that they would support me all the way.

Interviewer: What do you expect to occur next?

Teacher: I don't know. The kids may forget about it and the whole thing will blow over. I'll just have to wait and see.

Conflict between teachers and students outside the classroom is more frequent and severe. This persistent conflict in areas outside the classroom

is explained by the fact that pupils can maintain their anonymity there and, unless the teacher is willing to try to forcefully apprehend a male-factor, go unpunished. Dissension tends to be greatest between teachers and Black pupils, but an increasing number of Mexican pupils openly challenge school regulations. Although most student-teacher conflicts are strictly verbal, an increasing number are physical. There were at least three physical incidents during the school year including one in which a teacher was injured severely enough to require several stitches in the mouth.

One typical way in which pupils try to offend, or otherwise show their disrespect for Sunnydale teachers is by using obscene language in their presence or by making a derogatory reference to the teachers' appearance. Several dozen incidents of this nature were reported by teachers and the investigator himself experienced similar treatment on numerous occasions. Although the event reported below was rather prolonged and atypical in the sense that the teacher responded, the remarks are characteristic of those made by Sunnydale pupils to teachers outside the classroom.

Black girl: (Opening the door to the teachers' cafeteria) Did a teacher with white shoes on come in here?

Teacher 1: I didn't see anyone, but then I don't usually look at a guy's shoes.

Black girl: Come on. He's got white shoes on and is wearing shades.

Interviewer: You must mean Mr. Jacobs.

Black girl: I don't know who he is. He's just wearing white shoes and shades. (Mr. Jacobs walks back out of the serving area with a lunch tray in his hand) What did you call us?

Teacher 2: (Walking towards the door) I didn't call you anything.

Black girl: Yes, you did. You called us a whore.

Teacher 2: I didn't call you anything. When I walked around the corner I heard one of you say "Doesn't he look like a pimp?" All I said was "I'd rather be a pimp than a whore". I wasn't talking to anybody.

Black girl: That's what I thought. You called us a whore.

Teacher 2: I didn't call anybody anything. (Mr. Jacobs walks back to the lunch table. Girls leave the lunchroom)

Teacher 1: What happened anyway?

Teacher 2: I was walking down the hall and I passed these girls and one of them said "Hey, doesn't he look like a pimp?" And I said I'd rather be a pimp than whore. That really made those girls mad. Boy, if one of them had put their hands on me, I'd have laid 'em out cold. That's one thing that really makes me damned mad. We don't put up with that where I come from and that's just the reason why I'm going back to Oklahoma.

Interviewer: You said that you are leaving because of this sort of thing. Has anything like this happened before?

Teacher 2: Too often. These kids don't have any respect for teachers and they'll do anything in the book to get at you. I've had enough of it.

Sunnydale teachers, as we have already noted, respond to verbal abuse and disruptive pupil behaviors by demanding that the school administration resort to more repressive measures. Given the social organization of the school, with its extraordinary emphasis on timing and careful sequencing of all activities, the preoccupation with order is not surprising. But, the measures employed to enforce regulations are perceived by pupils as unduly harsh and these perceptions, in turn, serve to exacerbate the friction.

One afternoon a teacher noticed a boy leaning against a locker near the street door. Obviously disturbed by the boy's presence in the hall, the teacher approached him and the following exchange occurred:

Teacher: What are you doing out here in the middle of the period? Why aren't you in class?

Pupil: I don't have no class now. I'm in Mr. Harvey's class (mentally retarded program) and I got to go to work.

Teacher: Well, don't you know you're not supposed to be in the halls? If you're going to work then let's get going.

Pupil: I am but I'm waiting for my ride. Besides, I'm just standing by the door. I'm not making no noise.

Teacher: I don't care whether you are or not. Just get out of the hall. Stand on the outside if you want, but move.

Pupil: Man, I'm not looking for no hassles and ain't making no noise. Why can't...

Teacher: Move!

Pupil: (Walking out the door) OK, cop!

As the two of us walked back to the hallway which we had originally intended to enter, the teacher gave the following explanation for his own behavior.

Teacher: Punk kids like that burn me up. If I wouldn't lose my job, I'd work kids like that over.

Interviewer: Is there a rule that says that he can't be there in the hall?

Teacher: You damn well better believe there is. The kids know that they are not supposed to have one foot in that hall during class periods. The trouble is we don't enforce it enough.

Interviewer: I was just curious because he was standing right by the door and he was being quiet.

Teacher: Yes, but if you give an inch they'll take a mile. Rules like that may not seem very important but once you give in the lid blows off and then you've got no control. I think you can see that just by the way that smart alec talked back to us.

These data on the interaction patterns between pupils and the certificated staff illustrate how teacher adaptive responses to pupils reinforce pupil beliefs that Sunnydale teachers are inherently hostile and try neither to understand nor sympathesize with the educational needs and interests of pupils. Rebellious behavior outside and passivity and/or uncooperativeness in the classroom, on the other hand, are accepted by teachers as evidence that pupils are disrespectful, have limited self-control, and are uninterested in education. Furthermore, these data allude to the great obstacles to be overcome by any who wish to successfully intervene in the current system because the patterned adaptive responses of each group are the manifestation of self-sustaining belief systems.

INTERACTION PATTERNS BETWEEN THE CERTIFICATED STAFF

That teachers consider themselves representatives of the specialized disciplines is of crucial importance, for this orientation is one of the major factors governing interaction between faculty members. To a large extent the members assigned to the various departments entered the school sharing similar academic orientations and the arrangement of the physical plant and the nature of the role structure help to reinforce and maintain these equivalences. Teachers in the same department, for example, tend to be in the same general location most of the day, and although they are confined to classrooms for most of this time, the breaks between classes (during

which teachers are expected to inspect the halls) afford them an opportunity to interact with others nearby and to solidify the friendships thus established.

The strength of the ties that develop between members of the same department also are revealed by the degree to which they interact during those periods when they leave their classrooms. During the lunch hour, for example, persons belonging to the same department generally are found eating together. During a two-week period the investigator attempted to map out the lunch hour patterns by observing seating arrangements during this period. The first five to ten minutes of the two lunch periods were spent at the various eating facilities, noting the names of those present and their arrangement in the room. Near the end of the period each room was again visited and the names and seating arrangements recorded. This procedure proved important because some teachers ate in the teachers' cafeteria, but then returned to one of the other faculty meeting areas to join their friends.

The data presented in Table 8-2, Who Eats Lunch with Whom?, confirms that members of the same department usually were found together. Even before these observations, however, the investigator noted that one of the faculty lounges was used almost exclusively by members of the business department, especially during lunch periods. Data yielded by an interview with one teacher in the business department about this pattern are instructive because they indicate the more important reasons why members of the same department interact so frequently with one another outside the classroom. The relevant excerpts from this interview transcript are as follows.

Table 8.2

WHO EATS LUNCH WITH WHOM?

PERIOD 5A

Teachers' cafeteria

	Informant number	Department affiliation
Main table	00/14	Social studies
	01/05	Social studies
	01/06	Social studies
	05/05*	Special educ.
	05/06	Special educ.
	05/11	Special educ.
	06/02	Driver educ.
	04/14	Fine arts
Table 1	03/03	Mathematics
	03/07	PE
	03/08	PE
	04/10*	Industrial arts
Table 2	06/04	Driver educ.

Teachers' lounge, Room 6A

Table 1	01/00	Social studies
	01/01	Social studies
	01/03*	Social studies
	02/05	English
Table 2	01/04	Social studies
	02/13	Mathematics
	04/11	Fine arts

Teachers' lounge, Room 28

	03/13	Business
	04/00	Business
	04/02	Business
	04/05	Business
	00/13	Social studies
	05/07	Special educ.

Science workroom, Room 44

None

BREAK BETWEEN PERIODS 5A and 5B

Teachers' cafeteria

Main table	00/04	Vice principal
	00/05	Vice principal
	05/10	Special educ.

Teachers' lounge, Room 6A

Table 1	00/09	Counselor
	02/09*	English
Table 2	00/11	Counselor
	04/07*	Industrial arts
	05/03*	Special educ.

Table 8.2 (cont.)

PERIOD 5B

Teachers' cafeteria

	Informant number	Department affiliation
Main table	00/10	Counselor
	01/09	English
	01/10	English
	01/13	English
	05/09	Special educ.
	05/10	Special educ.
	04/09	Industrial arts

Teachers' lounge, Room 6A

Table 1	01/12	English
	01/14	English
	02/01	English
	02/02*	English
	03/14*	Business
Table 2	05/00	Fine arts
	05/01	Fine arts
	04/01	Business
	03/01	Mathematics
Table 3	04/12	Fine arts
	04/13	Fine arts
	05/12	Language
	05/13	Language
	05/08	Special educ.

Science workroom, Room 44

Informant number	Department affiliation
01/02*	Social studies
01/07*	Social studies
02/06*	Science
02/07*	Science
02/08*	Science
02/10*	Science
03/00*	Mathematics

Teachers' lounge, Room 28

03/12*	Business
00/08	Counselor

*Informant numbers followed by an asterisk indicates that the teacher is a member of the American Federation of Teachers (AFT).

Interviewer: I've noticed that this room is used almost solely by the same group of people. Has this room been reserved for your use?

Teacher: Oh, no. Anybody who wants to can use it. One reason why some people never come here is because we agreed a long time ago that this room would be for non-smokers. But, as you can see (pointing to an ashtray with several discarded cigarettes) it didn't turn out that way. One reason why most of us use it is because it's so close.

Interviewer: Close to what?

Teacher: Our classrooms. The business department classrooms are all right around here, you know. I guess you could say we just expropriated it.

INterviewer: Does anyone else ever use the room?

Teacher: Sure, especially during class periods. Mrs. Rand always does her work in here during period 2 and Mr. Peralta (Vice Principal) always stops by for a cigarette or two. But, during lunch you can usually find everybody in the department in here at some time or another. It gives us a chance to get together and talk. Sometimes we hold what you might call "mini-department" meetings.

Interviewer: What's a "mini-department" meeting?

Teacher: You know what I mean. They're kind of like those "mini-faculty" meetings we used to have. Only, in this case, those of us in the department with the same lunch period get together and talk about what we want to do in the way of offering courses and stuff like that.

In Table 7.23, we noted that teachers tend to perceive the athletic program as one which receives a great deal more financial and school support than it warrants. It is not surprising, then, that coaches and members of the regular teaching staff rarely interact with one another. As the data in Table 8-1 indicates, coaches avoid those facilities where other teachers

congregate for lunch. Members of the boys' physical education staff interact almost entirely with other P.E. teachers or with those teachers who coach after school. As a rule, the coaches purchase their lunches from the cafeteria and immediately return to the department office to eat with other coaches. No male coaches were ever observed eating outside this office.

In a few of the larger departments, there are several smaller cliques. This is partly due to the greater role differentiation in these departments and to the variance in teacher orientations which results. In the English department, for example, three different groupings of teachers can be discerned, differentiated by the type of students they teach. As a result of the low academic achievement of Sunnydale pupils, about half of the English faculty teach remedial courses. These teachers see themselves as experts in reading, and they usually convene during the second lunch hour in the teachers' lounge to talk about their special problems. Of those who teach "average" pupils (levels 3 and 4) three frequently complained about differentiating on the basis of tested reading and writing abilities and tend to be critical of the curriculum in general. Two of these have the same lunch hour and always ate lunch together in the teachers' cafeteria. The two teachers, including the department chairman, who teach levels 5, 6, and 7 (academically skilled pupils) exclusively, do not clique with one another, but seek out faculty in other departments who share their concern about a rigorous academic program.

Each department also holds periodic meetings to discuss the curriculum, problems of scheduling, classroom and subject assignments, and other matters of mutual concern. These meetings, usually organized by the department

chairman, are held after school. Aside from school-related business, they offer teachers an opportunity to solidify ties that already have a natural tendency to develop.

Nearly every member of the certificated staff also belongs to one or both of the professional teachers' organizations. The Sunnydale Teachers Association (STA) to which an overwhelming majority of teachers and administrators belongs, is a chapter of the California Teachers Association (CTA) and an affiliate ofthe National Education Association. The smaller and more recently organized Sunnydale Federation of Teachers (SFT) is connected with the American Federation of Teachers (AFT). The principal functions of both organizations are to support strong educational programs, to protect the general interests of teachers and to provide social activities for members.

Although AFT membership includes only 20 percent of the faculty, a disproportionate number of young teachers belong. They fill most leadership positions and tend to be its most active supporters. Of the dozen or so most active members, five belong to the science department and two to the social studies. These teachers interact frequently with one another and both on and off campus and, as Table 8-2 illustrates, can nearly alwasy be found eating lunch together in the science department workroom. Apart from this group, most other teachers have joined the AFT principally because of its militant stance on such issues as collective bargaining, pay raises and fringe benefits. Although supporting the organization on economic issues, these less active members occasionally denounce the leaders' position on matters related to curriculum, the legitimacy of pupil demands or requests for structural changes and the nature of the proper teacher-administrator role relationship. On a few occasions, these relatively non-active members

get together with the leaders during lunch, particularly when they do have a grievance in which they wish the union to become involved or when they wish to learn about negotiations that pertain to their economic interests. As a rule, however, none eats regularly with the more active members in the science workroom.

As Table 7.20 in Chapter 7 indicates, AFT members are perceived by both union and non-union teachers to be "militant" or "radical". During the student disorders of the previous spring, for example, the union leadership backed many pupil demands. This not only alienated non-union faculty but also caused considerable dissent in the union ranks. The following interview with one of the less active union members suggests the nature of this conflict.

Interviewer: I understand that you belong to the union. I was curious to know since I have 't seen you at any union activities.

Teacher: I'll have you know that I haven't done any agitating this year because CTA is getting off its fat butt. The union has finally started getting to them.

Interviewer: Yes, but are you a member?

Teacher: Listen. I was the first union member around here six years ago. Now, there are about twenty of us. Look at what we've done to CTA. They will even consider striking. We're a real threat to them because it was getting to the point where they wouldn't do anything for teachers. That's why the union has been a big help.

Interviewer: What has the AFT done for teachers?

Teachers: They're giving teachers just a little bit of backbone by showing them that they can get what want if they organize themselves.

Interviewer: How effective has the union been?

Teacher: Well, this year we sure didn't get very far on our pay raise, did we? But, at least they're in there fighting. You know, last year I got a little angry at most of those guys though because they were right in there telling the kids to go right on insisting that they get what they want. I just don't buy that. I'll tell you, McBride (another union member) and I really went around and around with them about that last year. This year though they're back onto board so I'll give them my support. That reminds me. I think I'll go down to the cell meeting and find out what's happening over that business of cutting the budget next year. Where is that? Room 28, isn't it? I think that it's something like that.

About three-fourths of the faculty belong to the well-established STA. Membership in this CTA affiliate is open to all members of the certificated staff, including local and district administrators. Unlike the AFT, which purposely excludes those with the authority to hire and fire school personnel, the CTA welcomes school administrators. The STA leadership tends to come from the older faculty. Until recently, most faculty members considered a top position in the local CTA organization a prerequisite to advancement into district administrative ranks and these close ties to the administration of both the local school and the district have, in the past, led the STA to support administrative decision.

Despite a willingness on the part of teachers in both organizations to work together to advance their economic interests, conflict between younger and older teachers often surfaces. STA members, for example, complain that AFT members are lax on pupil discipline and too often push for impractical and/or improper changes in school structures. AFT members reply that the school is responding inappropriately to the needs of its pupils and claim

that teachers should, therefore, expend greater energy to discover the educational needs and interests of pupils so that the school program can be adjusted accordingly.

Although these conflicts exist, teachers unaminously agree upon the importance of maintaining teacher dominance in the teacher-pupil role system. Throughout most of the school year, however, teachers felt that administrators, and the Black male dean, in particular, effectively diminished the authority of teachers by refusing to firmly reprimand and/or suspend disruptive pupils. Consequently, teachers continually gossiped about their ineffective disciplineary practices and occasionally would demand explanations from them regarding the manner in which they dispensed with specific cases. Of the three deans, only the Black female was believed to be fulfilling her duties. Because she was believed to be the only administrator in the school struggling to maintain the existing role structure, many teachers with pupil problems were circumventing the principal and the other deans.

The frequency and intensity of conflicts between teachers and the Black male dean warrant special comment because they reveal the overriding teacher concern about the maintenance of school role structure. This dean had established good rapport with many Sunnydale students, especially Blacks, and in general, supported the efforts of minority pupils to present their critical views about the school to the faculty and community. Furthermore, he endorsed many changes in school structures proposed or supported by students, most of which were unacceptable to the faculty. When working with pupils, the dean occasionally transgressed school regulations and this led an increasing number of teachers to demand that he either be removed or be held accountable for his actions.

Toward the end of the school year interpersonal relations between faculty members and this vice principal became more abrasive, particularly after he had become involved in setting up a meeting between Sunnydale students and the members of a club in a school in a nearby community. This event, held for the express purpose of facilitating communication between pupils of diverse racial and ethnic origins, had not been scheduled on the school calendar and thus many pupils who attended the meeting were unable to meet commitments previously made to other school organizations. Both the manner in which this meeting had been arranged and the pupils selected by the vice principal to attend the meeting caused considerable consternation among the faculty and they, in turn, demanded an explanation from him for his behavior. Such an opportunity arose later in the week during a regularly scheduled faculty meeting. A lengthy portion of his explanation and an exchange that occurred between him and the vice principal who articulated the views of teachers appears below because it typifies both the nature and acuteness of the friction that persisted throughout the school year between him and the rest of the certificated staff.

Vice principal: I want to take a minute to talk with you all about a meeting that I had something to do with at Lincoln High School since there seem to be a number of people on the faculty upset about it and have had some bad things to say about what went on...Since we've had a number of problems here dealing with student unrest and what-have-you, I thought it would be a good idea for our kids to get together with some of theirs. Now, I asked this club president when he called, who should I bring and he said whoever was interested. Now, I'm going to try and be unemotional about this but being Black and all that, I'll at least try. I know somebody has said that just

a bunch of militant kids (Curtis pronounces "militant" slowly and emphatically) went up there but I've got a list of names and see if it isn't a mixed bunch of kids. They're militant, passive, liberal, and conservative. Here's who I put on my list. Since the time was so short, I tried to do the best I could (Curtis reads list of names). Now (names of last two pupils) kind of got on the list by accident. They were in my office and overheard part of the plans and kind of invited themselves. Besides, one of them offered transportation for some of the others which I couldn't turn down.

Let me also back up a bit and say that when I first found out about this meeting I went and talked to about ten people on this faculty and invited them to participate. All of them said they were busy or that it was too short of notice so that they couldn't make it...

Principal: Thank you, Mr. Curtis. Does anyone have any questions?

Vice principal: (Rising from her seat) Yes, I do. Mr. Curtis has given you a beautiful explanation of something which I am sure is a very good thing but when he said that he wanted to talk with you about something of concern to many of us, he didn't address himself to the important point. The point was that the event wasn't scheduled on the school calendar. Many of the kids who attended the meeting in Lincoln had already been scheduled to participate in activites that had been already scheduled to participate in activities that had been planned previously. If we are going to avoid parental complaints and these kinds of conflicts we have to all agree to schedule activities on the school calendar. I think that we can all agree that this is really a necessity. That's really the important point and the one which I wanted to address myself to.

Vice principal (Curtis): I want to add that I know that some of the kids who went that night had other things scheduled but I asked every kid about that before he went. This one boy, Ellis Smith, was scheduled to give a speech but he got a replacement. Every kid who went, went on his own accord. He got to choose whether he wanted to go or not.

Vice principal: I'm sure that the affair was very worthwhile. All I'm saying is that we need to schedule these activities and as you can see by the date on the letter that you have showed us, there were a few days before the meeting so that the event could have at least been on the calendar.

Viceprincipal (Curtis): Yes, I can see that. I apologize for that.

Given teacher concern about the maintenance of school role structure these abrasive relationships between teachers and most Sunnydale administrators was not surprising. Although teachers typically resorted to letter writing, gossiping, and other forms of sanctioning, their efforts did not have much effect upon the behaviors of the administrative staff. This situation accounted for the conflict that persisted unabated throughout the school year among the certificated staff.

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Chapter 9

RESPONSES TO INNOVATION

A series of events occurred in the 1969 spring semester and posed a serious threat to the maintenance of existing school structures. In the spring of 1969, the ACSP-RP Senior Research Consultant met with the assistant superintendent of secondary instruction to explore the possibility of introducing Patterns into the curriculum and selecting one or more high schools within the district as implementation sites. This proposed curriculum innovation, and the research activities to be carried out in conjunction with the implementation of the course, were eventually approved by the assistant superintendent and he subsequently arranged for ACSP-RP staff to meet with a group of social studies department members at the selected implementation site to discuss the matter. In these preliminary discussions with departmental members at the local school, tentative plans were mapped to introduce Patterns into the school in the spring of 1970. Teachers were informed at that time that several administrative and reproduction problems had yet to be resolved but that the ACSP-RP staff would keep the school abreast of events as they occurred and would meet with them again in the fall to finalize implementation strategies.

A few weeks following this series of meetings, racial tensions at the selected site surfaced and led to full-scale disorders that forced the closing of the school for an entire week. In the days that followed the initial disturbances, dissident students delineated their grievances and demanded that the school make several alterations in the existing curriculum and role structures. In an attempt to resolve these conflicts, representatives of the faculty and school administration met with the leaders of the student revolt and eventually agreed to support several of the proposed structural changes sought by disgruntled pupils. One of the more important curriculum innovations to which the faculty gave its consent pertained to the development of a comprehensive ethnic studies program. According to the terms of the agreement finally reached, Black and Brown ethnic studies courses were to be introduced in the fall of 1969. During the first semester of this new program, ethnic studies were to be offered at the tenth-grade level, but in subsequent semesters, enrollment was to be open to both juniors and seniors. These tentative agreements between members of the certificated staff and student leaders were promptly given administrative approval and steps were immediately taken to schedule the new course and sign up all interested ninth-grade pupils.

After these and other critical issues had been resolved the school was re-opened, but until school closed for the summer the atmosphere remained tense and volatile. The general consensus of opinion among teachers at the time was that, although many of the problems facing the school had been openly discussed and partially resolved, the situation at the school in the fall would continue to be as potentially explosive.

The events of this spring, and the expectation among school personnel that pupils would press for additional alterations in the role and curriculum structures when school re-opened in the fall, had a direct bearing upon the response of administrators and teachers to ACSP-RP. In the late summer, for example, the ACSP-RP staff director arranged for three members of the ACSP-RP staff to meet with the assistant superintendent of secondary instruction to discuss matters of mutual concern that related to all aspects of the proposed implementation and research activities within the district. At this particular meeting, the assistant superintendent described the events of the previous spring and offered the opinion that a very judicious and cautious approach would be required if ACSP-RP staff members were to work effectively at the school.

Early in the meeting it became apparent that the assistant superintendent perceived the ethnic studies program as one that would appease dissident pupils, thereby assisting both the district and local school administration in their efforts to restore structural stability to Sunnydale. In conjunction with his explanation of the new ethnic studies program, he warned that we should not expect many pupils to enroll in Patterns, and furthermore, that the ACSP-RP staff was not to sign up pupils who had already opted for one of the ethnic studies courses. As indicated by the following excerpt from a transcript of the proceedings, the assistant superintendent candidly revealed his perceptions of the general situation at the school and the probable consequences of the events described for the ACSP-RP.

Research Associate: Is there any way we could get a rough estimate of the number taking the course? The problem we're faced

with now is that we have to get all of the materials printed for next semester. The means of production will be largely determined by the number of students taking the course.

Assistant Superintendent: As I have said, given the situation at Sunnydale High, I'd be surprised if you got 100. I think you can understand the problems that we faced but we just had no control over the situation there. We're really responding to a crisis. I would say though that you ought to be able to get at least 2 to 3 sections. At least we can plan on it. After all, if the course works out, OK. If it does, it does; if it doesn't, it doesn't. There's nothing you can do about it and there's no need to get upset.

Interviewer: Do you know how many students want to take ethnic studies?

Assistant Superintendent: We have a tentative list that's quite lengthy. These kids will be assigned to ethnic studies in either the fall or spring. But be sure not to sign up any of those kids. We don't want to encourage them to change if they have already expressed a preference for ethnic studies.

The views expressed by the assistant superintendent indicate that the district administrative staff was responding to a delicate situation over which they felt they had little control and that they did not want to do anything to jeopardize the relative state of stability in the teacher-pupil role system achieved in the final weeks of the previous school year. His reference to the pupil sign-up for the Patterns course is especially interesting in that he perceives that the implementation activities of the ACSP-RP staff might pose a threat to the tenuous stability of the system, especially

if pupils were to view the new innovation as an administrative attempt to either sabotage or lure pupils away from the new ethnic studies program.

Despite his apprehensions about the probable nature of pupil response to ACSP-RP, the assistant superintendent was very helpful in arranging for staff members to enter the troubled school. Furthermore, he immediately explored the possibility of introducing Patterns into a suburban high school and eventually helped to make it possible to offer several sections of Patterns at this second school site.

The events that had transpired in the spring of 1969 had an equally profound effect upon the reception accorded ACSP-RP by many local school personnel. This was especially true of the local administrative staff, all of whom were primarily concerned with the maintenance and stability of the local school role structure. The first time the investigator met with the school principal, for example, he too gave the impression that he was responding to events that had effectively diminished his own authority and that he wanted to ensure that all ACSP-RP activities in the school would do nothing to antagonize an already difficult situation. Aside from revealing how little he knew about the proposed innovation, the following exchange that occurred during this initial meeting with the principal is instructive because it reveals how closely his perceptions of both the general situation at the school and the possible structural implications of ACSP-RP activities paralleled those of the assistant superintendent.

Principal: Now I have to tell you right now that I really don't know much about the course. We were told that the course was going to be offered to the tenth grade and that it had something to do with

anthropology. Other than that I'm pretty much in the dark.

Interviewer: Have you gotten any other information about the course?

Principal: No, nothing other than a note from the Assistant Superintendent. He did tell me though that you're going to be working with the teachers and assisting with some kind of research. Is that right?

Interviewer: That's correct. My principal duties are to give teachers who teach the course assistance when they want it and to give some research assistance. The ACSP-RP wants to evaluate both the effectiveness of the course and learn something about the problems involved in getting a new course into the schools. Dr. Tenenberg, whom I believe you have met, is principally concerned with evaluating the course.

Principal: Yes, I understand that. Well, let me say that we'll consider you a regular member of the staff. I suppose I should tell you though that we have just started two different ethnic studies courses. I don't know how many pupils you will be able to get for your course. We're starting to offer ethnic studies because of the problems we had here last year and a lot of the tenth-grade kids have already signed up for them. When you meet Mr. Rile (VP-Guidance), he'll tell you more about it. You'll have to be careful that you don't take any kids from these classes. I'm sure you can understand why I tell you this and generally you know, I think, what we are up against. This is just something that we had no control over.

Throughout the meeting with the school principal, he gave the investigator the impression that he was generally indifferent to the ACSP-RP. Subsequent observations of his behavior and interview data obtained from other members of the professional staff confirmed these inferences and provided some additional explanations for his apparent lack of interest not only in ACSP-RP, but in most other aspects of the school curriculum as well. During

the disturbances of the previous spring, the authority of the principal had diminished as a result of the retransaction of his own role and consequently, the principal requested that the school board accede to student demands and that he be reassigned to another school in the district. The school board responded by reaffirming the position and authority of both the school board and administration in the school structure. They then turned down his appeal, asserting that such a move would be tantamount to a complete capitulation to dissident pupils. This decision prompted the principal to let it be known that he was actiyely seeking employment elsewhere. Even though the principal's lackadaisical posture was not unique to ACSP-RP alone, his failure to live up to the expectations of others that the principal provide aggressive (educational) leadership had a debilitating effect upon the enthusiasm of other faculty members for all innovative programs in the school.

The second week after school had opened, the vice principal responsible for the guidance office asked the investigator if someone on the ACSP-RP staff could get a list of people who would like to enroll in the Patterns course. He mentioned that the Assistant Superintendent had asked for a list of names and that the information was needed as soon as possible, preferably by the end of the week. The vice principal suggested that the ACSP-RP staff talk to students currently enrolled in the driver education course about Patterns but that the staff must meticulously avoid signing up pupils who had already opted for the ethnic studies program. The investigator informed the vice principal that he would contact someone in the ACSP-RP office about the matter and that the needed information would be passed on to him as soon as possible.

Two days later the ACSP-RP research associate arrived at the school and he, along with the investigator, visited all driver education classes for the purpose of providing students with an overview of the course. After each presentation, pupils who were interested in taking the course were asked to sign their names to a list. This list, which eventually contained the names of more than 125 pupils, was later given to the vice principal and he, in turn, transmitted it to the Assistant Superintendent in the central offices.

A few days later, the vice principal approached the investigator to inquire about the possibilities of obtaining some additional descriptive information about the course itself. In the conversation that ensued, the vice principal yielded data that were particularly instructive in that they reveal the highly patterned administrative perceptions about transacted pupil beliefs as they relate to a need for an ethnic studies program, and the implications of these beliefs for pupil response to ACSP-RP. The relevant excerpts from this transcript are presented below.

Vice principal: Do you have any information I could pass on to others? The counselors have been asking me about the course and all they know is that they have a list of names in front of them.

Interviewer: Well, I could get you some outlines and some sample lesson plans. That would give them some idea as to what the course is all about.

Vice principal: That would be a great help to me. Then I would know what to say when people ask me about the course.

Interviewer: Since we've had about 120-150 kids sign up, how many sections will there be, or can you say at this time?

Vice principal: I talked to Mr. Cook (principal) and he said that we'll probably have about two sections or maybe half that number. You see, what you did is make a survey but when kids come to register there'll be some who change their minds. There will be some rate of attrition.

Interviewer: But there is a possibility that all 120 and maybe more who may actually decide to take it, isn't that so?

Vice principal: Well, that's possible but we'll just have to wait and see.

Interviewer: I take it then that this sign-up list is not considered to be a student's final selection for the spring quarter.

Vice principal: When we actuate the program the kids may change their minds. But, like I say, we just don't know yet.

Interviewer: I have heard that you will probably offer four sections of ethnic studies in the spring. Is it possible that you will offer more?

Vice principal: Yes, there is. It's going to depend upon how many sign up.

Interviewer: Do you think that many kids who aren't already signed up for ethnic studies will do so?

Vice principal: I'm sure there will be some more. I imagine that more than half of the kids will want to take it.

Interviewer: I see. Then the more kids that sign up for the ethnic studies program, the fewer there will be in other courses.

Vice principal: Basically. You have to remember that we put this course in just a few months ago. That was what the kids said they wanted last spring. But you can't tell what the kids are going to do. We'll all just have to wait and see.

In view of the fact that normal class size in the social studies department for that year was approximately 26 pupils, enough students had expressed an interest in Patterns so that five and possibly even six sections would be

needed to accommodate all those who said they wanted to enroll. This interview revealed, however, that both the principal and vice principal felt that many more minority pupils would opt for ethnic studies and consequently, there would be a need for only two or three sections of Patterns.

Aside from his apprehensions about the nature of pupil responses to Patterns, the attitudes of the vice principal towards the ACSP-RP were affected also by his convictions that the course had been implemented in a manner that created additional problems for the guidance office staff. Despite the fact that the ACSP-RP proposal was submitted in the spring, during which time other departments were introducing their own new curriculum requests, the vice principal, on a few occasions, complained to other teachers in the social studies department about the procedures employed to introduce Patterns into the school. To learn more about the nature of his grievances and to discuss the potential implications for ACSP-RP, the investigator re-directed the following conversation with the vice principal so as to elicit his feelings about the entire matter. The relevant excerpts from the transcript of this interview are reported below.

Vice principal: I think I've told you,...we also may have more ethnic studies courses. Right at the moment we just can't say. All I know is that the second quarter is going to be about like last summer. You see, I had to work an extra week just to get kids programmed into ethnic studies because all of this had to be done after school was out. Now that we've got the other course (Patterns), you can see that this has been a pretty hectic year for me.

Interviewer: I can see that it has been. Do you always have a hectic year when you offer new courses?

Vice principal: Well, not necessarily. You see, if we know what we are going to offer in advance, we can plan for the entire year. What we try to do in a case like this is to get courses paired or put back to back. So, in other words, the kids in one class take one course the first semester and then the whole class switches to the other course the second semester. But since we decided to put in ethnic studies in the spring, I had to work extra to get the classes set up. Now I'll have to do the same thing with this Patterns course. What we are going to have now is a lot of kids switching from one class to another in the middle of the year.

Interviewer: At what time during the year do you try to work these problems out?

Vice principal: We like to try and start early. But when people want to start making changes in April and May, that's getting pretty late.

Interviewer: It is my understanding that plans were made to introduce the Patterns course sometimes last spring.

Vice principal: Oh, yeah. There was some talk about it then but nothing was very definite.

Interviewer: Are you saying that you didn't have enough time?

Vice principal: I guess you could say that. Actually, we needed to know which kids were going to take the course before school opened. Then we could have grouped them together so we wouldn't have to do a lot of changing around in the spring. I can see that this year is really going to be a mess now.

Although some faculty members believe that it takes an inordinate amount of time for the guidance office to implement new programs and cite the time factor as evidence that the vice principal actively resists most

curriculum innovations, these data indicate that the vice principal perceives his role as one which entails meticulous planning for new course offerings well in advance of the semester in which the innovation is to be introduced. Although the amount of time allotted and the procedures employed by ACSP-RP to introduce Patterns conformed to established practices, the vice principal clearly expressed his conviction that he had been given insufficient time to prepare for the introduction of the course.

In summing up the nature of the responses to ACSP-RP by members of the local administrative staff, including the deans, it is apparent that all members of the administrative staff were principally concerned about pupil pressures to change school role and curriculum structures, and that they perceived that a viable ethnic studies program would mitigate pupil challenges to existing structures. Consequently, the local administrative staff neither encouraged pupils to enroll in Patterns nor did they permit ACSP-RP staff to invite pupils to opt for Patterns rather than ethnic studies. Although it cannot be said that any one member of the administrative staff openly or covertly attempted to negate the implementation efforts of the ACSP-RP staff, it is fair to say that all provided an absolute minimum of support and assistance.

