

A DEVELOPMENTAL STUDY  
IN THE APPLICATION OF GROUP TECHNIQUES  
TO IMPROVE ORAL AND WRITTEN COMMUNICATION SKILLS  
IN THE HIGH SCHOOL ENGLISH CLASS

by

PHYLLIS BENNA SCHWARTZ  
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APPROVAL

Name: Phyllis Benna Schwartz

Degree: Master of Arts (Education)

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Examining Committee:

Chairman: Arthur H. Elliott

---

Maurice Gibbons  
Senior Supervisor

---

Norman Robinson

---

Thomas Mallinson

---

F.L. Brissey  
External Examiner  
Professor  
University of British Columbia

Date Approved: Mar 28 / 73

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IN THE HIGH SCHOOL ENGLISH CLASS

Author: \_\_\_\_\_

(signature)

PHYLLIS B. SCHWARTZ

(name)

10 April / 73

(date)

## ABSTRACT

### A DEVELOPMENTAL STUDY IN THE APPLICATION OF GROUP TECHNIQUES TO IMPROVE ORAL AND WRITTEN COMMUNICATION SKILLS IN THE HIGH SCHOOL ENGLISH CLASS

The purpose of this study was to develop a method of instruction that would facilitate the improvement of a student's oral and written communication skills and his attitude toward himself as a communicator. To do this, a model, based upon the fundamental process of human development, was created. It was hypothesized that as a result of training in the skills necessary to work in a small group, there would be an improvement in a student's oral and written communication skills as well as an improvement in the student's attitude toward himself as a communicator. The proof of this hypothesis was dependent upon the condition that the small groups did, in fact, form.

A developmental study to identify and refine the effective elements of a small groups training programme was carried out for nine weeks in two grade eleven English classes. Although a developmental study, quasi-experimental conditions were used to gather some summative data on the effect of this programme on oral and written communication skills and the student's attitude toward himself as a communicator. The experimental group was composed of two grade eleven English

classes which participated in the small groups training programme; the comparison group was composed of two grade eleven English classes which were taught in their usual manner.

Both the experimental and comparison groups were pre-tested and post-tested on oral and written communication skills, attitude toward themselves as communicators and attitude toward English class. The experimental class was also pre-tested and post-tested on group formation. Extensive observation of the programme was recorded in field notes kept by teachers, journals kept by students and fourteen paper-and-pencil tests.

Important findings resulting from this study are (1) there was an observable improvement in students' oral communication skills but no improvement in written communication skills; (2) students were cautious, slow and reluctant to become personally involved in the programme, but when they did become involved, observable improvements included more awareness of themselves, more awareness of others, more skill at group work, improvement in communication skills, and personality and behaviour changes; (3) before independent group work was possible, students required more training in group work skills than was planned in the original programme; (4) most of the instruments for observing change and growth during the programme were both irritating to the students and ineffective. . . .

Both the formative in-process data, and the summative quasi-experimental data suggest promising directions for the

next stage in the development of this training programme, but the timetable of activities must be drastically changed and more effective instruments for assessing individual and group change must be found or developed.

THE IMAGE

Within the earth, wood grows:  
the image of PUSHING UPWARD.

Thus the superior man of devoted character  
Heaps up small things  
In order to achieve something high and great.

46. Shên / Pushing Upward  
The I Ching

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## Chapter 1

### INTRODUCTION

After air, water, food and shelter, communication skills are necessary for man's survival. In fact, to acquire food and shelter in a technological society, communication skills are essential. As technological advances make high speed communication devices more accessible and as the world becomes a more crowded place, survival essentially comes to depend upon the development and perfection of one's communication skills.

The public school seeks to provide specific training in communication skills by offering language arts courses, i.e., training in reading, writing and speaking skills. The inadequacy of this method of instruction is that it is based upon the assumption that effective communication skills are acquired by imitating uniform patterns of acceptable speech and writing which have been established by a self-selected group of authorities. Training in effective communication skills does not concern itself with the interpersonal communication necessary to everyday life or the demands of a highly structural society.

If one turns to the available research on teaching communication skills, one finds many novel, attention-getting teaching gimmicks and a dearth of sound research on effective ways of teaching oral and written communication skills. Both avenues are dismal. Yet communication skills are learned early

in a child's development, before he enters school. Somewhere in the course of the child's schooling, this development is arrested. In fact, the very nature of the classroom does not encourage the learning of interpersonal communication skills which are necessary for growth to continue.

The aim of this study was to seek a method of instruction that would help students to acquire the communication skills necessary for the demands of academic, occupational and social life. As available research provided no direction for a method of instruction that facilitated the development of communication skills, it was necessary to chart a new course. The study began with an inquiry into the nature of communication skills as they develop in the individual. In this inquiry, it was found that fundamental to every human being is the machinery with which to develop communication skills. Necessary for this is an environment which demands them and nurtures them (Piaget, Erikson and Lenneberg). A model of this fundamental process was translated into a classroom programme which established an environment that encouraged communication and provided training in communication skills. This environment was the autonomous small group.

The purpose of this study was to test the hypotheses that as a result of training students to work in small groups, there would be an improvement in the student's oral and written communication skills as well as in his attitude toward himself as a communicator. The proof of this was dependent upon the

condition that these groups indeed formed.

As this was a relatively unexplored area, it was necessary to identify effective elements in a programme based upon the theory. Thus the study was developmental in nature. Quasi-experimental conditions were established for this study in order to assess the effectiveness of such a programme and pave the way for empirical research.



## Chapter 2

### REVIEW OF THE LITERATURE RELATED TO THE TEACHING OF ORAL AND WRITTEN COMMUNICATION

In English classrooms a surprisingly small amount of time is devoted to training in the skills of communication. According to a survey of English teaching practices conducted by Squire and Applebee (1968, p. 40), instruction in oral and written communication skills receives less than 40% of the English teacher's attention. Closer examination of how this amount of time is distributed indicates that the English teacher, on the average, devotes 15.7% of instruction time to composition, 13.5% of the time to instruction in language and 4.9% of the time to instruction in speech (p. 40). It is also surprising to find how confused the methodology and curriculum in English language training is. "In the broad area of language especially, there seems to be no agreement on content, emphasis or sequence" (p. 50).

An examination of the history and research related to the teaching of oral and written communication skills yields very little advice about how to help a student improve these skills. The research about the teaching of composition has for the most part shown not what methods of teaching are successful but what methods are not.

Research in the teaching of oral communication skills is particularly scarce. The literature provides no proven

method of instruction in oral communication skills. More recent research being conducted in university speech classes focuses on (1) the relationships between training in speech and improvement in self-image and (2) communication in interpersonal relationships. However, little conclusive research is available in this area. A review of classroom practices shows that much of this research about training students to write and speak is being ignored.

At least part of the explanation for this situation lies in the state of the research in the field, and the relationship between research and practice. In the following review the focus will be on these divergent courses of research and practice during the recent history of the teaching of oral and written communication.

HISTORY. Before the turn of the century "...rhetoric, composition, English literature, and grammar were the most dominant and most constant school subjects in English curriculums of high schools in the North Central States" (Stahl, 1965, p. 20). The emphasis of instruction was on Rhetoric which was principally "...the study of figures of speech, literary style, versification, punctuation, diction, criticism, narration, exposition, description, argumentation, and the history of the English language" (pp. 49-52).

Composition was introduced as a high school subject when colleges began to demand a better quality of expression from prospective students (Hosic, 1917, p. 11). Composition

courses were especially concerned with "...sentence analysis, style, punctuation, capitalization, proof-reading, and rhetorical rules..." (Stahl, 1965, p. 66). The speech curriculum in academies and early high schools was based upon classical foundations. Most often instruction in oral expression "...consisted chiefly of phonetic drills, memorizing speeches, and practice in accent, articulation and gesture" (p. 72).

As education broadened its base to serve more students not specifically going beyond a secondary school education, there emerged a reaction to this college preparatory curriculum which "...played a strong part in the establishment of the National Council of Teachers of English in 1911" (Braddock, 1969, p. 445). This Council, working in conjunction with the National Education Association, formed the National Joint Committee on English which in 1917 produced a policy statement (the Hosis Report) that called for the reorganization of English in Secondary Schools.

The Hosis Report delineated a new future for the teaching of English by calling for several changes in the teaching of English.

a) English must be regarded as social in content and social in method of acquirement. The chief function of language is communication. Hence the activities of the English Classroom must provide for actual communication. The pupil must speak or write to or for somebody, with a consciously

to inform, convince,  
inspire, or entertain  
(Hosic, 1917, p. 27).

b) The subject matter of English consists primarily of activities, not information  
(Hosic, 1917, p. 33).

c) In the composition course, content should appeal to the pupil as first in importance; organization, second; details of punctuation, spelling, sentence structure, choice of words (matters of careful scrutiny), third  
(Hosic, 1917, p. 57).

Speech teachers promoted the teaching of speech courses "...in the regular curriculum as part of the English studies" through the National Association of Academic Teachers of Speaking, organized in 1915 (Stahl, 1965, p. 73). By 1932, speech was being taught as a regular course in more than half of the schools in the United States (p. 75). However, the teaching of speech and oral communication continued to be a secondary concern of most English teachers and professional organizations.

The Hatfield Report (1935) continued the emphasis upon personal and social needs of the individual learning written composition but went further than the Hosic Report in that "...it took its cue from the philosophy of John Dewey by dividing each major phase of English into 'Experience Strands' "of graduated difficulty and running" ...vertically through the elementary or secondary level or both" (Braddock, 1969, p. 446). The Experience Curriculum in English was designed "...to provide communication (speaking, writing, listening, reading) necessary to the conduct of social activities and to provide indirect (vicarious) experiences where direct experiences are

impossible or undesirable" (Hatfield, 1935, p. 4). These experiences in composition included practice at a variety of skills such as writing social and business letters, completing forms and writing reports, summaries, outlines, news stories and opinions. Speech experiences included practice at social conversations, telephone conversations, interviews and conferences, discussions, questions and answers, organization procedures and special occasion speeches.

The National Council of Teachers of English (1954), advocating that the language arts contribute to the individual's total growth, continued to play an influential role in the teaching of composition through the Second World War (p. 20). However, the practices in the teaching of composition seemed to ramble in various directions until another movement to tighten the English curriculum brought together the NCTE and the Modern Language Association in 1959 because "...few were satisfied with the present quality of student writing and there is little agreement on how to attack the problem" (Basic Issues in the Teaching of English, 1959, p. 6). The 1959 NCTE-MLA conference issued a list of thirty-five questions which, if answered, would significantly unify the English curriculum. Central to the composition question was "Should students be taught to 'express themselves' or to 'communicate'?" (p. 6).

In response to the public's concern about how writing should be taught, the NCTE established an ad hoc Committee on the State of Knowledge about Composition. The Committee met in

April, 1961, and agreed to "review what is known and what is not known about the teaching and learning of composition and the conditions under which it is taught" (Braddock, 1963, p. 1). A statement evaluating and describing the State of English Teaching was issued by the NCTE later that year (The National Interest and the Teaching of English, 1961). This report, concerned with specific problems related to teacher training, shortage of funds to develop programmes, and the paucity of research in English, recommended research in language development, learning and methods of teaching.

In response to this report, the United States Office of Education made funds available in 1962 for the establishment of Project English which would finance research, surveys and demonstrations and establish curriculum centres "to prepare new curricula in English, initially emphasizing 'reading, composition, and related language skills'" (Braddock, 1969, p. 448).

To answer the questions drawn up at the 1959 NCTE-MLA joint conference, members met again at the Dartmouth Conference in 1966. The concensus of this conference was that composition was valuable in the development of the child, and "By writing they [children] learn how to order and shape their experiences, thereby learning more about life and themselves" (Mueller, 1967, p. 98).

The continuous line of agreement which began with the Hosis report was again restated at the Dartmouth Conference-- the teaching of writing should provide realistic writing

opportunities not "dummy runs /because/ writing implies a message: the means must be associated with the ends as part of the same lesson" (Dixon, 1967, p. 13).

In Canada, Living and Learning (a report from the Provincial Committee on Aims and Objectives of Education in the Schools of Ontario, 1968) and the Ontario Institute for Studies in Education (1968) have extended the ideas of the Dartmouth Conference toward a more individualized and realistic environment for learning communication skills.

The Living and Learning Report emphasizes the learning of Communication skills as a

...major essential for the achievement of virtually any curricular purpose....Language is not the first or only means of communication, but it is the sine qua non of education in civilized society. The school must teach accepted usage of language and a discriminating vocabulary if pupils are to understand what they hear and read in almost every branch of knowledge and if they are to be able to think and express their thoughts in relation to such knowledge (Provincial Committee..., Ontario, p. 91).

The Committee further recommends that the language teacher abandon dull practices such as spelling drills and dull exposition of grammar. Instead, "Modern guidance of learning experience must encourage a free and creative response" (p. 92).

The Ontario Institute for Studies in Education, in English: Four Essays (1968), agrees in spirit with the Living and Learning Report. The OISE report recommends that the approach to the teaching of language in the secondary schools be one of "...discipline

as well as freedom in language....The criterion should be appropriateness rather than correctness" (OISE, 1968, p. 21).

This historical profile of the development of the English curriculum has shown a unity of purpose within the professional organizations of English Teachers. The major influence outside of these organizations have been university entrance requirements and the demands of industry. Since the turn of the century, professional organizations and government agencies responsible for public education have recommended that English be a practical course which teaches students skills appropriate to their further educational, occupational and social needs.

RESEARCH: The Teaching of Written Composition. Research in the teaching of oral and written communication skills has been a vital concern of professional organizations and government. As will be shown in this section, there has been a considerable amount of research in the area of written communication but very little in speech and oral communication.

Research in the teaching of composition clearly indicates that there is no magic formula for the improvement of composition skills. As will be discussed in this section, research findings, however, support the following four practises for the development of composition skills. (1) Students need ample time to practice their writing. (2) Students need to correct and revise their work. (3) Students need to be encouraged to write about topics that are meaningful and well-known to them. (4) Students need an audience for their written work.