The pivotal role duties of counselors at Sunnydale include consulting with pupils about their school careers and programming students into scheduled courses. With respect to the implementation of Patterns, however, counselors assumed practically none of these responsibilities principally because pupils were afforded an opportunity to sign up for the course in their driver education classes. Although there were two counselors who occasionally inquired about the progress being made by ACSP-RP teachers,

most remained ignorant of many aspects of the ACSP implementation and instructional activities. This fact became readily apparent towards the end of the school year when the researcher interviewed each member of the counseling staff for the express purpose of learning from them more about the nature of pupil responses to ACSP-RP. The following interview transcript contains several data which amply reveal the marginal impact of the counseling staff upon ACSP-RP and the limited role which they performed in terms of the course implementation.

Interviewer: I have been asked by the ACSP-RP staff director to talk to each of the counselors to find out what, if anything, they have heard from pupils about the Patterns course. I wonder if you would mind telling me anything you've heard.

Counselor: You know, I haven't heard one kid say a thing. Some of us were just talking about this the other day. Most of us haven't heard anything about ethnic studies either.

Interviewer: Have you talked with any kids who wanted in or out of the course, and, if so, what did they say?

Counselor: Sure, we always have some of that. At the beginning of the semester several kids from Mr. Gibb's class came in and said the course was going to be hard so they wanted to change. But, other than that--nothing.

Interviewer: Do you remember anything that the kids said when they enrolled last fall?

Counselor: No, you remember how we did it, don't you? The kids signed up for the courses in their driver education classes. All we did was just ask them if they wanted to stay in when we programmed them for the spring. I really don't think any of us counseled with the kids about these courses.

Interviewer: Do you ordinarily do more counseling with pupils?

Counselor: Usually, but in this case the kids just told us what they wanted. Several of the kids wanted to know if they would get full credit towards college for the course but that's about it.

The interesting reference in the preceding interview to those pupils who had asked to be re-assigned to another course warrants some additional comment. As it turned out, nearly all students who originally signed up for Patterns actually did enroll in the course and consequently, each of the four sections offered in the spring was initially overcrowded. In an effort to cut down on his class size, one of the project teachers deliberately employed the common teacher tactic of overemphasizing the amount of work which pupils were to do in the course with the expectation that pupils who were disinclined to exert much effort in class would opt for one of the other social studies courses available. This tactic accomplished its purpose and accounts for the reason why some counselors received reports of the type mentioned in the interview.

As with any departmental curriculum innovation, the success or failure of a new course depends upon how well teachers receive it. For this reason, closest attention was given to the responses by members of the social studies department to ACSP-RP. As noted earlier, the preliminary groundwork for the implementation of Patterns at the local school had been laid the previous spring, at which time the ACSP-RP staff director outlined the details of the course and issued an invitation to several department members to participate in the preparations to introduce it into the curriculum. Although the disruptive events that occurred shortly thereafter in the school precluded any further preparations before the end of the school year, members of the

ACSP-RP staff scheduled a meeting early in the fall term to speak to the entire social studies department about the Patterns course and the proposed implementation procedures. The teachers present asked several questions about the history of the project, the nature of the course, and the difficulty of the assigned readings. Most appeared to be interested in learning more about Patterns and the questions posed were fairly evenly distributed among members of the department. Toward the end of the meeting, however, one teacher raised a series of questions that alluded to a matter of obvious concern to many teachers present, the specific nature of which was not discerned by the researcher until several days later. The germane portions of the events tnat transpired at this initial meeting are reported below.

Teacher: You know, I'm not at all clear as to what we have going at the sophomore level. Frank, how many choices do these kids have now?

Department chairman: We've got the regular world history, the two ethnic studies courses, Black and Brown studies, and now, the anthropology course.

Teacher: Well, what's happening with the ethnic studies program?

Department chairman: Nobody really seems to know. Originally, it was set up so that the first semester would be for sophomores but that in the second semester seniors would have an opportunity to enroll. I don't really think anybody knows.

Teacher: For this anthropology course, do we know how many sections we are going to have? Has anybody talked to the kids?

Research associate: About two weeks ago we talked to all of the kids in the driver education classes who are scheduled to take world history next semester. I think about 150 indicated that they would like to take the course.

Teacher: Frank, who is going to teach the course?

Department chairman: Gibbs will teach two sections. If there definitely are others, Joe has said he would like to teach it.

Teacher 1: Incidentally, who made the decision to offer this course at Sunnydale, anyway?

Teacher 2: I guess Mr. Pryor (Assistant Superintendent) did.

Teacher 1: When was this done? During the summer?

Teacher 2: It must have been.

Research associate: I don't really know. I didn't have the responsibility of making the arrangements at Sunnydale. (Long pause) If there aren't any more questions, I would like to distribute an outline of the course to you. Should any other questions arise, I'll be around on occasion to try and answer them if I can.

The attentiveness of all members in the department during this exchange and the silence that ensued led the investigator to infer at the time that many teachers in the department were perturbed by the manner in which Patterns had been introduced into the school. Two days later one of the teachers who had already established an amiable relationship with the members of the ACSP-RP staff commented that a few of the teachers were "poor-mouthing" the ACSP-RP and that they were disturbed because they felt that they had not been consulted or actively involved in bringing the course into the school. In subsequent interviews with teachers in the department designed to elicit their perceptions of the role of teacher in curriculum adoption and implementation, four teachers said that they felt that the extent of teacher involvement in the whole matter had been too limited. An interview one week later with the same teacher who had posed most of the questions at the

department meeting yielded considerable data, the relevant portions of which appear below, that typifies the views expressed by this group of teachers within the department.

Interviewer: I was especially interested in your comments about what you went through to get the ethnic studies program into Sunnydale High. What role do members of the department play in getting new courses into Sunnydale?

Teacher: We've always been involved here. We have been very willing to experiment and try new things. Some of the things we have done have proven very successful but some things were miserable failures. For example, we had homogeneous grouping a few years ago and the kids in the lowest groups figured that they weren't expected to do much so they didn't. So now we have gone back to the no-tracking system. We often get together and talk about the changes that we think we ought to make and evaluate what we are currently offering.

Interviewer: How do you go about making the changes that you want in the department?

Teacher: A lot of things we can do ourselves. If we want to adopt new scheduling procedures or start a new course, we can do that without too much trouble. Another thing you probably already know is that several of us have worked on curriculum. Like I told you at lunch today, I've been working on a course produced by VITA Corporation on comparative economics and Joe spent part of last year writing an outline for Mexican-American studies.

Interviewer: It sounds as if members in the epartment are very active in all aspects of curriculum work.

Teacher: That's right. I think that most of us try to keep up with what's going on. That's why some of us were a little concerned about the anthropology course. We didn't know much about it.

Interviewer: That's interesting. I had understood that the groundwork had been laid in the spring and that at least someone had spoken to members of the department about introducing Patterns into the curriculum.

Teacher: Oh, no. Now, I had heard about the plan to offer the course, but as far as I know, nobody was involved. I think that was Dr. Pryor's (Assistant Superintendent) baby.

In addition to underscoring the emphasis which members of the social studies department place upon what they believe to be their proper role in the adoption and implementation of new curricula, these data are particularly instructive in view of the invitation extended by the ACSP-RP staff director the previous spring to members of the department to become involved with the ACSP-RP. What these data suggest is that the perceptions of several department members of their role in curriculum innovation were incongruent with their perceptions of the role they had been invited to perform and that the dissonance induced by this initial contact with a representative of the ACSP-RP led these teachers to simply screen out the event and subsequently assert that they had been asked to assume a very marginal role in the entire affair. Another plausible explanation is that members of the department who attended the earlier meeting either misunderstood what had been communicated to them and/or they misinformed others who had not been present.

Even though all teachers agree that they should have a pivotal role in curriculum adoption and development activities, the event described above had a very limited impact upon a few members of the department. This was especially true of two teachers in the department, both of whom perceive the curriculum structure of the school, including those courses offered

within their own department, as in need of a comprehensive overhaul. Their view is that most all materials available are uninteresting to pupils and that to rectify the problem they must offer students an array of entirely new educational experiences that heavily emphasize pupil involvement in the learning experience. The following interview yielded data that is indicative of the feelings expressed by these teachers within the department and makes explicit at least one of the more important reasons why the implementation of Patterns received considerable support from them.

Interviewer: How did that activity work out that we were talking about last week?

Teacher: It was all right but just a little too tough for the kids; I decided that I'm going to give it up.

Interviewer: What are you going to start now?

Teacher: For the last couple of days we've been talking about the split in Black leadership, you know, the conflict between the Panthers and the NAACP and organizations like that. The kids really turn on to that. It's something they can relate to.

Interviewer: This is in your U.S. history class, isn't it?

Teacher: Yes, but we haven't spent much time dealing with history. The kids are interested in what's happening now in their own community so we talk about that. Sometimes, though, we tie together what's occurring now to what's happened in the past. The other day, for example, we were talking about some of the changes that have taken place in the community and which account for the fact that South Sunnydale's populated largely by poor people and minorities. And the kids really wanted to pursue it. It's the same way with the kids in the course that you're involved with. If you give the kids something interesting to work with and get them involved in finding things out for themselves without the teacher telling them everything

to do, they'll do a good job. But,you can't get the kids to read those history texts we've got around here.

This theme of pupil involvement in learning activities was repeatedly stressed by members of ACSP-RP staff when they talked about the Patterns course to members of the social studies department. Although there were very few teachers both in and outside of the social studies department who complained about the traditional, passive pupil learning role, those who did verbally express the view that teachers need to retransact the teacher-pupil role relationship within the classroom gave considerable support to the implementation of Patterns.

There are some other factors that had a direct bearing upon the reception accorded ACSP-RP and which may or may not have a profound impact upon future implementation at other sites. Some of these factors were alluded to in Chapter 7 but they warrant reiteration in that they significantly affected the attitudes of a few social studies department members towards Patterns. As pointed out earlier, most teachers in academic departments conceive of self as a representative of a specific academic discipline. The nature of these transacted conceptions of self are largely dependent upon the structural configuration of the collegiate sub-culture and of the departments with which each individual teacher was principally affiliated while in pursuit of his degree. Because the college and university curriculum structure has reflected, until quite recently, a strong bias in favor of history and political science, most social studies teachers have majored in one of these two fields. As a consequence of these structured realities few teachers in the social studies department have been exposed to either

the disciplines of anthropology or sociology and this is especially true of older faculty members. Although a few of the teachers at Sunnydale High expressed an interest in and appeared to be intrigued by the content and approach of the Patterns course, their previously transacted conceptions of self as teachers of history and/or government impeded their motivation to volunteer to teach the course or actively support its implementation. The following interview with one of the social studies department members two weeks after the beginning of the spring semester typifies the strengths of these beliefs and the extreme reluctance on the part of some to become involved with the course.

Teacher: How are the anthropology courses coming along?

Interviewer: Quite well, but both Charlie and Joe have encountered all of the normal problems in starting a new semester.

Teacher: I heard Joe say this morning that his kids were really interested in studying those African tribes. That's probably something that most of our kids haven't learned anything about. From what he said, it sounds like it would be an interesting course to teach.

Interviewer: Do you think you would like to teach a section or two next year?

Teacher: I couldn't do it. I'm really not qualified. I know that Joe said something about the course actually being a history course, but studied using anthropology methods. I just haven't had that kind of training though.

Interviewer: Do many other teachers feel the same way you do?

Teacher: Oh, I haven't talked to very many people about it although Howard said that he didn't know beans from barley when it came to anthropology.

Interviewer: Have you heard anybody else say whether they would like to teach the course?

Teacher: No, but I suppose Joe would like to teach it again. I just know I couldn't do it. Besides, I got enough problems teaching something that I know about. You'd be surprised how little these kids know about the history of their own country. I don't know what these kids have been doing for the last eleven years in school but they sure can't tell you much about their own heritage.

Aside from this teacher's admission that he knows little about anthropology, it is clear that he conceives of himself as a history teacher--and a distraught one at that--whose principal duty is to do as best he can to compensate for the little knowledge which his pupils have acquired about American history. Although this particular teacher, as well as others in the social studies department, expressed a willingness to learn more about Patterns, there is sufficient data to suggest that teachers who conceive of self similarly will hesitate to make commitments to teach the course unless they can see some parallels between both the method and content of what they are currently teaching and that which is prescribed by the Patterns course material.

Although the attitudes of teachers in other departments usually have a minimum of impact in terms of the ecision reached by members of one department to implement new curricula, their dominant position in the teacher-pupil role system is a favorable one from which to influence pupil attitudes towards an innovation. Although the extent to which teachers attempt and succeed in their efforts to influence pupil opinions about certain aspects of the curriculum structure is an empirical question. Some of the misconceptions about anthropology expressed by several Sunnydale teachers warrant comment because of their potential effects upon future implementation effort.

Two datum, the first of which is admittedly rather extreme, illustrate the point. During the second week of the school year, the investigator entered the teachers' cafeteria and entered into a conversation with one of the teachers seated at a lunch table. After we had introduced ourselves, the teacher inquired about the investigator's role in the school and then proceeded to demonstrate both her ignorance and hostility towards anthropology.

Teacher: I haven't seen you at Sunnydale before. You must be new here.

Interviewer: Yes, this is my first week at Sunnydale.

Teacher: What are you teaching?

Interviewer: Actually, I'm not teaching. I'm working for ACSP-RP and will be an aide to teachers who teach the course developed by the project and will also assist in the research related to the implementation of the course.

Teacher: You said anthropology. Is that right?

Interviewer: Yes, it's a course in human history studied fromthe perspective and using the methods of anthropologists.

Teacher: I suppose you're going to solve the race problem. Is that it?

Interviewer: What do you mean by that? (Pause)

Teacher: I was reading something by a woman anthropologist a while ago. Mead's her name. All she talked about was why we shouldn't be so harsh on marijuana and the race problem. It's no wonder everybody's down on professors.

Interviewer: Is that what most anthropologists seem to talk about?

Teacher: I suppose not but then she's the one that you always hear about, I know that she's lived with a lot of really primitive people and stuff like that.

In one other instance, a teacher openly queried as to whether the Patterns course c ild generate much interest among many pupils, regardless of their racial, ethnic, or socio-economic background. The initial response of this teacher was "Do you think kids will really want to study about old bones?" When the contents of the four parts of the course had been described, and it was further explained that the Patterns course was designed to be a study of human history approached from the perspective of anthropologists, the teacher refocused her attention upon that section of the course that dealt principally with the physical evidence for human evolution and replied "I'm still not sure that kids will see that studying old bones will get them anywhere."

As instructors in a school with a large number of minority pupils who openly challenge existing social structural arrangements, Sunnydale teachers are as deeply concerned about the maintenance of the school role structure as are administrators. Although most teachers are skeptical about the adequacy of the conceptual underpinnings of ethnic studies programs, most perceive these courses as being ones which will sufficiently placate pupils so thatthe certificated staff can maintain adequate control over the more critical aspects of the school structure. Consequently, a majority of teachers gave nominal support to the implementation of the ethnic studies program. In other urban schools in which similar conditions exist, those who wish to introduce Patterns may expect a somewhat less than desirable degree of support from other faculty members in their implementation efforts.

Observational data obtained the day on which members of ACSP-RP staff spoke to pupils about enrolling in Patterns gave the first concrete indications

as to how Sunnydale pupils would respond to ACSP-RP. During the discussion period that followed the formal presentation of Patterns to the first class, pupils asked a number of questions about the course, several of which denoted an already favorable or indifferent disposition towards Patterns. The tone and content of the questions posed by pupils during this first meeting prompted the researcher to note all questions raised in each of the six subsequent presentations that he attended. These questions, grouped into categories and then tallied in order to determine the frequency with which each type of question was asked, are depicted in Table 9.1.

Although the entire presentation about the course and most of the discussion which ensued pertained to the content of, and pupil activities offered by, Patterns, it is interesting to note the rather large number of questions raised about the credit awarded for taking the course and the possibility of substituting Patterns for other required curriculum. In every single class visited, except those largely comprised of pupils who had already opted for ethnic studies, several questions were raised about the credits that pupils were to receive. It is especially interesting to note the rather large number of inquiries about the possibility of substituting Patterns for the regular world history course and receiving the same high school graduation credit. Of the seven questions that pertained to supplementing Patterns for world history, the tone of each indicated a strong pupil preference for Patterns. As one girl put it, "Then, if we take this (Patterns), we can get out of world history?" This pattern of response, incidentally, tends to confirm the assertions of most counselors and many teachers that the traditional tenth-grade world history course is perhaps

Table 9.1

PUPIL QUESTIONS ABOUT PATTERNS

	Number of questions
A. Credit received for taking Patterns	
1. College credit	6
2. Graduation/high school credit	6
3. Take in place of world history/ethnic studies and receive credit	8
4. Other	1
B. Nature and/or value of anthropology	
1. Activities of anthropologists; what they do, how they study history, etc.	6
2. Difference/similarities between anthropology and history	2
3. Relation between Patterns and sociology	1
4. Value of course in preparing for college	
C. The Patterns course	
1. Course content	
(a) Groups studied	9
African, other tribal groups	6
groups in America	2
miscellaneous	1
(b) Archaeological data	14
(c) Physical evidence for evolution	11
(d) Miscellaneous	6
2. Pupil activities	
(a) Use of artifacts	14
(b) Observations; how much, of whom, etc.	3
(c) Movies; other audio-visual materials	3
(d) Amount of work required	2
(e) Types of skills learned	2
(f) Homework	5
(g) Readings; nature of, degree of difficulty	6
D. Other	14

the one disliked by the greatest number of pupils in the school. Undoubtedly, a large, yet undetermined number of pupils who enrolled in Patterns did so as a means of avoiding this particular course.

As one might expect, in the two classes visited in which a majority of pupils had already been assigned to ethnic studies, there was little interest expressed by pupils in learning more about Patterns. The fact that not one Black student in either of these two classes so much as inquired about the course further documents the prevalence of the belief among minority pupils that ethnic studies was a more relevant curriculum. It is equally important to reiterate the point made earlier that all three Mexican girls, the only non-Black pupils in either class, opted for the Patterns course. This also tends to confirm an earlier conclusion that considerable peer group pressure was operating to encourage non-Black pupils to remove themselves from Black Studies classes.

Observational data on the behavior of pupils who actually enrolled in Patterns indicates that, in general, pupil responses to the prescribed learning activities were very favorable. Those lessons which afforded students an opportunity to utilize the concepts and skills which they had learned to analyze primary data, such as the artifacts and the site map, were widely acclaimed by a large majority of pupils. As the semester progressed, pupils continually expressed the view that Patterns was one of the few social studies courses, if not the only one, that they had ever taken that permitted them to analyze data, construct and test hypotheses, and reach independent conclusions without considerable teacher intervention.

Throughout the semester it appeared that the only problem that caused a majority of Sunnydale pupils considerable consternation was the difficulty

and, on occasion, the length of the reading assignments. This problem had been anticipated by both project teachers due to the retarded reading and academic skills of most pupils in the school and despite efforts to mitigate this problem by having pupils read the materials to describe the contents to others, the difficulty persisted unabated throughout the entire semester. Although both teachers, as well as the researcher, concluded early in the semester that this was the major drawback of the course as perceived by pupils, these inferences were confirmed on the last day of the school year during which time the pupils in all four classes were interviewed for the express purpose of learning more about their response to Patterns. In each class nearly all of the negative comments about the course pertained to either the difficulty and/or the length of the assigned readings.

In summarizing the nature of pupil responses to the ACSP, it is imperative that those pupils who were exposed to Patterns be differentiated from those students who opted for other social studies courses. As revealed by the data, a growing number of minority students, particularly Negroes and Mexicans, believe that an ethnic studies program is more relevant to their own needs and interests than other courses offered by the department. In view of the increasing pervasiveness of these transacted beliefs and their general lack of knowledge about Patterns, there is no data to suggest that their original indifference towards the course was in any significant way affected by the implementation of the ACSP course.

Pupils who did take the course, regardless of their predispositions towards Patterns when they enrolled, were favorably impressed by the course for reasons already cited. On the basis of the data yielded by the ethnographic

studies, it is reasonable to assume that the major difficulty that will confront those who wish to implement Patterns in public schools with similar pupil orientations will be to get pupils into the course in the first place, rather than getting students deeply involved in the learning experiences structured for them once they have enrolled.

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Chapter 10

IMPLICATIONS AND RECOMMENDATIONS

The data yielded by the ethnographic studies have a number of implications for curriculum innovation. The purpose of this chapter is to explicate a few of the more significant findings, compare them with the experience of the curriculum developers who produced Patterns, and make some recommendations. It should be recalled that the research staff worked with a total of 16 teachers. The developers experience was with over 250 teachers. The research data represent an intensive experience; the developers' data represent a diffuse, extensive exposure. These experiences supplement each other and both should be considered when considering recommendations for future use of Patterns.

The ethnographic data clearly reveals that teachers see selves as dominant-active agents and pupils as subordinate-passive agents in the teacher-pupil role system. The teacher decides how the classroom learning environment is to be structured, what material is important for pupils to learn, and how this teacher selected content is to be transmitted to pupils in the classroom. Consistent with their perceptions of the teaching role, high school instructors place considerable emphasis upon the dissemination of information to pupils usually via lectures, worksheets or assigned readings. As a general rule, teachers neither allow active pupil participation in the classroom nor do they emphasize the need for learning experiences that require pupils to seek out and to

independently integrate newly acquired information into their own structure of knowledge in a meaningful way, principally because these activities are perceived as inconsistent with their perceptions of the teaching role. To ensure the maintenance of this transacted teacher dominated, teacher-pupil role system, overt pupil threats to the established patterns of relationships are severely sanctioned by reprimands, removal of pupil privileges or, in extreme cases, suspension from school.

Patterns, with its emphasis on intense pupil involvement, threatens teachers' perceptions of self because of the implied redefinition of the pupil role in the classroom. The dilemma of this implication was anticipated by the ACSP curriculum development staff who hoped that the opportunities for more student involvement also created opportunities for teacher growth. The extent to which this can take place will not be known for many years.

Another finding is that most teachers in social studies departments conceive of self as teachers of history or government. These transacted conceptions of self are largely a consequence of the structural arrangements of the academic subcultures in which they received their professional training and of the nature of their own personal experiences as a student affiliated with a specific academic department. Traditionally, the curriculum structure of most colleges placed extraordinarily heavy emphasis upon the teaching and learning of world history, United States history, and American government and until quite recently anthropology and several of the related social science disciplines have been largely ignored. Even though most colleges now have formally organized departments of anthropology and sociology, a majority of high school teachers, with the exception of most recent graduates, have had limited exposure

to psychology, anthropology and sociology and consequently know little about these disciplines and their relation to the other social sciences. Although there are some research data to suggest that many social studies teachers find the general approach and content of Patterns intriguing, their previously transacted conceptions of self as teachers of history and/or government can be expected to impede their motivation to teach and actively support the implementation of the ACSP course--except--as the developers experienced it, for those teachers who actively seek alternatives to conventional history programs.

Other ethnographic data on teacher perceptions of the role of teacher have additional implications of potentially great significance for both curriculum innovation and the development of curriculum implementation strategies. In general, teachers believe that their special training and daily classroom teaching experience have prepared them, at least as well as anyone else, to determine both the content of the curriculum structure and the nature of the various learning experiences that are to be offered to pupils. Consistent with these beliefs, teachers readily assert that they are to have a pivotal role in the adoption and implementation of all curriculum innovations. In general, teachers recognize that their formally defined role duties preclude extensive curriculum development work, yet these conflicting role definitions cause no diminution in the firmness to which they adhere to the belief that teachers should actively participate in and/or initiate curriculum innovations. Furthermore, while teachers recognize that other persons in the upper levels of the school structure have the authority to unilaterally adopt or restructure the school curriculum, they, as well as

the administration, are fully aware of the various patterned ways in which teachers may successfully impede or thoroughly sabotage a new curriculum offering. In many instances, for example, teachers restructure the course so that the content and teaching strategies are congruent with their own perceptions of the teaching-learning roles and processes. This reinterpretation of a teaching assignment is not uncommon even insofar as district or state mandated courses are concerned. Either by reinterpreting the teaching assignment, discouraging pupils to enroll in a new course, or by outright resistance to the innovation by department and/or other faculty members, efforts to successfully implement a new curriculum can be effectively impeded.

Another finding is that most teachers know very little about the discipline of anthropology and the nature of the anthropologists' approach to the study of human history. This is due in part to the structural realities of colleges already mentioned, but also to the fact that anthropologists are by nature a practical and eclectic group of scholars who irreverently violate the established disciplinary territories of others whenever they feel so inclined. This latter situation, in particular, has made it difficult for some teachers to define what anthropologists do, as evidenced by the sample data presented in Chapter 9. Misconceptions about the nature of anthropology as a discipline are such that many teachers perceive the subject as irrelevant to the needs and interests of pupils regardless of their socio-economic, racial or educational background. Although the most erroneous conceptions about anthropology are expressed by teachers outside the social studies department, teachers in all departments are in a very favorable position to influence

pupil attitudes towards all aspects of the school curriculum structures. Thus, it is conceivable that some teachers who have misconceptions about anthropology may initially have a detrimental effect upon pupil attitudes about the Patterns course. The course developers experienced another danger in teachers' misconception of anthropology--overexpectation of the discipline as a cure-all and the subsequent disillusionment.

On the basis of the data available, pupils who do enroll in the course can be expected to react very favorably to Patterns. The favorable response already accorded Patterns is due in part to the novel content, but, more importantly, to the high degree of equivalence between the learning role of pupils envisioned by the designers of the course and pupil perceptions of the ideal pupil learning role. The active pupil participation required of pupils who have experienced Patterns led many to express the view that this course was one of the few offered which allowed pupils to become deeply involved with concrete data, systematically work through their own ideas and formulate and test hypotheses, all with a minimum of teacher intervention.

Finally, there is considerable data to indicate that in schools with large concentrations of minority pupils, there will be increasing pupil pressures to introduce courses into the curriculum that deal principally with the cultural heritage of specific racial and ethnic groups and the nature of their contribution to American culture in general. Furthermore, because the minority pupil population has transacted a highly elaborated structure of beliefs about the need to reassert and reinforce racial and ethnic identities, considerable peer group pressures on pupils to opt for these new ethnic studies courses can be expected. Although many teachers

and administrators may give only tacit approval to these innovations, their overriding concern for the maintenance of the teacher-pupil role system will lead many to openly support the implementation of an ethnic studies program, especially if such a program can mitigate pupil pressures for additional changes in either the role or curriculum structures of the school.

Recommendations

A successful Patterns implementation strategy that will ensure proper use of course materials by teachers and thus genuinely affect pupil abilities to observe and analyze human behavior, and which will result in the sustenance of the innovation, must take into account certain structural realities of the school as well as some of the more critical findings as they relate to teacher perceptions of selves, of the teaching role, and the curriculum structure. Although there is frequent teacher and pupil criticism of the content and organization of world history, the traditional curriculum offering at the 10th grade level, this course is firmly embedded in the curriculum structures of most school systems, and is likely to continue to be so at least in the immediate future. This conjecture is based on the knowledge that most social studies teachers conceive of self as teachers of history and believe that some pupil exposure to the history of Western European culture is an essential educational experience. Rather than dismantle the world history course as a result of the rather harsh criticism directed towards it, there is ethnographic data to suggest that many social studies departments will simply restructure the course itself and place much greater emphasis upon the study of recent

history and contemporary social and political events. Patterns, in the developers' experience, offers a framework for this restructuring.

The fact that both the title and content of the ACSP course reflect a general historical orientation will undoubtedly facilitate the acceptance of Patterns by many teachers in social studies departments. But in terms of devising successful implementation strategies, the ethnographic data suggests that considerable emphasis should be placed upon the fact that the course is a study of human history approached from the perspective of anthropologists. This implies that methodological parallels between the disciplines of history and anthropology be unveiled whenever possible and that teachers in social studies departments be continually reassured that both the content and prescribed teaching methods are not totally foreign to their own experiences. This point is critically important because there is an absolute minimum of ethnographic data from the 16 research program teachers to suggest that the course will be favorably received if Patterns is presented to them as strictly a course in anthropology. However, experience in schools involved in the development of ACSP materials shows that teachers do explicitly seek anthropological materials.

Given the presently existing teacher-pupil role system in the public schools, it appears that at least a minimum degree of resource personnel training and other support services in the school are essential if teachers are to structure the classroom learning situation in a manner that is consistent with the nature of the pupil experiences prescribed in the Patterns teaching plan. This supplementary assistance is important because most teachers must retransact the teacher-pupil role relationship if their instructional behaviors are to facilitate pupil attainment of

the learning objectives. This is particularly true of those teachers who place extraordinarily heavy emphasis upon teacher domination of the classroom and who perceive of themselves as disseminators of information. On the basis of limited experience to date with some teachers who have been actively involved in the implementation of Patterns in the past year, there is already some evidence to indicate that such resource personnel training experiences can facilitate the classroom role retransaction that is requisite to successful teaching of the course.

Data on the school structure indicates that although a new curriculum innovation can be superimposed upon local schools by key district administrative personnel, an effective implementation strategy that will ensure sustenance of the innovation requires that the innovative agents work very closely with the teachers at the department level at implementation sites. In view of the elaborate steps taken by the ACSP-RP to elicit teacher support for Patterns prior to its implementation and the perceptions of teachers of their proper role in curriculum development and adoption, the problem of working sufficiently close with teachers in the local school poses monumental problems for projects like ACSP. Nevertheless, several data from Sunnydale amply illustrate the relative impermanence of the elective curriculum structure and the consequences for innovative agents who fail to gain the support of local school personnel. This result was, no doubt, due in part to the fact that ACSP-RP experience was with Patterns as an elective course whereas it is the hope of the developers that it be seen as an introduction to the required world history sequence. In either case, on the basis of data yielded by the ethnographic studies there is conclusive evidence that many teachers remain

indifferent, if not totally hostile, to a new course offering in their department unless they feel as if they have been intimately involved in the planning and implementation processes.

Finally, the ethnographic data suggest that schools in which the certificated staff and/or pupils perceive the course to be subordinate to other curricular offerings. One means of approaching those who continually lobby for a comprehensive ethnic studies program would be to emphasize the anthropologist's cross-cultural perspective on the study of human groups. It can be pointed out that Patterns is designed to teach pupils the skills that will enable them to map out and analyze patterns of group behavior within their own society and that the sub-cultural patterns of one group can then be compared and contrasted with the patterns which characterize other groups.

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PART THREE

COGNITIVE STUDIES

Chapter 11

THE RELATIONSHIP OF CONDUCTED RESEARCH TO THE ACSP COURSE

The over-all strategy for the cognitive research into the impact of Patterns during the implementation period was derived from a combination of several empirical and theoretical considerations. First, an exhaustive examination of the student materials and Teaching Plan resulted in the identification of a distinctive characteristic of the course with respect to both aims and activities. It appeared desirable that the conducted research be related to this critical attribute. Second, an accumulating body of recent learning research and related theory suggested an analytic division of the distinctive characteristic of Patterns into two fundamental categories of learned entities. This division, in turn, led to an essentially double-stranded design for cognitive research, then modified to take into consideration the potential influence of several student variables of particular interest to the course designers and the constraints imposed by limited time and money.

The function of this chapter is to present the general strategy of ACSP-RP cognitive research and to relate the design of that strategy to the course as a distinctive series of curricular experiences.

COURSE MATERIALS

Patterns in Human History includes diversified materials for student use: over 100 printed items including stories, case studies, drawings, photographs, maps, evidence cards, charts, worksheets, and expository

articles; seven color filmstrips made from original slides, six accompanied by a sound recording; casts of five prehistoric stone tools, two figurines, and a cuneiform tablet; eight overhead projector transparencies together with overlays; recordings of a series of folk tales from a Pygmy band in Central Africa and a simulated interview of a band member by an anthropologist; and an album of fifty photographs of a Peruvian hacienda.

Accompanying these student materials is a Teaching Plan for teacher use. The course is divided into four major parts:

Part I: Studying Societies

Part II: The Origins of Humanness

Part III: The Emergence of Complex Societies

Part IV: Modernization and Traditional Societies

Each of these parts is divided into a series of topics, or, as is the case of Part II, a series of problems for student investigation. The Teaching Plan further subdivides both topics and problems into numbered lessons, each referring to one or more daily periods of recommended class activity. For each lesson there is a description of its function in a larger series, a listing of specific learning objectives to be attained and the materials to be used, a detailed outline of recommended procedures to be followed during the class period(s) involved, and, in many cases, additional background information for the teacher. The Teaching Plan is, to be sure, extensive, highly organized, and considerably detailed.

DISTINCTIVE CHARACTERISTICS

A detailed analysis of the lessons recommended in the Teaching Plan reveals the following distinctive patterns:

(1) All but three of the eighteen topics and problems into which the course is divided[1] begin with the presentation of new social data to students in some form other than a written expository article. In fact, a major portion of all the lessons begin with such presentations; archeological site maps, photographs of people, drawings or casts of artifacts, stories, translations of original documents such as records of court cases, and the like.

(2) In the most typical lesson beginning with the presentation of data, students are asked to examine the presented item(s) and to"speculate" on the nature of aspects of the societ from which the data derive which cannot be directly observed in the data itself. The term "speculation" has a special meaning in Patterns: it is an inference supported by the data, an hypothesis in accord with the evidence at hand. Thus, lessons typically require the formulation by students of supportable inferences.

(3) Students are not asked to draw supportable inferences from data without guidance. Recommended guidance appears in several forms:

(a) Typically, the teacher will pose a question or questions for investigation which identify a focus for student inferences and delimit the scope of speculation. For instance, in many lessons the teacher will "frame" the discussion of some new visual data by asking how the "life of the people who lived here" (in the case of an archeological site map) or "the

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[1]The reader is reminded that this report refers to Patterns in Human History, including the Teaching Plan, as it appeared on October 1, 1969.

life of the people who made these things" (in the case of casts or drawings of artifacts) "was different from the life of the people we just studied." In other instances, the opening question may be narrower, e.g., "what do these items tell us about the possible thoughts these people had about the supernatural?"

(b) Throughout discussion the teacher assists students in "processing" the presented data by asking questions about overlooked characteristics of the evidence; having students make lists of various things they observed; prompting students to recall concepts learned earlier in the course; probing speculation in order that students make evident to themselves their assumptions, their reasoning, and the evidence they used; inviting alternative hypotheses; and generally channeling the discussion to a sifting and patterning of the data and arguments concerning conflicting interpretations.

(4) Despite the structuring influences provided by the materials themselves, the focusing questions of the teacher and his channeling role during discussion, lessons are typically intended to be "open-ended" in the sense that alternative inferences are not only anticipated but are to be genuinely invited and encouraged. There is no one "right answer" in the drawing of inferences. However, some inferences are better than others if they account for evidence better; the purpose of many of the lessons is to develop students' skills in making inferential statements and deciding among alternative interpretations.

(5) In the main, the students, not the teacher or the materials, process the presented data. A term which seems to appropriately describe the kind of instructional setting recommended for the major portion of lessons in Patterns is "guided inquiry" as distinct from, let us say, "pure" inquiry in which the pupil poses his own questions and problems and designs his own procedures for investigation; and from "didactic presentation" in which the questions for investigation, the investigations themselves, and the answers, are carried out (if at all) in the materials and/or by the teacher.

In summary, the improvement of student data processing skills is a fundamental and pervading objective of Patterns; the predominant type of recommended lesson is best characterized by the term "guided discovery": presumably it is primarily through engaging in these guided though open-ended data processing activities that students are to improve their data analysis capabilities.

INFLUENCE OF TEACHER ROLE-BEHAVIORS

Considerable research has shown that what a student learns is affected decisively by what he does during the process of learning.[2] Further, many recent studies have confirmed that during classroom episodes the character of what students do (their patterns of learning behavior) are critically influenced by the pattern of interactive behavior exhibited by the teacher.[3]

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[2]See, in this regard, Rothkopf, E. Z., "The Concept of Mathemagenic Activities," in Review of Educational Research, 40:3 (June 1970)

[3]See, in this regard, Amidon, E. J., and J. B. Hough (eds.) Interaction Analysis: Theory Research and Application, Reading, Mass.: Addison-Wesley Publishing Co., 1967.

Based on these principles, one would predict that students taking Patterns would attain the distinctive instructional objectives of the course to the extent that the teachers transact roles resulting in the students, with appropriate guidance, processing the presented data. The type of student learning involved and the nature of recommendations in the Teaching Plan, suggest that the course cannot be expected to achieve its objectives if teachers and students transact the type of relationships which customarily exist in high school classrooms with the teacher as "giver of knowledge" and the students as "receivers." In other words, students cannot be expected to learn the desired data processing skills unless the instructor exhibits a teacher style which transmits expectations for the intellectual behaviors involved and provides adequate opportunities for students to learn and practice the competencies in question.

An obvious line of important research follows from these considerations: investigation of the effects of differing teaching styles (role patterns) on student learning outcomes. As indicated in an earlier section of this report a substantial sub-study was planned which would have pursued this line of inquiry. Patterns of teaching styles were to be determined through analysis of videotaped class sessions and student post-course performance compared for teachers with varying patterns. Unfortunately, this study could not be carried out.

DATA PROCESSING COMPONENTS

For purposes of analysis all the components of thinking employed in what has here been called "processing social data" can be grouped into two related yet theoretically distinct categories. These two classes of thinking

components are referred to as (a) intellectual skills and (b) internal representations. Recent research in human learning, notably by Gagné[4] and Ausubel,[5] suggests that effective learning of each type depends on somewhat different pre-requisite conditions both within and external to the learner. A consequence for instruction is that provision must be made within the same curriculum for the acquisition of both classes of thinking components. The implication for research is that the comprehensive investigation of cognitive effects must include assessment of learning for both skills and representations since a particular course of instruction can conceivably have differential effects in these two areas. Accordingly, ACSP-RP cognitive research measured learning independently for these two classes, insofar as separation in actual practice is possible, and then investigated potential relationships between change in these two areas.

INTELLECTUAL SKILLS

"Intellectual skills" refer to inferred operations or activities carried out by the human nervous system in manipulating data relayed to it from sensory organs and tissues. These activities have been referred to by many investigators using a variety of terms. Such phrases as "intellectual skills", "data processing skills", "intellectual maneuvers", and "cognitive strategies" have been employed as labels either for inferred thinking operations, or the ability to carry out such activities. Strictly speaking, thinking does have a basis in genuine internal motions--complex patterns of the movement of electrical impulses along nerve pathways and through other

[4]Gagné, R. M., The Conditions of Learning Rev. ed., New York: Holt, Rinehart, & Winston, 1968.

[5]Ausubel, D. P. Educational Psychology: A Cognitive View. New York: Holt, Rinehart, & Winston, 1968.

parts of our physical thinking apparatus. "Learning psychologists", however, classify thinking operations in terms of differentiated functions or tasks useful in reaching some processing goal. For instance, if a young child is asked to pick out all the "round" objects from among an array of novel items, his internal operations can be described in distinctive inferred steps each having a function in carrying out the total task of selecting all the round objects. One step, as an example, would have the function of establishing or finding out the characteristics of the presented items and might be referred to as "surveying". Another step functions to recall for the child some internal representation corresponding to "roundness". Still another would refer to that portion of the whole process during which the characteristics of the various objects are somehow compared to the internal representation for "roundness". And so on.

A recent series of experimental studies conducted by Gagné and his associates[6] has generated considerable evidence to support a hierarchical model of intellectual skill learning. According to the model the acquisition of any complex capability depends upon the prior learning of simpler requisite capabilities. As an example, in a study by Coleman and Gagné[7] the ability of sixth-grade pupils to make short summary statements comparing and contrasting the major differences between lists of the main exported items for two countries was found to depend upon their prior ability to perform a whole series of less complex tasks, including, for instance, grouping

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[6] Gagné, R. M., Basic Studies of Learning Hierarchies in School Subjects, Final Report Project No. 6-2949, U.S. Dept. of Health, Education, and Welfare Office of Education, Berkeley, California, 1970.

[7] Ibid., Coleman, L.T., and R. M. Gagné, "Transfer of Learning in a Social Studies Task of Comparing-contrasting."

exports into a variety of alternative categories, constructing comparison charts, and making brief statements to express charted differences. Once the experimental students had learned all the requisite tasks, they were able, without further training, to successfully contrast export lists and to transfer this capability to two new situations involving completely different social studies content.

SKILL HIERARCHIES AND THE ACSP COURSE

The intellectual capability referred to in this report as "social data processing" would appear to be a highly complex skill, dependent upon the prior acquisition of a large number of simpler requisite skills. Typically, students are asked to (a) examine limited samples of data concerning a previously unstudied society; (b) draw supportable inferences about aspects of the society not directly observable in the presented data; (c) decide between alternative inferences; (d) contrast inferences made about this society with inferences previously made about a different society. For instance, during Part III of the course, pupils are shown a color filmstrip of the various artifacts found at Jarmo, the site of a prehistoric village in the Middle East. The students are asked to speculate on the possible functions of the artifacts shown and, from these, to draw inferences regarding how the life of the people at Jarmo may have been different from the life of the other prehistoric peoples studied in preceding lessons. Some of the objects presented in the filmstrip are quite different in appearance from all the other artifacts previously examined in the course and speculations about their distinctive functions provide a basis for drawing inferences regarding differences in the life of the people of Jarmo and that of the other prehistoric groups studied.

ACSP-RP was initially designed to identify the hierarchy of requisite skills underlying successful carrying out of the analysis of social data of which the Jarmo task is one example. Further, the planned research, through a series of studies modeled after Coleman's, would have determined which sub-skills were significantly strengthened through experiences in Patterns, and which were most frequently unaffected, the latter signaling the areas in which subsequent course elaboration or revision would be desirable. Two of these studies were begun during the research period. One was subsequently abandoned due to monetary constraints; the other, described below, was carried out but in abbreviated form due to practical difficulties encountered in the administration of tests to project and control students.

CONTRAST/INFER TEST

The "intellectual skill" study completed during the research period provided a limited answer to the question of whether Patterns improved students' social-data processing skill. It employed an ACSP-RP designed instrument for measuring student ability to draw inference from certain kinds of social data and to contrast inferences made about two or more societies. A description of the study, including comment on the nature of the Contrast/Infer Test (COIN), the design used, and findings, constitutes Chapter 12 of this section of the research report.

INTERNAL REPRESENTATIONS

As with "intellectual skills", various inferences can be made about the ability of the human nervous system to make and retain some kind of record of events and other phenomena, to "represent" elements from

experience in some internal fashion. Without reference to some kind of mental representations or "images" of external reality, it is difficult to explain how thought of any kind does occur, from simple remembering of some previous experiences to the complex maneuvers which appear to be involved in such things as drawing inferences about societies from visual data. In order to process or manipulate sensory data mentally, it would appear that one must have internal "representations" to "manipulate", representing items and classes of items in the external world.

When expressed in language mental representations take the form of names for and statements about phenomena, their properties, and interrelations among them. Collectively, they are what is normally referred to as "knowledge". More correctly, they might be referred to as "verbalized knowledge". Knowledge refers to three classes of mental representations:

(a) All verbalized representations of single unique directly experienced phenomena or attributes of phenomena (e.g., <u>that</u> object and <u>only</u> that particular, unique one; the internal image of the unique color of some object, not as "color" but as a conglomerate of internal sensory events);

(b) Representations referring to <u>classes</u> of phenomena whose members are similar in some fashion but may differ in any other respects (e.g., dogs, animals, clothing, families, sharp objects, societies);

(c) Representations referring to <u>relationships</u> among classes (e.g., the influence of human brain development on tool-making ability and vice-versa; the relationship between agriculture and the emergence of complex urban "states").

Recent research into the acquisition of verbalizable knowledge has

contributed to an understanding of the conditions within which such learning occurs. Ausubel,[8] drawing inferences from a number of significant studies, indicates that the acquisition and retention of verbalized knowledge depends critically on the structure of the ideas (representations) already in the learner's possession and the manner in which new knowledge is incorporated into or added to that structure. Optimum conditions of instruction are those which contribute to a well-organized, stable internal system of representations and which assist the learner to preserve the distinctive qualities of newly acquired learning while establishing the location of this knowledge in relation to the structure of his previously acquired knowledge. A number of practices appear to facilitate these objectivss: the presentation of "organizers", verbal propositions that indicate the relevance of the to-be-learned knowledge to the pre-existing cognitive structure; the presentation of the most inclusive ideas first, followed by increasing detail; and the deliberate and explicit pointing out of similarities and differences between the newly presented ideas and those previously learned.

RESEARCH ON INTERNAL STRUCTURE

It was deemed highly desirable to obtain a measure of student acquisition of verbalizable knowledge due to experiences in Patterns. This would allow for inferences to be drawn regarding the extent to which students had increased their stock of internal representations, presumably then available for application during the processing of social data. The decision was made to concentrate on the most inclusive conceptual categories (classes of

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[8] Op.cit.

phenomena possessing common characteristics) appearing in Patterns. An ACSP-RP instrument, the Concept Recognition Test (CRT), was designed to measure the extent to which students learned these concepts. Each included concept refers to a considerable number and range of social phenomena, has a distinctive name or label used in the course (e.g., "environment", "social position", "adaptation"), and can be expressed in a verbal statement. The use of two different question formats in the CRT instrument made it possible to draw inferences regarding not only the acquisition of concepts but the internal structure of course-related concepts possessed by students. A detailed description of this portion of the cognitive research constitutes Chapter 13 of this section of the report.

THE INFLUENCE OF OTHER VARIABLES

Since Patterns was designed for use with the majority of American high school students, an assessment of the influence of various student variables on the learning of intellectual skills and concepts (representations) was accomplished through the use of correlational and factor-analysis sub-studies. Variables investigated included initial capabilities as measured by the COIN and CRT instruments, reading achievement as measured by a standardized reading test, personality configurations and value orientations as measured by standardized instruments, and an SES index. A summary of data-gathering instruments, dates of administration, and groups tested appears in Figure 11-1.

Post results on the COIN and CRT instruments were also compared in a correlation study as a means for investigating potential relationships between change in the two areas of capability involved.

Figure 11-1

SUMMARY OF DATA GATHERING INSTRUMENTS

	Instrument	Date administered	Groups tested
(a)	Concept Recognition Test (CRT)	Pre: 2/70 Post: 5/70	All available project and control classes
(b)	Contrast-Inferencing Test (COIN)	Pre: 2/70 Post: 5/70	Representative sample of project and control classes.
(c)	Status Identification Test (SIT)	Post: 5/70*	Representative sample of project and control classes (same as for item (b) above
(d)	Comprehensive Test of Basic Skill; Reading Section, Form Q4	Sunnydale 12/69 Castlemont 3/70	All Sunnydale project and control classes. Representative sample of Castlemont project and control classes
(e)	California Psychological Inventory (CPI)	3/70	Representative sample of project classes only
(f)	Gordon Personal Values Inventory (GPV)	4/70	Same representative sample of project classes as in item (e) above
(g)	Gordon Interpersonal Values Inventory (GIV)	4/70	Same representative sample of project classes as in item (e) above
(h)	SES Inventory	6/70	All available project pupils

*A pre-form was also administered in 2/70 but results not used in any subsequent analyses.

Correlation and factor-analysis studies are not reported in a separate chapter but are interspersed among Chapters 12 and 13 where appropriate.

IDENTIFYING STATUSES FROM ANECDOTAL MATERIALS

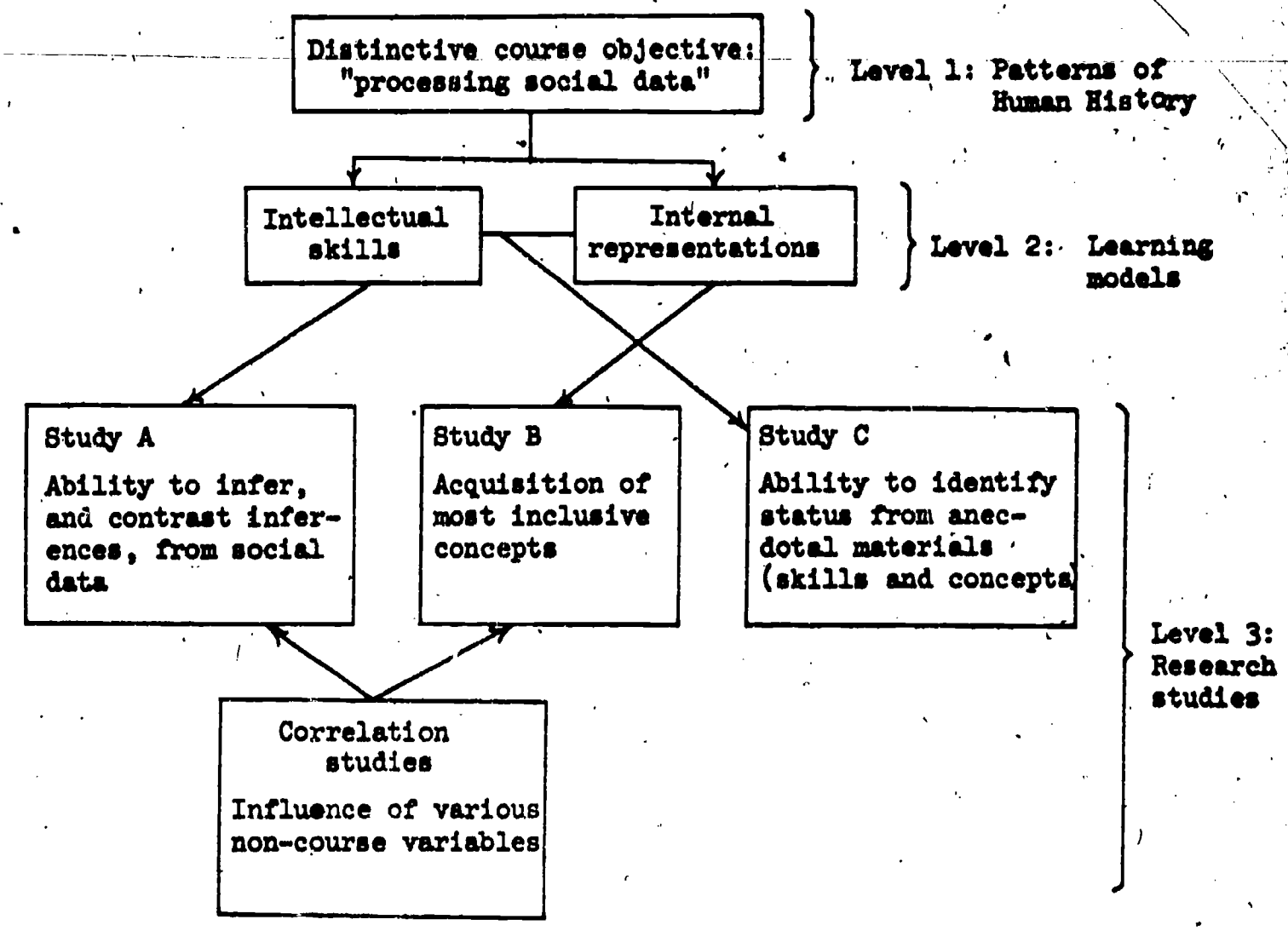
One additional study was carried out to investigate in detail student learning of a cluster of intertwined concepts and processing skills associated with a series of lessons not previously field tested. These lessons are designed to teach students to identify statuses from an analysis of anecdotal materials. A separate instrument, the Status Identification Test (SIT), was designed for use here. The research, reported in Chapter 14 of this section, provides an in-depth analysis of one area of data processing in Patterns without attempting to separate skills and concepts (representations) as was done in the studies involving the COIN and CRT instruments.

SUMMARY

The derivation of the studies for cognitive research connected with Patterns is represented visually in Figure 11-2. Three levels are shown in this figure. Level 1 refers to the distinctive elements of Patterns as a series of curricular experiences. Level 2 refers to the division of "data processing capability" into two types of learned components, such division derived from a consideration of recent research and theory development in human learning. Level 3 indicates the derived studies conducted after alterations due to practical considerations. What does not appear in this figure are crucial considerations having to do with the decisive influence of teacher classroom roles on student classroom roles and subsequent learning outcomes, and the aborted study planned for investigation of this critical issue.

Figure 11-2

SUMMARY OF DERIVATION OF ACSP RESEARCH STUDIES



Chapter 12

THE LEARNING OF COMPLEX CONCEPTS

The Concept Recognition Test was designed to assess the effect of Patterns in Human History on the number of highly inclusive course-related concepts possessed by students. Fundamental to the construction and use of this instrument is the assumption that the ability to process social data and arrive at warrantable inferences is influenced by two sets of thinking components: the number and nature of intellectual maneuvers a student can perform, and combine into sequences at will; and the number and nature of the conceptual categories he can employ in carrying out various maneuvers. For example, if a student is presented with an array of artifacts produced by a society he has not previously studied and is asked to make inferences about the technology of that society, the nature of his performance will depend on whether he has learned to carry out and sequence such processes as surveying the physical attributes of the artifacts, grouping these into categories, searching for previously learned links between the identified categories and aspects of "technology", making tentative inferences and checking their validity through reference to other patterns of attributes among the artifacts. The students' performance also depends on the conceptual categories into which he attempts to group attributes; whether, for instance, he classifies the objects presented on the basis of the degree of precision needed for their production or the amount of concentrated power necessary, or the number of separate and distinct operations

that would have to be performed to produce each of the artifacts, and so on. It is categories such as these which structure students observation of the presented objects, which "tell" him that it is important to examine such things as size, texture, number of parts, materials used, and how precisely moveable parts fit together. The same categories also suggest related ways to sort the data--such as classifying the materials which make up the objects on the basis of how much they were changed from their natural form.

It should be noted in the example given that the meaning the student supplies to "technology"--that is, the kind of entity he believes "technology" to be and the sub-entities he believes it includes (in other words, into which conceptual categories he classifies "technology" and its components) structures the examination of the artifacts and the categorization of attributes. For example, the student who conceives of "technology" as a category which includes the processes people use to produce items will be led to search the presented data for attributes and attribute patterns from which he can infer the nature of the processes employed. In contrast, the student to whom "technology" means only "tools" in the narrow sense of the physical objects used during production will not attempt to relate observed patterns to processes and cannot, therefore, be expected to draw inferences regarding the magnitude of planning and organization achieved by that society.

In this discussion no distinction has as yet been made between conceptual categories based on observed physical attributes, such as "blue", "small", and "pointed"; and categories based on complex combinations of observed and inferred attributes, such as "power", "raw materials", and

"technology". A few authorities in the field of human learning have precisely identified the distinctive character of each of these two general types. For purposes of this report, however, it appears adequate to indicate tha the CRT test is concerned with concepts of the latter sort and to call these "highly abstract" in contrast to "concrete".

TEST COMPOSITION

The complete Concept Recognition Test appears in Appendix C. It consists of thirty multiple-choice items requiring students to classify described phenomena into abstract conceptual categories, correct classification considered evidence that the responder has "learned" the concept in question. The same form was employed for both pre- and post-testing. Each student's score is equal to the total number of correct responses given.

The abstract concepts included in the CRT instrument consist of a sample of those named often in the pupil materials in Patterns, those explicitly identified in the Teaching Manual as ideas to be learned by students, and a number students are asked to employ during the course even though these are not specifically labeled in either student or teacher materials, The thirty test items consists of all abstract concepts from these three "pools" for which it was possible to write clear examples and item choices.

Two different formats are used in the presentation of items. Format I, used with twenty items, presents a concept label, such as "technology", followed by descriptions of five phenomena. The student's task is to select the one phenomenon which is either an example of the named concept or an example of one of its attributes (or, in some cases, the one phenomena which is not an example of the named concept or one of its characteristics). Here

is a sample of a Format I question:

9. Hunter-gatherer society: which one of the following is usually found in a hunter-gatherer society?

(a) There are extreme differences in the wealth of the adult members of the society.
(b) The privileges people have in the society are based mainly on their age and sex.
(c) A few people in the society have most of the power.
(d) There are a great many different kinds of jobs, each done by a different person; most do only one kind of job.
(e) There are a great variety of social positions.

Format II, used for ten items, describes a phenomenon and requires the student to choose which of five presented concept names best fits the phenomenon. An example of Format II follows:

24. Situation: In Mbuti society all men, women, and older children hunt together.

Question: What is hunting together in Mbuti society an example of?

(a) an integrative mechanism.
(b) a biological characteristic.
(c) reciprocal resistance.
(d) economic differentiation.
(e) unnatural selection.

DESIGN

Covariate analysis

The CRT instrument was administered to all available project students in the project and control "pools"[1] during the second week of February 1970 and the last week of May 1970. Scores on the Reading Section of the Comprehensive Test of Basic Skills, Form Q4, were available for almost all project

[1]See Chapter 4 of Part II for the procedures employed in the selection of project and control "pool" classes.

and control students in Sunnydale, and for a representative sample of project and control classes in Castlemont. Analyses of covariance for CRT post-performance was carried out in a two-way design in which reading achievement level and type of treatment (project and control) were the investigated variables and reading achievement raw score and CRT pre-test score were the covariates. The analysis, of course, was confined to those students for whom there were pre- and post-CRT scores and a reading achievement score.

For this analysis, variance among three levels of reading achievement was examined, the levels corresponding in rough fashion to designations of "high average and above" (level 1), "low average" (level 2), and "below average" (level 3) with respect to national performance norms. The statistical analysis was performed at the University of California, Berkeley, Computer Center with a program that equalizes cell sizes by random exclusion of subjects from over-represented cells. Results of the analysis were examined for evidence of significant main effects, "complex" interaction effects between treatment type and reading levels, and "simple" interaction effects within each reading level.[2]

Intercorrelations

To investigate the potential influence of other known variables these procedures were followed:

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[2]The distinction between "complex" interaction effects referring to variance over all cells, and "simple" interaction effects referring, in this case, to variation between treatment at each reading levels is drawn pointedly in Marascuilo, L. A., and J. R. Levin, "Appropriate Post Hoc Comparisons for Interaction and Nested Hypotheses in Analysis of Variance Designs; The Elimination of Type IV Errors," in American Educational Research Journal, Vol. 7, No. 3, May 1970. All other statistical procedures follow those presented in Guilford, J. P. Fundamental Statistics in Psychology and Education, McGraw-Hill Book Company, New York, 1956.

(a) Intercorrelations between CRT change scores and scores on non-cognitive instruments were computed for a representative sample of project students, and statistical tests of the null hypothesis of "zero correlation" ($r = 0$) were applied. The non-cognitive instruments were:

(1) The California Psychological Inventory (18 scales).

(2) The Gordon Values Survey, Personal (6 scales) and Interpersonal Forms (6 scales).

(3) A socio-economic inventory adapted from North and Hatt.[3]

(b) Intercorrelations between CRT change scores, CRT pre-scores, pre-scores on the COIN test (see Chapter 13), and reading achievement scores were computed for the samples of project and control pupils; statistical tests of the null hypothesis of "no difference" between project and control correlations ($r_p - r_c = 0$) were applied.

Formats

Of interest to the research staff was whether the two formats employed in the CRT test measure the same kind of abilities and whether change in performance is related to format. In order to investigate this question the various analyses of variance mentioned above were carried out separately for Format I items combined, Format II items combined, and for the total test. In addition, intercorrelations among pre- and change scores for Format I and Format II were computed and tested for statistical significance.

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[3] Hatt, P. K., and C. C. North, "Jobs and Occupations: A Popular Evaluation," Opinion News, September 1, 1947.

RESULTS

Performance; project versus control

The analysis of covariance for project and control post-performance on the CRT test is summarized in Figure 12-1. No significant F-values are found for main or complex interaction effects. A separate computation for simple interaction effects within each reading level not included in this figure yielded no statistically significant values.

Figure 12-1

SUMMARY OF TWO-WAY ANALYSES OF COVARIANCE, POST-PERFORMANCE ON CRT TOTAL TEST, PRE-CRT SCORES AND READING ACHIEVEMENT SCORES AS COVARIATES

Source of variation	Degrees of freedom	Sums of squares	Mean squares	F* values
Between treatments	1	17.41	17.41	.81
Among reading levels	2	58.57	29.29	1.35
Treatment levels reading	2	4.20	2.10	.10
Error	250	5403.26	21.61	

*None of the obtained F-values are significant at P > .05.

Analyses of covariance carried out separately for Format I items and Format II items also reveal no significant F-values for main effects for either treatment or reading levels, and none for complex interaction effects. Separate one-way analyses for treatment effects within each reading level revealed no significant F-values for Format I post-performance. The results for separate one-way analyses within each reading level for Format II appear in Figure 12-2. Significant effects in favor of project pupils were observed at Reading Levels 1 and 3.

Figure 12-2

RESULTS FOR ONE-WAY ANALYSIS OF COVARIANCE FOR TREATMENT EFFECTS WITHIN EACH OF THREE READING LEVELS, FORMAT II, SRT POST-PERFORMANCE

Reading level	Adjusted project mean	Adjusted control mean	Degrees of freedom	Associated F-values
1	6.32	4.82	1.82	8.43*
2	4.96	4.62	1.82	.432
3	4.87	3.76	1.82	6.31*

*Statistically significant at $p \geq .05$.

Non-cognitive variables

All intercorrelations among CRT change scores and scores on instruments designed to measure non-cognitive variables are given in Appendix G. Of the 186 correlations computed (93 for males, 93 for females) only the ones appearing in Figure 12-3 below are those for which the null hypothesis of "zero correlation" ($r = 0$) can be rejected at $p \geq .05$. None of the 15 significant correlations is large, and the configurations for boys and girls are quite dissimilar.

Two of the areas in which there were positive significant correlations for boys ("sense of well-being" and "intellectual efficiency") are associated in the Manual for the California Psychological Inventory (CPI) with the tendency to be seen, among other things, as alert, versatile, and active; a third area ("communality") is associated with the appearance of such characteristics as dependability, reliability, honesty, and tact. The negative correlation on the "variety" scale of the Gordon Personal Values Survey is connected, according to the Manual for that instrument, with not valuing such items as doing new and different things, having a variety of experiences,

Figure 12-3

STATISTICALLY SIGNIFICANT* CORRELATIONS BETWEEN CRT CHANGE SCORES AND SCORES FOR NON-COGNITIVE VARIABLES; 124 MALES AND 121 FEMALE ACSP STUDENTS

California Psychological Inventory			Gordon Survey			
			Personal values		Interpersonal values	
	Scale	Correl.	Scale	Correl.	Scale	Correl.
Male						
Format I	-	-	-	-	-	-
Format II	-	-	Variety	-.189		
Total test	Sense of well-being	.219				
	Communality	.208				
	Intellectual efficiency	.196				
Female						
Format I	Self-acceptance	-.242	Achievement	-.183	Conformity	.238
	Self-control	.205			Leadership	-.205
	Good impression	.197				
Format II	-	-	Achievement	-.183	-	-
Total test	Dominance	-.199	Achievement	-.246	Leadership	-.243
	Self-acceptance	-.209				

*Null hypothesis of "zero correlation" ($r = 0$) rejected at $p \geq .05$.

traveling a great deal, going to strange and unusual places, and experiencing an element of danger.

According to the appropriate Manuals the configuration of significant positive and negative correlations for girls corresponds to a somewhat different set of characteristics. Several for the CPI are associated with tendencies to be seen as slow in thought and action, self-abasing and lacking in self-confidence; others with being patient and deliberate, persistent, sociable and concerned with making a good impression. With respect to the Gordon Surveys the significant correlations corresponds to such items as valuing "what is socially correct", following regulations closely...being a conformist", but not valuing being in a position of leadership, authority and power, working on difficult jobs, and "having a challenging job to tackle". In this case the CPI and Gordon results appear to present a fairly consistent pattern: concern for recognition from others coupled with a somewhat poor self-image and tendencies to work slowly yet deliberately.

SES

Correlations between CRT change scores and SES index (see Appendix G) are quite small (ranging from -.07 to .142) and none are statistically significant.

Initial capabilities

Correlations among CRT change scores and the initial capabilities of pupils as measured by CRT and COIN pre-scores and reading achievement scores appear in Figure 12-4. The values appear in pairs with the left-hand member of each pair representing the correlation for project pupils, and the right-hand member, the correlation for control pupils. No significant differences

between project and control pupils were found. In the main, correlations were quite low. It appears that the effect of the course on CRT scores was not dependent on students' reading achievement or initial capabilities as measured by the CRT and COIN pre-tests.

Figure 12-4

CORRELATIONS BETWEEN CRT CHANGE SCORES AND INITIAL PUPIL CAPABILITIES AS MEASURED BY CRT AND COIN PRE-SCORES AND READING ACHIEVEMENT FOR 110 PROJECT PUPILS (P) AND 70 CONTROL PUPILS (C)

Test	Concept recognition test change scores* P/C Format I	P/C Format II	P/C Total test
Pre-CRT test			
Format I	-.32/-.32	.20/.15	-.14/-.22
Format II	.07/-.01	-.18/-	-.06/.06
Total test	-.18/-.21	.06/-.02	-.12/-.17
Pre-COIN test			
Part I	.09/.18	.15/.07	.06/.18
Part I	.05/-.04	.08/.12	.08/.03
Total test	.09/.09	.13/.11	.14/.12
Reading	.00/.15	.00/.11	.00/.16

*No significant differences between correlations for project (P) and control (C) at $p \geq .05$.

Format I versus Format II

The analyses of variance for Formats I and II were summarized above. Figure 12-5 shows the intercorrelations for Formats I and II for both pre- and change scores. It is noteworthy that though the correlation between Formats I and II on the pre-test (.10) is relatively high and statistically significant, the amount of change for either Format does not appear to be statistically related to the amount of change for the other (-.02).

Figure 12-5

INTERCORRELATIONS CHANGE AND PRE-SCORES, FORMATS I AND II, CRT TEST 110
PROJECT PUPILS

	Pre-scores		Change scores	
	Format I	Format II	Format I	Format II
Pre-scores				
Format I	1.00			
Format II	.60*	1.00		
Change scores				
Format I	-.32*	.07	1.00	
Format II	.20*	-.18	- .02	1.00

*Rejection of null hypothesis of "zero correlation" ($r = 0$) at $p \geq .05$.

SUMMARY OF RESULTS

The various analyses carried out in relation to the CRT instrument show that, though there are "simple" interaction effects in favor of project students at Reading Levels 1 and 3 for Format II, there is no consistent evidence of over-all CRT test gains made by project students as a result of course influences. There is no evidence that performance was affected by reading ability, socio-economic status, or initial capabilities (as measured by the pre-CRT and COIN tests). The evidence of differential performance by pupils exhibiting differing patterns of personality variables and values orientations (as measured by the CPI and Gordon instruments) is scant. There is some suggestion of relationship between the magnitude of CRT change scores and such qualities as alertness and dependability for boys, and for girls a lack of self-confidence and a concern for conformity and social correctness coupled with deliberateness in action. However, the evidence for such relationships is neither consistent nor extensive.

The difference in the correlation between Format I and Format II for pre-scores (r = .62) and change-scores (r = .09) suggests that the two formats measure related, and possibly overlapping, yet different sets of capabilities. Format I presents the pupil with the name of "conceptual class of phenomena (such as "technology") and requires the pupil to select which one of the presented items is (or is not) an example of the named class or an attribute of the named class. Format II, in contrast, describes a phenomenon and requires the student to select the one concept name from those presented which is most appropriate for the described situation or phenomenon. It is conceivable that in order to make a proper or correct selection in Format II, the student need know only <u>one</u> of the defining attributes of the named conceptual class and connect the appropriate name with it; whereas for Format I items, in order to make a proper choice, the student may need to know <u>several</u> or <u>all</u> of the attributes which together define the named conceptual class. If this is indeed the case, a number of implications follow:

(a) A larger sample of Format II items (they now constitute 10 out of the 30 CRT test questions) might have produced significant main treatment effects for Format II and for the Total Test.

(b) The significant interaction effects in favor of project pupils at Reading Levels 1 and 3 for Format II constitute positive evidence of course influences on the learning of <u>some</u> of the attributes of the most inclusive concepts appearing in <u>Patterns</u>.

(c) The absence of parallel significant effects for Format I constitutes evidence that project students did not learn to identify sufficient <u>combinations</u> of defining attributes of abstract categories to perform significantly better than control students.

Chapter 13

PROCESSING SOCIAL DATA

The importance of the Teaching Plan of Patterns of Human History to understanding the instructional objectives of the course and recognizing the manner in which the currrculum designers intended the varied student materials to be used cannot be overstressed. It is patently clear from the Plan that students are to accomplish something other than the memorization of a series of concept definitions and strings of information about the field of anthropology and what anthropologists do. They are to learn to apply ideas from the discipline of anthropology (among other social disciplines) to social realities, to learn to analyze social data of various forms, producing in the process what for the student will be new knowledge based on adequate analysis. Furthermore, they are to learn these capabilities in a particular fashion, characterized by the phrase "guided inquiry", in which the most characteristic role of the student is that of "processor" and the most characteristic role of the teacher is that of "guider".