Grammar and usage drills, until the last decade, have been one of the most frequently used methods of training students in written composition skills. Regarding the application of grammar and usage drills in the teaching of composition, "Reviews of educational research...have continually emphasized that instruction in grammar has little effect upon the written language skills of a pupil" (Meckel, 1963, p. 974).

Writing practice does not necessarily improve writing. Lokke and Wykoff (1948) in their research on writing practice found that one student group which wrote twice as many themes as the other improved 60% (p. 438). Research since then strongly questions the view that practice alone will improve the quality of student writing. Mere practice in writing without attention to writing quality does not improve writing skills (Dressel, Schmid and Kincaid, 1952). In an experiment which compared a group of students which wrote frequently with a group of students which wrote less frequently, it was found that there was no great improvement in organization, sentence structure, grammar and mechanics, diction, use of supporting material manifest in the writing of the group that wrote frequently (p. 293).

Similarly, the theme-a-week approach to the improvement of the quality of composition was not supported in an experiment first conducted in grade eleven and then in a sampling taken from grades nine through twelve (Heyes, 1962). This study compared two methods of teaching composition, (1) a class in which a theme a week was rigorously corrected and (2) a class in

which reading was emphasized and a theme once every three weeks was written. It was found that students in the writing class improved only in mechanics; however, the reading class showed improvement in diction and rhetoric, content and organization and on the STEP (Sequential Tests of Educational Progress) writing test (p. 321).

Red ink alone was found not to be the solution to the problem of how to improve written work. The Buxton Study (1959) examined two methods of instruction, (1) the "freedom from restraint" method in which students were given no marks, no grades, just a few general comments, and (2) the "prevision, writing and revision" method in which more direction was provided through marking, grades and an opportunity for revisions. At the end of this experiment, "The revision group gained significantly over the writing groups in three categories and over the control group in six of the fifteen categories measured" (p. 68). Buxton concludes,

College freshmen whose writing is graded and thoroughly marked and criticized and who revise their papers in light of these matters can improve their writing more than college freshmen whose writing receives a few general suggestions but no grades or intensive marking and who do not revise their papers. It is not clear however, what the relative influence is of each of these three factors (pp. 69-70).

Those conducting preliminary research under Project English doubt the above research findings and thus far show that there is "no significant difference in the writing performance of high school students which can be associated with

frequency of writing, or with intensity of teacher evaluation..." (Brett, 1964, p. 466).

Students can be taught to discover and correct language errors in their own compositions (Lyman, 1959, p. 757). In a study conducted by R. L. Lyman, junior high school students were provided with an opportunity to organize, revise and edit their own written work before it was submitted to the teacher. Students responded favourably to a weekly composition routine that allowed them ample time to concentrate upon structure and to "discover and correct language errors in their own compositions" (p. 757). After five consecutive weeks of such practice, pupils learned to find and correct three-fifths of their own language errors. There was also a reported growth in the quality of writing produced (p. 757).

What stimulates a student to write and to write well has provided an open-ended source of information about the improvement of composition. Writing about topics drawn from personal experience and as a means of expressiveness is supported by the research of Burrows, et al. (1939), Clark (1954), Holbrook (1964), and Brown (1968).

Early research in this area conducted by Burrows, et al. (1939) found that "Personal writing should not be expected until a child has had a wealth of satisfying experience with oral expression and has gained sufficient physical skill to prevent undue fatigue" (p. 221). In their work with very young writers, they also found that "Direct sensory experience

promotes lively observation and precise vivid expression" (p. 222).

Clark's (1954) research findings agree with Burrows. Clark examined a number of writing situations statistically and subjectively. She found that sixth grade students wrote longer sentences and used more dependent clauses in highly personal writing (p. 152). "Even when writing on subjects which are normally impersonal the children seemed to respond at great length and with greater enthusiasm if they were urged and permitted to tell not only the facts but how they felt about the subject" (p. 154).

In working with rejected students in England, David Holbrook (1964) found that "Too much pre-occupation with spelling and punctuation, neatness, English exercise and the rest made One of his students halt and lame in his expressions" (p. 144). Holbrook presents numerous case studies which show a student's transition from a virtually paralyzed writer to an able writer who can tell a story that is comprehensible and organized. Holbrook uses these case studies to support his thesis that "Encouraging a child to think better of itself, helping it develop its perception by praise and love and the exercise of the imagination will release its oral-verbal powers and also its relish for experience" (p. 198).

Research conducted under the Ford-Esalen project (Brown, 1970) agrees with the experience of Burrows, et al., Clark and Holbrook and adds another dimension to the stimulus for writing.

Aaron Hillman, a teacher participating in this project, designed classes in which students learned the content through first-hand experiences by using improvisation, fantasy and simulation. "The primary objective...in the cognitive field was the improvement in the student's reading and writing ability" (p. 208). The results of this learning project are reported subjectively by Aaron Hillman.

The writing also became a means of self-expression. The writing was a moving out of their inwardness, and each new paper they completed was a step toward facing life. The content of the themes showed significant improvement, but there was a correlative improvement in its style and grammar.

Perhaps more significant than this was the desire, the need of the student to approach reading and writing (p. 209).

Little research is available about the influence of an audience upon a writer. Burrows, et al. (1939) found that "Individual projection to an understanding audience was the basis of wholesome self-realization and a means to stronger, clearer written expression" (p. 220).

L. S. Vygotsky's (1962) study of language and thought processes indicate the writer's need for an audience. A child according to Vygotsky has very little motivation to learn to write when writing is first introduced to him (p. 99).

He feels no need for it and has only a vague idea of its usefulness. In conversation, every sentence is prompted by a motive. Desire or need lead to request, question to answer, bewilderment to explanation. The changing motives of the interlocutors determine at every moment the turn oral speech will take. It does not have to be consciously

directed--the dynamic situation takes care of that. The motives for writing are more abstract, more intellectualized, further removed from immediate needs (p. 99).

This review of the literature related to written communication skills has shown that little is known about how to teach written communication. The literature has provided guidelines about the context necessary to stimulate written communication and has shown that practice, feedback and corrections are also part of this training process.

RESEARCH: The Teaching of Oral Communication. Research in oral communication is a vast chasm waiting to be filled. A search for research about methods of improving a student's oral communication skills resulted in finding no significant information about improving these skills in the high school classroom. Research in psycholinguistics and research being conducted in university speech courses are two areas of research related to oral communication and provide some insight into the oral communication process.

"A Survey of Psycholinguistic Research, 1954-1964" (Diebold, 1965) provides an intellectual history of this relatively new field of study. Though the research reviewed in this article does not provide direct information about oral communication skills training, it does provide a direction for inquiry into the nature of language learning.

It has been found through research that there is a direct correlation between speech training and a more favourable self-evaluation. S. Frank Miyamoto, et al. (1956)

compared the development of self-concepts in beginning college students enrolled in speech courses and psychology courses. It was found that the students in speech courses increased their scores particularly on items referring to confidence in speaking before others, ability to persuade others and ability to express themselves in a clear and well organized manner (p. 273).

Miyamoto concluded that self-confidence is also a necessary prerequisite to good speaking performance (p. 273).

McCrosky (1967) began his study with the hypothesis that a basic speech course did not improve a student's attitudes toward himself. The results of his research did not support his hypothesis. Instead, students held a more favourable attitude toward themselves at the end of a speech course. McCroskey concluded that increased confidence in speaking ability was related to effective speaking, and that was in turn improved by training in speech (p. 117).

Brooks and Platz (1968) began their study with the premise, "Because percept of self is directly related to behavior in general, PERCEPT OF SELF AS A COMMUNICATOR would seem to have a specific impact on one's communication proficiency" (p. 48). Their study showed that a fundamental speech course had a positive effect upon three-fourths of the individuals enrolled. Though the results of the study were not found to be statistically significant, the results were interpreted positively. Brooks and Platz believe that a student's self-concept as a communicator tends to deteriorate during the first

semester of college as a result of the general college experience. Brooks and Platz thus conclude that a speech course acts as a buffer to this effect and works to improve the student's self-concept (p. 48).

"The importance of feedback in the improvement of communication is studied by Scheidel and Crowell (1966). "The feedback process in many groups is a dominant part of group discussion" (p. 273). The prime function of feedback in small group discussion, they conclude, may be to make consensus explicit on one point before the group moves along to the next (p. 278).

The function of one's self-image in determining the nature of the individual's communication was studied by Crowell, et al. (1955). Their research supported their hypothesis that "A person's self-concept of his communicative skills is related to his performance in discussion groups..., and there was a significant positive relationship between self-description of the communication skills and the performance in group discussions, particularly in leadership, contribution to group decisions, desire to do a good job and keeping the group on the ball" (pp. 26-27).

This research on oral communication, though sparse, has shown that oral communication, like written communication, needs a context and that skills cannot be developed in conditions which are unrealistic to the individual. The literature has also shown that self-image is a primary influence in the



development of oral communication skills. Like research on written communication, the feedback process is an essential for the development of these skills.

The research on oral and written communication has shown that these research findings are complementary to the recommendations of professional organizations and government agencies responsible for public education. While research in oral and written communication has shown relevance and the context of the communication to be of prime importance, professional organizations and government have continually advocated a philosophy concisely stated by Hasic in 1917:

The chief function of language is communication. Hence the activities of the English Classroom must provide for actual communication. The pupil must speak or write to or for somebody, with a consciously [sic] conceived purpose to inform, convince, inspire, or entertain (p. 27).

CURRENT CLASSROOM PRACTICES IN THE TEACHING OF ORAL AND WRITTEN COMMUNICATION. It is disillusioning to juxtapose the profile which shows agreement between recommendations and research and the profile of current teaching practices. Whereas research supports the improvement of composition skills through ample practice and revision, a most discouraging survey of the practices in the English departments of 158 schools in the United States reveals that there is so little writing instruction being done in the classroom (Squire and Applebee, 1968, p. 121).

Even less classroom time is spent on the teaching of

speech. Squire and Applebee found, "Not only is little time consciously devoted to speech instruction, but even the opportunities provided by class discussion are ignored or mis-handled by the majority of teachers" (p. 157).

A further examination of the Squire and Applebee study shows that "...the bulk of the instruction during the 15.7% of the total class time devoted to writing was instruction after the fact--after the papers had been written" (pp., 121-122). Teachers basically relied upon "...the process of correction and revision to improve student composition" (p. 137).

In contradiction to research that supports the improvement of composition skills by encouraging students to write about well-known and meaningful topics (Burrows, et al., Clark, Holbrook and Brown), Squire and Applebee also observed that the frequent but trivial composition topic called forth no real effort on the part of the student to improve his writing ability. The student was merely asked to repeat what was done in the past (p. 253). Their study found few instances of students reading each other's papers (p. 135).

Whereas recommendations and research encourage practice of speech within a natural environment, Squire and Applebee's survey of practices in the English class indicate that developing oral communication skills received little attention from English teachers (p. 157). Squire and Applebee did, however, find that a one semester speech course was being offered in some schools.

A review of textbooks on rhetoric and composition in popular use in the high school also reveals the trend of composition instruction. Emphasis in these texts is placed upon

- a) the use of models, sometimes merely for examples, sometimes for detailed analysis.
- b) insistence on and practice in the use of topic sentences.
- c) identification and illustration of various methods of development (example, analogy, etc.).
- d) consideration of possible kinds of order.  
(Lynch and Evens, 1963, p. 312).

Lynch and Evens conclude from their review that "Running through all the textbooks is an underlying tone of the futility and mounting desperation, leaving the sense... [that] students will not find any subject whatsoever on which they will be genuinely interested in writing." (p. 337).

This profile of the majority of high school composition classes is indeed maudlin and underlines the need for more research and innovation. There are however, promising trends in classroom practices that show movement toward the integration of oral and written communication skills. These practices are still isolated instances of change and do not represent the norm.

An emerging trend in the teaching of composition places more emphasis upon "...purposeful and effective communication..." (Evans and Walker, 1966, p. 54). Evans and Walker report that teachers are emphasizing what is involved in the communicative process. "The role of the sender, the role of the receiver, the role of the medium and the gestalt of the total situation are significant areas of concern" (p. 54).

More teachers are providing time for pre-writing activities and using literary models in the teaching of composition (pp. 56 and 59).

The British Columbia Curriculum Guides for the teaching of English at the Junior and Senior Secondary levels advise teachers to make oral and written communication experiences realistic to the students. These guides recommend that teachers spend 40% of their curriculum time on the teaching of writing, teach writing through the encouragement of reading, and approach writing "...as both a craft and an art, not merely a mechanical process" (Province of British Columbia, Department of Education, English 11, 1966, p. 3). Teachers are also advised that

Even though oral work is time-consuming, and necessarily takes place in classtime, it must be taught and tested. Every normal classroom provides opportunity for such training: a speaker must have an audience; the audience listens to speakers. All such situations should be made purposive (p. 2).

A handbook for language arts teachers (Loban, Ryan and Squire, 1969) advocates a comprehensive curriculum in which the teaching of composition should be based on three keystones of effective communication--clear thinking, the desire to communicate and the skill needed to make communication effective (p. 332). "The very nature of writing indicates that it must be learned through actual experience in putting words together to express one's own meaning" (LaGrant in Loban, Ryan and Squire, 1969, p. 332).