A major portion of the ACSP-RP cognitive research connected with Patterns was predicated on the assumption that the thinking components of adequate social data processing can be divided into two fundamental yet related categories: intellectual operations and the internal representations of reality which are manipulated in the performance of these operations. As a result, the investigation of the cognitive impact of Patterns included

(a) a study of changes in the number of highly inclusive, course-related concepts possessed by students (reported in the preceding chapter), and (b) an examination of changes in student ability to carry out one kind of complex intellectual task appearing frequently in recommended lessons. This task can be described as "the contrasting of inferences about two societies drawn from samples of material or non-material culture of these societies". It was studied through the use of the Contrast/Infer Test (COIN).

The task in question takes basically the same form no matter which societies and what type of "data" are involved: (a) some visual, aural, or written artifact or artifacts are presented to the student; (b) the student is asked to draw inferences from the presented items about the society in which they were produced; (c) the student is asked to contrast the inferred aspects of the society in question with those of a previously studied society. The prior inferences have been generated through the examination and processing of a different set of presented data. Figure 13-1 presents a schematic representation of the task under discussion.

Figure 13-1

SCHEMATIC REPRESENTATION OF CONTRAST/INFER TASK

Draw inferences about society A	Contrast differences	Draw inferences about society B
Examine data Array A		Examine data Array B

Previous research in social studies and social science education regarding complex performances like the one investigated here is extremely meager. A number of studies in both <u>science</u> and <u>mathematics</u> instruction

have established that the attainment of higher order objectives, involving for instance, the application of abstract principles to the solving of novel problems, depends on the prior learning of the concepts related by the principles, of multiple discriminations underlying the learning of the concepts, and even simpler kinds of learning underlying the ability to make multiple discriminations. Further, the student appears to also need a general strategy for proceeding, for choosing appropriate operations to perform in doing the task and for sequencing these operations.

Coleman[1], in the first extension of the notion of hierarchically arranged cognitive skills into the field of social sciences education, investigated sub-processes presumed to underlie the successful comparison of two countries' exports by students. Her findings parallel those of experimental studies in other school subjects:[2] the ability to perform the final task in question was dependent upon the prior acquisition of the ability to perform all simpler requisite tasks.

The Contrast/Infer Test (COIN) was designed to assess student ability to carry out the task outlined earlier and represented in Figure 13-1. Its original form was prompted by the hierarchy-of-skills studies performed in social studies by Coleman and by others in other school subjects.[3] It was

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[1]Coleman, L. I., "A Study of the Acquisition of the Intellectual Skill Comparing in the Area of Social Science," Ed.D. dissertation, University of California, Berkeley, 1969.

[2]See in this connection summaries of hierarchical learning studies in Gagné, R. M., and W. D. Rohwer, Jr., "Instructional Psychology" in Annual Review of Psychology, Vol. 20. 1969.

[3]Gagné, R. M., Basic Studies of Learning Hierarchies in School Subjects, Final Report Project No. 6-2949, U.S. Department of Health, Education, and Welfare, Office of Education, Berkeley, California, 1970.

initially designed to investigate not only the attainment of the terminal performance of contrasting inferences about societies, but also to assess the effect of course experiences on an hypothesized hierarchy of underlying requisite skills. Due to unforeseen problems in the total testing program, large portions of the COIN test were eliminated when it was administered in its post form at the end of May 1970. In view of the almost complete absence of carefully planned experimental studies on higher order data-processing skills in social studies, it is particularly unfortunate that the signficant COIN gains reported in this chapter for project students cannot be compared with their performance on such skills as recognizing similarities and differences among two presented items, the ability to generate operational definitions, and the ability to generate categories for contrasting such things as the physical attributes of artifacts.

The final form of the COIN post-test appears in Appendix D. It has two major parts. In both, the pupil is asked to examine data from two societies, draw inferences about the societies, and contrast the inferred characteristics. For each contrast, a required dimension for comparison is explicitly indicated. For instance, for one item in Part I the student is asked whether the two societies in question differ in the way they <u>obtain their food</u>, and, if so, to describe the difference. Similarly, for one item in Part II the pupil is asked to tell ways in which the social positions in one of the societies differ from the social positions in the other. The two societies referred to in Part I are not the same societies referred to in Part II.

A major difference between the two parts of the test is in the nature of the data presented. In Part I, the student is presented with two sets of

drawings, each drawing showing a stone, bone, or wood artifact made in a prehistoric society. Part II presents the student with written descriptions of two incidents, each incident having occurred in a different society.

The pre- and post-forms of Part I of the COIN test are identical. In all the ACSP-RP classes one of the two societies represented was studied in detail some time during the spring of 1970 semester. The society was a small prehistoric food-producing community called "Jarmo". As far as anthropologists can now determine, Jarmo was one of the first food-producing communities in the world. Though the word "Jarmo" does not appear anywhere in the COIN test, and though the black and white drawings used in the test differ to a certain extent from color photographs of the same artifacts examined in Patterns, it was expected that turing the post-test project students would recognize the artifacts as coming from Jarmo and use the knowledge acquired about this comuunity in completing Part I of the test. One would anticipate that project group performance on this portion of the COIN instrument would be significantly better than the performance of control students, despite the fact that the other society represented in Part I would be equally as unknown to both groups of students.

The post-form of Part II of the COIN test includes two written incidents neither of which were studied in any way during the course of Patterns in the spring of 1970. Pre- and post-forms are not identical since the pre-form contained a written incident subsequently studied by project students during the course itself. This situation precluded the correlation of Part II with non-cognitive variables which would have paralleled procedures used with CRT test results (reported in the preceding chapter). However, it did provide

a means for comparing project and control performance with two sets of data (two stories in this case) not studied in class by either group. Thus, the comparison of results for Parts I and II of the COIN test can suggest the degree to which skill learning was bound to the specific content of the course.

DESIGN

Covariate analysis

The COIN instrument was administered during the second week of February 1970, and during the last week of May 1970 to a representative sample of project and control students. The sample was drawn from those "pool" classes for which scores on the Reading Section of the Comprehensive Test of Basic Skills, Form Q4, were available.[4] To minimize the possible effects of differences in initial capabilities on post-results, a covariate design of analyses of post-scores was employed in which both reading achievement scores and pre-COIN test-scores were covariates. The analysis was performed separately for Part I and Part II, and involved, in each case, a two-way design in which type of treatment (project and control) and reading achievement level were the investigated variables. In each case, the analysis was confined to those students for whom there were pre- and post-COIN scores for the part in question and a reading achievement score.

For these analyses, variance among four levels of reading achievement were examined, the levels corresponding in rough fashion to designations of "high" (level 1), "high average" (level 2), "low average" (level 3), and

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[4] See Part I, Chapter 2 for the procedures employed in the selection of project and control "pool" classes.

"below average" (level 4) with respect to national performance norms. The statistical analyses were performed at the University of California, Berkeley Computer Center with a program that equalizes cell sizes by random exclusion of subjects from over-represented cells.

Results of the analyses were examined for evidence of significant "main effects", and "complex" interaction effects, as well as "simple" treatment effects within each reading level.[5]

Intercorrelations

To investigate the potential influence of other known variables these procedures were followed:

(a) Intercorrelations between Part I COIN change scores and scores on non-cognitive instruments were computed for a representative sample of project classes, and statistical tests of the null hypothesis of "zero correlation" ($r = 0$) applied for all students in these classes for whom the data were available. The non-cognitive instruments were:

(1) The California Psychological Inventory (18 scales)

(2) The Gordon Values Survey, Personal (6 scales)
and Interpersonal Forms (6 scales)

(3) A socio-economic inventory adapted from North and Hatt[6]

(b) Intercorrelations between Part I COIN change scores, COIN pre-scores for Parts I and II, pre-scores on the CRT test (see Chapter 2),

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[5] See Marascuilo and Levin (op.cit.) for a discussion of the distinction between "complex" interaction effects referring to variance over all cells, and "simple" effects referring in this case to variance between treatments at each reading level.

[6] Hatt, P. K. and C. C. North, "Jobs and Occupations: A Popular Evaluation," Opinion News, September 1, 1947.

and reading achievement scores were computed for a representative sample of project and control classes and statistical tests of the null hypothesis of "no difference" between project and control correlations ($r_p - r_c = 0$) were applied.

Test differences

Of interest to the research staff was whether the two parts of the COIN test measure different capabilities, and whether the CRT and COIN instruments measure the same entities. Intercorrelation among pre-test scores for both formats and total for CRT and both parts of COIN were computed; as well as intercorrelations among change scores for both formats and total for CRT, and Part I of COIN. Statistical tests of the null hypothesis of "zero correlation" ($r = 0$) were applied.

RESULTS

Performance, Part I

The analysis of variance for project and control post-performances on Part I of COIN is summarized in Table 13-1. A significant F-value in favor of project treatment was obtained for treatment effects. F-values associated with the effect of reading levels, and complex interaction effects

Table 13-1

SUMMARY OF TWO-WAY ANALYSES OF COVARIANCE, POST-PERFORMANCE ON PART I OF COIN, PRE-SCORES AND READING ACHIEVEMENT SCORES AS COVARIATES

Source of variation	Degrees of freedom	Sums of squares	Mean squares	F-values
Between treatments	1	78.59	78.59	3.37*
Among reading levels	3	24.41	8.14	.35
Treatment x reading levels	3	100.84	33.61	1.44
Error	118	2751.69	23.32	

*Statistically significant at $p \geq .05$.

between treatments and reading levels were not significant. Separate computations for simple treatment effects within each reading level not included in Table 13-1 yielded no statistically significant values.

Performance, Part II

The analyses of variance for project and control post-performance in Part II of COIN is summarized in Table 13-2. A significant F-value in favor of project treatment was obtained for treatment effects. F-values associated with the effect of reading levels, and complex interaction effects between treatments and reading levels were not significant. Separate compilations for simple treatment effects within each reading level not included in Table 13-2 also yielded no significant values.

Table 13-2

SUMMARY OF TWO-WAY ANALYSIS OF COVARIANCE, POST-PERFORMANCE ON PART II OF COIN, PRE-SCORES AND READING ACHIEVEMENT SCORES AS COVARIATES

Source of variation	Degrees of freedom	Sums of squares	Mean squares	F-values
Between treatments	1	42.31	42.31	6.03*
Among reading levels	3	15.74	5.25	.75
Treatment x reading levels	3	15.79	5.26	.75
Error	70	491.28	7.02	

*Statistically significant at $p \geq .05$.

Non-cognitive variables

All intercorrelations among Part I change scores and scores on instruments designed to measure non-cognitive variables are given in Appendix G. Those for which the null hypotheses of "zero correlation" can be rejected at $p \geq .05$ appear in Table 13-3. The configuration of these significant

correlations is dissimilar for the two sexes and somewhat contradictory for the boys. Several of the CPI correlations for boys, according to the testing Manual for that instrument, are associated with the appearance of being "deliberate", "restrained", "calm", "steady"; others with being "informal", "quick", "clear-thinking", "enterprising", "energetic", and "productive". The two significant correlations with Gordon Personal Values scales are associated in the Gordon Testing Manual with valuing the full use of one's possessions, getting one's "money's worth"; and with <u>not</u> valuing a well-organized, systematic approach to work.

CPI correlations for girls are associated with such qualities as being "honest", "sincere", "conforming", "cautious", "self-denying", "dependable", and "anxious". The Gordon values scales for significant correlations are indicative of valuing recognition from others, and <u>not</u> valuing freedom to make one's own decisions or having authority over others. These characteristics appear to present a more consistent composite than those related to the significant correlations for boys. There is some similarity here to the composite for girls associated with change scores on the CRT instuument (see the preceding chapter). Nonetheless, the evidence is spotty and the correlations, though statistically significant, are low.

The difference in correlations with SES for males and females in Table 13-4 is noteworthy, especially since one is positive and one negative, and the difference between them is statistically significant. The possible interaction between sex and socio-economic status would appear to warrant further investigation in any future ACSP studies.

Table 13-4

STATISTICALLY SIGNIFICANT* CORRELATIONS BEWTEEN COIN PART I CHANGE SCORES AND SCORES FOR NON-COGNITIVE VARIABLES; 49 MALE AND 44 FEMALE ACSP STUDENTS

	SES Correlation	California Psychological Inventory		Gordon Survey	
				Personal values	Interpersonal values
		Scale	Correlation	Scale correlation	Scale correlation
Male*	.324	Social presence	-.235	Practical mindedness .219	
		Sense of well-being	.210	Orderliness-.220	
		Socialization	.311		
		Self-control	.231		
		Tolerance	.221		
Female**	-.246	Socialization	.256		Recognition .247
		Communality	.284		Independence-.219
		Achievement via independence	-.264		Leadership -.264

*Null hypothesis of "zero correlation" ($r = 0$) rejected at $p \geq .05$.

**The null hypothesis of "no difference" between correlations for male and female ($r_m - r_f = 0$) can be rejected at $p \geq .05$.

Initial capabilities

Correlations of CRT Part I change scores for experimental and control students with pre-CRT and COIN tests and reading achievement scores are given in Table 13-5.

Table 13-5

CORRELATIONS BETWEEN CHANGE SCORES ON COIN PART I AND PRE-TEST CAPABILITIES AS MEASURED BY CRT, COIN, AND READING ACHIEVEMENT, REPRESENTATIVE SAMPLES OF PROJECT AND CONTROL STUDENTS

Instrument	COIN Part I change scores		Difference
	Project sample (N = 110)	Control sample (N = 70)	
CRT pre-test			
Format I	-.08	.15	.25
Format II	.04	.25*	.21
Total	-.03	.23*	.26
COIN pre-test			
Part I	-.38*	-.60*	.22
Part II	-.01	.37*	.38*
Reading achievement	-.09	-.06	.03

*Statistically significant at $p \geq .05$.

The data in Table 13-5 suggest that post-test performance is affected by pre-test capabilities for students not taking the ACSP course; that is, the amount of change from pre- to post-test is positively related to initial CRT scores and COIN Part II scores, and negatively related to initial COIN Part I performance. In contrast, the correlations for project pupils are quite low and not significant except for the one between COIN Part I change

score and pre-score. The effect of the course appears to have been that of depressing or minimizing the influence of pre-course capabilities. This is especially apparent in regard to the correlation with initial COIN Part II performance where the difference between project and control values (.38) is statistically significant.

From the low correlations in Table 13-5, there would appear to be no relationship between change in COIN Part I performance and reading ability.

COIN versus CRT

Tables 13-6 and 13-7 present correlations between scores on the COIN and CRT instruments for a representative sample of project pupils. As explained earlier in this chapter the pre- and post-forms of Part I of the COIN test were identical, whereas considerable change was made in the post-form for Part II. Consequently, change scores (the difference between pre- and post-performance) were not computed for Part II and corresponding correlations with CRT change-results do not appear in Table 13-7.

It would appear from the the statistically significant correlations between pre-scores that the CRT and COIN instruments measure capabilities related to each other in some fashion; the low correlations for change-scores, however, indicate that, at least for Part I of COIN, the relationship is not one of causal interdependence since changes in performance on one test do not apparently produce corresponding performance changes on the other. On the basis of other data reported in this and the preceding chapter, the course has apparently had its greatest impact on the kinds of data-processing capabilities measured by the COIN instrument in contrast to the learning of abstract conceptual categories measured by the CRT instrument. It can reasonably be concluded from these considerations that increases in

Table 13-6

CORRELATIONS BETWEEN PRE-SCORES ON CRT AND COIN INSTRUMENTS FOR A REPRESENTATIVE SAMPLE OF 110 PROJECT PUPILS*

CRT scores	COIN scores	
	Part I	Part II
Format I	.58	.59
Format II	.47	.51
Total	.60	.69

*Null hypothesis of zero correlation ($r = 0$) rejected for all presented correlations at $p \geq .05$.

Table 13-7

CORRELATIONS BETWEEN CHANGE-SCORES ON CRT AND COIN INSTRUMENTS FOR A REPRESENTATIVE SAMPLE OF 110 PROJECT PUPILS*

CRT scores	COIN scores Part I
Format I	-.08
Format II	.04
Total	-.03

*Null hypothesis of zero correlation ($r = 0$) not rejected at $p \geq .05$ for any presented values.

course-related intellectual skills can occur without changes in the number of highly abstract course-related concepts possessed by pupils.

SUMMARY OF RESULTS

The various analyses carried out in relation to the COIN instrument show consistent evidence that ACSP course experiences resulted in significant changes in pupils' data-processing capabilities, specifically in their ability to draw inferences about societies from an examination of (a) drawings of prehistoric artifacts and (b) written anecdotes involving the violation of social role expectations; and in their ability to contrast the inferences derived. Portions of the data support the conclusion that these changes are not totally "course-specific" but transfer to the analysis of new data and previously unstudied societies. The extent of transfer to radically different contexts, however, was not investigated. Hopefully, further ACSP research will determine the degree to which skills developed by the experiences in Patterns can be applied by students in the analysis of such things as artifacts produced in industrialized societies, descriptions of social events in which role violations do not occur, and the directly observed behavior of groups in their own schools and neighborhood.

The impact of the course on data-processing skills does not appear to depend upon reading ability or pre-course intellectual capabilities as measured by the CRT and COIN instruments. In fact, the analyses of correlations of COIN scores with pre-data suggests that experiences in Patterns reduced the influence of initial skills on the ability to process social data of the type presented. The absence of interaction effects coupled with significant main treatment effects in the analyses of variance presented

in this chapter further supports the inference that student changes in analysis skills were not confined to the "more capable" students taking the course but were widespread with respect to pre-course abilities. This is an extremely important conclusion in light of the course designers' desires to produce a curriculum which could be used effectively with the majority of American high school students. With respect to these interests, the statistically significant difference in correlations between COIN change scores and SES index for males and females warrants further investigation to determine possible course effects arising from interactions among sex, socio-economic background, and course experiences. The different patterns of correlations of COIN results with non-cognitive variables for males and females, though rather "weak" when viewed in isolation, supports the advisability of further investigation of sex differences when seen along with the SES data.

Finally, the data from the COIN and CRT instruments suggest that significant improvement in data-processing skills of the type investigated can occur without corresponding widespread increases in the number of highly inclusive, course-related conceptual categories possessed by students. It would appear that extensive change in either area is neither a prerequisite for nor a necessary consequence of significant change in the other area. However, data from the analysis of CRT results, reported in the preceding chapter, suggest limitations to the interpretation of the apparent lack of relationship between data-processing skills and knowledge of highly inclusive conceptual categories. These limitations are discussed in the final chapter of this section of the report.

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Chapter 14

IDENTIFYING STATUS POSITIONS

One instructional objective for Topic Two, Part I of Patterns was examined in considerable depth. It is associated with a sequence of lessons which had not previously been field tested in classrooms. The sequence is designed to teach students the concept of "status" and how to identify statuses in social contests. Later in the course, for example, during the study of the Mbuti, of Sumer, and of Vicos, students are presented with a variety of contextual data and asked to identify the statuses in the society from which these data derive.

ANALYZING THE INSTRUCTION OBJECTIVE

Designing a procedure for investigating the learning objective in question was begun by breaking the process of status identification into a series of highly discrete steps a student would have to carry out in order to correctly identify all the statuses in Mbuti society from the various data supplied to students during Topic Three, Part I of Patterns. These efforts revealed the selected objective to be one for which the student must identify groups of people meeting highly abstract criteria: every group named must be one for which others in the society hold particular expectations regarding the actions of members of that group.

The many discrete steps presumably underlying successful completion of the task were seen to cluster into "chains" of capabilities. In order to correctly identify status positions the student apparently must be able to:

(1) Distinguish among distinct patterns of behavior and identify them with appropriate and distinctive labels; e.g., "stringing nets", "building huts", "gathering nuts".

(2) Judge whether instances of described behavior constitute evidence of "expectations" regarding someone else's actions; in other words, recognize both overt and covert sanctions in descriptive contexts.

(3) Distinguish among distinct groups and identify them with appropriate and distinctive labels; e.g., "men", "story-teller", "youths".

(4) Determine to which groups sets of expected behavior apply.

(5) Combine groups for whom identical expectations apply.

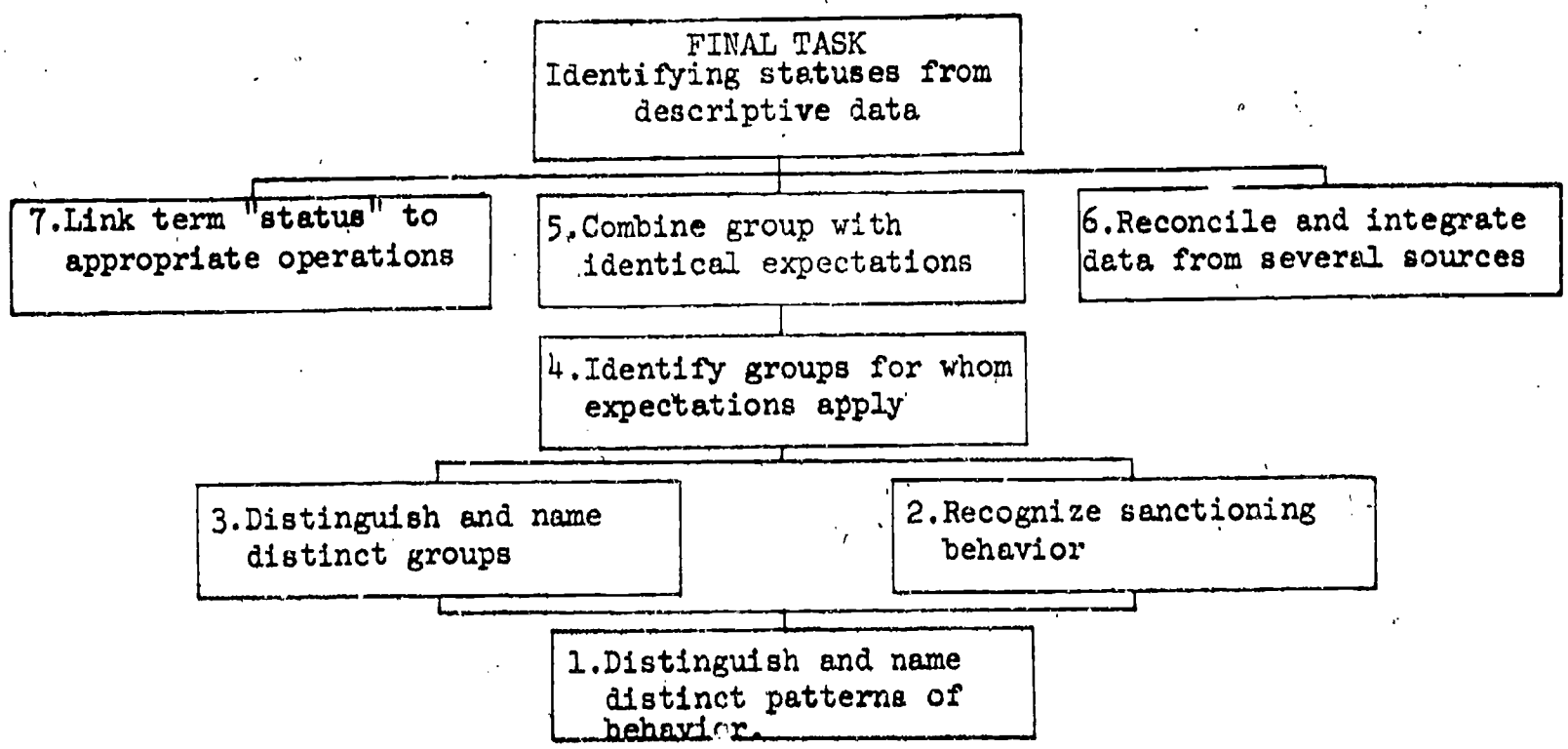
(6) Reconcile and integrate data from several sources.

(7) Link the term "status" to the appropriate operations.

Figure 14-1 represents the general relationships presumed to exist among the clusters. Each box in the figure represents one of the clusters.

Figure 14-1

PRESUMED RELATIONSHIPS AMONG CAPABILITY "CHAINS" REQUISITE TO IDENTIFYING STATUSES FROM DESCRIPTIVE DATA



In relation to Figure 14-1, it is presumed that the ability to carry out any "higher" cluster depends on prior acquisition of ability to perform all clusters below and connected to it. Thus successful performance of cluster 3 is presumed to depend on the ability to perform number 1; successful performance of 5 dependent on the ability to perform numbers 4, 3, 2, and so on. Though it is not apparent from Figure 14-1, each of the seven clusters represented has its own internal structure of "chained" sub-capabilities.

TEST CONSTRUCTION

The procedures indicated above follow these recommended by Gagné[1] and used in a series of recent studies on hierarchical learning. Following Gagné's general model, the impact of the course on the terminal objective (identifying statuses) and on underlying capabilities should be measured. Data thus produced gives not only a picture of whether or not the lesson sequence in question was successful in meeting its objectives, but also allows for a mapping of requisite capabilities for students with whom the lesson sequence was unsuccessful. These latter patterns can be effectively used in revising, extending, or elaborating the lesson sequence for subsequent use, for they define intellectual tasks unsuccessful students must be taught to perform before they can identify statuses.

An elaborate trial test was administered individually to twelve tenth-grade students at a high school not included in the basic ACSP-RP research plan. The test included separate items referring to the Final Task and clusters appearing in Figure 14-1, as well as to a number of sub-capabilities within clusters. The trial test was then revised into a pre-test for group administration.

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[1]Gagné, R. M., "Curriculum Research and the Promotion of Learning," Perspectives of Curriculum Evaluation (Chicago: Rand-McNally, 1967).

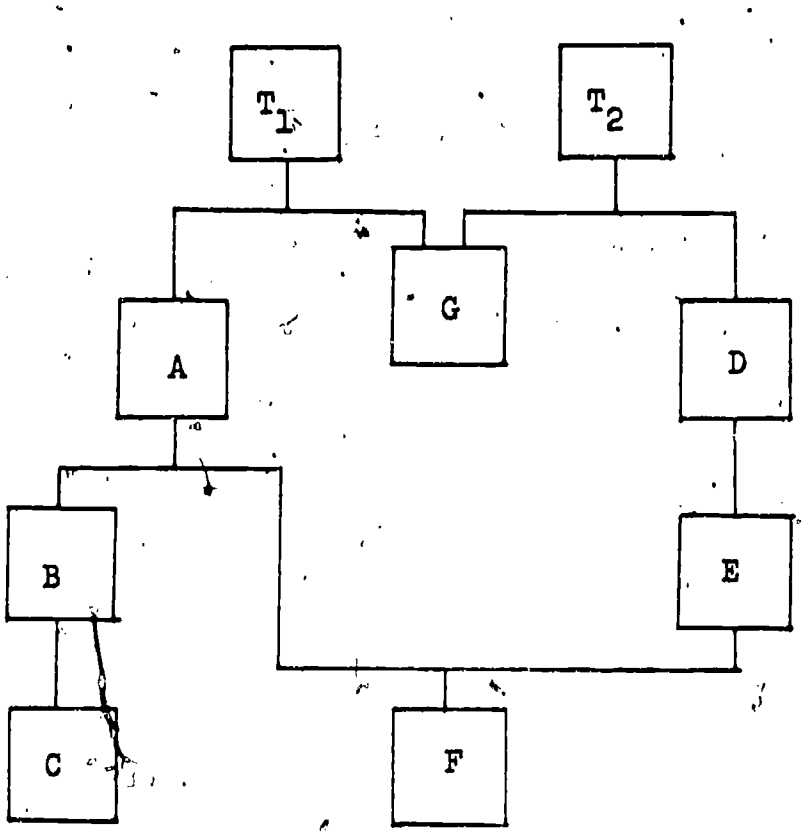
Various elements of the trial test were revised into a pre-test for group use. This pre-test was administered to randomly selected groups of both project and control classes in February 1970 just prior to the study of the topic of "status" by project classes. The pre-test proved to be confusing to many students and apparently intimidating to some who felt they were incapable of doing any segment of it successfully. According to many of the teachers, the wording of instructions, which posed no problem in the individual setting of the trial test, created considerable difficulty in the group setting, apparently suggesting erroneous answers and procedures in some cases. When scored, many items failed to detect any differences in performance for groups known to possess enormous variation in reading ability. The test was extensively revised and shortened for purposes of gathering data. The post-test form contained entirely new descriptive material and considerably altered instructions. In some cases, questions were completely eliminated and new ones added.

The Status Identification Test (SIT) post-form (Appendix E) presents pupils with three segments of descriptive material, each followed by a series of questions to be answered in sentences or phrases. The first two segments describe a "crime" committed in a Cheyenne hunting party; the third describes some of the participants in a tribal battle in central New Guinea. Test results were used to assess pupil's ability to perform nine separate tasks relating to the identification of status positions from the evidence in the descriptive segments.

Figure 14-2 is a schematic representation of presumed relationships among the nine tasks appearing in the final SIT instrument. In Figure 14-2,

Figure 14-2

SCHEMATIC REPRESENTATION OF TASKS IN SIT INSTRUMENT



the terminal objective of the lesson sequence under study is represented by boxes T_1 and T_2. Two test tasks were needed for this objective--one for situations in which the presented written anecdote contained evidence of negative sanctions being applied against a person or persons in the story and one for anecdotes in which no negative sanctions a dent. This difference in presented materials accounts for the two "chains" of underlying tasks in Figur 14-2--chain ABCFG and chain DEFG. In essence, in order to do Task T_1 successfully, it was presumed that the student must have previously learned to do Tasks A, B, C, F, and G; in order to do T_2 successfully it was presumed the student must have previously learned to do Tasks D, E, F, and G.

CRITERION MEASURES

A student's performance for each task on the SIT instrument was scored as either "pass" or "not pass" depending on whether it met certain specified written criteria. A description of each task together with the criteria for scoring appears in Appendix F. All tests were marked independently by two scorers in accord with the criteria. Any differences were resolved through subsequent discussion between the scorers.

Total scores were not computed by summing the number of "pass" responses. In fact, total scores, as well as all other kinds of analogous measures for "over-all" performance, were <u>not</u> computed! Such measures are antithetical to the nature of the analysis strategy employed. The concern here is with <u>patterns</u> of "pass" and "not pass" performances; that is, configurations of which items were successfully carried out and which were not.

PROJECT AND CONTROL SAMPLES

From "pools" of classes taking the ACSP course and classes at the same schools taking other tenth-grade world history offerings, random structured samples of eighty-two project and eighty-two control students were selected for inclusion in this portion of the ACSP-RP. Table 14-3 summarizes various information regarding these samples.

Table 14-3

COMPARISON OF INFORMATION, PROJECT AND CONTROL GROUPS USED IN ANALYSIS OF SIT

Group	No. of teachers	No. of schools	No. of pupils Sunnydale	Castlemont	Total	Mean raw reading score*
Project	6	4	42	40	82	53.91
Control	6	4	38	44	82	54.27

*Difference not statistically significant at $p \geq .05$.

STATISTICAL ANALYSIS

For each task in the SIT instrument, the ratio of "pass" answers to number of subjects was computed separately for project and control groups. Pearson's Chi-square (χ_2) test for statistical significance was applied to the distributions of "pass" and "not pass" responses involved and the resultant statistic was used as an indicator of the significance of the difference between ratios.

The mean number of statuses identified in response to the SIT item requiring such identification was compared for project and control classes through the use of one-way analysis of variance.

Performance between project and control groups was compared by noting

the configuration of statistically significant and non-significant differences in performance for each test task and for total number of statuses identified in response to the SIT item calling for such identifications. Pattern differences were interpreted as evidence of course effects. Specific recommendations for lesson revisions are made in relation to these interpreted effects.

Results

Table 14-4 presents the results for the nine tasks specifically represented in the SIT instrument. Values for project and control groups are the percentages for any task, where these occur, represent significant "pass," "no pass" distributions for project and control groups.

Table 14-5 presents the mean number of statuses named by project and control groups on the SIT item calling for such identification, the difference, and the associated F-value resulting from the conducted analysis of variance.

Table 14-4 Comparison of Performance for Project and Control Groups on SIT Tasks

Task	Percentage of "Pass" Responses		Difference Between Project and Control (P - C)
	Project Students (N = 82)	Control Students (N - 82)	
T1	57	52	5
A	45	27	18*
B	94	83	11*
C	71	51	20*
G	85	77	8
T_2	14	11	3
D	34	26	8
E	28	14	14*
F	38	32	6

* Statistically significant at P > .05

Table 14-5 Number of Status Named
in Response to Appropriate SIT Item

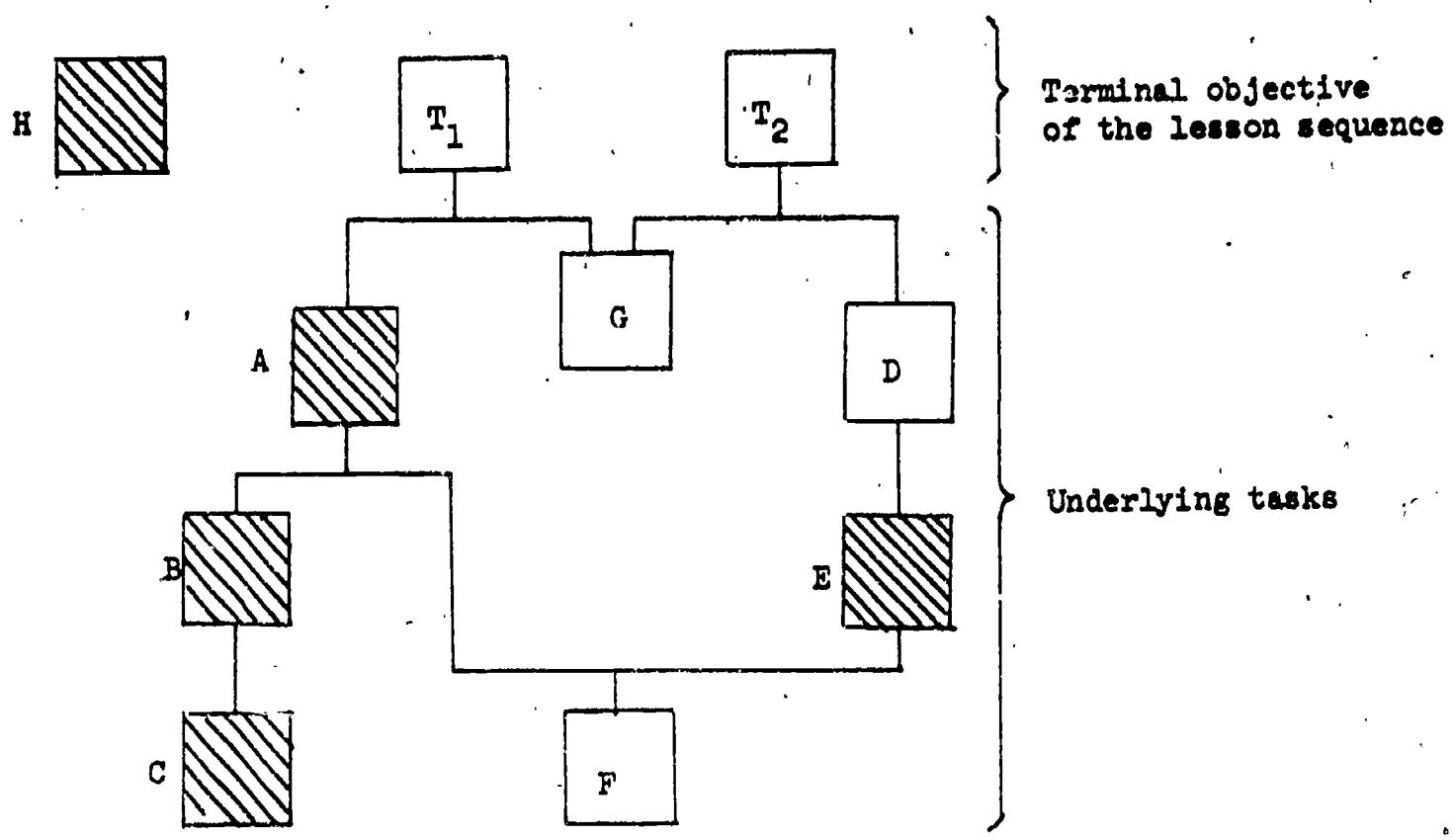
Group	Mean	Difference Between Means	Associated F - Value
Project Students (N = 82)	3.66	.91	18.82 *
Control Students (N - 82)	2.75		

* Statistically significant at p>.05

Figure 14-5 schematically presents significant and non-significant differences between project and control groups for each SIT task as these were presumed to relate to each other. Task H has been included in the figure. It represents the comparison of mean number of statuses named for the SIT item calling for such identification.