A programme that is "...integrated both in the sense that continuity is sustained from one general stage of growth

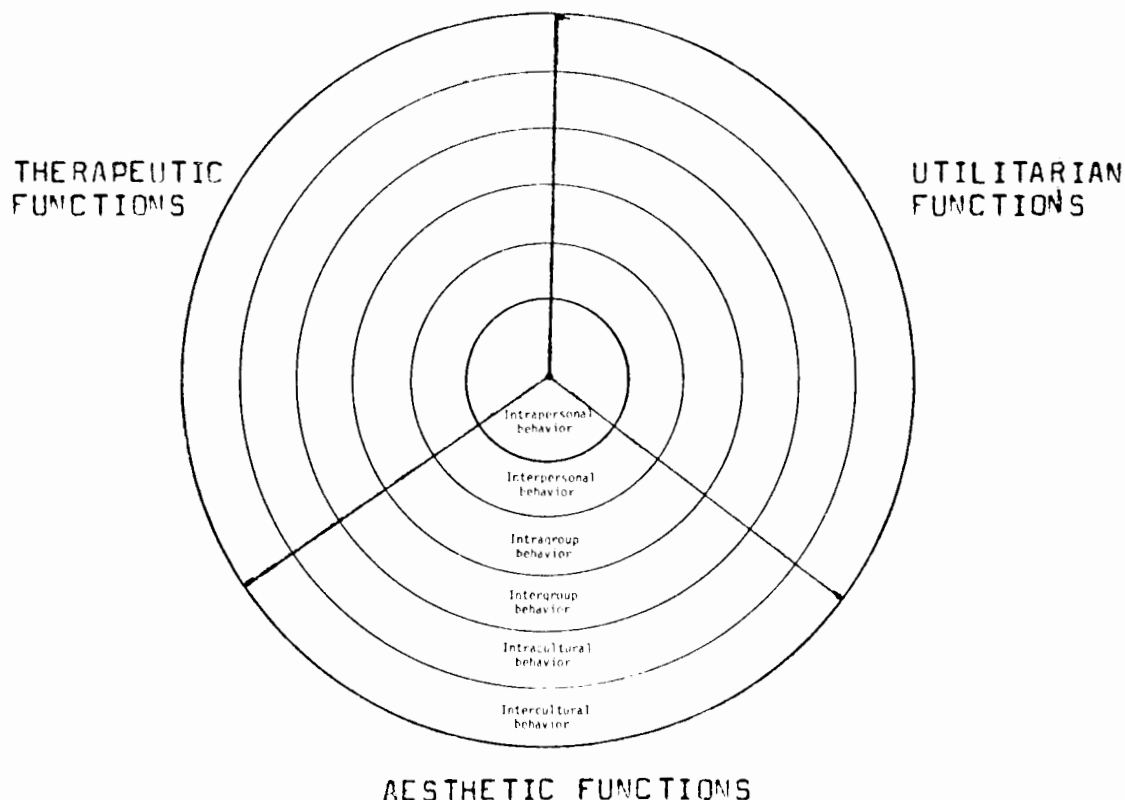
to another and in the sense that reading, speech, literature, drama, composition, and language are learned by means of each other and interrelated to the point of effacing some conventional categories of the field" is proposed by James Moffett in A Student Centered Language Arts Curriculum: Grades K-13 (1968). Moffett proposes a programme that features "the learner's own production of language" for any type of student population (p. 1).

Research being conducted at the Esalen Institute at Big Sur, California suggests another approach to the improvement of composition skills. The Esalen approach to learning emphasizes both affective and cognitive domains of learning in individual and group work. Researchers have devised curriculum units in the language arts which provides students with first-hand curriculum experiences. For example, in studying the lack of communication in Death of a Salesman, students begin with non-verbal communication exercises. In groups of two, students are directed to carry on a conversation using only their hands:

Slowly get acquainted....One speaks, the other listens; then switch....Do a dance together....Have a fight....Make up slowly. Don't hurry this....Say good-bye... (Brown, 1971, p. 74).

The interrelationship of speech and its context is diagrammed by Keltner in the preface of Interpersonal Speech-Communication (1970).

## THE ARENA OF SPEECH-COMMUNICATION



The underlying assumptions of this book are

...that speech-communication is thoroughly interdisciplinary in every aspect of its form and function. The understanding of the self and the other in the societal context of speech-communication is fundamental to this book. Through development of the process, many of the individual needs and the group-process needs of our society may be served. Our survival, our upward mobility, our leadership, our decision-making processes, our management of conflict, and our accomplishment of peak experiences in living are perceived as being closely related to our speech communication (Preface).

This review of the literature has thus far discussed

the history, research, classroom practices and more recent trends in the teaching of oral and written communication. While much of this review illustrates the dichotomy between theory and practice, newer trends in teaching practices indicate movement toward a unity of theory and practice. More recent literature on the teaching of oral and written communication skills (Brown, Moffett, Ryan, Loban and Squire, and Keltner) stress the integration of all of the language arts--reading, writing and speaking. A key principle in all of these approaches is the importance of the inter-relationships existing within the classroom, i.e., the relationships among students and the relationship between teacher and student.

Once again, the literature on communication within the classroom is scarce and inconclusive. There is, however, research on the use of small groups within the classroom which indicates the advantages of group learning situations.

RESEARCH IN THE USE OF SMALL GROUPS IN TEACHING. An examination of articles in the English Journal and the Elementary English Review related to the use of grouping in the teaching of English composition indicates that teachers do not appear to be training their classes or students in how to work in groups or in interpersonal communications. Two articles suggest that teachers are operating under the philosophy that working in groups is a good source of developing self-discipline (Kraus, 1959) and much can be learned by having students edit each other's compositions (Dale, 1954).

Research in small group learning has revealed favourable information about the use of groups in the classroom. The product of group thinking was found to be "distinctly superior to the average and even that of the best members of the group" (Watson, 1928, p. 336). Groups of students working cooperatively to create words out of the letters contained in a given word produced more words than did the best individuals of the group (p. 332). Watson concludes that group production may be the result of not only intelligence but also practice in group work (p. 336).

Group problem solving which required a number of correct steps before the solution was found to produce a larger proportion of correct solutions than individual problem solving (Shaw, 1932, p. 497). "This seems to be due to the rejection of incorrect suggestions and the checking of errors in the group" (p. 504).

Class sentiment was favourably influenced by a group approach to the teaching of college composition. In an experimental class, the classroom structure was altered so that seating arrangements were less formal, problems in the class were acted out through role play, students participated in syllabus decisions, and students partially set standards for the evaluation of their work. (Kneiger, 1961, p. 221). Much of this class work was done in groups. At the end of the course, students attributed the informal seating arrangements, their freedom to express ideas and an opportunity for interaction as major



factors in affecting the overall favourable opinion toward the class (p. 223).

Kaye and Rogers (1968), in a large-scale experiment in group learning conducted in a school in Bristol, England, founded their study on the rationale that the "peer group is a natural form of social organization for the secondary school child, and one in which powerful emotional mechanisms are already at work" (p. 77). Group work enabled the student to become "directly involved with the information, knowledge and ideas that they themselves are using" (p. 65).

A study of the effects of democratic, authoritarian and laissez-faire styles of group leadership indicates that democratic group leadership provides the most productive group work atmosphere (Lippitt and White, 1958). Lippitt and White found that eleven year old children working in an authoritarian atmosphere were "markedly more dependent upon the leader than either the democratic or laissez-faire situations" (p. 502) whereas children in the democratic and laissez-faire atmospheres "...initiated more 'personal' and friendly approaches to their adult leaders..." (p. 503). The children in the authoritarian atmosphere took "...no group initiative to start new work or continue with work already under way..." when group leaders arrived late; children in the democratic situations were found "active in productive fashion"; and children in the laissez-faire situations were found "active but not productive" (p. 504).

"An Experimental Study of Effects of Co-operation and

Competition upon Group Process" (Deutsch, 1949) found that co-operative groups "...worked together more frequently...and were more highly co-ordinated...than were the competitive groups" (p. 212). It was also found that members of co-operative groups were "...significantly more attentive to each other...", and "...there were significantly fewer communication difficulties..." while performing group tasks (p. 217). Productivity in co-operative groups was found to be significantly higher than in competitive groups (p. 220). "Observers rated that the discussions of the co-operative groups not only came out with more fruitful ideas for handling the problems presented to them, but also that their group discussions showed more insight and understanding of the nature of the problem being posed to them" (pp. 220-221).

The types of group dynamics that are applicable to classroom situations have been examined in the work of Jack R. Gibbs and Lorraine M. Gibbs. They found that "...optimal growth occurs most frequently in groups that have no professional leaders present and in which possibly because of the absence of a professional leader, emergent and interdependent strength is maximized" (Gibbs and Gibbs, 1968, p. 103).

Similar results emerge from the research of Wood and Goldberg (1968) which examines the effectiveness of traditional groups (with a critic-teacher), T-grouping and instrumental styles of training in laboratory settings (trainers). The study concludes that all three styles of group training are

effective, but the instrumental training group rated highest in sentiment, interacted at a level that was nearly twice as high as in the other groups and had an activity level that was much higher than the activity in the trainer-led group (p. 224).

Research in the use of groups in the classroom has been found to be successful and efficient in problem solving and error checking (Watson, Shaw). Peer groups were found to be cohesive learning units (Kay and Rogers). Groups were found to function with a minimum of direct teacher facilitation (Lippitt and White, Gibbs and Gibbs, and Wood and Goldberg). It was also found that in co-operative groups there was a high level of production as well as effective inter-member communication (Deutsch).

SUMMARY. This Review of the Literature Related to the Teaching of Oral and Written Communication Skills has shown that a single effective method of teaching oral and written communication skills is yet to be found. More recent trends (Brown, Moffett, Keltner) in classroom practices stress the importance of realistic communication situations and the importance of integrating both oral and written communication. Research in the use of small groups in the classroom has shown that small groups are effective learning units. Although research has provided guidelines for improving composition and speech (e.g., meaningful and well-known topics, ample time for practice and opportunity for revision), it has not yet supported an effective method of teaching oral and written communication.

Therefore, the author of the Review concludes that, further research, which develops an effective method of teaching oral and written communication, is necessary.

## Chapter 3

### RATIONALE

The preceding chapter has made it obvious that further research is needed in order to develop a method of instruction that provides students with an opportunity to improve oral and written communication skills. Although most of the literature related to the teaching of oral and written communication skills provides little guidance for the development of a method of instruction, there are a few encouraging trends. The importance of integrating instruction in oral and written communication is shown in the work of Brown (1970), Burrows (1939), Keltner (1970), and Moffett (1968). The inter-relationship of speaking skills and the individual's self-concept is shown in the research of Brooks and Platz (1968), McCrosky (1967), and Miyamoto, et al. (1956). The effectiveness of small group learning has been shown in the studies of Watson (1928), Shaw (1932), Kaye and Rogers (1968), Lippitt and White (1958), Deutsch (1949), and Wood and Goldberg (1968).

The above research considered, the development of a method of instruction that facilitates oral and written communication skills must begin with a re-examination of the nature and development of man's communication skills. This chapter then is a re-examination of the nature of man's communication skills and a rationale for the construction of a model for the

development of a method of instruction that facilitates the growth and improvement of language skills. The rationale is presented in three parts: (1) a theoretical discussion of human development and the language acquisition process, (2) the argument for an alternative method of language instruction and (3) a model for the development of this method of language instruction.

THEORETICAL DISCUSSION. A study of the fundamental process of man's development is the starting point in the search to develop a method of instruction that facilitates the growth and improvement of communication skills. An explanation of this process is found in Jean Piaget's ontogenetic theory of cognitive development, Erik K. Erikson's epigenetic theory of psychosocial development and Eric H. Lenneberg's biological theory of language development. In brief, this fundamental process is one of continual adaptation and assimilation. The direction of this development is always away from egocentricity toward socialization. This developmental pattern is in a constant state of change, striving for equilibrium. "Each equilibrium state...carries with it the seeds of its own destruction..." (Phillips, 1969, p. 10) which in turn give rise to the next state of equilibrium.

Piaget's theory of cognitive development rests on the premises that development takes place according to a fixed sequence of ontogenetic stages and that these stages are affected by variables such as intelligence, previous experience

and culture (Flavel, 1963, p. 20). Eventually these stages repeat in such a way so as to form an integrated whole (p. 20). Therefore, "Intellectual development is a movement from structural disequilibrium to structural equilibrium, repeating itself at an even higher level of functioning" (p. 21).

The specific stages of ontogenetic development occur in the following pattern.

#### Egocentrism

1. Imitation--unconscious adaptation
2. Imitation--pursued for the pleasure of doing so

#### Socialization

3. Movement out into the unknown--perception of two things as an undifferentiated whole
4. Substitution of object-object relationships for subject-object relationships
5. Objectification--perception of detached or or independent entities which can be separated
6. Symbolization

(Flavel, p. 149)

Examples of this basic pattern applied to the acquisition of intellectual processes, the acquisition of affective meaning and the development of language are shown in Figure 2, page 48.

Erikson's theory of psychosocial development rests on the same premises as Piaget's theory of cognitive development. Erikson's theory involves a developmental pattern which depends upon previous development to form an integrated whole. Erikson's theory is based upon the Epigenetic Principle. "...This principle states that anything that grows has a ground plan, and that out of this ground plan the parts arise, each part having its time of special ascendancy, until all parts have arisen to

form a functioning whole" (Erikson, 1968, p. 96).

The Epigenetic Principle is articulated across eight stages of development defined as eight crises which the individual must resolve. "Crisis is used here in a developmental sense to connote not a threat of catastrophe, but a turning point, a crucial period of increased vulnerability, heightened potential, and therefore the ontogenetic source of generational strength and maladjustment" (Erikson, 1968, p. 96). These stages, similar to the specific stages of ontogenetic development described by Piaget, exist within an Epigenetic matrix:

(1)...each critical item of psychosocial strength is systematically related to all others, and ...all depend on the proper development in the proper sequence of each item.

(2)...each item exists in some form before its crucial time normally arrives (Erikson, 1963, p. 271).

The individual's resolution of each of these crises contributes toward the formation of a whole person who is capable of generativity, "concern for establishing and guiding the next generation" (Erikson, 1968, p. 138). Beyond generativity is integrity.

It is the ego's accrued assurance of its proclivity for order and meaning--an emotional integration faithful to the image-bearers of the past and ready to take, and eventually to renounce, leadership in the present. It is the acceptance of one's one and only life cycle and of the people who have become significant to it as something that had to be and that, by necessity, permitted of no substitutions (Erikson, 1968, p. 139).

The psychosocial development process comes full circle



when trust (the first crisis to be resolved) and integrity (the last crisis to be resolved) are seen to be interrelated. Erikson quotes Webster's Dictionary, "Trust...is defined here as 'the assured reliance on another's integrity'" (Erikson, 1963, p. 269). The eight stages of psychosocial development are shown in Figure 2, page 48.