Figure 14-6

SIGNIFICANT AND NON-SIGNIFICANT DIFFERENCES IN PERFORMANCE BETWEEN PROJECT AND CONTROL GROUPS FOR SIT TASKS



■ = difference between project and control group statistically significant at p>.05.

□ = difference between project and control group not statistically significant at p > .05.

Discussion of Results

Results given in Figures 4, 5, and 6 suggest the following interpretations:

a. Task T_2 would appear to be particularly difficult since only 14 and 11 percent of project and control groups, respectively, performed it successfully (see Figure 4). T_2 requires students to identify statuses from a context in which no evidence of overt sanctioning appears. This may present a special problem with the task at hand, possibly because it creates the need for determining peoples' expectations for the behavior of others when no active evidence of expectation is indicated. The absence of significant difference between project and control performance for task T_2 suggests that the lesson sequence in question does not provide assistance in overcoming this particular difficulty.

b. The high performance percentages for Task C for both project and control classes (see Figure 4) suggests that it is a relatively easy task. To be sure, it is one which requires the student to link the term "status" to all the groups his is identifying -- whether or not his process of identification is valid.

c. The absence of significant performance differences for item T_1 and T_2 indicates that the lesson sequence was not successful in accomplishing the objectives of the designers (see Figure 6). T_1 and T_2, it will be recalled, represent the terminal objectives of the sequence under study.

d. Though the project group did not perform significantly better with terminal objective T_1, it did so with three of the tasks

(A, B, and C) presumed to underly successful attainment of T_1.

The significantly better performance by the project group on Tasks A, B, and C suggest an explanation for the lack of success of the lesson sequence: though many project students may have learned to perform tasks underlying T_1, they may not have been employing these sub-tasks in carrying out the terminal task (T_1). In other words, though they could do the right steps in isolation, they were using other procedures to carry out the terminal task. This interpretation explains an apparent contradiction -- though the project group did not perform any better than the control group on Task T_1, it was able to identify a significantly greater number of social positions than the control group (box H in Figure 6). In short, many project students appeared to have used a "short-cut" method of identifying social positions which actually by-passed some of the process of anecdote analysis desired by the curriculum designers.

Instead of equating "status" with "expected behavior" many students may have linked it to something like "job" or "doing something not done by other," and then searched the narrative data primarily for evidence of distinctive patterns of behavior, such as "hunting," "cooking," "stringing nets," "leading," "scouting" and so on. The conceptual linkage "status -- expected behavior," in contrast, would lead to a search for evidence of sanctions in the passage -- the actions of "others" in the narrative in response to the actions of the "actors" in the narrative. If this inference is valid, one would expect the underlying incomplete strategy to be reflected in a large

proportion of incorrect student responses to the test tasks requiring a demonstration of the criteria used to identify statuses or the criteria used in identifying groups expected to act in particular ways. These are tasks T_1, A, T_2, and D. For instance, in responding to Task B, many students named "women" as a group expected to act in a particular way but substantiated this choice by simply describing what women do; e. g., "The women skinned the animals." Similarly, for Task T_2, more than half of the project students named "warrior" or "Kain" as a status but most merely described a characteristic behavior of warriors or of "Kains" to substantiate the claim that they had indeed named a status: "They act brave." "Warriors do the fighting," etc. In Task D, students are not asked to name a group; instead they are given the name of a group ("kepu" men) and required to demonstrate whether or not the group meets the criteria for classification as a status. The most frequent answer given by both project and control students describes the unique behavior of "kepu" men without any reference to the fact that others in the society expect these men to act in these ways.

e. Inspection of the performance comparison pattern for the task series presumed to underly T_2 (Tasks D, E, F, and G) contributed additional evidence to the interpretations given above and led to similar recommendations. Note that the project group performed significantly better than the control group on Task E but not on Task D (see Figure 6). In this case, Task E involved demonstrating that some given group in an anecdote (e.g., men, children) was expected to act in a particular

way even though no overt sanctions (rewards or punishments) were evident in the anecdote. Task D is identical to E with one important exception: in D, the student must identify a group for whom expectations exist, whereas in E, the student is given the name of a group by the test item. Once again, students knowing how to carry out a sub-task (E) may not have employed that procedure in carrying out a more complex task (D).

Recommendations[1]

The following recommendations are given in light of the above interpretations:

1. The lesson sequence in question should be revised so that the desired process of data analysis is modeled for students *in toto* subsequent to the modeling of sub-processes. It follows that the desired process be modeled in the Teaching Plan for the teacher.

2. In the revised sequence, students should a) be given opportunity to practice the terminal task (represented by T_1 and T_2) *in toto* and b) be provided with immediate feedback regarding whether or not they have used the desired sequence of steps.

3. The revised lessons should include explicit reference to social situations in which no overt sanctioning behavior occurs and explicit instruction regarding how to identify status positions without this kind of evidence. The revision should be designed to teach students to use the absence of overt sanctioning behavior as evidence in itself for hypothesizing that behavioral expectations are in fact being carried out.

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[1]It should be noted that Recommendations were incorporated in the printed version of *Patterns* within the boundaries of the material already there.

4. Assistance to students in recognizing the evidence potential of the absence of overt sanctions might be gained from their learning, through suitable example, the principle that humans have a crucial need to predict the reactions of others toward themselves. This is a statement, on the individual level, of the principle that societies operate by rules. It explains interpersonal relationships and behavior in social settings partly in terms of covert dynamics that operate even when there appears to be no covert action.

5. The revision should include student practice in distinguishing among such conceptual categories as a) sanction, b) expectation, c) job, d) distinctive pattern of behavior (behavior characteristic of one group which is not engaged in by other groups, e) expected behavior. Such practice will facilitate extension of student processing activities in identifying statuses to a determining of patterns of <u>expected</u> behavior.

Chapter 15

IMPLICATIONS AND RECOMMENDATIONS

The ACSP cognitive research associated with the Spring 1970 implementation of Patterns in Human History investigated the impact of the course on student learning of highly abstract and inclusive anthropological concepts, their skill in analyzing and drawing inferences from selected types of social data, and their ability to identify social positions from anecdotal materials. Three tests were developed to measure student progress, one for each of these areas of learning. In general, the research strategy adopted was that of comparing the post-performance of representative samples of project and control students, using a variety of statistical designs to control for the potential influence of initial differences in capabilities.

What patterns can be observed among the data from the three tests? What interpretations of these patterns are warranted, and what implications can be drawn for future revision or extension of the course and its accompanying Teaching Plan? The function of this chapter is to answer these questions.

Before proceeding to a summary of the findings reported in earlier chapters and an exploration of implications, several comments should be made to define the framework within which all the data must be considered. To begin with, it should be kept in mind that the version of Patterns used in Castlemont and Sunnydale during the period of research was a "pre-publication" version. One section, Part I Topic 2, "How Human Societies Operate: the Significance of Status and Role," had not been used

previously, and various other portions were being used in sequence in a full semester course for the first time. Subsequent changes in materials, the order of particular lessons within sub-topics, terminology, direction, and suggestions in the Teaching Plan, have been consistent with the several recommendations of this report. These alterations in the published version of Patterns have, of course, contributed to the constancy of its distinctive features. Thus, the research was conducted with a product that has, subsequently, undergone revision; the facilitating effects of such revision on student learning cannot be derived from present data. It is tempting to speculate that since course changes have been consistent with the recommendations resulting from the research, the findings reported here would have been even more dramatic had the published version of the course been used during the research period.

One must keep in mind that the sixteen teachers included in ACSP-RP had not been trained to teach Patterns. (This is, of course, consistent with ACSP strategy that teachers will master the course through careful use of the Teaching Plan.) Furthermore, their previous contact with anthropology was, typically, quite varied; in most cases, it had been minimal or virtually non-existent. Contacts between teachers and the research staff were used mainly for administrative purposes and for the collection of data and cannot, in any sense, be considered to have constituted a training program. Information from teacher logs, comments made during meetings, and direct classroom observation of lessons, made it apparent that Patterns was not being taught in the same fashion by each of the sixteen teachers. There appeared to be considerable variation in the manner in which

recommendations in the Teaching Plan were carried out, the number of lessons omitted, the order in which activities occurred and the kind and number of additional elaborative activities planned by the teachers. Most of this information was of an exploratory nature so no attempt has been made to present it in this report. Nonetheless, it is important to bear in mind that great variation appeared to exist and that the research staff did not try to alter the extent and character of these differences. Since the general strategy of the conducted research resulted in samples of project students instructed by several, in some cases all project teachers, the reported effects cannot be said to be the result of exposure to any particular teaching style. It is, again, tempting to speculate on the potential impact of the course if taught only by teachers with styles highly consistent with the teaching roles reflected in the recommendations of the Teaching Plan.

One additional observation, not mentioned in any previous chapter, must be added to the framework for the interpretation of data: none of the ACSP-RP classes completed the whole course in the school semester during which research was conducted. All ACSP-RP classes from which performance data were used did, however, study all four major parts of the course to some degree. To make this possible, project teachers omitted the teaching of various topics in accord with recommendations for exclusion made by the research staff as the semester progressed. Though there were individual variations, the most prevalent pattern consisted of considerable concentration and thoroughness on Part I, selected omissions during the central portions of Parts II and III,

and confining Part IV to the study of the Hacienda Vicos. The possibility of having to make these alterations was anticipated by the research staff prior to the beginning of the semester and the three test instruments developed for the investigation of cognitive effects were related to the portions of the course which were accurately predicted to be among those studied in some sense by all project classes. What is not known, however, is the degree to which the length of the course and the volume of topics included influenced the manner in which teachers implemented the recommendations in the Teaching Plan. It is conceivable that the charge to teach only two or at most three of the four major parts in one semester might have resulted in altered planning and sequencing activities on the part of project teachers. Recommendations regarding course length appear later in this chapter.

SUMMARY OF FINDINGS

Data from the various sub-studies reported in the preceding chapters warrant these general conclusions:

(1) With respect to the most inclusive and abstract conceptual categories appearing in Patterns, course experiences during the spring of 1970 significantly affected the learning of some of the components of these concepts but did not significantly affect the learning of the combinations of conceptual attributes which adequately define the categories in question.

(2) With respect to the social data-processing capabilities associated with Patterns, course experiences during the spring of 1970 significantly increased student ability to draw inferences about societies from prehistoric artifacts and from written anecdotes and to contrast the inferences derived.

(3) There is no evidence that course influence on the learning of processing skills and highly abstract concepts was affected by reading achievement; course effects, where observed, were not confined to any particular level of reading ability. This does not mean that the performance of students with reading difficulties matched the performance of average or better readers; it does mean that change in performance was not related to reading achievement --that students with reading difficulties made as much pre-to-post progress as students with average or better reading capabilities.

(4) There is no evidence that the impact of the course on the learning of highly abstract concepts is affected by initial capabilities as measured by the CRT and COIN instruments; there is, however, some data to suggest that course experiences depress or minimize the influence of initial capabilities on the learning of the data-processing skills measured by the CRT test.

(5) There is some evidence of interactive effects on student learning among sex, non-cognitive variables, and course experiences--particularly with respect to the skills associated with the COIN test. Some trends in the data suggest that passivity in appearance, low self-esteem, valuing of conformity, and low socio-economic status were related to the progress made by girls. The evidence, however, is sporadic, and any relationships which do in fact exist would appear to be quite weak.

(6) With respect to the ability to identify social positions from anecdotal materials, Spring 1970 course experiences had significant

positive effects on student ability to isolate and name such positions but appear to have promoted incomplete data-processing procedures that by-pass the relationship of role-expectations to social positions and omit the use of overt and covert sanctioning behavior in the presented materials.

(7) Extremely low correlations between changes in performance on the CRT and COIN instruments suggest that significant improvement in processing skills associated with the course does not depend on extensive learning of the most abstract concepts of the course as a pre-condition; nor is extensive change in the latter area a necessary consequence of significant change in the former area.

Implications and recommendations with respect to these findings are discussed below.

INCLUSIVE CONCEPTS

All of the concepts pertaining to Patterns can be visualized as constituting a complex and extensive "filing" system in which less inclusive concepts are "nested" within increasingly more abstract and more inclusive representations of reality. In order to correctly classify any described phenomenon one must be able to identify its characteristics and compare them with the attributes which define sub-divisions within the "filing" system. For instance, if one is told that Mbuti pygmies value cooperation in hunting and punish individuals who engage in certain types of individual hunting acts, the conclusion can be drawn that this phenomenon is an "adaptation" by comparing the characteristics of the presented information to the defining

attributes of the category "adaptation". If there is a "match", a correspondence between the phenomenon and the distinctive elements of the conceptual category, then one can conclude "Yes, this is an example of (in this case) 'adaptation'." If there is no correspondence, then one concludes that the described phenomenon is not an example of such-and-such a category--i.e., it cannot be properly classified into that sub-division of the "filing" system.

As one proceeds from less abstract to more inclusive categories the problem of classifying any presented or described phenomenon becomes more complex since one must consider more characteristics in making a decision. One can, for instance, classify as "punishment" or "negative sanction" the ridiculing and ostracizing behavior of some Mbuti men and women toward a member of their group who has set up his hunting net in front of the community nets by noting whether the behavior is unpleasant or potentially unpleasant for the recipient. Classifying the sanctioning behavior as samples of "adaptation", however, entail the application of <u>further</u> criteria. These might include, in addition to recognition (classification) of the behavior as "punishment", examination of whether the sanctioned act or acts, <u>if eliminated</u>, would assist the group in satisfying their needs within their particular environment. Similar comparisons can be made of the complexity of thought involved in the classification of other phenomena presented in the course into comparatively "lower" order (less abstract, less inclusive) and "higher" order (more abstract, more inclusive) conceptual categories.

The analyses of data for the Concept Recognition Test (CRT), particularly the difference in results for Format I and Format II items, suggest that

project pupils made significant gains in the number of conceptual categories into which they could classify phenomena, but did not, in contrast to control pupils, learn a significant number of the combinations of attributes which define the most abstract concepts associated with the course. Increasing the impact of the course at this latter level of abstraction would appear, from the work of Ausubel[1] and others, to depend on the employment of methods which will further increase the stability and organization of the internal structure of a student's knowledge. That is to say, the student must be further assisted to develop a well-organized "filing" system in which conceptual categories are appropriately "nested" and their boundaries clearly delineated. The following measures are recommended:

(a) The designing of a number of lessons and portions of lessons for each of the major parts of the course whose sole function would be that of assisting students to "locate" new knowledge in relation to the structure of what they have previously learned. From the published research in this area, these lessons would appear to be facilitating if prior to the introduction of new material they relate knowledge-to-be-learned to what pupils already know, and if they progressively identify the distinctive features of the new knowledge. Since the function of these lessons and lesson segments would not be to guide students in the discovery of additional knowledge or the solving of novel problems, but rather to improve the organizational structure of what students know, it is quite conceivable that they would depart considerably in format from the

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[1] Ausubel, D. P., Educational Psychology: A Cognitive View, New York: Holt, Rinehart, & Winston, 1968.

type of lesson most characteristic of the Teaching Plan.[2]

(b) Provision be made to increase the amount of specific practice pupils have in multiple classification of varied phenomena into "higher" order categories, coupled with direct assistance regarding how to establish correspondence between the characteristics of a presented or described phenomenon and the defining attributes of highly abstract concepts.

(c) The development of visual representations of the relationships among various "higher" and "lower" order concepts learned at different times during the course. Such representations, in the form, for instance, of flow charts or "Venn" diagrams, might be extremely useful to both pupils and teachers in conceptualizing complex relationships. It is recommended that several types of representations (e.g., two- and three-dimensional, containing fixed or moveable components) be created and the efficacy of their use and placement within topics investigated.

(d) Whenever additional, more complex abstract concepts appear, their relationship to the earlier concept should be made clear. The course can then be viewed in part as the accumulation by students of samples and examples fitting into the labeled categories involving progressively broader and more varied aspects of social behavior and increasing precision in mapping the boundaries among concepts.

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[2]Because of timing, the ACSP curriculum development staff and the ACSP-RP staff have never discussed these recommendations. This is unfortunate because of an apparent but not inevitable difference between them regarding strategy. The ACSP staff might say that the ACSP-RP staff are preoccupied with conceptual neatness and logic. The researchers might say that the developers are preoccupied with spontaneity and serendipity. Who knows? Only the discussion would provide the answer. M.C.

(e) An essential characteristic of the course is that the students do the processing. This takes time and because it is absolutely essential to the success of their experience with the course, time must be allowed for this to take place. A series of guidelines should be developed to assist schools and teachers in making decisions concerning how many and which of the course parts can be planned for one-semester use in various settings. Some schools might even be encouraged to use the full course over a complete school year This would be particularly important if additional activities to assist in the development of a stable internal knowledge structure will make it difficult to teach the whole course in one semester.

PROCESSING SKILLS

Data warranting the conclusion that project pupils made significant improvement in their ability to process various kinds of social data appear at first glance to support several major assumptions made by the curriculum designers and to demonstrate the conformity of Patterns to the implications of these assumptions. Distinctive features of Patterns as a curriculum plan appear in the recommendations for classroom activities contained in the Teaching Plan and in the student and teacher roles implied by the type of lesson which predominates practically all sub-sections of the course. It typically begins with the presentation of new data to students in the form of some description or representation of a social phenomenon. Students are then asked to make warranted inferences about the society from which the data have come and to compare and contrast these with the previously inferred attributes of other societies. The students' role is one of "data-processor": they must observe, summarize, and pattern the presented data; they must recall and apply previously learned principles to make inferences about the society

in question, and must resolve or attempt to resolve alternate interpretations through further examination and patterning of the available evidence; finally, they must compare and contrast the inferred attributes of two or more societies with respect to significant dimensions of social life. The teacher's role is that of "guider": he is to assist students in developing strategies for analyzing data; he will do such things as frame questions to initiate and focus classroom inquiry, suggest alternative routes for investigation, and prompt students to recall and apply previously learned knowledge and skills.

The theoretical framework for instructional design revealed in the distinctive character of recommended lessons and roles--a framework supported by a considerable quantity of recent research--is based on the assumptions that (a) the extent of learning in any given situation depends to a considerable degree on the intellectual activity of the learner in the situation and (b) the intellectual behaviors carried out by students in class depend to a considerable extent on the interactive behavior of the teacher. Thus, the instructional strategy built into the plan for using Patterns proceeds from the propositions that students learn to process social data by engaging in guided practice in "operating" upon data and that the teacher's role in the classroom is instrumental to students' developing appropriate analysis skills.

Unfortunately, the data from the COIN test do not by themselves contain direct confirmation of the appropriateness of the instructional strategy exemplified by the general plan for Patterns. What can be concluded, with high security, is that project students made significant improvement in

processing skills as a result of their course experiences. Whether or not these gains were due to the specific dynamics underlying the design of the curriculum must remain an unanswered question until subsequent empirical research confirms the hypothesized relationship among teaching styles (roles), student roles, and learning outcomes. Such research must monitor and categorize teacher and pupil activities as these are actually carried out during the course and then compare resulting pupil-teacher patterns to learning outcomes.

What alternative explanation can account for the significantly better performance by project than control students on both parts of the COIN instrument? It can be argued that increased familiarity with the subject matter and the learning of a number of new concepts, reflected in the significant results for project students with Format II items in the CRT instrument (see Chapter 12) constitute sufficient factors to have caused significant growth in processing skills. The validity of this assertion can be challenged by two other pieces of evidence from the present research. First, computed correlations of CRT change scores (both for Format I and II items) with COIN change scores, where available, are not significant and are extraordinarily small (see Chapter 14, Figure 4-6). Second, both parts of the COIN instrument present data which were not examined in ACSP classes, and to the extent that they depart from the conditions within which learning may have occurred during the course they constitute evidence of the transfer of skills by project pupils to novel situations. This is particularly the case with Part II of COIN since neither of the two anecdotes used in the post-form were examined during the semester in any project or non-project classes.

Of course, one must be careful to avoid concluding that the skills involved can transfer to the analysis of types of data other than those used in the COIN instrument, or that students will use the skills in giving meaning to their experiences when outside of the school setting. Further research is needed to establish the extent of transfer.

Though the results of the present research cannot be used to confirm the validity of the instructional strategy presented in the Teaching Plan for Patterns, the findings here are consistent with the framework of conceptual dynamics employed by the course designers. The major recommendation, therefore, is that the pupil and teacher roles represented in the Plan and exemplified in its recommendations for the enactment of classroom lessons be retained. It is further recommended that the presentation of desired roles and lesson patterns be extended by the inclusion of "model" classroom dialogues either in the Plan or as additional material for teacher examination. These materials should include samples of appropriate and inappropriate lesson patterns.[1] The development of a system for self-appraisal by teachers in improving pupil data processing behavior, an effort begun earlier by several ACSP-RP staff members, should be continued. Such a system, using taped classroom episodes, can be instrumental in developing teacher skill in analyzing their own roles in the promotion of learning.

INITIAL CAPABILITIES

The complete absence of any evidence to indicate that the cognitive impact of Patterns depends upon reading ability is an extremely important finding. It strongly supports concluding that the effects of the course were not due primarily to the written materials included for student use

[1] Such materials have been prepared and will be published by ACSP.

but to the activities carried out and the experiences engaged in during the semester. It lends further support to the recommendations immediately abo e concerning instructional strategy.

These remarks should not be misinterpreted as an invitation for teachers to ignore the effects of reading ability on performance as such. Relatively high correlations between reading achievement test scores and pre-scores on the CRT and COIN instruments are indidative of a close relationship between language capabilities and performance on course-related tasks. Students with reading difficulties can be expected to have problems with Patterns but as the present research amply demonstrates, can make as much progress as those with stronger reading capabilities--given the appropriate experience, activities, and guidance.

All of the comments referring to reading achievement also apply to pre-course capabilities as measured by the CRT and COIN instruments. The intercorrelations among pre-scores for CRT and COIN are positive, relatively high, and statistically significant--indicative of close relationships among the capabilities measured, and constituting a caution to teachers that students with a small stock of concepts and low initial analytical skills can be expected to exhibit difficulty with course tasks. Correlations between pre- and change-scores, however, indicate that the amount of growth (pre-to-post) due to the course is not dependent upon initial capabilities. There is, in fact, some indication that course experiences depress the influence of entry abilities on the kind of processing skills measured by COIN.

NON-COGNITIVE VARIABLES

The possibility of differential interactions among personality variables, socio-economic background, and course experiences for girls in contrast to

boys needs further examination. The data from the present studies relative to this question are not consistent enough to justify any other implications or recommendations.

The absence of any strong and repeated patterns of performance as related to non-cognitive variables is in itself an interesting finding. It supports concluding that the course can promote significant cognitive growth in the areas measured for students exhibiting a wide range of personality characteristics, value orientations, and socio-economic backgrounds. Examination of the Teaching Plan and written and other materials for student use, as well as the recommended roles for students, might lead one to predict that the course would be most successful with intellectually aggressive pupils who value non-conformity and the challenge of new problems, who are willing to take chances and assume a leadership role in classroom discussions. Course success, as measured by change in performance, appears to be unrelated to any of these characteristics (though their influence on performance as such might be considerable--relationships not investigated in the present studies). In fact, the weak pattern observed for girls, if anything, presents an almost opposite composite of the attributes of the successful (as measured by pre-post change) female participant.

The findings here regarding reading achievement, pre-course capabilities, personality variables, value orientations, and SES (as measured by the instruments used) should be heartening to the designers of Patterns since their stated objective has been to produce a course which could be used effectively with the majority of public school students.

IDENTIFYING STATUS POSITIONS

Recommendations in this area pertain to methods for extending student analysis of anecdotal material to a search for evidence of covert as well as overt sanctions and a linking of the label "social position" to patterns of expected behavior. Data from the present investigation show that project students tend to apply less complex criteria in identifying "statuses" or "social positions" from descriptive contexts, and that these criteria are identical to the ones employed by control students who presumably receive relevant instruction only from the directions of the SIT test.

The most frequently used criteria pertained to whether an isolated group performed some common or unique function or "job," behaved in a common fashion in the described incident, or possessed some special privilege or prestige. The use of these criteria will in many cases result in the identification of the same "positions" that the more complete processing techniques implied by the Teaching Plan will yield. These are "shortcuts," however, that do not work in many cases, and, more importantly, bypass the whole social interaction component of social structure and do little in assisting students to develop a dynamic framework with which to interpret interpersonal behavior.

In order to shift student criteria in the desired direction these measures are recommended:[1]

(a) The examination of an incident in which the absence of overt sanctions can be readily understood as evidence that expected behaviors are being carried out.

(b) The modeling, for teachers in the Plan, and for students during instruction of all the steps to be applied while identifying a "status" from anecdotal material.

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[1] As noted on p. 269, the printed version of Patterns incorporated these recommendations.

(c) Provision for students to learn how internal expectations for the behavior of "others" are of assistance to individuals in predicting how others will act and in maintaining "psychic balance".

RELATIONSHIP OF ABSTRACT CONCEPTS AND SKILL

Low correlations between CRT and COIN change-scores make it difficult to argue that there are causal relationships existing between the two types of capabilities measured by each instrument. The implication is that, since it does not follow automatically that increase in data-processing skills lead to increases in the number of highly inclusive concepts learned by students and vice-versa, separate and different provisions must be made within the course for adequate learning to occur in both areas. Recommendations regarding these provisions have been made earlier in this chapter.

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APPENDIXES

Appendix A Coding Manual

Appendix B Seating Arrangements

Appendix C Concept Recognition Test (CRT)

Appendix D Contrasting-Inferencing Test (COIN)

Appendix E Identifying Status Positions (SIT)

Appendix F Description of Tasks Included in SIT

Appendix G Correlations of Cognitive Tests Change Scores with Non-Cognitive Variables

SEP 1

APPENDIX A

ANTHROPOLOGY CURRICULUM STUDY PROJECT - RESEARCH PROGRAM

Coding Manual

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September 1970

INTRODUCTION

The primary purpose of the coding system explained in this manual is to provide for the systematic storage and retrieval of data collected in the field. The research project necessitates the collection of data pertaining to specific social phenomena. Categories of phenomena to be investigated have been grouped under various subject headings. Each subject corresponds to one or more of the blocks of numbers arranged around the periphery of the punch cards utilized in this system. All data pertaining to the phenomena researched are to be copied onto the punch cards. By punching a number or combination of numbers on the cards, all data can be coded into categories under specific subjects for storage purposes and retrieved at a later date for analysis. Since successful use of this system depends largely upon a thorough understanding of the coding procedures and coding categories, it is most important that all coding instructions be read carefully and that the defining attributes of each coding category be clearly understood.

USE OF PUNCH CARDS

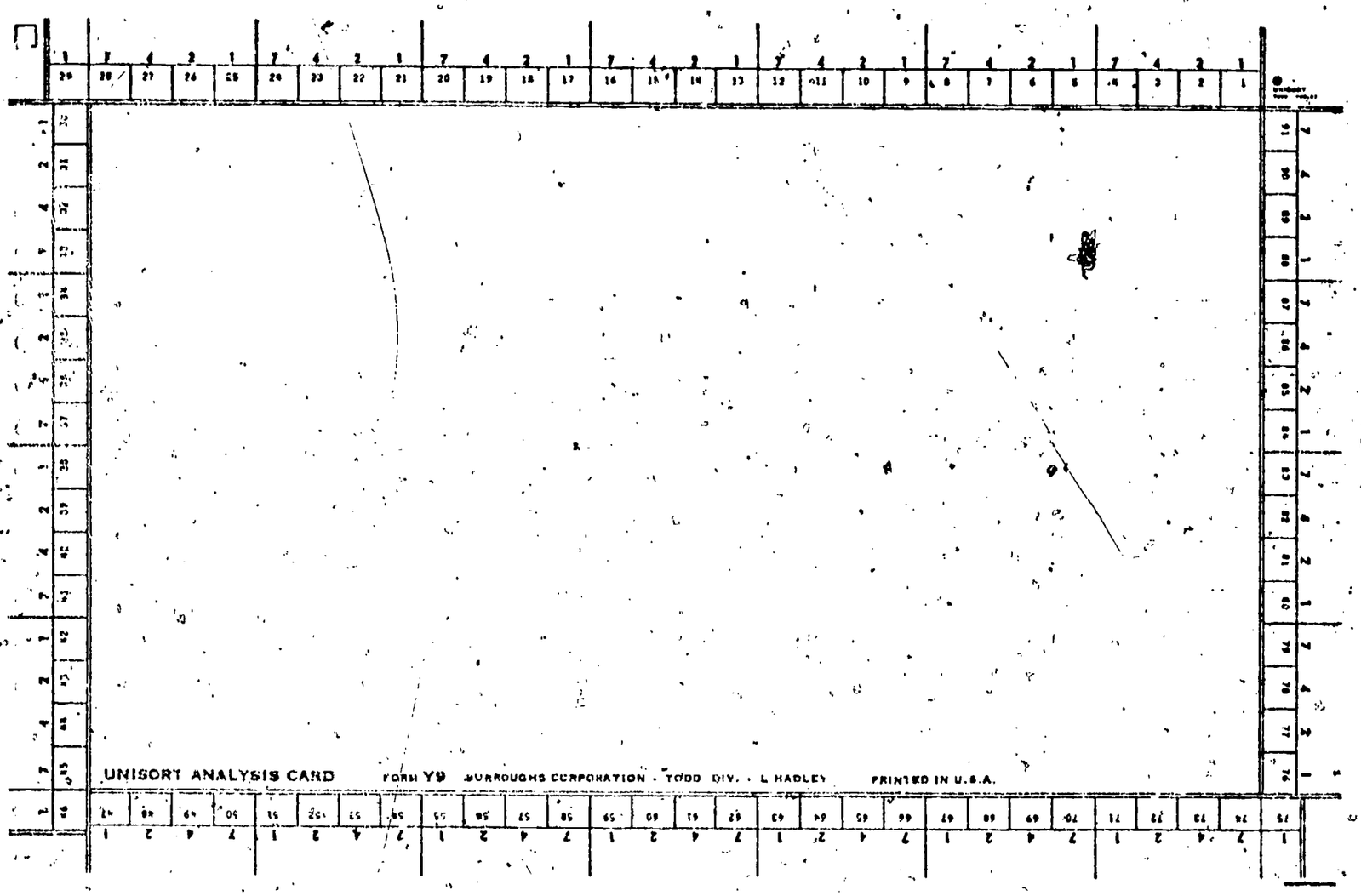
While this system may be modified for the use of other card types it is based on the Unisort Analysis Card Form Y9 of the Burroughs Corp., Todd Division. An illustration of this card is provided on the following page.

For consistency of reference and to insure that the directions which follow will be clear, the following conventions will be employed:

(1) The card will be oriented with the notch at the upper right corner as it is seen in the illustration.

Figure C-1

UNISORT ANALYSIS CARD



(2) The inner series of numbers (1 through 29 at the top, 30 through 46 at the left, etc.) will be referred to as Serial Numbers.

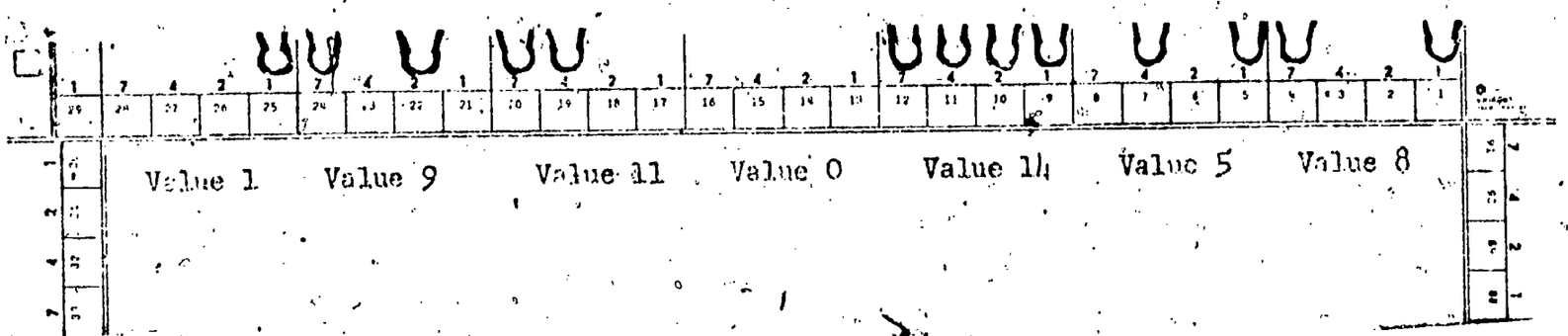
(3) The side of the card which bears these numbers will be referred to as the front of the card. The obverse will be referred to as the back of the card.

A moment's study of the card will make clear the two ways in which such a card may be coded. Along the outer margin of the card is a recurrent series

of numbers set off in blocks of four digits. Those numbers (1, 2, 4, and 7) may be used to give each block a numerical value from zero (no hole punched) to fourteen (all holes punched). Thus by using as few of these numbers as possible and adding them together within each block one of fifteen different numbers (0 through 14) can be recorded in each block. This approach will be referred to as the Additive system of coding. Examples of the punching for several numbers can be seen below.

Figure C-2

THE ADDITIVE SYSTEM

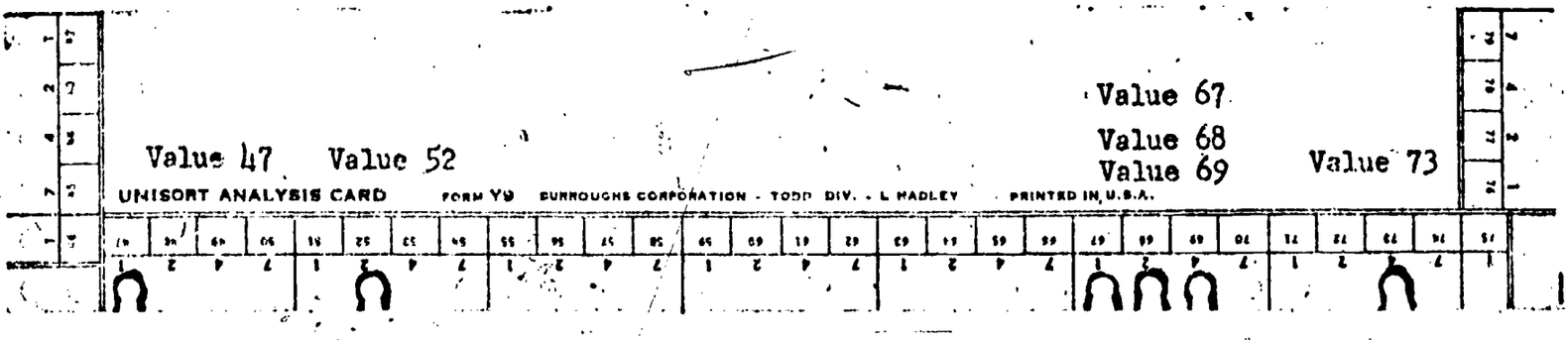


The Additive system of coding has one severe limitation; it requires that the material to be coded within that four-hole block be mutually exclusive since only one of the fifteen values (the highest) can be read from the block. Thus when it is necessary to employ a typology which is not mutually exclusive it is necessary to employ a different system.

Such a system uses the inner block of numbers which we refer to as the serial numbers. In such a case the number coded corresponds directly to that inner number. This system of coding will be referred to as the Discrete Numbers system. Examples are provided on the following page.

Figure C-3

THE DISCRETE NUMBERS SYSTEM



It is essential that this distinction between the Additive and the Discrete Numbers systems of coding be understood. Any confusion of the two systems of coding will make it impossible to read the value coded and thus will make the card useless.

GENERAL CODE

Directions for the coding of specific information is provided later in this manual. What follows in this section are the general directions for the preparation of all the cards employed in this system. These rules hold for each entry card.

(1) Written entries

(a) Data to be coded and stored will be found most often to take the form of written or transcripts of spoken words, phrases, and longer statements. These statements are to be copied verbatim on the front side of the cards. The back side of the card will be used only whenever the space on the front side of the card is insufficient to permit recording of all necessary data. All quotations must contain enough detail to insure that the meaning is clear. This may often mean that a full

paragraph from transcripts or other source material will be copied. If additional material is written on the card, as for example, some editorial comment relevant to the context of the statement, it must be clear that it is an addition to the primary material. The standard usage of single and double quotation marks as well as brackets and ellipses is essential.

(b) Each time a number is recorded on a card by punching a hole that number is to be written alongside the appropriate part of the card. This is done to facilitate the visual reading of the card.

(c) All cards must provide a citation identifying the primary material from which the item is taken. This citation must make it possible to return to that material with a minimum of effort. While the citation is not punched onto the card it is to be written below the quotation or entry.

(d) The initials of the person who coded the card and the data upon which the information was collected are to appear on the card.

(2) Top margin

The top margin of all cards will bear the Entry Number, Informant Type, and Informant Number where that number is applicable. These entries are explained on pages C-7 through C-9 .

(3) Upper left, lower left, and lower right corners

The sex, professional organization affiliation, and race of each informant are recorded in their respective corners on all cards. Directions for making these entries are given under Subject #2,

Informant type, on pages C-10 and C-11.

(4) Color coding

Many statements copied onto the cards will be lengthy and may contain multiple references requiring multiple coding. The process of reading the cards or sorting for more specific information will be facilitated by underlining, bracketing, or enclosing in parentheses, key words, phrases, or other pertinent data with colored felt pens. This process of underlining or marking off portions of statements on the cards will be referred to as color coding. To each of the major subjects numbered 5 (Role perception) through 12 (Values), with the exception of subject #10, a color has been assigned. All symbols used to underline or enclose words, phrases, and other information must be of the same color as the color assigned to the subject into which that particular data has been coded. Extreme care must be exercised so as to avoid marking off (color coding) data coded into one subject with a colored pen corresponding to a color assigned to a different subject. In the directions under each subject specific instructions are given as to how and what words, phrases, or other information on the card is to be color coded.

(5) Storage of the cards

Following the preparation of the cards and subsequent to each use of the cards they are to be returned to a storage file. All cards are to be filed by Entry Number.

IDENTIFICATION OF CARD TYPE

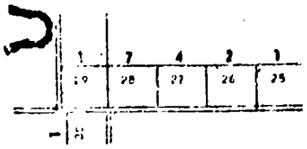
The number of coding categories used in this system exceeds the number which can be located on one punch card. Thus, two sets of cards, Card Type I and Card Type II, will be employed in this system. Figure C-5 shows both card types and the subjects located on each card. Whenever different attributes of the same expression are identified in data copied onto cards for storage purposes and the categories into which the data are to be coded are located on both card types, the entry must be recorded twice, once on each card type. Whenever a single item is written on both card types, each card will bear the same Entry Number, Informant Type, and Informant Number. The same rule applies when recording the sex, professional organization affiliation, and race of the informant.

In order to allow for the easy sorting of the cards by type, the following system of coding by punching will be employed:

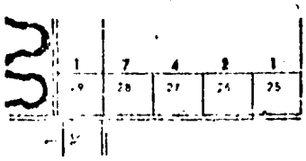
Figure C-4

CARD TYPE PUNCHING

Type I cards will be punched in the upper left corner thus:



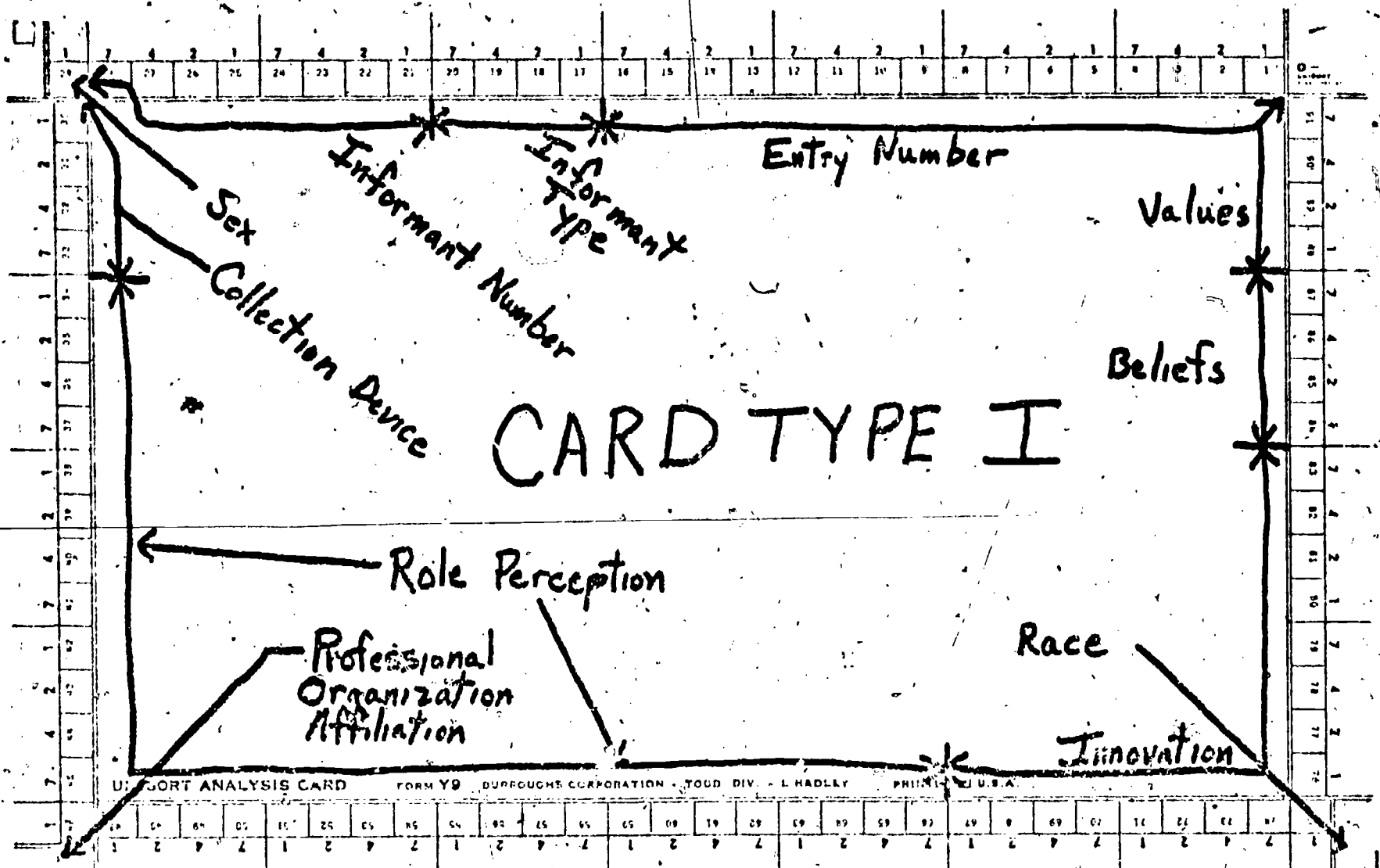
Type II cards will be punched in the upper left corner thus:

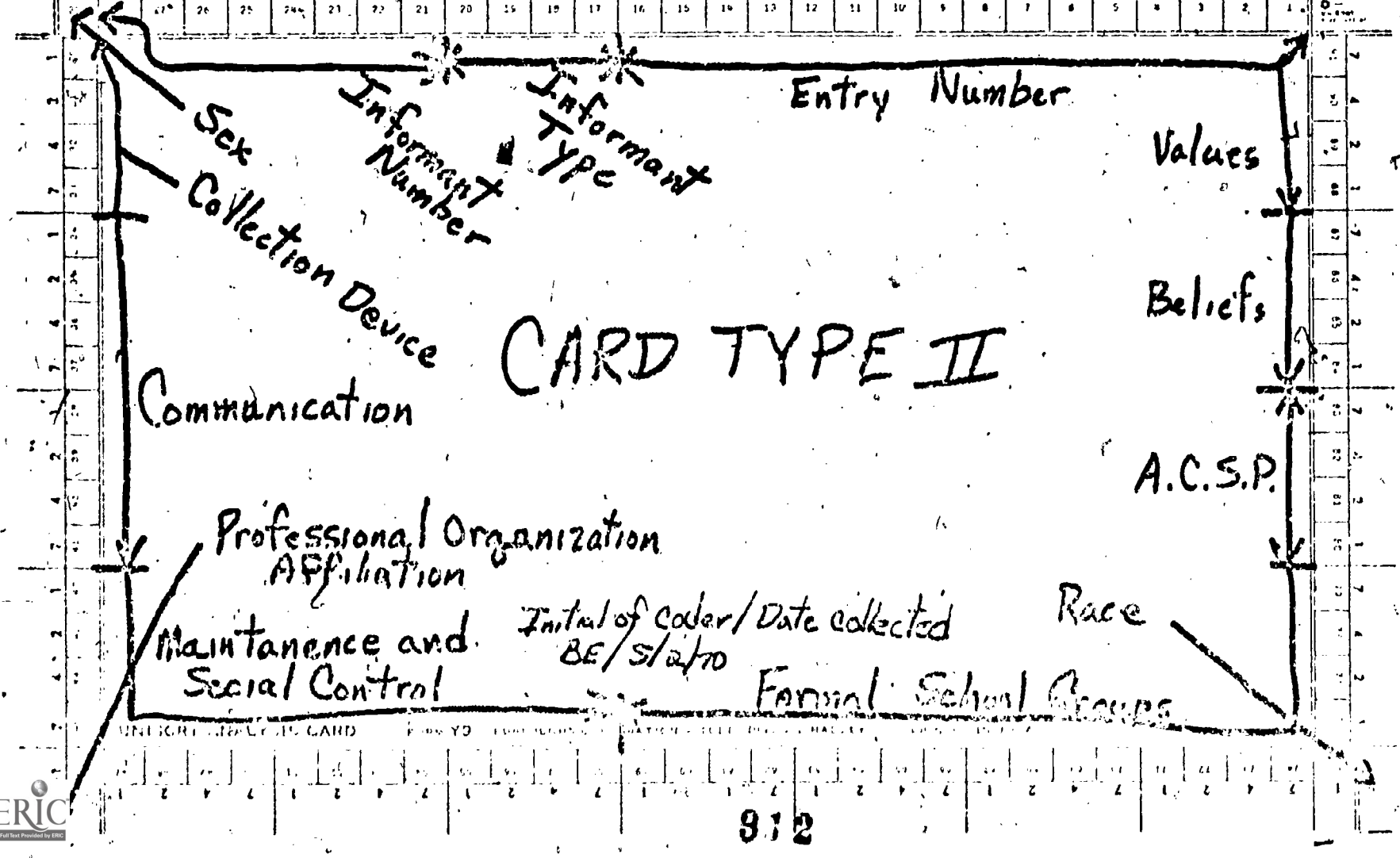


ERRORS

In the event that a card is mispunched, a special correction tape is available and may be used to make a correction. This is simply a matter of taping over the holes which were erroneously punched.

Figure C-5
CARD TYPES





Any suspicion of a systematic error should lead to a thorough review of material previously prepared. Errors, both fortuitous and systematic, are to be expected in the development of a system such as this. The great danger, of course, is that they will go unnoticed and uncorrected.

SUBJECT #1: ENTRY NUMBER

(Serial numbers 1 through 16, both card types, blocks used in an Additive fashion.)

Each time a phrase, sentence, or statement is selected for copying onto a card it will be assigned an entry number. The same entry number is to be used whenever a single item is written on more than one card.

The entry numbers will allow the recovery of any particular item for later review or confirmation. In the writing and rewriting of the final report it may be desirable to return to the card; this can be done only if such a number has been assigned and then used as a reference number in the initial drafting of the manuscript.

Since the blocks assigned for the entry number are to be used in an Additive fashion, the entry number will take the form: nn/nn/nn/nn, where each "nn" will have a value from 00 to 14 inclusive, and where the "/" is used to separate the blocks or values. Thus, one entry number might take the form 00/13/02/09.

By using the blocks in this fashion, it is possible to record over 40,000 entry numbers in the four blocks.

SUBJECT #2: INFORMANT TYPE

(Serial numbers 17 through 20, both card types, blocks used in an Additive fashion.)

Since the coding categories under informant type are designed to be mutually exclusive, this block will be used in the Additive fashion.

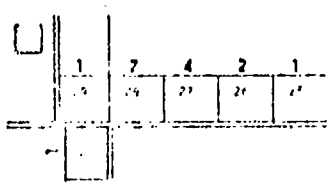
Typology:

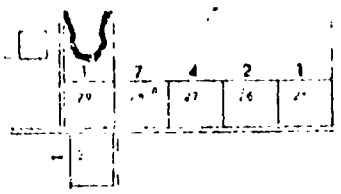
Value recorded	Informant type
1	Teachers (Edison)
2	Counselors (Edison)
3	Administrators (Principal, Vice Principals)
4	Secretaries (Principal, Attendance, Counseling, and Main office)
5	Caretakers, Food Service, and Maintenance Personnel
6	School nurse
7	Students
8	Participant Observers (will also have an informant number)
9	District Administrators (Superintendent, Assistant Superintendents, etc.)
10	Other district teachers
11	Reserved for expansion of key

Note

To complete Subject #2, Informant Type, the sex, race, and when applicable, professional organization affiliation of the informant are to be noted in the corners of each card as follows:

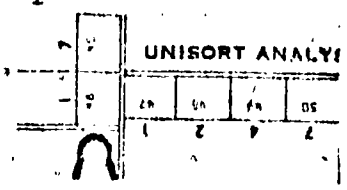
Sex: upper left corner (serial number 29) of all cards punched thus

Male 

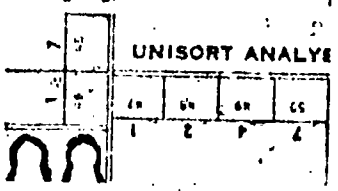
Female 

Professional organization affiliation: lower left corner of all cards punched thus

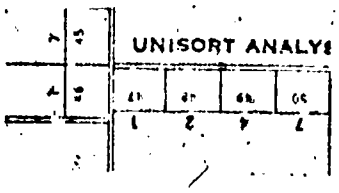
American Federation of Teachers (AFT)



Sunnydale Teachers Association (STA)

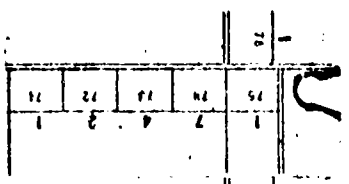


Unaffiliated

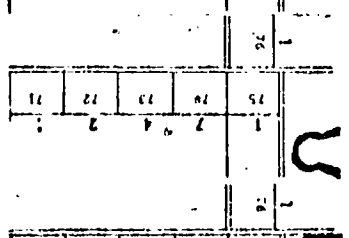


Race: lower right corner of all cards punched thus

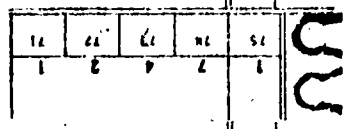
Negro



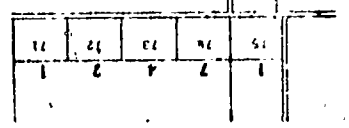
Caucasion



Oriental



Other



SUBJECT #3: INFORMANT NUMBER

(Serial numbers 21 through 28, both card types, blocks used in an Additive fashion.)

This block of numbers will be used to record an informant number for the most significant individuals who serve as informants. By using these blocks as is done (the additive system), very nearly 200 different informants can be individually identified. A master list of names and numbers must be kept in conjunction with this system.

As with the Entry Number, the Informant Number would be recorded using slashes and would take the form: nn/nn. Thus an individual informant might be 00/14.

Informants, whose identification numbers appear on a master list (Appendix C2), will be grouped into the general role categories delineated in Subject #2, Informant Type. For additional sorting purposes, the informant numbers of teachers will be grouped into categories along departmental lines. Thus, the master list of names and numbers will take the form:

Certificated staff	Value recorded	Informant
Administrators	00/01	Name of principal
	00/n	Name of administrator N
Counselors	00/06	Name of counselor A
	00/n	Name of counselor N
Teachers (social studies)	01/01	Name of teacher A
	01/n	Name of teacher N
(English)	02/01	Name of teacher A
	02/n	Name of teacher N

SUBJECT #4: COLLECTION DEVICE

(Serial numbers 30 through 33, both card types, Additive system)

This block of numbers will be used to identify the type of collection devices employed to obtain the information coded. Since the set of items or typology is designed to be mutually exclusive, the block will be used in the Additive fashion.

Typology:

Value recorded	Collection device
1	Systematic observations
2	Individual interviews
3	Group interviews

Value recorded	Collection device
4	Faculty bulletins
5	Union flyers, STA newsletters, ETA informational materials, etc.
6	Newspapers
7	Student publications
8	Student bulletins
9-14	Reserved for expansion of key

SUBJECT #5: ROLE PERCEPTION

Color code: RED

(Serial numbers 34 through 66, Discrete Numbers; 55 through 62, Additive System; 63 through 66, Discrete Numbers. Card Type I only.

Under "Role Perception" are to be coded those statements which are explicit or manifestly implicit statements about an informant's perceptions of:

(a) his own role;

(b) other institutional roles;

(c) the relation of the informant in his role (a) to other role incumbants in the institution, in both the same and different roles;

(d) dyadic role relationships;

(e) the existance, nature and extent of conflict between persons in specific paired roles;

(f) the manner in which interrole, intrarole and interpersonal conflicts are resolved.

All statements containing information about general or specific roles (see (a) and (b) above) and dyadic role relationships (see (c-f) above) are to be coded into the appropriate categories in the eight serial blocks, 34

through 62. The specific role(s) or role dyads mentioned or alluded to in each statement copied onto a card are to be color coded by underlining RED and written in the upper left corner of the card. This procedure is particularly important since it is expected that many informants will frequently mention differentiated subgroups in several of the role categories used in this manual. The first set of coding categories (serial numbers 34 through 54) is not designed to be mutually exclusive; any one or any combination of these items may be coded at the same time. As a result these blocks are NOT to be treated in the additive fashion but as Discrete Numbers. The second set of categories (serial numbers 55 through 62) is designed to be mutually exclusive. Thus, the blocks will be used in the Additive fashion.

For every statement coded in serial blocks 34 through 62, one or more of the values in serial block 63 through 66 must be punched. This block of numbers will be employed to identify various attributes in statements made about each specific role(s) or dyadic role of relationships. These coding categories are not meant to be mutually exclusive; hence, the Discrete Numbers system is used.

General category

Role (serial numbers 34 through 54, Discrete Numbers).

All statements about general or specific roles. Includes statements about an informant's perceptions of his own role and other institutional roles. Color code by underlining RED all roles mentioned in statements copied onto the cards.

Serial number of block	Coding category
34	Teachers
35	Department chairman
36	Local administrators (general category)

Serial number of block	Coding category
37	Counselors
38	Principal
39	Vice principal (guidance)
40	Vice principal (tenth grade)
41	Vice principals (eleventh and twelfth grades)
42	Classified staff (general category)
43	Principal's secretary
44	Other secretaries (main, attendance, and counseling office)
45	School nurse
46	Caretakers, food service and maintenance personnel
47	Students
48	Parents of students
49	District administrators (general category)
50	Superintendent
51	Other district administrators (assistant superintendents, supervisors, etc.)
52	School board members
53	Reserved for expansion of key
54	Differentiated subgroup Statements containing references to specific subgroups in any of the preceding role categories. A primary purpose of this category is to facilitate sorting when there are many references to two or more highly specific roles which are subsumed under one of the preceding categories.

General category

Dyadic role relationships (serial numbers 55 through 62, Additive System).

All statements about dyadic role relationships. Includes statements about an informant's perceptions of dyadic role relationships; the relation of the informant in his role(s) to other role incumbants in the institution, in both the same and different role; the existance,

nature and extent of conflict between persons in specific paired roles and the manner in which interrole, intrarole, and interpersonal conflicts are resolved. Specific roles mentioned in statements are to be color coded by underlining RED and written in the upper left corner of the card.

Value recorded	Coding category
01/00	Administrator-teacher
01/03	Administrator-department chairman
01/06	Administrator-counselor
01/09	Administrator-pupil
01/12	Administrator-classified personnel
02/00	Administrator-parent
02/03	Administrator-other
02/06	Teacher-department chairman
02/09	Teacher-counselor
02/12	Teacher-pupil
03/00	Teacher-classified personnel
03/03	Teacher-parent
03/06	Teacher-other
03/09	Counselor-department chairman
03/12	Counselor-pupil
04/00	Counselor-classified personnel
04/03	Counselor-parent
04/06	Counselor-other
04/09	Pupil-department chairman
04/12	Pupil-classified personnel
05/00	Pupil-parent
05/03	Pupil-other
05/06	Parent-department chairman
05/09	Parent-other
05/12	Department chairman-other
06/00	Department chairman-department chairman

Value recorded	Coding category
06/03	Administrator-administrator
06/06	Teacher-teacher
06/09	Counselor-counselor
06/12	Pupil-pupil
07/00	Classified personnel-classified personnel
07/03	Parent-parent
07/06	Other-other
07/09	Interpersonal relationships-roles unspecified
07/12-14/14	Reserved for expansion of key

(Serial numbers 63 through 66, Discrete Numbers.)

Note: Key words, phrases and/or sentences contained within statements coded into the following categories (serial numbers 63 through 66) are to be color coded. A symbol to be used for marking off (color coding) data has been assigned to each category. Data coded into any of the four categories are to be color coded using the symbol which corresponds to the category into which the information has been coded. Since the color code for subject #5, Role Perception, is RED, all symbols used to enclose data coded in serial block 63 through 66 are to be drawn using a pen of this color.

Serial number of block	Coding category
63	"Real" role(s) or paired role relationships Statements about normative or expected behaviors of persons in a particular role or in a specific dyadic role relationship. Brackets [ ] (in RED) will be the symbol employed to color code data in this category.
64	"Ideal" role(s) or paired role relationships Statements about ideal behavior for persons in a particular role or in a specific dyadic role relationship. Parentheses ( ) (in RED) will be the symbol employed to color code data in this category.

Serial number of block	Coding category
65	Interrole, intrarole, and interpersonal conflict For purposes of this system conflict is defined as disagreement or tension between two or more individuals. The intensity of the conflict may vary from minor verbal disputes to overt physical aggression. All statements about intrarole (conflict between two or more persons in the same role--NOT conflicting expectations for a particular role), interrole (conflict between two or more persons occupying different roles), and interpersonal (conflict between persons in roles not specified) conflict. Slashes / / (in RED) will be the symbol employed to color code data in this category.
66	Interrole, intrarole, and interpersonal conflict resolution Statements about the manner in which the three types of conflicts are resolved. Quotation marks " " (in RED) will be the symbol employed to color code data in this category.

SUBJECT #6: INNOVATION

Color code: PURPLE

(Serial numbers 67 through 70, Discrete Numbers; serial numbers 71 through 75, Additive System; serial numbers 76 through 83, Discrete Numbers. Card Type I only.)

Under "Innovation" are to be coded all statements about change in institutional structures and institutional practices. Included are statements about desired or contemplated changes and statements about changes already

implemented. All statements containing information about general or specific areas of innovation are to be coded into the appropriate categories in the two serial blocks 71 through 74 and 75. It is particularly important that the specific innovation(s) mentioned in statements copied onto the cards be color coded by underlining in PURPLE and written in the upper left corner of the card. This procedure will facilitate sorting when several subcategories of innovation are subsumed under one main category. Since this set of coding categories is designed to be mutually exclusive, these blocks will be used in the Additive fashion.

For every statement coded in serial blocks 71 through 75 one or more of the values in serial blocks 67 through 70 and 76 through 83 must be punched. The values in these serial blocks will be used to identify various aspects of the innovation processes mentioned in the statements copied onto the cards. This set of coding categories is not designed to be mutually exclusive, hence the Discrete Numbers system is used.

Due to space limitations on Card Type I and the desirability of avoiding a third card type, the coding categories for Subject #6, Innovation, have been located on the card in an irregular fashion. Serial blocks reserved for the Discrete Numbers system of coding have been separated so that the corner serial block 75 can be used with serial block 71 through 74 in the additive fashion. Incorporating serial block 75 into the additive system thus permits a sufficient number of values to be available for both the additive system and the discrete numbers system. While this change eliminates the need for an additional serial block with four serial numbers, which in turn would require a third card type, it does necessitate a more cautious approach when coding data in this subject.

Note: A special serial block has been reserved for coding all statements about the Anthropology Curriculum Study Project (ACSP) and the Patterns in Human History course. Code statements about the ACSP under subject #10 only.

General category

Areas of innovation (serial numbers 71 through 75, Additive system).

All statements coded under subject #6, Innovation, will contain references to change in institutional structures and institutional practices. The coding categories below will be employed to identify the general or specific areas of innovation cited in statements copied onto the cards. To facilitate visual reading of the cards and additional sorting when two or more innovations are subsumed under one coding category, the specific roles, curriculum, rules or practices mentioned or alluded to in statements are to be color coded by underlining PURPLE and written in the upper left corner of each card.

Value recorded	Coding category
	(Curriculum)
0/01	Curriculum (general category) Statements about curriculum which do not make specific reference to general areas or specific courses.
0/02	Social studies All statements about social studies courses except Patterns in Human History.
0/03	English, speech, journalism
0/04	Business
0/05	Mathematics
0/06	Science
0/07	Foreign language
0/08	Physical education

Value recorded	Coding category
	(Curriculum, cont.)
0/09	Industrial arts
0/10	Fine arts
0/11	Special education Statements about curricula or special courses for the mentally, emotionally and/or educationally handicapped, the deaf, non-English-speaking student, etc.
0/12	Reserved for expansion of key
	(Roles)
0/13	Roles (general category) Statements about changes in roles but which contain no reference to specific roles.
0/14	Administrative
1/00	Teaching
1/01	Student
1/02	Classified staff
1/03	Reserved for expansion of key
	(Rules and practices)
1/04	Rules and practices (general category) Statements about changes in school rules and school practices but which contain no reference to specific rules and practices.
1/05	Attendance Statements about change in attendance procedures and practices. Include statements about changes in enforcement of regulations.
1/06	Discipline Statements about changes in disciplinary procedures and techniques.
1/07-1/14	Reserved for expansion of key.

(Serial numbers 67 through 70, 76 through 83, Discrete Numbers.

Remember: The numbering of the categories is discontinuous. Code with caution.)

Note: Data coded into the following categories (serial numbers 67 through 70, 76 through 83) are to be color coded. A symbol to be used for color coding data has been assigned to each of the general categories (Innovation Processes, External Forces, Internal Forces). Data coded into these categories are to be color coded using the symbol which corresponds to the general category into which the information has been coded. Since the color code for subject #6, Innovation, is PURPLE, all symbols drawn to color code the data are to be purple.

General category

Innovation processes (serial numbers 67 and 68, Discrete Numbers).

All statements about innovation processes. Include statements about process related to the implementation of completed changes and processes related to innovations in progress. Color code data in this general category. Enclose data on the cards coded into this general category with the symbols [ ] (in PURPLE).

Serial number of block	Coding category
67	Processes Statements about procedures and processes related to the proposing, planning, and implementing of changes in institutional structures and practices.
68	Problems Statements about the nature of the problems (a) encountered in past innovations, (b) confronting innovations currently in progress and/or (c) anticipated in the implementation of desired or contemplated changes.

External forces (serial numbers 69, 70, 76, and 77, Discrete Numbers).

Statements about pressures for innovation originating outside the public school. Includes statements containing information about the extent and nature of the pressures applied by the external forces for innovation. Color code all data on the cards coded into this general category using the symbols ( ) (in PURPLE).

Serial number of block	Coding category
69	Federal and/or state governmental units Statements about pressures from federal or state governments in the form of legislation, financial incentives, recommendations, etc.
70	Community Statements about pressures originating from community groups and/or leaders, local governmental units or agents, etc. Exclude statements about pressures brought about by all groups and individuals for commercial or industrial reasons.

(Note: Begin using the values in serial block 76 through 79, Discrete Numbers.)

76	Commercial and/or industrial Statements about pressures originating from commercial and/or industrial sources, both local, regional, and national.
77	External change agents Statements about pressures from individuals or groups of individuals whose role it is to encourage and help implement change. Include in this category statements about local district consultants from college or university staffs, etc.

Internal forces (serial numbers 78 through 83, Discrete Numbers).

Statements about pressures for innovation originating from within the local public school system. Include statements about the extent and nature of the pressures applied by the internal forces advocating innovation. Color code all data on the cards coded into this category with the symbols / / (in PURPLE).

Serial number of block	Coding category
78	District administrative personnel Statements about pressures for innovation originating from school board members, district administrators (including directors of state and federal projects undertaken by the district), etc.
79	Local administrative personnel Statements about changes advocated, supported and/or decreed by local administrators.
80	Teachers Statements about pressures for changes brought about by individual teachers or groups of teachers within the school or school district.
81	Students Statements about pressures for changes originating from individual students or groups of students in the local school system.
82-83	Reserved for expansion of key.

SUBJECT #7: COMMUNICATION

Color code: BROWN

(Serial numbers 34 through 41, Card Type II. Serial block 34 through 37 used in the Additive fashion; serial numbers 38 through 41, Discrete Numbers.)

Under "Communication" are to be coded statements about the frequency, content and problems of communication between individuals or groups of individuals within the school system. Several areas of communication relevant to the investigation (serial numbers 34 through 37) have been delineated below and all statements coded under communication are to be coded into one of the coding categories in this serial block. Since this set of coding categories is designed to be mutually exclusive, this block will be used in the Additive fashion.

For every statement coded in serial block 34 through 37 one or more of the values in serial block 38 through 41 must be punched. The values in this block will be used to identify various aspects of the communication processes mentioned in the statements coded. This set of coding categories is not designed to be mutually exclusive, hence the Discrete Numbers system is used.

General category

Areas of communication (serial numbers 34 through 37, Additive System).

Communication between individuals or groups of individuals may occur at various systemic levels. Individual statements about communication at a particular systemic level are to be coded into the one appropriate category below. Color code by underlining BROWN the identity of the communicator(s) mentioned in statements. In addition, record the same of the communicator(s) in the upper left corner of the card.

Value recorded	Coding category
1	Intradepartment Statements about communication between members of the same faculty department.
2	Interdepartment Statements about communication between members of different faculty departments.