The nature of these natural growth forces are explained by Abraham H. Maslow in Toward a Psychology of Being (1968). Here Maslow describes the dialectical nature of human development as a point in time when two forces act upon the individual-- one force pulls the individual toward the past and one force pulls the individual toward the future.

It is therefore useful to think of growth or lack of it as the resultant of a dialectic between growth-fostering forces and growth discouraging forces (regression, fear, pains of growth, ignorance, etc.). Growth has both advantages and disadvantages....The future pulls, but so also does the past....The total ideal way of growing healthily is, in principle, to enhance all the advantages of forward growth and all the disadvantages of non-growing, and to diminish all the disadvantages of growth forward and all the advantages of not-growing (p. 205).

When an individual grows, according to Maslow, he also outgrows his past environment. When "...his nature, his goals, his potentialities..." change "...then everything changes..." (p. 189).

A comparison of Piaget and Erikson shows that both explain human development as continuous processes of integrated stages. In both theories the individual's development moves

from thought and activity concerned about the self (egocentricity) to an expanded self where thought and activity contribute to something greater than the self (socialization). This is the fundamental de-centering process.

The development of language, according to Eric H. Lenneberg (1967), follows a pattern of increasingly more difficult developmental stages. The language development process described by Lenneberg is similar to the process described by both Piaget and Erikson--one of traversing highly unstable states of disequilibrium until full maturity or integration is reached. "Language-readiness is an example of such a state of disequilibrium during which the mind creates a place into which the building block of language may fit" (Lenneberg, p. 376).

Language development, according to Lenneberg, is inherent to the human species and has its own special time of ascendancy. The basic capacity for a communication system

...develops ontogenetically in the course of physical maturation; however, certain environmental conditions also must be present to make it possible for language to unfold. Maturation brings cognitive processes to a state that we may call language-readiness. The organism now requires certain raw materials from which it can shape building blocks for his own language development. The situation is one somewhat analogous to the relationship between nourishment and growth (Lenneberg, 1967, p. 375).

Essential to the rise of language in the individual is an environment that will nourish the development of an individual's language growth comes from the individual's environment, "...the language spoken by the adults surrounding

the child" (Lenneberg, p. 375). Because the individual is equipped with his own power supply, he can construct

...language by himself (provided he has the raw material to do it with), and the natural history of his development provides for mechanisms by which he will harmonize his function with that of other equally autonomously functioning individuals around him; the outer form of his language will have the outer form of the language of his native community (Lenneberg, p. 378).

Lenneberg's theory of the biological foundations of language is that the ascendancy of language is ontogenetic and epigenetic and needs to be nurtured by proper environmental conditions for full development. Language functions as one of the skills that enables man to continually adapt and assimilate in order to successfully meet his own needs and the needs of his environment. In this ground plan, language development is inseparable from cognitive (intellectual) development and personality (psychosocial) development.

A summary of the commonality among Piaget's theory of cognitive development, Erikson's theory of psychosocial development and Lenneberg's theory of language development illustrates the inter-dependency of cognitive, psychosocial and language development. According to Piaget, Erikson and Lenneberg, it is inherent that a fundamental process of development take place according to a ground plan. This ground plan is a series of stages of disequilibrium which continually repeat themselves at a higher level of sophistication until all parts have been developed to form an integrated, functioning whole. These

stages of disequilibrium cannot come about or be resolved without the necessary environmental conditions to maximize their development. As the individual develops he is continually adapting, assimilating and enlarging his perspective so that he is capable of perpetuating the environment of which he is a part.

This theoretical discussion has shown the process of language development in relationship to cognitive and psychosocial development. In an examination of this process, it was found that language development, which is part of the individual's total maturation, does not occur in isolation; rather language development essentially depends upon the individual's natural development (the machinery) and a responsive environment (the fuel); at the same time language is necessary for further development.

ARGUMENT FOR AN ALTERNATIVE MEANS OF LANGUAGE INSTRUCTION.  
An individual's language development is greatly affected by the formal language instruction received in school. To continue the process of language development, the school usually offers language arts courses such as English grammar, composition and speech. The traditional method of teaching these courses has been essentially one of language drill. The language drill method has its roots in

...the empiricist notion that language is essentially an adventitious construct, taught by "conditioning" (as would be maintained, for example, by Skinner or Quine) or by drill and explicit explanation (as was claimed by

Wittgenstein), or built up by elementary 'data-processing' procedures (as modern linguistics typically maintains), but in any event, relatively independent in its structure of any innate mental faculties (Chomsky, 1965, p. 51).

In the classroom context, a student is taught models of oral and written communication based upon uniform patterns of acceptable speech and written form which have been established by authorities. This method of instruction essentially separates oral and written communication skills from human development.

As seen in the Review of the Literature, most instruction in written composition and speech is based upon the language drill method (see pages 20-26), and the results of experimentation show this method to be an unsatisfactory means of improving oral and written communication skills (Meckel). As seen in the discussion of the language acquisition process, language is (1) inherent to human development, (2) part of an individual's total maturation process and (3) essential for further development.

It is obvious then that an alternative to the present means of language instruction is necessary to continue and to facilitate the natural language acquisition process in the school setting. The question is what method of instruction continues and nurtures the natural language development process?

THE CONSTRUCTION OF A MODEL. The theoretical discussion of human development has shown that cognitive, psychosocial and language development are inter-dependent processes which take place according to a ground plan. The student therefore comes

to school equipped with the machinery necessary for growth. Necessary for this continuous development is the fuel supplied by an environment which makes demands and supplies feedback. But how can the fuel necessary to foster continuous growth and improvement of oral and written communication skills be supplied in the school setting?

The theoretical discussion has provided a basis for the construction of a model which continues the fundamental growth process. The construction of this model begins with a description of three dimensions of communication which are essentially derived from the theoretical ideas of Piaget and Erikson. As will be seen, each dimension follows the basic developmental pattern of continuous adaptation and assimilation at higher levels of sophistication, moving away from egocentricity toward socialization. Together, these three dimensions describe the communication process. (1) The environment where the fundamental process continually occurs is found in Theodore Mills' Sociology of Small Groups (1967); here Mills outlines a ground plan for group development modeled on Erikson's Epigenetic Principle. (2) The depth of communication is described in Robert R. Carkhuff's Scale for Empathic Understanding in Interpersonal Processes (1969); here Carkhuff operationally defines the communication process as one which seeks depth. (3) Modes of communication are described in James Moffett's Universe of Discourse (1968); the Universe of Discourse is a hierarchical structure that is dependent upon the distance between the

sender and the receiver. Figure 1 diagrams the inter-relationship of these dimensions.

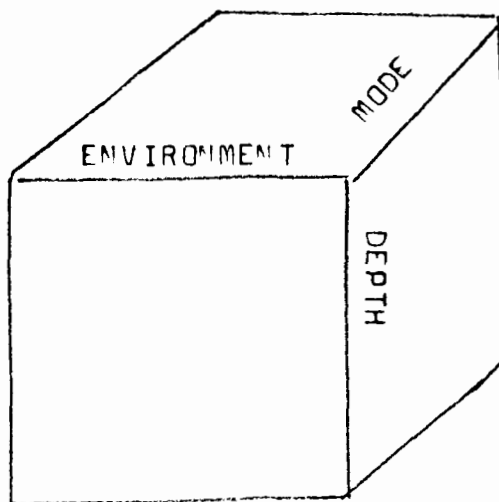


Figure 1

#### THE DIMENSIONS OF COMMUNICATION

How do the constructs of Mills, Carkhuff and Moffett provide a model for a method of instruction which enhances the fundamental development process? In the following discussion, the similarity and inter-relationship between the theoretical constructs of Piaget, Erikson, Mills, Carkhuff and Moffett will be shown. Figure 2 (page 48) following this discussion charts the inter-relationship.

(1) The Environment for Communication in the Sociology of Small Groups. Theodore Mills has constructed a paradigm of small group development which is described in the same terms

as Erik K. Erikson described psychosocial development. A key assumption of this paradigm is that "Human groups are information processing systems potentially capable of increasing their capabilities" (p. 19). "Group growth...depends directly upon members who are both capable of personal growth and committed to group development" (p. 21).

Group growth is a series of stages traversing states of disequilibrium which continually repeat themselves at a higher level of sophistication until all parts develop into an integrated whole. At each stage of development, the group must, in Erikson's terms, "resolve a crisis." Mills calls these crises, "Orders of Purpose."

The orders are cumulative. This means that the final purpose (growth) presumes the capabilities necessary to accomplish the four lower orders: (1) intermember gratification; (2) sustaining contacts among the parties; (3) reaching a common goal; and (4) altering the goal and re-arranging internal and external relations in order to accomplish a new goal (p. 103).

Crucial to the growth of any group is the establishment of communication among the group members. Group growth depends upon (1) goal-seeking feedback (2) the re-organization of relationships according to common experiences and (3) consciousness, or the group's awareness of itself (p. 19). In order for an individual to become a functional member of a group, he must master these levels of communication. Since the individual himself is an "information processing system," the cybernetic-growth model can be applied to him as well as to the group as



a whole.

He may employ the three orders of feedback: process information from his external world, from his past and from his present state; develop ability to monitor and govern himself; and acquire the ability to grow. In fact, unless he or some other member is committed to group development, no advance in the group's capabilities can be expected (p. 21).

(2) The Depth of Communication. The interpersonal communication which develops between group members is both the cause and effect of group development. Similarly, a helping relationship between a therapist and a client depends upon interpersonal communication and at the same time facilitates the development of interpersonal communication skills in the client. Robert R. Carkhuff's Scale of Empathic Understanding in Interpersonal Processes (1969, p. 315) measures the observable interpersonal communication in the therapist-client relationship.<sup>1</sup> The basis for this scale is Carl Rogers' hypothesis that in a helping relationship, if a counselor or therapist "...can provide a certain type of relationship, the other person will discover within himself the capacity to use that relationship for growth, and change and personal development will occur" (Rogers, 1961, p. 33).

Outcome research on client-centered therapy described by Rogers has consistently found "...empathy, warmth, and genuine-

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<sup>1</sup>Carkhuff's scale is derived in part from "A Scale for the Measurement of Accurate Empathy," which has been validated in extensive process and outcome research on psychotherapy (Summarized in Truax and Carkhuff, 1967) and in part from an earlier version that has been validated in extensive process and outcome research in psychotherapy (Summarized in Carkhuff, 1969; Carkhuff and Berenson, 1967) (Carkhuff, 1969, p. 315).

ness characteristic of human encounters that change people--for the better" (Truax, 1969, p. 141). "Empathy," according to Carkhuff (1969) "is perhaps the most critical of all the helping dimensions. Without empathy there can be no basis for helping" (p. 83).

Carkhuff's Scale of Empathic Understanding (summarized in Figure 2, page 48) operationally defines five levels of observable interpersonal communication. The development of empathic understanding is similar to the process of development described by Piaget. The first level of empathic understanding is a state of self-centeredness, i.e., no awareness of the client's surface feelings. Each subsequent stage of empathic understanding demonstrates more awareness and more accurate understanding of the client. The highest level, a state of full awareness of the client, is described as a state in which the client and the therapist are "tuned-in" to each other.

Whereas Mills' paradigm of small groups has provided a context for the continuation of the natural language development process, Carkhuff's Scale of Empathic Understanding provides an operational definition of communication. The third dimension is the mode of communication described in James Moffett's hierarchically structured Universe of Discourse (1968).

(3) The Modes of Communication. The Universe of Discourse is based upon the rhetorical relationship between I and Thou and I and It, as described by Martin Buber, and the de-centering process in cognitive development described by Piaget.

The hierarchical structure begins within a concrete, self-centered world and moves outward toward symbolization and socialization.

There are four modes of discourse in Moffett's construct: reflection, dialogue, correspondence and publication.

Differentiating among modes of discourse, registers of speech, kinds of audiences is essentially a matter of decentering, of seeing alternatives, of standing in others' shoes, of knowing that one has a private or local point of view and knowledge structure (Moffett, 1968, p. 57).

Within this hierarchy of discourse, the abstraction process occurs. Moffett describes the abstraction process as trading "...a loss of reality for a gain in control" (p. 22). This abstraction process is basic to the Universe of Discourse and is "...essentially determined by the distance in time and space between the speaker and the listener" (p. 22).

The hierarchical structure of the Universe of Discourse explains the modes of communication as functions of the communication situation. That is, the situation determines the appropriate form of communication. Further description of the modes of discourse is given in Figure 2, page 48.

The Model. These three dimensions of communication, the context, depth and mode of communication, have described the process of communication as one of adaptation and assimilation. Each dimension grows outward from self-centeredness. One will recall that in the discussion of the theoretical background, cognitive, psychosocial and language development also

develop according to this hierarchical pattern. The inter-relationships between the theoretical background and the components of the model are shown in A Chart of the Inter-Relationship between Theories of Development and Theories of Communication (Figure 2, page 48).

The next question to be answered is how is this fundamental process continued and enhanced in the classroom? In order to create a model which will enhance the individual's language development process in the classroom, let us begin with the classical model of communication. Figure 3 shows communication as a continuous process of adaptation and assimilation.

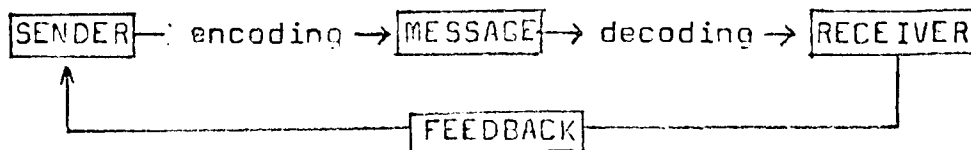


Figure 3

### The Classical Model of Communication

This model of communication is also a diagram of the adaptation-assimilation process characteristic of human development.

Figure 2

A CHART OF THE INTER-RELATIONSHIP BETWEEN THEORIES OF DEVELOPMENT AND THEORIES OF COMMUNICATION

PERSONAL DEVELOPMENT		INTER-PERSONAL DEVELOPMENT		COMMUNICATION		
ACQUISITION OF INTELLECTUAL PROCESSES (PIAGET)	ACQUISITION OF AFFECTIVE MEANING (PIAGET & INHELDER)	PSYCHOSOCIAL DEVELOPMENT; THE RESOLUTION OF EIGHT CRISES (ERIKSON)	SMALL GROUP FORMATION (MILLS)	LEVELS OF EMPATHIC UNDERSTANDING (CARKHUFF)	LANGUAGE DEVELOPMENT IN THE CHILD (PIAGET)	THE HIERARCHY OF DISCOURSE (MOFFETT)
ORDERLESS ARRAY OF STIMULATION INDISCRIMINATE REACTION TO ALL OBJECTS	EGOCENTRICITY INTERINDIVIDUAL EFFECT OF SOCIAL FEELING	TRUST VS MISTRUST	IMMEDIATE GRATIFICATION	NO AWARENESS OF SURFACE FEELINGS EXPRESSED	EGOCENTRICITY	REFLECTION (THINKING) - INTRAPERSONAL COMMUNICATION
SELECTIVE RESPONSE TO SPECIFIC STIMULI PERCEPTION OF SIMILARITIES AND DIFFERENCES		AUTONOMY VS. SHAME, DOUBT	- of Ego Needs - commitment - Group Emotion	SOME AWARENESS OF OBVIOUS FEELINGS EXPRESSED	EGOCENTRIC SPEECH - Repetition - Monologue - Dual or Collective Monologue	BETWEEN TWO PARTS OF ONE NERVOUS SYSTEM
INTENTIONAL RESPONSES TO STIMULI - GROUPING - CONCRETE MOTOR MEANING	FEELINGS ABOUT IDEAS AND IDEALS - Ideals are people who are part of the surroundings	INITIATIVE VS. GUILT	SUSTAIN CONDITIONS FOR GRATIFICATION	DISTORTION OF MEANING	SOCIALIZED SPEECH - Adapted Information - that it is successful - aimed at an audience - Criticism	CONVERSATION (SPEAKING) - INTERPERSONAL COMMUNICATION BETWEEN TWO PEOPLE IN VOCAL RANGE
APPLICATION OF FAMILIAR SCHEMA TO NEW SITUATIONS - CAUSALITY, PROBLEM-SOLVING - SYMBOLIC MEANING OF STIMULI	SOCIALIZATION LIFE PLAN; AFFIRMATION OF AUTONOMY	INDUSTRY VS. INFERIORITY - Technological - To Make Things (together)	PURSUIT OF A COLLECTIVE GOAL - establishment of group BELIEFS - development of a "technology" - Intimacy, work	ACCURATE UNDERSTANDING OF FEELINGS EXPRESSED (INTERCHANGEABILITY)	- addressed to a specific person - Question and Answer - spontaneous search for information and response	CORRESPONDENCE (INFORMAL WRITING) - INTERPERSONAL COMMUNICATION BETWEEN REMOTE INDIVIDUALS OR SMALL GROUPS WITH SOME PERSONAL KNOWLEDGE OF EACH OTHER
MODIFICATION OF FAMILIAR SCHEMA TO FIT NEW SITUATIONS - Systematic Variation of Responses - GENERALIZATIONS - COMBINATION OF SYSTEMS		IDEAL BECOMES AUTONOMOUS - Creates something NEW - Idealistic Reformer	IDENTITY VS. CONFUSION - Ideological - To be oneself - Share being oneself	GROUP SELF-DETERMINATION - development of group Conscience - group executive (AUTONOMY)	UNDERSTANDING AT A DEEPER LEVEL OF FEELING THAN EXPRESSED	- COMMANDS, THREATS, REQUESTS
INVENTION OF NEW MEANS THRU MENTAL COMBINATIONS - Symbolizing a causality by observing its effect - SYMBOLIZATION - THOUGHT ABOUT THOUGHT	ACHIEVEMENT - Ego adjusts to Reality - Reality meets ego needs	INTIMACY VS. ISOLATION - Cooperation and competition - To lose and find oneself in another	GROWTH - GENERATIVITY - Increased range of personalities - Growth - Interchange with other groups - Intergroup Executive	"TUNED-IN", FULL AWARENESS, EXPLORATION OF PREVIOUSLY UNEXPLORED AREAS OF MEANING		GROUP EXTENDED OVER SPACE AND/OR TIME  (Each requires the embodiment of the previous step)
Phillips (1969)	Inhelder and Piaget (1958)	Erikson (1968)	Mills (1967)	Carkhuff (1969)	Piaget (1926, 1959)	Moffett (1968)

However, in the theoretical discussion, it was shown that the growth process requires an environmental demand. Thus a model to describe growth would include (1) readiness for growth, (2) the requirements of the environment as a stimulus for growth, (3) the process of communication as a vehicle for this process and (4) growth as a measurable sign that the process has occurred. The model for growth is diagrammed in Figure 4.

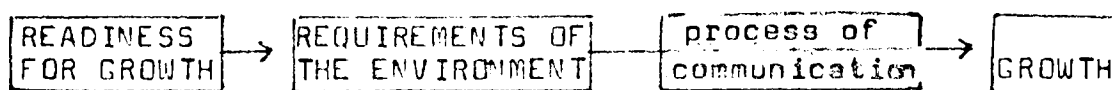


Figure 4

#### Model of the Human Development Process

What are the implications of these models in the classroom? Presently much language instruction is based upon the classical model of communication (Figure 3). The student is trained to encode certain types of messages which are usually decoded by a teacher. The teacher usually provides feedback to the student. The expected outcome of this approach to language instruction is an improved message. Although this method of instruction is based upon the fundamental communication process, the communication situation is usually an artificial one.

But the Review of the Literature Related to the Teaching of Oral and Written Communication Skills has shown that providing training in the encoding process through various teaching methods has not improved communication skills (pages 11-20).

The theoretical information on development and on the communication process has shown that realistic environmental demands are essential for growth. Information available on human development has shown that personal and interpersonal development are inter-dependent processes which depend upon communication. This interrelationship is diagrammed in Figure 5.

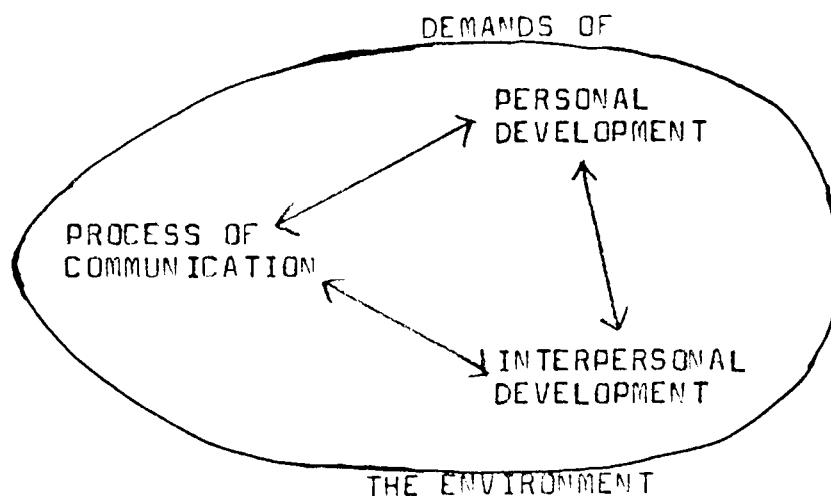


Figure 5

#### The Inter-dependence of Communication and Development

Thus, a diagram of the communication process described by the theoretical background would show the sender equated with the receiver in an environment making demands upon the individual. Figure 6 diagrams this growth process

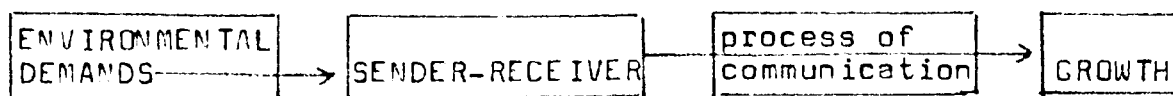


Figure 6

#### The Growth Process

The question then is what method of instruction replicates this model? Since the formation of small groups is basically an environment demanding the development of communication skills for survival and since the individual who becomes a group member is both the sender and the receiver of messages (Mills, pp. 19-21), it is proposed that the process of forming a small group is a realistic means of continuing the fundamental development process. The environmental demand here is the realistic task of developing a means of communicating with other group members. In order to expedite and maximize the small group formation process, certain conditions need to be met. These essential conditions are (1) greater self-awareness, (2) awareness of others and (3) training in the skills of small group work. The model of this proposed method of instruction is diagrammed in Figure 7.

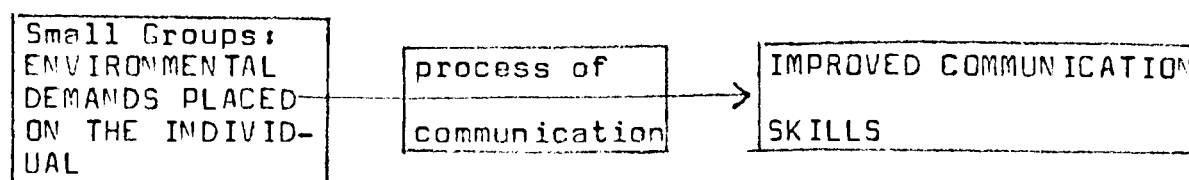


Figure 7

Proposed Model of a Method of Instruction  
to Improve Communication Skills

If the research and theory are sound, then it is hypothesized that as a result of training students in the skills necessary to form a small group, there will be an improvement in the student's oral and written communication



skills and an improvement in the student's attitude toward himself as a communicator. The proposed model (Figure 7) provides the basis for the development of a method of instruction which offers an environment that continues to facilitate the growth and improvement of oral and written communication skills. The test of this hypothesis is in the exploration of the workability of such a model in the classroom and in the assessment of the effectiveness of such a programme as a method of improving oral and written communication skills.

## Chapter 4

### CASE STUDY: METHODOLOGY AND RESULTS

To explore the possibilities of the model created in the previous chapter, a programme which trained students in the skills of working in small groups and provided an experience in group work was developed. Field testing of this programme was planned to be carried out for eight weeks in two grade eleven English classes at Alpha Secondary School in North Burnaby, British Columbia. This chapter reports the methodology of the study, the process change, and the results of the developmental study. The section on methodology describes the small groups training programme, the design and strategy of the developmental study, and methods of data collection. The results of this exploration are reported as a case study.

METHODOLOGY: The Programme. To translate the model created in the previous chapter into practice, it was necessary to develop a programme which trained students with the skills to work in a small group, provide an opportunity for autonomous group work and assess any observable changes in oral and written communication skills. A small groups training programme was designed to begin with four weeks of training in small group work skills, followed by three weeks of group work and conclude with one week of evaluation. Students selected two members of the class with whom they would like to work and

remained in the same small group for the entire programme.

The training phase of the programme focused simultaneously on the individual student as a participant in a small group and on the dynamics of the group as a whole. Activities which emphasized the individual were concentration, meditation, sensory awareness and self-discovery exercises. The concentration, meditation and sensory awareness activities were selected to provide the students with more awareness of their own mental processes and more awareness of their sensory receiving processes. Self-discovery activities were designed to ask students to think about their personal values, accomplishments, goals and relationships with others. The option of behaviour modification was the student's choice, and no pressure was applied to a student to force participation in any activities which he felt were too threatening.

The dynamics of group work focused upon the interactions of group members and the skills necessary to function as an autonomous group. These activities were designed to give the students insight into how they functioned in social and group work situations. Specific activities provided training and experience in cooperation, problem solving and decision making.

The three-week experience phase of the programme offered each group the opportunity to apply their small group work skills to a communication project of their choice. During this time the teacher acted as a resource person as well as a

counselor to groups having difficulties. A more detailed description and the sources of the activities in the programme are given in Appendix A.

Evaluation was an on-going part of the programme. Both teachers and students kept journals which recorded events and reactions to the programme. The last week of the programme was devoted to student evaluation of the programme, an assessment of changes they observed in themselves and an evaluation of their group functioning. Evaluation procedures used as part of the programme are given in Appendix B.

Design and Strategy of the Developmental Study. The field testing of this model was conducted under quasi-experimental conditions which involved an experimental group and a comparison group. The experimental group was comprised of two English 11 Alternate classes participating in the small groups training programme. One of these classes was taught by an experienced English teacher; the other class was taught by the author. The comparison group was comprised of two regular English 11 classes which were taught in their usual way. At the beginning and end of the programme both groups of students were compared on oral and written communication skills, attitude toward themselves as communicators and attitude toward English class.

The purposes of the field testing of this model were (1) to examine the workability of the small groups training programme in the classroom and (2) to assess the effectiveness of

this approach to teaching oral and written communication skills. It was expected that modifications would be necessary in order to adapt the drawing board version of the programme for classroom use. Major interventions and deviations from the programme were also expected, but they involved more careful study.

Because so little was known about the effective elements of a programme of this nature or the difficulties which would be encountered by such a programme, a flexible research design was necessary. A developmental research design was selected because it provided such flexibility.

The developmental cycle is a series of systematic changes conducted in the field as operational weakness in the programme become evident. The objective is to produce the most effective form of the model possible. The central features of this stage are recognition of inadequacy, introduction of change and performance of assessment.