Value recorded	Coding category
3	Administration-faculty Statements about communication between faculty members and local school administrative personnel.
4	Certificated staff-students Statements about communication between students and the certificated staff at the local school.
5	Intraschool Statements about communication between persons within the school not coded into one of the preceding categories. Include all general statements about intraschool communication.
6	Interschool Statements about communication between administrators, teachers and/or students at different schools.
7	District administration-local school Statements about communication between district administrators and local school personnel.
8	Local school-community Statements about communication between local school personnel and parents of students, community groups and leaders.
9	District administration-community Statements about communication between district administrators and persons in the local school attendance area and the community at large.
10-14	Reserved for expansion of key.

(Serial numbers 34 through 37, Discrete Numbers.)

Note: Data coded into the following categories are to be color coded. A symbol has been assigned to each of the coding categories below and is to be used to enclose data coded into each category. All symbols are to be drawn in PURPLE, the color code for subject #7, Communication.

General category

Communication processes (serial numbers 34 through 37, Discrete Numbers).

Statements about problems and processes of communication within the school system.

Serial number of block	Coding category
34	Processes/procedures Statements about formal and informal communication procedures, nature of communications, frequency with which information is communicated, etc. Brackets [ ] (in PURPLE) will be employed to color code data coded into this category.
35	Problems Statements about the inadequacy of communication, lack of communication channels, etc. Parentheses ( ) (in PURPLE) will be employed to mark off data coded into this category.
36-37	Reserved for expansion of key.

SUBJECT #8: MAINTENANCE AND SOCIAL CONTROL

Color code: BLACK

(Serial numbers 42 through 46, Additive System; serial numbers 47 through 58, Discrete Numbers. Card Type II only.)

Under "Maintenance and Social Control" are to be coded all statements

about resistance to changes in institutional structures and institutional practices. Statements about agents and mechanisms of social control are to be included also. All statements about the maintenance of institutional practices and structures are to be coded into the appropriate categories in the two serial blocks 42 through 45 and the block containing the single number 46. Once again, it is particularly important that the specific institutional structures (courses, roles, rules and practices, etc.) mentioned in statements copied onto the cards be color coded by underlining BLACK and written in the upper left corner of each card. This procedure will facilitate sorting, especially when several statements about two or more areas of maintenance are coded into one coding category. Since this set of coding categories is designed to be mutually exclusive, these blocks will be used in the Additive fashion.

For every statement coded in serial blocks 42 through 46 one or more of the values in serial blocks 47 through 58 must punched. The values in this block willbe used to identify the various agents of control, sources of resistance to change, as well as the mechanisms utilized to induce conformity to existing institutional structures and practices.

General category

Areas of maintenance (serial numbers 42 through 46, Additive System).

All statements coded into subject #8 will contain references to social control and maintenance of institutional structures and practices. Of particular interest are statements about the control of behavior viewed as deviant by one or more persons and data about resistance to contemplated or already completed changes in the areas of curriculum, institutional roles, rules and practices. The coding categories below will be employed to identify the general

or specific areas of maintenance cited in all statements copied onto the cards that are coded under this subject. To facilitate visual reading of the card and additional sorting when two or more areas of maintenance are subsumed under one coding category, the specific roles, rules, practices, and courses mentioned or alluded to in statements are to be color coded by underlining BLACK and written in the upper left corner of each card.

Value recorded	Coding category
	(Curriculum)
0/01	Curriculum (general category) Statements about curriculum which do not make specific reference to general areas or specific courses.
0/02	Social studies Statements about all social studies courses except Patterns in Human History.
0/03	English, speech, journalism.
0/04	Business
0/05	Mathematics
0/06	Science
0/07	Foreign language
0/08	Physical education
0/09	Industrial arts
0/10	Fine arts
0/11	Special education Statements about curricula or special courses for the mentally, emotionally and/or educationally handicapped, the deaf, the non-English-speaking student, etc.
0/12-0/14	Reserved for expansion of key.
	(Roles)
1/01	Roles (general category) Statements about the maintenance of roles but which contain no reference to specific roles.

Value recorded	Coding category
1/02	Administrative
1/03	Teaching
1/04	Students
1/05	Classified staff
1/06-1/08	Reserved for expansion of key (Rules and practices)
1/09	Rules and practices (general category) Statements about the maintenance of school rules and practices but which contain no reference to specific rules and practices.
1/10	Attendance Statements about the maintenance of existing attendance procedures and practices.
1/11	Discipline Statements about the nature of the discipline employed to induce conformity to existing rules and/or expectations. Also include all statements about the maintenance of existing disciplinary practices.
1/12-1/14	Reserved for expansion of key.

(Serial numbers 47 through 58, Discrete Numbers.)

Note: Data coded into the following categories are to be color coded. A symbol has been assigned to each of the general categories (agents of control and maintenance mechanisms) and is to be used to enclose data copied onto the cards. Since the color code for subject #8, Maintenance and Social Control, is BLACK, all symbols drawn to mark off the data are to be black.

General category

Agents of control, sources of resistance to change (serial numbers 47 through 52, Discrete Numbers).

Into this category are to be coded all statements about the sources of

resistance to desired, anticipated, or already completed changes. Include statements about agent(s) controlling or attempting to control behavior viewed as deviant by one or more individuals or group of individuals within the school system. The specific agents or sources mentioned or alluded to in statements copied onto the cards are to be color coded by underlining in BLACK and written in the upper left corner of the card. Brackets [ ] (in BLACK) will be the symbol employed to enclose data copied onto the cards coded into this general category.

Serial number of block	Coding category
47	Administrative staff Statements containing references to school board members, district administrative staff, or local administrative personnel.
48	Teachers
49	Students
50	Parents of students
51	Community groups and/or leaders
52	Federal or state legislation and/or pressures

Maintenance mechanisms (serial numbers 53 through 58, Discrete Numbers).

Statements about the control mechanisms employed or available to induce conformity to existing structures. Data coded under maintenance mechanisms are to be color coded. Parentheses ( ) (in BLACK) will be the symbol employed to enclose data copied onto the cards coded into this general category.

Serial number of block	Coding category
53	Appeal to authority Statements indicating appeals to authority for corroboration, decision or vindication.
54	Gossip Statements containing references to gossip as a means of social control.

Serial number of block	Coding category
55	Appeal to custom and tradition Statements containing appeals or references to the established manner of fulfilling one's role, teaching a course, etc.
56	Sanctions All statements about sanctions ranging from minor verbal admonitions or reprimands to physical coercion.
57	Apathy, inertia Statements containing references to a lack of desire for and/or motivation to change.
58	Reserved for expansion of key.

SUBJECT #9: SCHOOL GROUPS

Color code: ORANGE

(Serial numbers 59 through 62, Additive System; serial numbers 63 through 79, Discrete Numbers. Card Type II only.)

For purposes of this system a school group is any group comprised of incumbents of one or more of the general or highly specific roles delineated in subject #5, Role Perception. School groups may be informal such as a friendship or clique group or quite formal and possess a written constitution containing explicit rules governing the activities of the group and the behavior of its members.

Under "School Groups" are to be coded all statements about groups within the school. All explicit or manifestly implicit statements about specific groups are to be coded into the appropriate sub-category under the general category, School Groups (serial block 59 through 62). Since the coding

categories in this serial block are designed to be mutually exclusive, the block will be used in the Additive fashion.

For every statement coded in serial block 59 through 62 one or more of the values in serial blocks 63 through 79 must be punched. This block of numbers will be employed to identify comments contained within coded statements about the qualities and other general characteristics of each specific group. These coding categories are not meant to be mutually exclusive; any one or any combination of these items may be coded at the same time. As a result these blocks are to be treated as Discrete Numbers.

Note: If any statements about appropriate and/or expected behavior for particular role incumbents in a school group indicate that the same expectations apply to all persons in one of the role(s) delineated in subject #5, the statement is also to be coded into the appropriate "Role Perception" category.

General category

School groups (serial numbers 59 through 62, Additive System).

All statements which contain references to school groups. The specific groups mentioned in statements copied onto the cards are to be color coded by underlining in ORANGE and written in the upper left corner of the card.

Value recorded	Coding category
(Adult groups)	
1	Faculty-administration groups (miscellaneous) Statements about all formal and informal faculty and/or administration groups excluding those listed below.
2	Faculty department groups Statements about faculty department members as a group.

Value recorded	Coding category
3	California Teachers Association (CTA) Statements about the CTA and/or one or both of its two local affiliates, the Sunnydale Teachers Association (STA) and the Sunnydale High Teachers Association (ETA).
4	American Federation of Teachers (AFT) Statements about the AFT and/or its local affiliate, the Federation of Teachers.
5	Parent Teachers Association (PTA) Statements about the national, state, and, in particular, local PTA organizations.
6	Parent and community groups (miscellaneous) Statements about all formal and informal parent and community groups that have some relation to the school. Exclude statements about the PTA.
(Student groups)	
7	Student government Statements about the student council and other organs of student government.
8	Student social clubs Statements about all student clubs or groups that have been organized primarily for recreational or other social purposes.
9	Student ethnic clubs Statements about clubs or groups restricted to or primarily established for persons of a particular racial or ethnic group.
10	Student service clubs Statements about clubs or groups that have been organized to provide specific services to the school or community.

Value recorded	Coding category
11	Student groups (miscellaneous) Statements about all student school groups other than those mentioned above.
12-14	Reserved for expansion of key.

(Serial numbers 63 through 79, Discrete Numbers.)

Note: All information copied onto cards and coded into the following categories is to be color coded. A symbol has been assigned to each of the general categories (characteristics of group members, group relationships, and general orientation and effectiveness) and is to be used to enclose data coded into the subcategories under each. Since the color code for subject #9, School Groups, is ORANGE, all symbols drawn to mark off data are to be drawn using an orange-colored felt pen.

General category

Characteristics of group members (serial numbers 63 and 64, Discrete Numbers).

Statements about the characteristics of members belonging to specific school groups. Do not include statements about the characteristics of an individual who happens to be a member of a particular group unless the qualities of the person described are explicitly ascribed to many or all members of the group to which the individual belongs. Color code data in this general category. Brackets [ ] (in ORANGE) will be the symbol employed to enclose data copied onto the cards coded into this general category.

Serial number of block	Coding category
63	Demographic attributes Statements about the age ranges, racial and sex composition of group members.

Serial number of block	Coding category
64	General characteristics Statements about the personal qualities and other characteristics of group members.

Group relationships, group activities (serial numbers 65 through 75, Discrete Numbers).

Statements about (a) structure of relationships, both formal and informal, between group members; (b) relationships between members of different groups; and (c) customs and activities of the various groups. Color code data in this general category. Parentheses ( ) (in ORANGE) will be the symbol employed to enclose data copied onto the cards coded into this general category.

Serial number of block	Coding category
65	Formal entrance procedures and requirements Statements about entrance procedures and requirements formally stated in an official group document.
66	Formal structure of relations between members Statements about relations between group members formally stated in an official group document.
67	Informal entrance procedures and requirements Statements about entrance procedures and requirements which are not formally stated in an official group document. Statements about entrance procedures and requirements for school groups which do not possess a formal constitution but which are heavily patterned to be coded here.

Serial number of block	Coding category
68	Informal structure of relations between members Statements about the structure of relations other than those formally specified in an official group document. Include also statements about the structure of relations between members of school groups which do not possess a formal constitution but which have heavily patterned relations between members.
69	Qualitative nature of relationships between members All statements about the qualitative nature of relationships between group members.
70	Qualitative nature of relationships between members and non-members Statements about the qualitative nature of relationships between individuals belonging to different groups.
71	Socialization Statements about the process of inducting individuals into the group.
72	Social control Statements about rules governing the behavior of group members. Include also statements about the nature of the sanctions imposed for violation of rules.
73	Customs and activities Statements about activities of the group regarded as habitual, seasonal, customary, or patterned. Include statements about customary activities in which there is no awareness of custom or pattern.
74	Group as a unit as in intergroup relations Statements about groups or representatives of different groups in interactive situations.

Serial number of group	Coding category
75	Cliques Statements about groups not formally constituted held together by common vested interests, goals, or friendship. The primary purpose of this category is to provide a means of retrieving statements about significant clique groups within the school.

General orientation and effectiveness (serial numbers 76 through 79, Discrete Numbers).

Statements about group goals or position on specific issues as well as general group effectiveness in achieving desired ends. Color code data in this general category. Slashes / / (in ORANGE) will be the symbol employed to enclose data copied onto the cards coded into this general category.

Serial number of block	Coding category
76	Group position or group orientation Statements about the position or orientation of the group with respect to specific educational, political, and other issues.
77	Group effectiveness Statements about the ability or effectiveness of the group in achieving stated goals. Include all evaluative statements about groups.
78-79	Reserved for expansion of key.

SUBJECT #10: ANTHROPOLOGY CURRICULUM STUDY PROJECT (ACSP)

Color code: None

(Serial numbers 80 through 83, Additive System. Card Type II only.)

Under "ACSP" are to be coded all statements about the ACSP. Included are statements about faculty and student acceptance of the Patterns in Human

History course, resistance to implementation of the course, perceptions of ACSP personnel, etc. Since the set of coding categories below is designed to be mutually exclusive, serial block 80 through 83 is to be used in the Additive fashion.

General category

ACSP personnel

Value recorded	Coding category
1	ACSP personnel Statements about informants perceptions of ACSP staff members in the local school.

ACSP course implementation

Value recorded	Coding category
2	Implementation processes General and specific statements about implementation procedures and processes. Include statements about the activities of the principals involved.

External sources of support for and/or resistance to the ACSP

Statements about the nature of support for and/or resistance to implementation of the ACSP course by forces external to the school.

Value recorded	Coding category
3	Parents of students
4	Community groups and/or leaders

Internal sources of support for and/or resistance to the ACSP

Statements about the nature of support for and/or resistance to implementation of the ACSP course by forces within the local school system.

Value recorded	Coding category
5	District administrators
6	Local school administrators

Value recorded	Coding category
7	Counselors
8	Teachers-social studies department
9	Teachers-all other departments
10	Students
11-14	Reserved for expansion of key

SUBJECT #11: BELIEFS

Color code: BLUE

(Serial numbers 84 through 87, both card types, Additive System.)

Under "Beliefs" are to be coded all explicit or manifestly implicit statements of belief. Beliefs, as defined herein, refer to the individual's psychologically real and generalized conceptions of nature, self, the human and non-human environment and his relation to it.

Because expressed beliefs are most likely to be contained within statements coded under any of the major subjects, categories for coding beliefs have been located in the same place on both card types. This arrangement will eliminate the necessity of recopying many statements for the purpose of coding the beliefs.

All data coded under "Beliefs" are to be color coded. Brackets [ ] (in BLUE) will be the symbol employed to color code data on the cards coded under this subject. The coding categories in this subject are designed to be mutually exclusive, hence the serial block 84 through 87 is used in the Additive fashion.

General category

Nature of man

Value recorded	Coding category
1	Characteristics of all humans

Group characteristics

Statements expressing beliefs about the characteristics of groups. To facilitate visual reading of the card and additional sorting when expressions of belief about two or more groups are coded under the same category, the specific groups mentioned in statements are to be color coded by underlining BLUE and written in the upper left corner of the card.

Value recorded	Coding category
2	Age groups Expressions of belief about groups of people who are differentiated by age.
3	Socio-economic, ethnic, racial Expressions of belief about groups of people who are differentiated by socio-economic factors, ethnicity, and race. Of particular interest are expressions of belief about Blacks, Whites, Mexicans, North Sunnydale residents, South Sunnydale residents, etc.
4	Inherent ability Statements of belief about groups of people differentiated by levels of inherent ability.
5	Role Statements of belief about people differentiated by role. Of particular interest are expressions of belief about administrators, counselors, teachers, students, etc.
6	Reserved for expansion of key.

Metaphysical

Value recorded	Coding category
7	Nature of reality Expressions of belief about the orderliness of the universe, nature of being, etc.

Beliefs about process

Value recorded	Coding category
8	Learning Statements of belief about the learning process.
9	Teaching Statements of belief about the teaching process.
10	Change Statements of belief about the manner in which change is initiated, sustained, and halted.

Beliefs about institutional structures

Value recorded	Coding category
11	Curriculum Statements of belief about specific courses and the curriculum structure in general.
12	Institutional role structures Statements of belief about the role structure in the school.
13	Physical structures, materials, etc. Statements of belief that relate to all aspects of the non-human school environment.

SUBJECT #12: VALUES

Color code: GREEN

(Serial numbers 88 through 91, both card types, Additive System.)

Under "Values" are to be coded all explicit and manifestly implicit statements of value. Values, as defined herein, refer to the individual's basic motivational patterns or his predispositions to act in certain patterned ways in specific situations. Statements containing beliefs are to be double coded in one or more of the value categories when references to the situations and/or objects contain positive or negative feeling-tone.

Because expressed values are most likely to be contained within statements coded under any of the major subjects, categories for coding values have been located in the same place on both card types. This arrangement will eliminate the necessity of recopying many statements for the purpose of coding expressed values.

Data under "Values" are to be color coded. Brackets [ ] (in GREEN) will be the symbol employed to color code data on the cards coded under "Values". The coding categories in this subject are designed to be mutually exclusive, hence the serial block 88 through 91 is used in the Additive fashion.

General category

Interpersonal values

Value recorded	Coding category
1	Admiration and support Statements of value that relate to the importance of receiving support, kindness, and admiration from other human beings.
2	Dominance, leadership Statements of value that relate to taking the initiative in social situations, exerting dominance over others.
3	Independence Statements of value that relate to ~~in~~dependence, being free to do what one wants to do in one's own way.
4	Conformity Statements of value that pertain to the importance of conforming to group norms.
5	Altruism Statements of value that relate to the importance of helping others; ensuring that the values of other humans are satisfied.

Personal values

All explicit or manifestly implicit statements of value that involve the manner in which the individual orients himself towards the problem of everyday living.

Value recorded	Coding category
6	Achievement/academic orientation Includes statements about the value placed upon the completion of challenging or assigned responsibilities, willingness to do the best job that one can, etc.
7	Control over self Statements of value involving the individual's control over self and one's own belongings. Includes statements of value pertaining to individual maturity and integrity.
8	Variety Statements of value that pertain to individual propensity to experience the new and unusual and to strike out on one's own.

Object values

Statements of value pertaining to human and non-human objects associated with consummation of personal and interpersonal values. Includes all statements of value as they relate to institutional structures.

Value recorded	Coding category
9	Curriculum Statements of value that relate to specific courses or the curriculum structure in general.
10	Institutional role structure Statements of value that relate to specific social roles androle behaviors.
11	Physical structures, materials, etc. Statements of value that relate to all aspects of the non-human school environment.

STRATEGY FOR CODING

(1) Review this manual, especially Appendix I, the summary of typologies [not reproduced here], to increase sensitivity to the items being sought.

(2) Write down the pertinent statement on the cards. When a significant item has been identified, copy it in enough detail and length to ensure an accurate re-reading by others. In copying the item be sure to maintain standard usage of double and single quotation marks, brackets, and ellipses. It must be clear to others not only what was meant by the informant but what were his words and which were the comments provided for clarity by the coder.

(3) Indicate the source of the item by providing a clear citation of that source.

(4) Indicate the date upon which the material was initially collected.

(5) Initial the item so that your work can be identified.

(6) Fill out the top margin of each card. Begin coding by working through subjects 1 through 4.

(7) Defer punching the card until the coding is complete and the holes to be punched have all been marked.

(8) Defer color coding of the data until all holes have been marked and punched.

(9) After having coded the obvious material, glance down the list of typologies to check for any omissions.

(10) In the early stages of coding the typology of beliefs and values will be minimal. In order to develop a typology for both subjects,

a notebook is to be kept in which the evidently significant beliefs and values are entered with an indication of their frequency and citations of the appropriate Entry Numbers. After a convenient body of data has been processed, this material will be subjected to a low-order analysis and the more obviously significant beliefs and values will be codified for inclusion in all subsequent entries. This approach will be maintained throughout in order to permit the review of the code developed.

(11) In addition to a notebook for beliefs and values, a separate notebook is to be kept in which ideas for data analysis are to be entered. These ideas will then become the subject of periodic review.

Appendix II

Master List of Key Informants
(All names omitted)

Certificated staff

	Value recorded
Administrators	00/01
	00/02
	00/03
	00/04
	00/05
Counselors	00/06
	00/07
	00/08
	00/09
	00/10
	00/11
Teachers (social studies)	00/12
	00/13
	00/14
	01/00
	01/01
	01/02
	01/03
	01/04
	01/05
	01/06
	01/07
Teachers (English)	01/08
	01/09
	01/10
	01/11
	01/12
	01/13
	01/14
	02/00
	02/01
	02/02
	02/03
	02/04
	02/05
Teachers (science)	02/06
	02/07
	02/08
	02/09
	02/10
	02/11
	02/12
Teachers (mathematics)	02/13
	02/14
	03/00
	03/01
	03/02
	03/03
Teachers (physical education)	03/04
	03/05
	03/06
	03/07
	03/08
	03/09
	03/10
	03/11
Teachers (business)	03/12
	03/13
	03/14
	04/00
	04/01
	04/02
	04/03
	04/04
	04/05
Teachers (industrial arts)	04/06
	04/07
	04/08
	04/09
	04/10

	Value recorded
Teachers (fine arts)	04/11
	04/12
	04/13
	04/14
	05/00
	05/01
	05/02
Teachers (EMR/special education)	05/03
	05/04
	05/05
	05/06
	05/07
	05/08
	05/09
	05/10
	05/11
Teachers (foreign language)	05/12
	05/13
Teachers (homemaking/ food service)	05/14
	06/00
Teachers (nurse)	06/01
Teachers (driver education)	06/02
	06/03

APPENDIX B

SEATING ARRANGEMENTS IN CLASSROOMS IN WHICH PUPILS SELECTED THE SEATS OF THEIR CHOICE *

FRONT

B B -- B --
B B B B B
B B B -- B
B -- B M M
-- B B -- M
-- B -- -- --

Driver Education
(Paired with Black Studies)

FRONT

M W M B --
M -- -- B B
W M O O B
W -- B B B
M M B -- M
M -- M -- M

Typing I

FRONT

B B O M
M B M --
W (?) B M
M -- W M
-- B M O (?)
B B B B
-- B B --

English 11th

FRONT

W M O B B
M W W O B
M -- -- B M
M M B -- --
B B B B --
M M B -- --

Driver Education

* Symbols used in this appendix denote the race or ethnicity of pupils: M=Mexican; W=White; B-Black; O-Orientals (includes Filipinos): (?)=race or ethnicity uncertain

FRONT

M M M --

-- M M M

M M M --

-- W (?) -- M

-- -- M M

M -- M M

-- -- M --

Brown Studies

FRONT

-- M -- W W

B B O -- B

B M O M --

B M M M W

-- B B -- --

-- B -- -- M

Driver Education

FRONT

M -- O O

M -- O --

B M W M

-- W O M (?)

B -- M M

B -- B M --

B B B -- --

U. S. History

FRONT

— W W O

M O M M

M O W —

M M W B

— B M B

B B — M

— B — —

English 10th

FRONT

— O O W O B

— O M M B —

B — M B B —

M M B — B B

M M B — B B

— — — M M —

Science 1

FRONT

— M W M — O

— B B B — W

M B B — — —

M M O M(?) — M

M — — — M M

Science 1

FRONT

O W M — W

W O — B M

O O B B B

M O B M

— — M M —

— — — M —

Algebra I

SEP 14 1971

APPENDIX C

ACSP

CONCEPT RECOGNITION TEST (CRT)

This test has been designed to help study the ways in which high school students learn knowledge in social studies. The results will not affect your grade in this course in any way.

Do not write in this booklet. All of your answers are to be marked on the answer sheet provided. Your teacher will give you instructions as to how to fill in the information needed on the answer sheet and how to mark your answers.

Your best thinking and serious participation will be extremely helpful.

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Questions 1 through 20 are presented in the same way. Each question will give an underlined word or phrase. It will then ask you to pick out one answer (from a list of five items) which is either an example of the underlined word or phrase or is not an example of the underlined word or phrase.

Here is a sample question. This is Sample Question A.

Sample Question A. vehicle: Which of the following is an example of a vehicle?

1. a cup
2. a bed
3. a truck
4. a flower
5. none of the above are examples of vehicles

Notice in Sample Question A that the underlined word is vehicle. Item 3. is an example of a vehicle and is the correct answer. Note that if item 3. was not a vehicle, then item 5. would have been the correct answer.

Here is Sample Question B. Sample Question B is different. It asks you to pick out the answer which is not a vehicle.

Sample Question B. vehicle: Which of the following is not an example of a vehicle?

1. a truck
2. a car
3. a train
4. a flower
5. all of the above are examples of vehicles.

Notice that the underlined word is still vehicle. Item 4. is not an example of a vehicle and is the correct answer. Note that if item 4. had been a vehicle (like "airplane", for instance), item 5. would have been the correct answer.

Remember, choose only one answer for each question.

Before you answer each question be sure you know whether it is asking you which of the five possible answers is an example of the underlined word(s) OR whether it is asking which of the five possible answers is not an example of the underlined word(s).

1. agriculture: Which of the following is not a type of agriculture?

   1. sheep herding
   2. cloth weaving
   3. grape growing
   4. wheat growing
   5. all of the items above are types of agriculture

2. division of labor: Which one of the following would most likely show the great amount of division of labor (human labor)?

   1. a cattle farm
   2. a car factory
   3. a barber shop
   4. a hunter-gatherer society
   5. a grocery store

3. natural selection: Which of the following would not be an example of natural selection the way this idea is used in the theory of evolution?

   1. Dinosaurs died out because they were not equipped to deal with the problems that came with a big change in climate.
   2. A heavy rainfall floods a river and the people move their village.
   3. Dark-haired rabbits slowly disappear from a place where there is snow most of the year.
   4. When prehistoric human beings began to use tools, human traits useful for successful tool using became more developed.
   5. All of the above are examples of natural selection the way this idea is used in the theory of evolution.

4. Inference: In one of the following examples the pupil does not make an inference. In which example is no inference made by the pupil?

   1. A pupil looks at a picture of some tools made by prehistoric people and then describes the clothing they may have worn.
   2. A pupil reads a poem written by a Japanese poet and uses certain lines in the poem to draw some conclusions about the weather in Japan, even though the poem does not describe the weather.
   3. A pupil looks at a picture of some people and describes the clothing they are shown wearing.
   4. A pupil examines a list of the main products of a country and then uses that list to make a list of some of the social positions people have in that country.
   5. None of the pupils in the above examples make any inference.

5. social position (or "status position"): Which of the following is not a social position (sometimes called "status position") in American society?

1. garbage collector
2. brown-eyed person
3. doctor
4. teacher
5. all of the above are social positions in American society

6. environment: Which of the following is not a part of our environment?

1. the weather
2. traffic laws
3. teachers
4. air pollution
5. all of the above are parts of our environment

7. adaptation: Which of the following is not an example of adaptation?

1. People who live in peasant villages are often very suspicious of strangers.
2. Eskimos sharpen their bone knives by licking them. The saliva on the bone quickly becomes ice and provides a sharp edge.
3. Large societies usually have written laws.
4. The air we breathe is full of all kinds of dirt and harmful solid particles we cannot see.
5. Twenty thousand years ago some prehistoric hunters slowly moved south as the climate gradually changed from warm to cold.

8. social environment: Which of the following is not a part of our social environment?

1. the weather
2. a person's family
3. traffic laws
4. the ways pupils are expected to behave in school
5. clothing styles

9. hunter-gatherer society: Which one of the following is usually found in a hunter-gatherer society?

1. There are extreme differences in the wealth of the adult members of the society.
2. The privileges people have in the society are based mainly on their age and sex.
3. A few people in the society have most of the power.
4. There are a great many different kinds of jobs, each done by a different person; most people do only one kind of job.
5. There are a great variety of social positions.

10. artifact: Which of the following is an artifact (according to the way archeologists use the word artifact)?

1. the weather
2. hunger
3. pencil
4. the ways doctors are expected to act toward patients
5. none of the above items would be called an artifact by an archeologist.

11. biological characteristic: Which of the following is a biological characteristic?

1. a traffic regulation
2. skin color
3. hair length
4. shoes
5. a pupil's score on a reading test

12. technology: Which of the following is not part of technology?

1. a stone axe
2. an electronic computer
3. the process of making steel
4. plowing a field with a wooden plow pulled by an ox
5. all of the above are part of "technology".

13. function: Which of the following does not tell the function of something?

1. In the last million years man's brain has become increasingly more developed.
2. The use of a symbol, such as a flag or emblem, often helps members of a group to feel a sense of group-belonging which assists the group in working together.
3. Walking erect was very useful to prehistoric humans in spotting animals hiding in tall grass.
4. The hostility some peasant groups express toward strangers often assists these groups in keeping certain information from the government.
5. All of the above tell the function of something.

14. archeologist: Which of the following men is doing what an archeologist normally does?

1. A man studies race-relations problems in the United States.
2. A man lives with and studies a hunter-gatherer society.
3. A man studies and classifies butterflies.
4. A man studies the human body and how it works.
5. None of the above accurately describes what an archeologist does.

15. objective description: Five pupils are shown a picture. They each write a one sentence description of the picture. Which one of the descriptions below is the least objective description?

1. "The picture shows two children and two adults sitting near each other on the floor."
2. "The picture shows four people just sitting and doing nothing."
3. "The picture shows four people sitting around wasting time."
4. "The picture shows a family sitting and thinking about something."
5. "The picture shows four people--a mother and father and their two children."

16. objective description: Five pupils are shown a picture. They each write a one sentence description of the picture. Which one of the descriptions below is the most objective description.

1. "The picture shows two children and two adults sitting near each other on the floor."
2. "The picture shows four people just sitting and doing nothing."
3. "The picture shows four people sitting around wasting time."
4. "The picture shows a family sitting and thinking about something."
5. "The picture shows four people--a mother and father and their two children."

17. role: Which of the following does not describe part of a person's role or a group of people's role?

1. All the people in the kingdom bowed to the king.
2. Privates in the army must salute their superior offiters.
3. People who earn money in the United States are expected to pay taxes.
4. People who smoke cigarettes have a greater chance of getting diseases of the lung than people who do not smoke cigarettes.
5. At many schools, pupils are not allowed to call teachers by their first names in class.

18. hypothesis: In which of the following examples does the pupil not make an hypothesis?

1. A pupil looks at a collection of stone tools. The shape of several of the tools suggests to him that the society in which the tools were made had a written language. The pupil tries to find more evidence to help him decide if the society did have a written language.
2. A pupil looks at a collection of stone tools. He has an idea that the people who made them lived in houses and not in caves. The pupil later finds that the tools were found in a cave by an archeologist.
3. A pupil looks at some things made by a group of prehistoric people. He has an idea from looking at the things that the people did not live in caves. Later he learns that near the place where these things were found, the remains of sun-baked mud walls were also found. The pupil feels certain that he is right.
4. A pupil reads a story about a village in Southeast Asia. He looks for more information about the people who live in the village. He finds more information in several places and learns all he can about the village.
5. A pupil reads a story about a village in Southeast Asia. As he reads the story he begins to think that the village is what an anthropologist would call a "peasant' village. While he is finishing the story he looks for more evidence to tell him whether or not this is a "peasant" village.

19. cultural characteristic: Which of the following is not a cultural characteristic?

1. The language a person speaks.
2. The number of kinds of jobs found in a society.
3. Using chopsticks to eat with.
4. The amount of scientific knowledge a society uses.
5. All of the above are cultural characteristics.

20. surplus: In which of the following examples is there a surplus of food?

1. There is just enough food to feed everyone in the village. Nobody goes hungry.
2. There is a shortage of food in the village. Most people are hungry. Some have starved to death. Many are ill.
3. The village people are well fed. Nobody goes hungry. The village trades some of its food to the city in exchange for manufactured items.
4. In none of the above examples is there a surplus of food.
5. It is impossible to have a surplus of food in a village.

* * * * * *

Questions 21 through 30 are presented differently than the questions you have already answered. Questions 21 through 30 first describe or present a situation and then ask you to pick out a name or descriptive phrase which best fits that situation.

Here is Sample Question C. It is like questions 21 through 30.

Sample Question C.

Situation: Five pupils line up in a row. At a given signal they run as fast as they can around a track back to where they started. Each pupil tries to finish before the others do.

Question: What kind of activity is this situation an example of?

1. deep thinking
2. a music festival
3. a social studies class
4. relaxation
5. a race

This situation describes a race, and item 5. is the correct answer.

21. Situation: A group of people live in a village. They get their food mostly through farming. The laws of the country in which they live are made by other people. The people in the village have nothing to say about the laws of their country. The people in the village must pay high taxes to the government of the country in which they live.

Question: What kind of society is the village described above?

1. a hunter-gatherer society
2. a tribal society
3. a peasant society
4. a prehistoric society
5. an industrialized society

22. Situation: People in ancient Mesopotamia kept records of law cases and legal contracts by making marks in tablets of clay. The system of marks is called cuneiform.

Question: What is cuneiform an example of?

1. a type of communication
2. a type of economics
3. a type of government
4. a type of resistance to change
5. a type of agriculture

23. Situation: In many societies people who cure diseases for a living have more prestige and are "looked up to" more than people who farm or make clothes as a way of making a living.

Question: What is this situation an example of?

1. biological characteristics
2. a kind of society called a "tribe"
3. a kind of society called a "state"
4. centralization of authority
5. ranking of status positions

24. Situation: In Mbuti society all men, women, and older children hunt together.

Question: What is hunting together in Mbuti society an example of?

1. an integrative mechanism
2. a biological characteristic
3. reciprocal resistance
4. economic differentiation
5. unnatural selection

25. Situation: In a small hunter-gatherer society the people in the society control the ways in which things are produced. They decide for themselves how much of "this" or "that" will be made, how long they will work at "this" job or "that" job, and so on. They decide what they will trade with whom for what.

Question: What part of the life of a society is described in this situation?

1. the agricultural part
2. the economic part
3. the resistance part
4. the technological part
5. the biological part

26. Situation: Some of the tools made by certain prehistoric people are very refined and show that they have been made by complicated and time-consuming methods. These particular tools were most likely made by a "tool-maker", a person who spent most of his time just making tools and not doing other things like hunting, making clothes, cooking, gathering firewood, and the like.

Question: What is this an example of?

1. genetic variation
2. specialization
3. peasant society
4. asymmetry
5. cultural diffusion

27. Situation: In particular countries, the rate of pay for a factory worker who runs a drill press machine is determined or set by the government of the country. The rate of pay for a sales girl in a department store is also determined or set by the government of the society.

Question: What is this an example of?