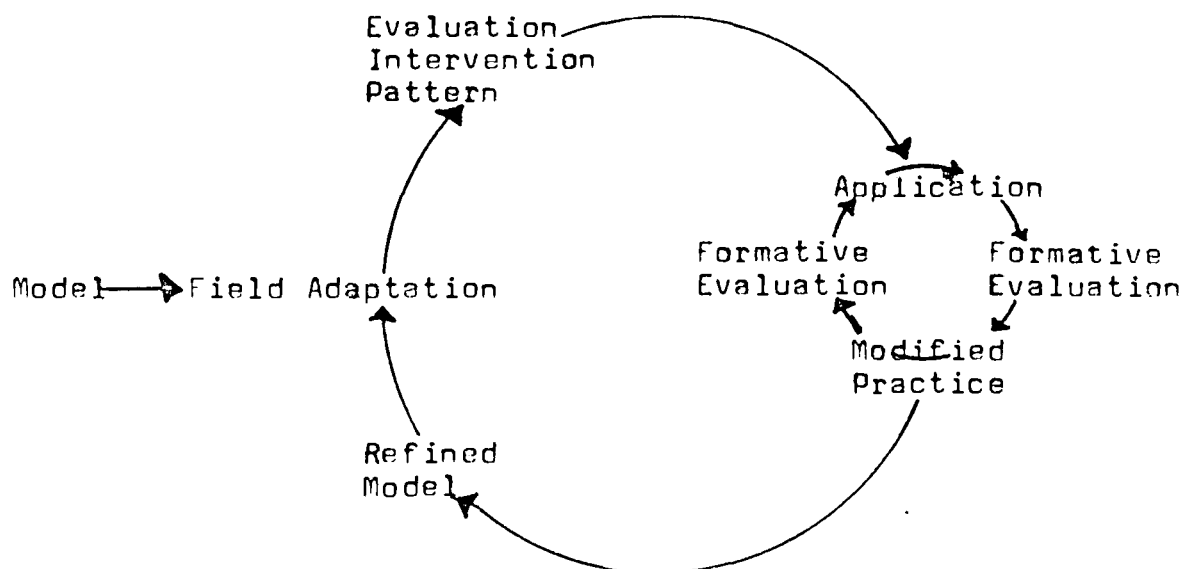


Figure 3

The Developmental Cycle.

Field adaptation is the translation of the conceptual model or theoretical design into a working model, complete with required environment and instructional materials ready for use (Gibbons, 1970, p. 37).

Modifications and interventions used to refine the small groups training programme were made according to the intervention process described by Holmberg (1960). The teacher's role according to the developmental research process is one of the "participant interventionist" whose

...job is to assist the community to develop itself and to study this process while it is taking place..., [and] as problem-solving and decision-making skills are developed the investigator intervenes less and less until he works himself out of the role of intervener and into the role of consultant and observer (p. 84).

The strategy for these interventions, therefore, involved (1) collecting data which supported the need for an intervention and (2) consulting with members of the supervisory committee about the changes necessary to continue the programme.

Methods of Data Collection. This programme was observed in great detail. The instruments which were used to observe the programme were primarily "home-made" because no previously validated instruments to observe the study were available.

The author, therefore, designed questionnaires and other means of observation based upon guidelines found in the literature.

To monitor the workability of the programme the author and the cooperating teacher met daily to compare their observation summaries, to identify problems and to plan any necessary modifications. To monitor the effectiveness of the

programme a battery of pre-tests and post-tests were administered, daily anecdotal comments were written about each student and daily journals were kept by the students.

This battery of tests assessed (1) oral and written communication skills, (2) the formation of small groups, (3) attitudes toward oneself as a communicator, working in small groups, and English class. Objective assessment of oral and written communication skills were made from pre-test and post-test interviews and writing samples. Additional information was gathered from daily reports on group work written by students (Post Meeting Reaction Sheets), audio and video tape recordings of group activities and reports of group functioning made by outside observers. Sample questionnaires and observation forms are given in Appendix C; the sources, purposes and conditions of each of these questionnaires and observation forms are summarized in Table 1, A Summary and Evaluation of Data Collection Instruments, page 61.

THE RESULTS: A Case Study. The results of the field testing of the small groups training programme are organized into four areas of investigation: (1) modifications and interventions which were necessary to conduct the programme, (2) the formation of small groups, (3) personal development and (4) the effect that the programme had on oral and written communication skills. Investigation of each of these areas indicated that there were recurring themes: (1) problems of orientation to the programme, (2) inhibitions to be overcome in interper-

sonal relations, (3) reluctance to participate in the programme and assume responsibility, (4) the need to develop confidence in self-directed activity and (5) a preference for games and tasks rather than introspection and analysis.

Orientation to the programme was problematic because students were asked to participate in activities that were radically different from the traditional English class. Students reacted unfavourably to the disruption of familiar patterns and the experimental conditions imposed upon them (e.g. being inundated by questionnaires and outside observers). They appeared uncomfortable and insecure about the absence of standard English class assignments.

Inhibition to speak out in group discussion and in class discussion, especially about personal topics, and reluctance to participate in the activities prevented a smoothly flowing programme. Students tended to avoid activities that did not have an aura of entertainment and anonymity. Personal commitment, responsibility, supporting one's own ideas or the ideas of others were avoided whenever possible.

Self-directed activity was virtually impossible, and most students helplessly looked for external leadership and guidance. The initial response of this condition was avoidance of responsibility, and thus much time during the programme was spent searching for the confidence to learn without dependence upon leadership found in the traditional teacher-directed classroom.



Personal involvement and responsibility evolved slowly and cautiously. Students cooperated when games and tasks resembled English assignments and refused to participate when activities required introspection or analysis of behaviour. As individuals developed more skill and confidence in interpersonal relationships, they became more capable of personal involvement and responsibility, introspection and analysis of behaviour.

Observation of the effectiveness of the programme, group formation, personal development and improvement of oral and written communication skills was limited by the nature of the instruments designed for this study. Most of the instruments were found to be either unreliable or impractical in the classroom. Five instruments yielded data that was useful for statistical interpretation (Tests Four, Five, Six, Nine and Ten); one instrument offered a limited amount of non-statistical information (Test Thirteen). Two instruments showed a significant shift in factor structure between pre-test and post-test conditions (Tests Three and Seven). Six instruments were not usable in their present forms. Three of these instruments proved to be ambiguous after factor analysis (Tests One, Two and Six); three were completely impractical in the classroom situation (Tests Eleven, Twelve and Fourteen). Table 1, A Summary and Evaluation of Data Collection Instruments, page 61, briefly describes the nature and use of these instruments and assesses their effectiveness.

## SUMMARY OF EVALUATION OF DATA COLLECTION INSTRUMENT

NAME	AUTHOR OR SOURCE	PURPOSE	CONDITIONS	EVALUATION AND LIMITATIONS	STATISTICAL TREATMENT
TEST ONE: Self-Description Questionnaire	Thomas J. Mallinson	to assess student's attitude toward himself as a communicator	-Pre-test, Post-test -Experimental and Comparison Groups	found to be ambiguous after factor analysis	Factor Analysis
TEST TWO: Attitude toward English Class	Phyllis B. Schwartz	to assess the student's attitude toward English class	-Pre-test, Post-test -Experimental and Comparison Groups	found to be ambiguous after factor analysis	Factor Analysis
TEST THREE: Group Climate	adapted from Pfeiffer and Jones (Vol. III, 1971, pg. 31)	To assess Group Climate	-Pre-test, Post-test -Experimental Group	Shift in factor structure	Factor Analysis
TEST FOUR: Group Cohesiveness	adapted from Beney and Johnson (1964)	to assess group cohesiveness	-Pre-test, Post-test -Experimental Group	four stable variables; found in factor analysis; re-named "Group Climate"	Factor Analysis; Multivariate Analysis of Variance
TEST FIVE: Attitude toward Group Work	Phyllis B. Schwartz	to assess student's attitude toward group work	-Pre-test, Post-test -Experimental Group	Six stable variables (general factor) found in factor analysis	Factor Analysis; Multivariate Analysis of Variance
TEST SIX: Communication Expectation Survey	John W. Wallen (University of Oregon, Eugene)	to assess communication among group members	-Pre-test, Post-test -Experimental Group	found to be ambiguous after factor analysis	Factor Analysis
TEST SEVEN: Trust among Group Members	Phyllis B. Schwartz	to assess trust among group members	-Pre-test, Post-test -Experimental Group	Shift in factor structure	Factor Analysis
TEST EIGHT: Oral Communication	Phyllis B. Schwartz	to assess oral communication samples	-Pre-test interview, -Post-test interview, -Experimental and comparison groups. -Each sample rated by two independent judges	One stable factor found	Chi Square Factor Analysis; Multivariate Analysis of Variance
TEST NINE: Written Communication	adapted from P. J. Diedrich (1966, pp. 435-449)	to assess written communication samples	-Pre-test, Post-test -Experimental and comparison groups. -Each sample rated by three independent judges	One stable factor found	Chi Squares Factor Analysis; Multivariate Analysis of Variance
TEST TEN: Group Dimensions Description Questionnaire	J. K. Hemphill and C. W. Westie	to observe dimensions of group formation	-Post-Test -Experimental Groups	Some dimensions were found to be ambiguous or irrelevant	Group profile based upon Stanine Scales
TEST ELEVEN: Group Cohesiveness (Sentence Completion)	adapted from Beney and Johnson (1964), pp. 379-80	to assess group cohesiveness.	-Pre-test, Post-test, -Experimental Group	No pattern of responses could be found by independent judges	None
TEST TWELVE: Recall of Group Discussion	Phyllis B. Schwartz	to assess communication among group members	-Pre-test, Post-test -Experimental Group	Post-test administered to one experimental class	None
TEST THIRTEEN: Unobtrusive Measures of Group Functioning	Phyllis B. Schwartz	to observe small group functioning	-Pre-test Observation; -Post-test Observation -Experimental Groups	four groups were not present for post-test observation	(Information reported in tabular form)
TEST FOURTEEN: Observations of Group Functioning	adapted from H. Thelen (1954)	to observe small group functioning	-Pre-test and Post-test Observations -Experimental Group	Units of observation were planned for too long a period of time; observations were discontinued.	None

The most useful sources of information about the results of the programme, therefore, were field notes and anecdotal comments written by the teachers, journals written by the students, self-evaluation written by students and interviews conducted by outside interviewers at the beginning and end of the programme. Data gathered from the instruments are reported in this section where relevant. All data gathered from these instruments and the interpretation of the results are reported in Appendix D.

Background of the Study. It was necessary to find a field site which met the following requirements: (1) a school that was interested in the small groups training programme, (2) a group of students and an experienced English teacher who were relatively unfamiliar with the activities of such a programme and (3) a staff willing to cooperate with the uncertainties and disruptions of a developmental study. It was also important to conduct this field test in a locale where the results of the study would not be a guaranteed success because the students were exceptionally bright and cooperative or a guaranteed failure because the students were academically handicapped and classroom behaviour problems.

Alpha Secondary School in Burnaby, British Columbia, was able to meet all of the conditions necessary to carry out the developmental study. Except for some group work done in social studies classes, relatively little group work had been done at Alpha. The programme could be conducted in Mrs. Sally

Anderson's grade eleven English classes. Two additional English classes were available as comparison classes.

The small groups training programme was conducted in the English 11 Alternate classes taught by Mrs. Sally Anderson. English 11 Alternate, a course designed by Sally Anderson, was different from the regular English 11 course because the emphasis was on more contemporary literature and Canadian authors. Sally Anderson, a teacher with five years of experience, was described by the chairman of the English department as "sensitive to her students and aware of the possibilities of the programme."

The students who participated in the field testing of the small groups training programme were 55 students who had elected to take English 11 Alternate. The students who typically selected this course were those who usually had difficulty in their previous English courses and were less likely to be concerned about preparation for university. Grades for English 10 for both the experimental and the comparison groups indicated that students in the experimental group tended to receive lower grades in English, especially the boys. Of the 55 students enrolled in English 11 Alternate, only ten students expressed an interest in going to university. The students enrolled in the regular English classes expected to be prepared for university.

Limitations of the Study. This study was not intended to be an experimental study for two reasons. First, this

study was intended to be a preliminary probe into the workability of the programme in the classroom setting and a preliminary assessment of the effectiveness of the programme. Second, the students in the English 11 Alternate classes had a history of difficulties with their previous English classes and less interest in academics while the students in the regular English 11 classes had a history of academic success. Classical experimental conditions, therefore, were impossible to obtain in the normal school setting without disrupting school organization.

The design of this developmental study, therefore, involved a comparison of two groups of students, those students who received structured training in how to work in small groups and those students who did not receive this training. It should be emphasized that the regular English 11 class is not a "control group" in the experimental sense but a comparison group. Observations were made which compared both groups of students on oral and written communication skills, attitude toward themselves as communicators, and attitude toward English class. These comparisons were intended to be used to (1) explore the hypotheses that as a result of training in the techniques of small group work, there would be an improvement in the students' oral and written communication skills and an improvement in their attitude toward themselves as communicators and (2) assess the effectiveness of the programme in its preliminary form in order to modify and develop a

programme for further empirical research. The results of this developmental study are reported in four sections (1) Interventions and Modifications in the Programme, (2) Small Group Development, (3) Personal Development, and (4) Oral and Written Communication Skills.

Modifications and Interventions in the Programme. The original small groups training programme was designed to occur in three phases: training to work in small groups, practice in working in small groups and evaluation of group work (see Appendix A). Through the participant interventionist process, it was found that modifications of the programme were necessary and major interventions were essential to continue the programme. The necessary modifications for the most part were additional orientation and explanation of the programme and adjustments in the observation and data gathering procedures. However, interventions required that basic changes in the nature of the programme be made in order to complete the programme effectively. Interventions involved (1) a shift of emphasis from analysis and introspection to task and project orientation and (2) a change in the teacher's involvement in the programme. The following chronological account describes the refinement of the programme and the reasons for the modifications and interventions.

The small groups training programme was preceded by a two-week period of preparation which involved (1) writing directions for conducting the programme, (2) training the

cooperating teacher, (3) making arrangements for the necessary pre-testing, (4) establishing a working relationship between the cooperating teacher and the author and (5) establishing a liaison between staff members at Alpha and professors, associates and graduate students from Simon Fraser University involved in the field study.

The first two training sessions were informal orientations for the cooperating teacher, Sally Anderson. The author described to Sally her role as a cooperating teacher, the theoretical background of the study and an overview of the programme. The author explained that Sally's role in this developmental study was primarily that of a gauge of how the programme worked in the hands of a classroom teacher.

Sally indicated that she knew almost nothing about the theoretical background to the programme, but she was aware of the potential of training people to be more aware of themselves. She expressed an open-minded and willing attitude toward trying something new, but she was not keen to involve herself in the academics of the developmental study or activities which were beyond the demands of preparation for her regular classes.

The third session was a luncheon meeting of the four who would be most directly involved in the programme, Sally Anderson, Robert Aitken, Chairman of the English Department, Dr. Maurice Gibbons, Senior Supervisor of the developmental study, and the author. This meeting was arranged to discuss any theoretical questions or major administrative problems which were

anticipated, but neither Sally nor Bob Aitken wanted to discuss topics related to the programme scheduled to begin in six days.

The last session was a lengthy work session in which the author and Sally spent the entire day organizing important administrative details and preparing an introduction to be presented to the students. It was arbitrarily decided that Sally would teach the second English 11 class and the author would teach the first English 11 class. Pre-testing was arranged according to Sally's suggestion. The fourteen paper-and-pencil tests and observations were to be staggered over the first two weeks of the programme. Pre-tests which involved both the experimental and the comparison groups were scheduled during the first week; pre-tests and observations involving only the experimental group were scheduled during the second week. Arrangements were made for interviewers and observers to begin coming to Alpha on the third day of the programme.

This atmosphere of cooperation, honesty and eagerness to participate in experimentation, at all levels of the school's administration, was sustained throughout the programme. It was, in fact, one of the essential factors that contributed to the fulfillment of the programme.

**Phase I: The First Two Weeks.** The first two weeks of the programme were cautious waiting periods for students and teachers. During this time, students alternately expressed enthusiasm about the new and unusual activities and displayed



confusion about how these exercises and activities related to what they knew to be an English class. The teachers during this time acquainted themselves with the students and at the same time stood back from the activities observing reactions to the programme. Much effort on the part of the teachers was spent trying to convince the students to trust that the exercises and activities would help them to improve their communication skills. By the end of the second week, it became clear that the basic nature of the programme had to be changed.

Activities during the first two weeks were intended to make students more aware of discussion techniques and the group process. Sensory awareness and concentration activities were intended to heighten the student's awareness of himself. During this time, students completed pre-test questionnaires, interviews were conducted and outside observers assessed group functioning.

Enthusiasm and rejection were the initial responses to the programme. The students were keen to participate in game-like activities (The Calculation of the Group's Average Height, the Murder Mystery Game, the Rumour Game, the One-Way and Two-Way Communication Games). Students were hesitant to participate in activities that involved introspection unless such activity was carefully structured (Wardrobe of your Mind, the Roadmap of your Life). Students could not and would not participate in sensory awareness and concentration exercises, especially those which were not structured. There was a

reluctance on the part of the students to analyze their behavior or discuss group dynamics in their small group and especially with the entire class. Students objected to the endless stream of questionnaires and outsiders observing their groups.

While the students' responses to the first day's introduction indicated a willingness to try the activities, it was evident to the author that the sociology of the classroom, the inhibitions characteristic of adolescence and the adjustment to a new teacher were factors which had not been given enough consideration when the programme was designed. This was especially evident in the author's class.

At the end of the first day, permanent groups were organized. In almost every case, students were placed in a group where two members had requested each other. There were, however, a few students in each class whose requests could not be accommodated. The students in Sally's class joined their groups quite willingly. However, the students in the author's class were hesitant to join their permanent groups. Most students avoided joining their group, and several students left the room, as class attendance was voluntary. After much milling around, those students who remained settled down and just sat together quietly waiting for the dismissal bell to ring.

Sensory awareness activities were not well received by either class. At first these activities were met by smirks

and giddiness, and most students did not relax or become involved in either the sensory awareness or concentration activities. Instead, students kept looking around the room to see who had closed their eyes and who still had their eyes open. The students did not want to talk about what they sensed or felt during the activities.

The students in the author's class registered their objection to sensory awareness activities by blurting out comments about the ridiculousness of the activities or refusing to participate. Objections to sensory awareness activities in Sally's class were registered with more explanation and less drama. Sally's journal observes that two boys, Pete and Nick, came up to the front of the room to discuss the purpose of the experiment with her.<sup>1</sup> It was

...A sincere conversation...about how he [Pete] thought people couldn't be trained to be more aware or to express themselves better. Either a person could or he couldn't--this is a natural ability--Also Pete said that he found concentrating at school difficult while at other times he and Nick talked for hours. Both were very interested in [the] conversation. First time Pete has ever expressed himself to me other than as a hip-dope smoking swinger (February 4).

Guided self-awareness activities were received with much less resistance. Some students indicated that they found these activities meaningful. The students in both classes

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<sup>1</sup>To protect the privacy of the students involved in this study, names have been changed.

were absorbed by the activities which asked them to think about eight words to describe themselves as if they were articles of clothing (Wardrobe of Your Mind). The "Who Am I?" questionnaire (see Appendix B) which followed this exercise was quite revealing, and the students seemed to open up and share much personal information about themselves.

Students were restless and unsure about the Roadmap of Your Life Exercise, especially about the confidentiality of the envelopes in which they would seal the paper they had written about their strengths, weaknesses, accomplishments and goals. Some students thought that Sally and the author would steam open the envelopes. When students were assured that the envelopes would not be steamed open, they willingly wrote down the answers to the questions.

Group tasks and games were accepted enthusiastically by both classes. The students seemed to enjoy activities like the Murder Mystery Game. These activities became competitive with other groups, and some students asked if they could do more of these activities. However, when group work involved discussion or analysis of group functioning, students were less interested. Students answered follow-up questions superficially, and most Post Meeting Reaction Sheets (PMR Sheets) sparsely indicated that group functioning was "fine" or "O.K." All students complained that the topics of discussion, parents, Americans in Canada, Indians in Canada, were boring.

Students were anxious about how these activities related

to English class and how they were to be graded on their performance of these activities. Students were more willing to participate in unusual activities if they were prefaced with an explanation of how the activities related to English class and how they would improve communication skills. During the second week, daily journals were assigned in order to give students an opportunity to reflect on the programme and allow teachers more information than students would publicly volunteer. Each journal entry would be shaped around six guiding questions (see appendix B). Students in both classes seemed keen to do this and willingly copied down the six questions.

It was decided that grading was a problem to be solved by both the students and the teachers. Students were at first uneasy and confused by this assignment and responsibility. Most students felt that it was the teacher's responsibility to determine a method of grading. However, after a day and a half's discussion, the students in Sally's class decided that they should not receive letter grades but comments on their participation in class. The students in the author's class were unable to reach a solution until the fifth week of the programme (see pages 83-85).

Audio and video tape recording equipment were available to students for analysis of their group functioning while discussing the grading problem. Students were hesitant to audio tape their discussions and refused to video tape their discussions. After much coaxing, four groups agreed to video tape

one discussion. While all four groups were interested in watching the playback of these discussions, none were interested in analyzing their performance as a group.

Evaluation of the First Two Weeks. Near the end of the second week, the author and Sally met with Dr. Gibbons to assess the programme. It was agreed that the problem areas were (1) students did not like most of the sensory awareness and concentration activities; (2) students readily and willingly participated in any of the activities that were fun, but were not interested in the serious, analytical aspects of these activities (e.g. answering follow-up questions, answering questions about how their group could function better or deciding how they should be graded); (3) students still seemed confused about the content of the course and insecure about how one should be graded; (4) students did not want to be video taped; (5) Post Meeting Reaction Sheets were sparse and not used by groups to guide them to function better; (6) journals were also sparse, most of them accounts of the events which took place in class that day.

Dr. Gibbons felt that these problems should be given closer attention and suggested that Dr. Mallinson be consulted before any major changes were made. He did however, recommend that Sally and the author preface the next day's activities with a discussion of (1) the obvious thoughts and feelings about resistance to the programme and (2) the consequences of "copping out" of commitment in family life, team sports and

government.

Interventions. Further discussion with Dr. Gibbons and then with Dr. Mallinson precipitated interventions necessary to continue the programme. Dr. Gibbons suggested that the emphasis of the programme be shifted away from analysis and insight toward groups solving real problems. He suggested problem solving according to a strategy outlined by Dr. L. Brisse of the Faculty of Education at the University of British Columbia. This problem solving strategy asked each participant to state his solution to the problem; then each participant rated these solutions for understanding and agreement.

The author discussed the same problems with Dr. Mallinson stressing students' reluctance to share pleasant and positive feelings with each other. Dr. Mallinson first emphasized the importance of not changing the programme radically because the students might feel as if there was something wrong with them. He reminded the author that the characteristics of adolescence might account for some of the students' shyness, inhibitions and non-participation. Dr. Mallinson recommended another format for the Post Meeting Reaction Sheets so as to encourage groups to report how they functioned (see Appendix B) and suggested several ways of easing students into class discussions and sharing of positive feelings.

Phase I: The Third and Fourth Weeks. The overall plan for the third and fourth weeks was to continue to prepare students for independent group work. Though the emphasis of

the programme was altered, the specific activities did not differ much from the original plan. Students were assigned the task of designing a house which pleased all group members. Students had unlimited funds for this house which could be built anywhere. However, the originally planned sensory awareness and interpersonal activities were omitted, and Brissey's strategy for reaching agreements was added to the programme.

The task of building a group house succeeded in involving all of the students in both classes and provided them with an opportunity to solve intra-group problems. By the end of the week, all groups, except one, had designed houses which were presented to the entire class.

While all groups were involved and pleased with this activity, it appeared obvious that the conditions of the assignment were too easy. Since the students ignored the Brissey Problem Solving Method, a visualizing activity which placed limits on the house design was developed. Students were asked to visualize themselves in their house and then write down five things they liked most and five things they liked least about their house. These ten items were then to be used by students to establish high and low priorities. When students met in their groups, before they continued to plan the house, they were asked to first consider everyone's high and low priorities. Most students in both classes became involved in visualizing themselves in their houses, except for two significant disruptions. Geoff, a boy in the author's class



continued to talk out loud during this exercise. When he was asked why he had been so disruptive during this concentration activity, he answered,

Because I think they're stupid! Nobody's really doing them anyway. I can't get into them.

Midway through this exercise in Sally's class, a low voice resounding through the vent in the door said, "Let...us... meditate...." This disrupted the mood of the class, baffled both Sally and the author and caused some snickering. Sally then encouraged the students to continue working on the houses they had begun planning the day before.

For the next two days, all groups worked industriously and intensely on their house plans. Interpersonal conflicts began to manifest themselves, and groups tried to gloss over them. Students were granted an extra day to finish their house plans and prepare for a class presentation.

Students in both classes seemed to enjoy this presentation, especially seeing the houses that other groups had designed. Each group showed the class the floor plans they had drawn and described the unique features in more detail. One group in the author's class did not have a house to present and told the class about some of the problems they had in reaching agreements which pleased every group member. In the author's class some students were more shy than others, but everyone had something to say. In Sally's class, representatives from each group came to the front of the class to present

their plans and the class paid attention except for one boy who snickered and laughed until Sally told him to mind his manners. Students in Sally's class called from the class if the group could not be heard when plans were being presented.

A special journal entry, asking students to think about what they had learned about themselves, other group members and their group while working on this project, was assigned. Most journals indicated that students learned more about each other while working on the group house project. Journals also revealed that some individuals were dissatisfied with their house plans but went along with group decisions in order to complete the project.

In an evaluation of the group house project, Sally and the author agreed that the activity had succeeded in involving the students in the programme and bringing them into more cohesive groups. The activity had also brought out intra-group conflicts which needed to be solved before groups could proceed with an independent group project. It was felt that the students should be confronted with these conflicts so they would be prepared for independent group work. Two types of activities were scheduled: activities which would make group members more aware of group functioning and activities which would intensify the interpersonal relationships within the group.

The first of these activities was The Sharing of Positive Feelings about the Group as suggested by Dr. Mallinson. Following this activity, it was planned for the group members

to do an activity that showed the difference between solving a problem by group members pooling their resources, information and talents and solving a problem by group members arriving at a consensus (NASA Lost on the Moon Exercise). A discussion about the differences between both methods of problem solving would lead into a discussion of the purpose for interpersonal activities. Four interpersonal activities to be done within the group were planned. The following day, group members would be assigned two non-verbal group tasks and then independent group projects.

This week of preparation for independent group work was the lowest, most difficult week in the programme. Instead of individuals becoming more involved in the programme, they were detached and unwilling to participate in class or group activities. Instead of bringing groups closer together, group functioning ceased altogether.

Evaluation. Sally and the author both agreed that something was drastically wrong with the programme because students were not coming to class and groups were not assuming any responsibility for independent work. The author and Sally felt that the problem might be caused by activities which were forcing group members to confront and resolve the difficulties of working in a group. (The events of this week are reported in more detail in the following section on small group development, pages 99-107.)

After a week of desperate attempts to resolve interpersonal conflicts, without success, these "crisis conditions" were brought to Dr. Gibbons' immediate attention. He first discouraged any further confrontation among group members and suggested that the teachers direct students toward working on group projects. Wally Eggert, Assistant Field Co-ordinator for the Faculty of Education, was asked to observe one of the classes at Alpha in order to find out if the conflicts were being encouraged by the teachers or if the conflicts were the result of certain activities.

The author planned the next day's activities to emphasize the importance of cooperation among group members (The Broken Squares Activity). This activity was done in random groups rather than in permanent groups in order to avoid any further intra-group conflict. Following this activity, students were asked to discuss several follow-up questions about how the problem was solved. Students were then to return to their permanent groups to work on their independent group projects.

Wally Eggert observed Sally's class working on the Broken Square Exercise. The students cooperated to complete the five puzzles, but instead of answering the follow-up questions, they either left the room or disintegrated into unproductive clusters of students chatting among themselves.

Wally reported to Sally and the author that he observed no intense or dangerous confrontations going on in the class,

but asked if he could report what else he had observed. He began by saying that the students had a lot more energy than was being tapped by the teachers and much of this energy was spilling off into anything that amused them. He remarked that much of the activity remained at the games level without any transfer to group work situations and neither Sally nor the author were convincingly selling their products.

Sally answered these observations by saying that she took most of her cues from the author. The author explained that her detached, clinical attitude toward the students and the programme was deliberate so that the success of her experimental programme would not be attributed to enthusiasm or over-zealousness. Wally reminded her that she would have to report her role and attitude as a factor in the experimental programme, whatever it happened to be. He suggested that both Sally and the author "stop holding back" and get more involved because the students' behaviour was in part a reflection of the teacher's attitude.