1. a surplus
2. theory of mechanization
3. theory of revolution
4. a peasant society
5. centralization of authority

28. Situation: A society has the following characteristics: (i) there are hundreds of different kinds of jobs in the society which are done by different groups of people; (ii) the society grows and raises its own food; (iii) there are great differences in the power and wealth of the members of the society with a small proportion of the people having most of the power and wealth; and (iv) the society produces a great many items that the people need and want.

Question: This society is most likely which of the following?

1. The kind of society anthropologists call a "state".
2. The kind of society anthropologists call a "peasant society".
3. The kind of society anthropologists call a "tribe".
4. The kind of society anthropologists call a "hunter-gatherer" society.
5. None of the above answers is correct. From the description there is no way of telling what kind of society this probably is.

29. Situation: A pupil is shown a picture. He says the following about the picture: "This picture shows some people in a park. Some of the people are sitting on the grass, some are fishing in a little pond, some are walking. A few people are carrying umbrellas. There are two dogs and a monkey in the picture. The people are of all different ages and they are dressed very differently than the way we dress. Everybody looks like they are not moving or moving slowly. Only one girl looks like she is in the middle of running. Her arms and legs are in the position one often sees when someone is running."

Question: Which word below tells best what the pupil was doing in his statement?

1. describing
2. making an inference (or making inferences)
3. making an hypothesis (or making some hypotheses)
4. drawing a conclusion
5. making a judgment

30. Here is a list of things:

tools	money	radios	government
shoes	drawings	cars	superstitions
laws	houses	watches	division of labor
agriculture	clothing	scissors	basketballs

Question: What are all these items examples of or parts of?

1. status positions
2. civilization
3. centralization of authority
4. culture
5. None of the above is correct. These are all separate examples of things societies can have.

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APPENDIX D

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Identification No. _____ Teacher: _____

School: _____ Period: _____

Age: Years _____ Months _____ Check one: Male _____ Female _____

CONTRASTING-INFERENCING TEST (POST FORM) (LOIN)

This test has been designed to help study the ways in which high school students learn certain kinds of knowledge in social studies. Do your best work and your best thinking and answer as many questions as you can. Your serious participation will be extremely helpful. The results will not affect your grade in this course in any way.

Most of the questions ask you to do some writing in your own words. For many of these questions there are several possible answers. Sometimes pupils do not answer questions because they think they cannot write well. The people who made this test really do want you to write in your own words and to answer as many questions as you can even when you are not sure of the best way to write what you want to say.

There are two parts to this test. Each part will ask you to read or look at some information and then to answer some questions.

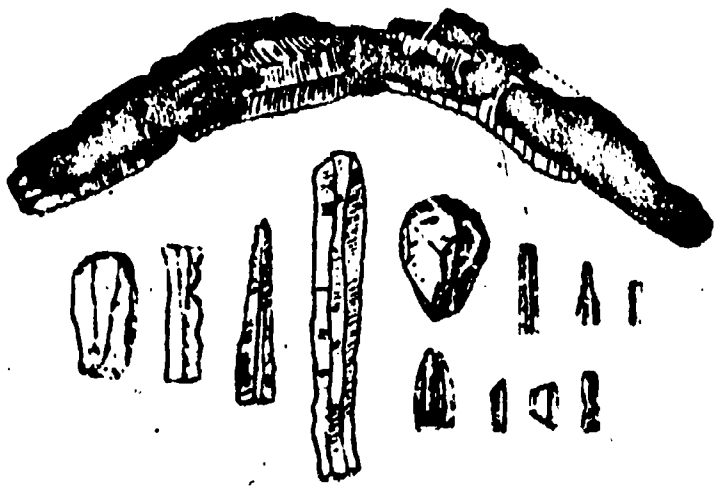
PART I

Directions

Part I of this test is about two different societies. One is called Society A and the other Society B. You will first look at pictures of things people made in these two societies. These pictures are on pages 2 and 3. After you look at the pictures you will be asked to compare some things about the two societies.

Now look at the pictures on pages 2 and 3.

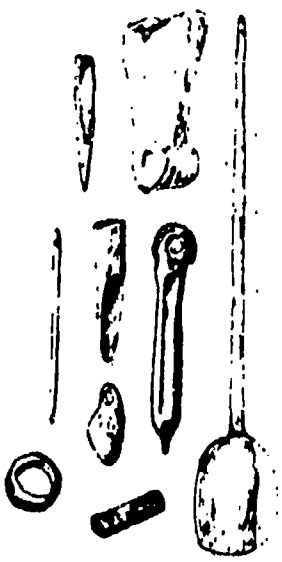
THINGS MADE IN SOCIETY A



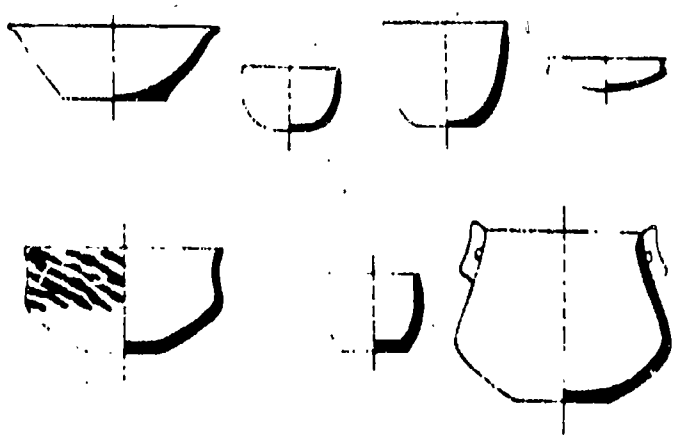
Chipped stone

Unbaked clay

Ground stone



Bone

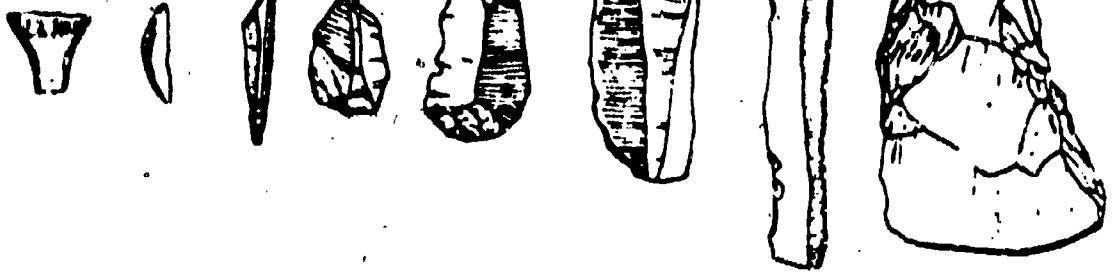


Baked clay

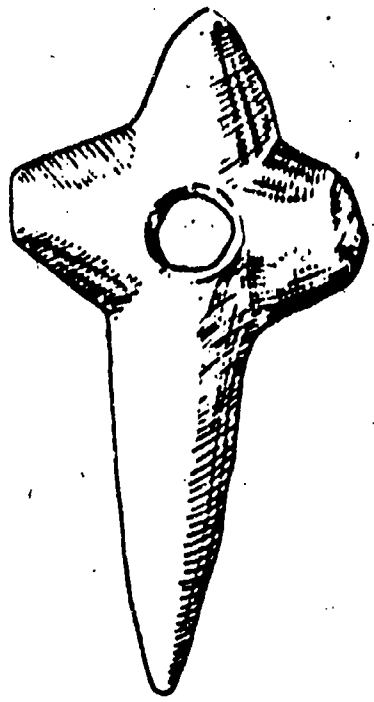
Reed matting

ITEM B

THINGS MADE IN SOCIETY B

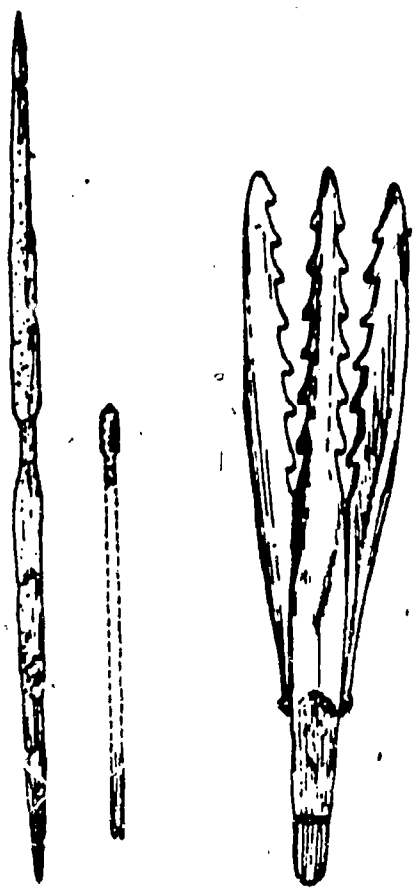


Chipped stone

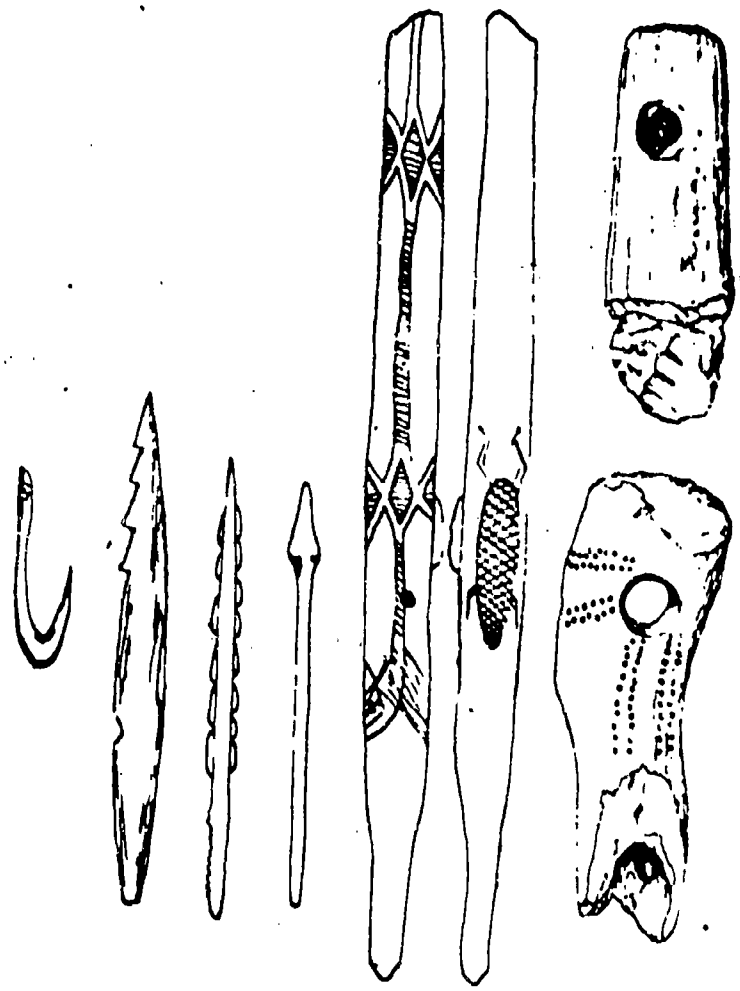


Ground stone

drawings



Wood



Bone and antler

Questions

Answer questions 1 to 9. You may look at the pictures on pages 2 and 3 while you are answering these questions. Use as much or as little of the space given for answers as you wish.

1. Do you think there is a difference in the ways the people in Society A and Society B obtained their food?

   Check one: _____yes _____no

2. If you checked "yes" in question 1, answer question 2. If you checked "no" in question 1, do not answer question 2.

   Write one or two sentences to summarize the differences between the ways the people in Society A and the people in Society B obtained their food.

3. What evidence from the pictures on pages 2 and 3 did you use in deciding on your answer for question 1? (If you did not use any evidence from the pictures, do not answer this question.)

4. Do you think there is a difference in the kind of shelter the people in Society A lived in and the kind of shelter the people in Society B lived in?

   Check one: _____yes _____no

5. If you checked "yes" in question 4, answer question 5. If you checked "no" in question 4; do not answer question 5.

   Write one or two sentences to summarize the difference in the kind of shelters used by Society A and Society B.

6. Name a social position (or status position) which you would probably find in Society A and probably not find in Society B. (Three status positions in our society are "father," "son," and "teacher.")

_____

7. What is your reason for answering question 6 the way you did?

_____

_____

_____

8. Name another social position (or status position) which you would probably find in Society A and probably not find in Society B. (Three status positions in our society are "father," "son," and "teacher.")

_____

9. What is your reason for answering question 8 the way you did?

_____

_____

_____

PART II

Directions

PART II of this test is about two "crimes." The two crimes were committed in different societies. After you read about the two crimes and what was done about them you will be asked to contrast (or tell differences between) the two societies in which the crimes occurred.

The Crime in Society C

The people in Society C were great buffalo hunters. After buffalo were sighted, the men of the society would ride out on their horses in a straight line. No man could charge the herd until the signal was given. When the signal was given, the two ends of the line would race out to close a circle around the buffalo herd so that it could not break away. Then the hunters would shoot the buffalo with their rifles. After the herd was killed, the women would come on foot and skin the animals and prepare them for cooking.

On one of the hunts the tribe was moving together up the Rosebud River toward the Big Horn Mountain country in search of the buffalo. The Shield Soldiers, who were in charge on that occasion, sent the scouts out looking for herds. When the scouts came back to report that they had seen buffalo just ahead, the Shield Soldiers gave the order that no one should leave the camp or attack the buffalo.

All the hunters went out in a line with the Shield Soldiers in front to hold them back. Just as they were coming up over a long ridge down wind from where the scouts had reported the herd, they saw two Cheyenne men down in the valley riding in among the herd.

As soon as the Shield Soldiers saw the two men riding in among the buffalo, a Shield Soldier chief gave a signal to his men. They paid no attention to the buffalo, but charged in a long line on the two violators of the rules. The Shield Soldier chief shouted out for everyone to whip them: "Those who fail or hesitate shall get a good beating themselves."

The first men to reach the spot shot and killed the horses from under the hunters. As each soldier reached the rule-breakers he lashed them with his riding whip. Then some seized the guns of the two and smashed them.

The father of these two young men rode up. He looked at his sons before talking. "Now you have done wrong. You failed to obey the law of the tribe. You went out alone and did not give the other people a chance. This is what has happened to you."

Then the Shield Soldier chiefs took up the talk. "Now you know we mean what we say." The young men did not say anything.

After that the chiefs relented. They called their men to gather around. "Look how these two boys are here in our midst. Now they have no horses and no weapons. What do you men want to do about it?"

One of the soldiers spoke up, "Well, I have some extra horses. I will give one of them to them." Then another soldier did the same thing. Bear Standing On A Ridge was the third to speak out. "Well," he announced, "we broke those guns they had. I have two guns. I will give them one. All the others said, "Ipewa, good."

The Crime in Society D

This crime was committed in Society D. At all the railroad stations in Society D there are large booths where coffee, tea, and other light refreshments are sold. The coffee and tea are sold by the cup but both are made in large quantities

in metal containers. Each booth has over two dozen workers who work in shifts so that the booths can be open 24 hours a day. Workers have definite jobs to do. Most of them are waiters and waitresses who take orders, make and serve the coffee and tea, and serve the other small items that can be ordered by travelers, wash and dry the cups and equipment, and keep everything clean. For each booth there are three "managers," (one for each of the three 8-hour shifts) who supervise the other workers and see that everything is going well. Finally, there is a "head manager" at each booth who supervises the "managers," orders supplies, and takes care of the records of the booth. "Head managers" must report to a "district chief." Each "district chief" is in charge of supervising the "head managers" of booths at about ten railroad stations. "District chiefs" are officials in the government of Society D.

The government of Society D has figured out exactly how much raw coffee and tea are to be used in brewing these beverages in the metal containers at the railroad station booths.

Thirty-one people were put on trial for committing a crime. Thirty of them were workers at one railroad station booth (26 waiters and waitresses, 3 "managers," and the "head manager"). The other person, whose name is Kusin, was the "district chief" in charge of the booth (along with nine other booths).

The people were charged with the crime of "stealing state property." Their crime consisted of the following: instead of using the correct amount of raw coffee and tea in making the large containers of hot coffee and tea, the waiters and waitresses used less raw coffee and tea. They, therefore, had "extra" raw coffee and tea with which they made extra containers of hot beverages. When they sold these "extras," they did not put the money into the cash box, but put in into their own pockets. Some of this "extra money" they kept and some they paid to the "managers" who in turn gave some of the money to the "head manager," who in turn gave some of the money to Kusin. Apparently this "stealing" had been going on for some time -- perhaps as long as a year.

The trial lasted over five weeks. Over 39 witnesses testified. Three lawyers defended the accused persons. The State Prosecutor tried to convince the judge that all the people were guilty and that the maximum penalty of 15 years in prison should be given. In the end, the judge declared them all guilty and sentenced them to an average of four years in a labor colony. All the private possessions of the 31 people were taken away.

Questions

Answer questions 10 to 20. You may re-read any part of the two "crime" stories while you are answering these questions. Use as much or as little of the space given for answers as you wish.

10. Write one or two sentences contrasting (telling the difference between) the number of people in Society C with the number of people in Society D.

11. Tell three different ways in which the government of Society C and the government of Society D are different from each other.

a.

b.

c.

12. All societies have things which pull the people in the society together and give them a feeling that they belong to the same group. Tell two things from Society C that help to pull the people together and help give them a feeling that they belong to the same group.

a.

b.

13. Tell two things from Society D that help to pull the people together and help give them a feeling that they belong to the same group.

a.

b.

14. Tell one way in which the social positions in Society C and the social positions in Society D are different from each other. (Three examples of social positions in our society are "father," "daughter," and "teacher.")

    Do not answer this question by listing the social positions in Societies C and D or by referring only to individual social positions.

15. Tell what evidence in the two stories you used in figuring out your answer to question 14. If you did not use any evidence from the stories in figuring out your answer to question 14, do not answer this question.

16. Tell another way the social positions in Society C and the social positions in Society D are different from each other. (Three examples of social positions in our society are "father," "daughter," and "teacher.")

    Do not answer this question by listing the social positions in Societies C and D or by referring only to individual social positions.

17. Write one or two sentences to summarize the differences between the technology of Society C and the technology of Society D. "Technology" refers to all the equipment, methods, and ideas the society uses to produce things.

18. Tell what evidence in the two stories you used in figuring out your answer to question 17. If you did not use any evidence from the stories in figuring out your answer to question 17, do not answer this question.

19. Tell three ways in which the punishment for the two people in Society C and the punishment for Kusin are different.

a.

b.

c.

20. How does the size of Society C and the size of Society D affect the character of law and punishment in the two societies?

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APPENDIX E

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Identification No._____ Teacher:_____

School:_____ Period:_____

Age: Years_____ Months_____ Check one: Male_____ Female_____

IDENTIFYING STATUS POSITIONS - (POST-TEST) (SIT)

This test has been designed to help find out the ways in which high school students learn knowledge in Social Studies. The results will not affect your grade in this course in any way.

During the test you will be given parts of two stories to read and will be asked questions about the stories. Answer as many questions as you can, even if you are not sure your answers are correct.

In some cases very long spaces are provided for answers. Use as little or as much of the spaces as you wish.

If you took a test like this several months ago you will notice that the one you are taking now does not repeat the same questions as many times and that the number of questions has been reduced.

YOUR TASK

You will now read a portion of the story "The Impatient Hunters". When you are finished you will be asked to NAME SOME GROUPS OF PEOPLE IN THE SOCIETY THAT ARE EXPECTED BY OTHERS IN THE SOCIETY TO ACT OR BEHAVE IN CERTAIN WAYS.

THE STORY - PART A

The Impatient Hunters

Part A - The Hunt Begins

One hundred years ago the Cheyenne were great buffalo hunters. After buffalo were sighted, the men of the tribe would ride out on their horses in a straight line. No man could charge the herd until the signal was given. When the signal was given, the two ends of the line would race out to close a circle around the buffalo herd so that it could not break away. Then the hunters would shoot the buffalo with their rifles. After the herd was killed, the women would come on foot and skin the animals and prepare them for cooking.

An old Cheyenne by the name of Stump Horn told this story about one of the hunts he went on. The tribe was moving together up the Rosebud River toward the Big Horn Mountain country in search of buffalo. The Shield Soldiers, who were in charge on that occasion, sent the scouts out looking for herds. When the scouts came back to report that they had seen buffalo just ahead, the Shield Soldiers gave the order that no one should leave the camp or attack the buffalo.

All the hunters went out in a line with the Shield Soldiers in front to hold them back. Just as they were coming up over a long ridge down wind from where the scouts had reported the herd, they saw two Cheyenne men down in the valley riding in among the herd.

QUESTIONS

You may look back at Part A of the story any time you wish.

1.

A. Name a group of people in the tribe in this story who are expected by others in the tribe to act or behave in certain ways.

_____

B. Carefully explain how you know that the group of people you just named are expected by others in the tribe to act or behave in certain ways.

_____

_____

_____

2.

A. Name another group of people in the tribe in this story who are expected by others in the tribe to act or behave in certain ways.

B. Carefully explain how you know that the group of people you just named are expected by others in the tribe to act or behave in certain ways.

3. Anthropologists have a definition for the term "status position". Here is the definition: a status position is made up of any group of people who are expected by others in their society to act or behave in certain ways.

From Part A of the story, make a list of the status positions in the society in which the story takes place. (Use as many or as few lines as you wish.)

YOUR TASK

Read Part B of the story. Then answer the questions appearing after Part B.

THE STORY - PART B

Part B - Crime and Punishment

As soon as the Shield Soldiers saw the two men riding in among the buffalo, a Shield Soldier chief gave a signal to his men. They paid no attention to the buffalo, but charged in a long line on the two violators of the rules. The Shield Soldier chief shouted out for everyone to whip them: "Those who fail or hesitate shall get a good beating themselves."

The first men to reach the spot shot and killed the horses from under the hunters. As each soldier reached the rule-breakers he slashed them with his riding whip. Then some seized the guns of the two and smashed them.

The father of these two young men rode up. He looked at his sons before talking. "Now you have done wrong. You failed to obey the law of the tribe. You went out alone and you did not give the other people a chance. This is what has happened to you."

Then the Shield Soldier chiefs took up the talk. "Now you know what we do when anyone disobeys our order," they declared. "Now you know we mean what we say." The young men did not say anything.

After that the chiefs relented. They called their men to gather around. "Look how these two boys are here in our midst. Now they have no horses and no weapons. What do you men want to do about it?"

One of the soldiers spoke up, "Well, I have some extra horses. I will give one of them to them." Then another soldier did the same thing.

Bear Standing On A Ridge was the third to speak out, "Well," he announced, "we broke those guns they had. I have two guns. I will give them one."

All the others said, "Ipewa, good."

QUESTIONS

4. Anthropologists have a definition for the term "status position". Here is the definition: a status position is made up of any group of people who are expected by others in their society to act or behave in certain ways.

The two men violated the behavior expected of a particular status position in Cheyenne society. Name the status position in Cheyenne society that they violated.

_____

5. Carefully explain how you know that the two men violated the status position you named in question 4.

_____

_____

_____

_____

6. What did the two men do that others in their society considered wrong or bad?

_____

_____

_____

7. Tell two things from the story that show you that others in the society felt the two men did something wrong or bad.

A. _____

_____

B. _____

_____

8. Make a list of any groups in the tribe in the story that perform actions or behaviors that no other group in the society performs. Name each group and tell the actions or behaviors it performs not performed by any other group in the society.

	Name of Groups		Actions or Behaviors Not Performed by Others
a.	_____	a.	_____
b.	_____	b.	_____
c.	_____	c.	_____
d.	_____	d.	_____
e.	_____	e.	_____

YOUR TASK

You will now read a few paragraphs about a group of people who call themselves the Kurela. When you are finished you will be asked to NAME SOME GROUPS OF PEOPLE IN THE SOCIETY THAT ARE EXPECTED BY OTHERS IN THE SOCIETY TO ACT OR BEHAVE IN CERTAIN WAYS.

THE STORY

The Kurela

In a huge empty field the Kurela men assembled in their war parties. At the edge of the field a young Kurela warrior groaned in pain as an arrow with a long, toothed tip was taken out of his forearm by an old man. Another Kurela warrior passing the wounded boy seized the bloody arrow as it was twisted free and ran with it toward the front where the fighting was taking place. The boy stood up, staring at the blood running away between his fingers. He was proud, and the pride showed.

Among the Kurela, a man without bravery is "kepu" -- a worthless man, a "man-who-has-not-killed." The kepu men go to the war field with the rest, but they remain well to the rear away from the fighting. Some howl insults and shake

weapons from afar, but most are quiet, content to add to the number of men and weapons the enemy sees. The kepu men are never jeered or driven into battle -- no one must fight who does not choose to -- but their position in the tribe may be determined by how they have acted in battle. Unless they have strong friends or family, any wives or pigs they may obtain will be taken from them by other men, in the confidence that they will not resist. Few kepu men have more than a single wife, and many of them have none.

A kain with long hair in twisted cordy strings stalked forward followed by another whose shoulders were daubed with yellow clay. U-mue came, in his huge mikak and tall paradise headdress, black grease gleaming in the hollows of his collarbones. The miraculous pig grease, blackened by the ash of grasses, is applied by all warriors whenever it is available. It is made holy by ceremony and is believed to aid morale and health as well as good appearance. It is worn by most men in their hair and on their foreheads, and sometimes in a broad band across the cheekbones and the nose, but U-mue smears it all over his head and shoulders producing a black devilish sheen. He moved separately from the rest, for he claims to fight alone, with a taste for the treacherous warfare of the underbrush. In truth, he is rarely seen in action, and his claim to five kills is treated with more courtesy than respect. Among the warriors the number of kills are well known and are a main measure of the importance and prestige of a kain.

QUESTIONS

9. Is "kepu" (or "kepu men") the name of a status position in Kurela society?

Check one: _____ yes _____ no _____ can't tell

If you checked "yes" answer question 10.

If you checked "no" answer question 11.

If you checked "can't tell" answer question 12.

10. (Answer only if you checked "yes" in question 9.)

What evidence is there in the passage about the Kurela that tells you that "kepu" (or "kepu men") is a status position in Kurela society?

_____

_____

_____

11. (Answer only if you checked "no" in question 9.)

How can you tell from the passage about the Kurela that "kepu" (or "kepu men") is not a status position in Kurela society?

_____

_____

_____

12. (Answer only if you checked "can't tell" in question 9.)

What is missing from the passage about the Kurela that makes it impossible for you to tell whether or not "kepu" (or "kepu men") is a status position in Kurela society?

13. Name a status position in Kurela society. (Do not use "kepu" or "kepu men".)

14. Carefully explain how you know that what you named in question 13 is a status position in Kurela society.

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APPENDIX F

Description of tasks included in the Status Identification Test (SIT) together with performance criteria for "pass" judgment of performance for each item are given in this appendix. The letter designations (T_1, A, B, etc.) refer to items in Figure 14.6 of Chapter 14 in Part III of this report.

	Description of task	Performance criteria
T_1	Given a brief written narrative passage about people in an unfamiliar society, such passage containing evidence of overt negative sanctioning behavior, pupil can demonstrate that the group toward which such sanctions would always apply is a status position by stating an appropriate rule of conduct for the group in question.	(Test item 5) Pupil must indicate that hunters (or men) must follow the orders of the Shield Soldiers or must hunt together (or similar) in terms indicative of the "expected" aspect of the behavior, e.g., "Hunters are expected to...", "Hunters must not...", etc.
A	Given a narrative passage containing evidence of overt negative sanctions, pupil can name the inclusive group all of whose members would be similarly sanctioned if performing the behavior presented in the passage.	(Test item 4) Pupil must answer "hunter" or "men" or "adult males", or terms having any of these meanings.
B	Given a narrative passage containing evidence of overt negative sanctions, pupil can describe the sanctioned behavior.	(Test item 6) Pupil must correctly describe what the two young men in the story have done which others consider wrong.
C	Given a narrative passage containing evidence of multiple overt negative sanctions, pupil can identify the sanctioning behavior.	(Test item 7) Pupil must describe two different instances of sanctioning behavior from the narrative.
G	Given the term "status position" and a verbal definition the pupil has already used, the pupil can link the term to the internal concept represented by the verbal definition.	(Test item 3) Pupil will repeat the answers he gave in test items 1A and 2A (the correctness of answers to 1A and 2A is inconsequential here).

	Description of task	Performance criteria
T_2	Given a written narrative passage about people in an unfamiliar society, such passage not containing evidence of overt sanctioning behavior, pupil can name a status position and demonstrate that he has used evidence of expected behavior to identify the position.	(Test items 13 and 14) Pupil must name a group in Kurela society and substantiate the choice by describing an expected behavior for the group named in terms which clearly indicate the "expected" nature of the action(s).
D	Given a narrative passage not containing evidence of overt sanctioning behavior, pupil can name inclusive groups of people in that society expected by others to act in unique ways and can demonstrate that he is applying the criteria of "expected behavior". (Note: C_1 and C_2 differ in that C_1 requires pupils to identify "status positions", while C_2 requires pupils to identify "groups expected by others to act in particular ways.")	(Test items 1 and 2) Pupil must name two different groups and substantiate these choices by describing, for each, expected behaviors in terms which clearly indicate their "expected" nature, e.g., "they were expected to...", "the men were supposed to...", "the scouts were told to go by the chief...".
E	Given the name of a group of people in an unfamiliar society, and a narrative passage in which others in the society do not express overt sanctions toward the named group, pupil can substantiate that the group in question constitutes a status position by application of the criterion of "expected behavior".	(Test items 9-12) Pupil must describe some unique behavior engaged in by "kepu" men and clearly indicate the "expected" nature of this behavior.
F	Given a narrative passage, pupil can name groups performing distinctive patterns of behavior and describe the patterns.	(Test item 8) Pupil must name at least two groups and describe unique behavior for each; naming the same group more than once using different labels or describing any behavior which others outside the group also perform disqualifies any answer.

	Description of task	Performance criteria
H	Pupils are given a narrative passage not containing evidence of overt sanctions and a verbal definition of "status position"; they are asked to name status positions for the society in which the narrative occurs.	(Test item 3) One point of correct credit is given for each unique group named; points are cumulated to yield a total.

APPENDIX G

TABLE 1 - CORRELATIONS OF COGNITIVE TESTS CHANGE SCORES WITH NON-COGNITIVE VARIABLES

Scales on CPI* - 135 Project Males

*California Psychological Inventory Scales	Concept-Recognition Test Format 1	Format 2	Total	Contrast/Infer Test (Part I)
DO	.072	.115	.125	.094
CS	.028	.095	.075	.006
SY	.054	.085	.091	- .124
SP	- .059	- .112	- .110	- .235
SA	- .045	.035	.018	- .058
WB	.240	.043	.219	.210
RE	.130	.137	.181	.069
SO	.072	.146	.139	.311
SC	.105	-.005	.083	.231
TO	.128	.026	.118	.221
GI	.141	- .063	.079	.074
CM	.176	.118	.208	.082
AC	.166	.010	.141	.120
AI	.106	.052	.115	.094
IE	.161	.119	.196	.120
PY	- .006	- .079	- .048	.034
FX	.007	.034	.024	.051
FE	- .018	.003	- .013	.122

TABLE 2 - CORRELATIONS OF COGNITIVE TESTS CHANGE SCORES

WITH NON-COGNITIVE VARIABLES

Scales on Gordon Personal and Interpersonal Values, Inventories, Reading Achievement, and SES Index - 135 Project Males

Variables		Concept Recognition Test			Contrast/Infer
		Format 1	Format 2	Total	Test (Part I)
Gordon	GP 1	.066	- .018	.045	.219
Personal	GP 2	.061	.124	.115	- .022
Values	GP 3	.020	- .189	- .082	- .008
Scales	GP 4	- .069	.175	.034	.128
	GP 5	- .065	- .062	- .086	- .220
	GP 6	- .023	.085	.025	- .111
Gordon	GI 1	.088	.011	.080	- .048
Interpersonal	GI 2	- .068	- .029	- .074	- .093
Values	GI 3	.050	.081	.088	.037
Scales	GI 4	.005	- .044	- .021	.050
	GI 5	- .024	- .128	- .093	- .092
	GI 6	- .001	.139	.077	- .027
Reading Achievement		.063	.110	.115	- .131
SES INDEX		- .027	.142	.056	.324

TABLE 3 - CORRELATIONS OF COGNITIVE TESTS CHANGE SCORES WITH NON-COGNITIVE VARIABLES

Scales on CPI* - 135 Project Females

*California Psychological Inventory Scales	Concept Recognition Test Format 1	Format 2	Total	Contrast/Infer Test (Part I)
DO	- .162	- .133	- .199	- .134
CS	- .079	- .027	- .075	- .091
SY	- .089	- .084	- .115	.017
SP	- .094	- .055	- .039	- .065
SA	- .242	- .046	- .209	.054
WB	.015	- .145	- .071	.000
RE	- .055	- .089	- .092	- .129
SO	.078	- .166	- .036	.256
SC	.205	- .146	.072	.106
TO	- .051	.075	- .081	- .167
GI	.197	- .093	.095	- .139
CM	- .099	- .111	- .138	.284
AC	.082	- .145	- .021	.054
AI	- .026	- .062	- .055	- .260
IE	- .056	- .016	- .052	- .132
PY	.069	- .039	.029	- .170
FX	- .043	.047	- .005	- .185
FE	- .025	.078	.026	.018

TABLE 4 - CORRELATIONS OF COGNITIVE TESTS CHANGE SCORES WITH NON-COGNITIVE VARIABLES

Scales on Gordon, Personal and Interpersonal Values, Inventories, Reading Achievement, and SES Index - 135 Project Females

Variables		Concept Recognition Test Format 1	Format 2	Total	Contrast/Infer Test (Part I)
Gordon	GP 1	.139	.068	.145	.056
Personal	GP 2	- .183	- .183	- .246	- .158
Values	GP 3	- .010	.121	.076	.176
Scales	GP 4	- .075	- .053	- .140	- .140
	GP 5	.113	- .017	.125	.125
	GP 6	- .001	- .027	- .091	- .091
Gordon	GI 1	.010	.165	.129	.129
Interpersonal	GI 2	.238	- .005	.189	.189
Values	GI 3	- .203	- .021	.247	.247
Scales	GI 4	.043	.106	- .219	- .219
	GI 5	.023	- .089	- .008	.008
	GI 6	- .205	- .157	- .264	- .264
Reading Achievement		- .143	.080	- .068	- .207
SES INDEX		- .070	- .012	- .061	- .246