Intervention. Continuation of the programme in light of Wally's observation meant a marked change in the teachers' involvement in the programme. Both Sally and the author felt that the bored, restless students needed to do something meaningful and involving. Both felt somewhat depressed that the programme was unexciting and threatening to the students. A change in teacher's attitude toward the students began with Sally's comment, "I'm going to have a talk with my class

tomorrow telling them how I feel and try to help them to see the point of this whole programme."

For the next three weeks, as planned, the emphasis of the programme was upon independent group projects. During this time, however, the teachers were more personally involved in the programme, acting as resource persons and counselling groups which were having difficulties functioning. There was no further coordination of activities between Sally and the author.

Phase II. Independent Group Work. The second phase of the small groups training programme began with a discussion of the purpose of independent group work. The following is a brief report of what occurred in each class during the three weeks of independent group work. More specific details about group development are given in the following section on Group Development, pages 105-107.

Sally's journal reports how she began the second phase of the small groups training programme.

Today I spent about the first 20 minutes talking with the whole class about my feelings regarding their response to this experiment. I was (or attempted to be) candid and honest--hoping that if I express my concern then the kids would respond. The class listened except for Ron, Dave, Chris, Jerramy and Paul. Lanny, Shiela and Loretta were very responsive and I think that all our feelings came together and (we) for the first time in a while the class energy was enthusiastic and positive. I stressed that the project was for students to decide what they wanted to learn and to go out and learn about that. I talked about adults and parents and the difference. Adults

could make decisions and carry through and didn't need a parent figure to tell them what to do. (March 1).

For the next twenty days, students worked in small groups to plan and carry out independent group projects on communication. During this time, one group successfully planned and carried out a communications project (The Out to Lunch Bunch); two group members planned and carried out a group project in their group's name (Carry on Thinking); one group attempted to carry out a project which was unsuccessful, then another which also collapsed before completion (Uriah); two groups never completed their projects because of interpersonal difficulties which could not be resolved (Chimo, The Bunch of Munchers).

The day before projects were to be presented, Sally asked the class to decide on the type of evaluation for the project. Students unanimously agreed that projects should be given both letter grades and comments by class members and group members. They decided that Sally should compile these comments and grades for the final evaluation.

Two group projects were presented to half of the students in Sally's class. These presentations were video taped by the author. The students who presented their projects were relaxed and self-assured about their presentations.

The first project, an interview-survey about communication in public, had been planned and carried out by all group members. Two students interviewed people on the street; two students interviewed young children at an elementary school;

one boy put together a musical soundtrack. No questions were asked by class members after the presentation. When Sally asked the students to tell her how they got the idea for the project, the students had alot to say about this and were quite proud of their accomplishments.

The second group project, a survey which polled students and parents on how each perceived communication with the other, was presented by two group members. These two girls prefaced their presentation with a summary of their findings and conclusions. Then each girl explained the charts which were drawn up to show the results of each item on the questionnaires.

The presentations and evaluation lasted for almost an hour. Some students asked if they could see the video tape of the group presentations. About half of the students, mostly those who had presented their projects, stayed to watch the video tape; the other students quietly disappeared.

In Sally's class, the second phase of the small groups training programme ended uneventfully. Two groups promised that they would somehow complete their projects before Easter holidays. One group refused to commit themselves about whether or not they would even have a project completed.

The author began the second phase of the small groups training programme with an attempt to clarify the problem of grading. At first the students seemed annoyed that this irritating, threatening and insoluble problem was re-issued, but the author felt that the solution of this problem was necessary



if students were to understand the purpose of independent group work.

To help clarify the purpose of some of the activities in the programme, a list of six of the activities that had been done in the past four weeks were put on the board. Each group was assigned to discuss the purpose of a different activity and then report to the class. Groups handled this task efficiently, and in each group, the person who reported was a person who had not previously spoken out in class.

In order to guide students to resolve this problem, the author reflected the consensus found in what the students said they had learned and the consensus found in what the students said should be a method of grading. The report of these consensus stimulated a class discussion of how to develop a method of grading. This discussion began in its usual silent manner. Finally one boy broke the silence, and students began to discuss the importance of grading (see the section on Improvement of Communication Skills, pages 131-134.)

A few days later, students were asked to design the report card that they would like to receive at the end of the programme. The students were told to meet in their groups and agree on a report card as a group. The students voiced no objection to re-examining this irritating problem. These report card forms were also tabulated according to consensus, and this was reported to the students. The students were asked to combine the consensus on evaluation and the consensus on

learning in order to finalize their report cards.

There seemed to be instant understanding of what I was trying to get at....All seemed to agree that grades should be on their journal and their group work....Spent 30 minutes total resolving this haunting problem.

The next day, the author reflected the consensus about evaluation as she saw it--a self-evaluation, a group-evaluation, and a teacher's evaluation of individuals and groups. There were no objections to the consensus decision about grading: a letter grade for accomplishments, a letter grade for effort, comments written by the student and the teacher (see Appendix B).

Except for extra time spent discussing evaluation, the independent group work in the author's class was the same as the work in Sally's class. Group work was as intense and industrious during the first week, and then interpersonal problems began to manifest themselves. Work began to lag so a deadline for group projects was announced. Then group members became more serious about completing their projects. At the end of three weeks of independent group work, all groups had a project in some form or other to present to the teacher, but students did not wish to present their projects to the class.

Four groups presented their projects to the teacher on the day assigned for presentation. The first group (Rob-Tim-Pat) handed the author an envelope of colour photographs of storefront windows; the author suggested that the group make their information more explicit and interesting. The next

group (Boners Ark) showed the author a multi-media project on the different types of communication around them. Another group (Gritski) reported to the author about their field trip to a local television station. The last group (The Street Greasers) discussed their scale drawings of a community for the deaf and concluded the presentation by teaching the author how to say her name in sign language.

Two additional projects were presented a few days later. One group (The Tumbleweeds) which had done two projects, a poster on communication and an edited tape recording of their discussions of some personal feelings. Another group (The Partners) presented a slide-and-sound show of the changes in British Columbia highways between 1900 and the present.

Phase III: Evaluation by the Students. The last phase of the small groups training programme was a tightly scheduled six-day evaluation and post-testing period. During this time students in both classes evaluated themselves according to the methods they had prescribed for themselves, and completed the post-tests necessary for the developmental study. For this, two days were set aside for completing all questionnaires. Another day was reserved for students to write an essay on how their expectations had been met and to assess what they had sealed in envelopes which contained their strengths, weaknesses, accomplishments and goals. Three days were planned for self-evaluation, group self-evaluation and personal conferences between student and teacher. Appointments for interviews with Associates from the Faculty of Education were also scheduled.

The comparison group was also asked to complete four post-tests, i.e. two questionnaires, an essay on expectations and an interview with an Associate.

The six-day evaluation period went exactly as scheduled. Students said they were relieved to spend two full days completing questionnaires rather than doing them a few at a time. Students in both classes answered the essay on expectations saying that their expectations had changed. The sealed envelopes were returned so that students could evaluate their strengths, weaknesses and accomplishment of a short-termed goal. Half of the students said that they attained their goal or came close to attaining their goals.

The interviews with Associates to the Faculty of Education were difficult to schedule at the end of the programme, especially with students in the comparison classes (see the concluding section on Improvement of Communication Skills, page 134.)

The three day evaluation period was a serious time for students in both classes. All students wrote confidential (between teacher and student) self-evaluations; all groups completed group self-evaluations. Both teachers had a personal conference with each student.

In Sally's class, students were asked to write a brief statement about what they had learned from the programme so that comments in lieu of letter grades could be written. She also had conferences with each group for the purpose of

evaluating group projects. Sally reported that the students were able to express their feelings openly in these group conferences.

In the author's class, after the students and the author compared self-evaluations, letter grades were determined and comments were written. Most students were cooperative and some were enthusiastic about this evaluation process. Students remarked that the teacher's evaluation and their self-evaluation were similar. Conferences were relaxed and many students were satisfied with the results. Students had no difficulty determining their grades and thinking of comments to write.

Summary and Conclusions. During the field testing of the small groups training programme, it was necessary to modify some aspects of the programme in order to adapt the programme to classroom use. These modifications were explanations of the purpose of activities and exercises that students at first found strange and awkward.

Major changes in the timetable of the programme and the teacher's attitude were essential to the effectiveness of the programme. It was necessary to involve students in realistic, task oriented group activities before introspection, analysis and discussion of behaviour were possible. In order to participate in independent group work, students required more training and confidence than was anticipated when the programme was designed. The teacher's open and genuine involvement in group functioning was found to be an essential part of an

effective small groups training programme.

It can be concluded from these modifications and interventions that (1) students need to understand the purpose of the activities; (2) strange and unfamiliar activities must be related to what the students understand; (3) students need guidance and training in order to perform self-directed activities; to do this, the students must perceive the activity as realistic and personally important; (4) adolescents are shy and inhibited about sharing personal information with their classmates until they are assured of its acceptability and appropriateness to their peers; (5) the classroom teacher facilitating small groups must be actively and personally involved.

Small Group Development. Eleven small groups were formed during the course of the small groups training programme. These groups were assigned specific activities which were intended to provide students with training in discussion, listening, cooperation, problem solving and decision making skills. As groups worked together on these assignments, intra-group relationships became stronger and intra-group conflicts arose. Five groups were able to resolve these conflicts and became stronger, independent, productive groups (BONERS ARK, THE STREET GREASERS, THE TURTLES, THE TUMBLEWEEDS and THE OUT TO LUNCH BUNCH); four groups were able to resolve some of their conflicts in order to do what was required (THE PARTNERS, ROB-TIM-PAT, CARRY ON THINKING AND URIAH); two groups were unable to resolve intra-group conflicts, and members ceased

to function as a group (CHIMO, THE BUNCH OF MUNCHERS).

The groups took on distinct personalities during the course of the programme. Six groups were primarily work oriented (BOMERS ARK, THE TURTLES, THE TUMBLEWEEDS, ROB-TIMPAT, THE OUT TO LUNCH BUNCH and CARRY ON THINKING); three groups were a network of interpersonal relationships which were sometimes capable of work and sometimes more concerned with getting to know one another better (THE STREET GREASERS, THE PARTNERS, and URIAH). Two groups which could not resolve enough of their internal difficulties were unable to work or get to know each other better.

Small group development was also influenced by (1) orientation problems, (2) inhibition in interpersonal relationships, (3) acceptance of the responsibility to participate, (4) developing confidence in self-directed activity and (5) preference for games and tasks rather than introspection and analysis of group behaviour. The histories of group development which follow will be reported according to the programme described in the previous section, i.e. four weeks of training, three weeks of independent group work and six days of evaluation. It is important to emphasize that each group was distinct in its development, but space does not permit a detailed account of all eleven group histories. Therefore, this account of group formation will report the general trends of group development and focus on the specifics of four groups which represent different patterns of group formation. The groups which will be discussed are (1) a

group which struggled hard to function together and produced a group project (THE PARTNERS); (2) a group that was strictly task oriented (BOMERS ARK); (3) a group which was unable to resolve enough of their conflicts to function as a group (CHIMO); and (4) a group which split into two groups (THE TUMBLEWEEDS). A summary of each group's communication project and self-evaluation will follow these histories. Statistical results will be reported at the end of this section.

Group Work During the Training Phase. Group organization remained relatively stable after the third day of the programme. Except for a few students in the author's class, most students found these permanent assignments satisfactory. New students who joined the author's class on the third day were randomly assigned to existing groups. The dissident students more or less selected or formed the groups they wanted. One boy, who joined the class a week after the programme was under way, was assigned to a group which appeared to be working well. Other changes in groups in the author's class were made later in the programme in order to keep groups functioning smoothly. These changes are discussed more fully in the following report. Table 2 (page 92) summarizes the changes in group size and structure.

Though all groups were able to do all of the game-like and task oriented activities assigned to them during the first two weeks, difficulties in group functioning became apparent. Group activities were at first organized by a strong, outgoing dominant member. This organization was successful for completing



## CHANGES IN GROUP SIZE AND STRUCTURE

Group Name	Number of Members						Changes
	First Week			Last Week			
	Males	Females	Total	Males	Females	Total	
Author's Class Boners Ark	2	3	5	3	3	6	1 boy joined the group during the second week.
Street Greasers	2	4	6	2	3	5	1 girl left school during the fourth week.
The Partners	3	3	6	3	3	6	No Changes
The Turtles (Name changed to "Gritski" during the seventh week)	3	2	5	2	2	4	1 boy joined the Tumbleweeds during the second week.
The Tumbleweeds	3	2	5	2	1	3	1 boy from the Turtles joined the group during the second week; group split into two groups during the fourth week; 3 members considered themselves the "original members" and kept group name.
Rob-Tim-Pat	-	-	-	2	1	3	Group was formed during the fourth week; an off-shoot of the Tumbleweeds.
Sally's Class							
Chimo	3	3	6	3	3	6	No Changes
The Out to Lunch Bunch	2	2	5	2	3	5	No Changes
Uriah	2	4	6	2	4	6	No Changes
The Bunch of Munchers	2	3	5	2	3	5	No Changes
Carry on Thinking	2	4	6	2	4	6	No Changes

games and tasks, but not for bringing group members closer together or for developing group consciousness. The solution to the problem of deciding grades required the participation and involvement of all group members. Some students met these requirements and were able to work out group solutions to the problem and thus group relationships grew stronger; however, many students did not have the skills or confidence to solve this problem as a group, and thus group relationships were strained and unpleasant. The following is a brief summary of how four groups worked during the first two weeks.

THE PARTNERS functioned cooperatively and efficiently at first, but then a rift deepening between the males and females hindered smooth group functioning. The first two activities were eagerly organized by Geoff, and group members were proud that they completed the group exercises instantaneously. The random discussion divided the boys and the girls. THE PARTNERS approached the problem of deciding grades with their usual enthusiasm and team spirit, but Geoff's dominating leadership was challenged by other group members. On Friday, Martin and Geoff both left the group discussion and the following was decided.

Today, being the last period of the day, and a real confusing. We again went to our groups and discussed about marks. Greg came up with a real good remark what English all about and I fully agree! He stated that English should be self expression and we should be graded on how well we can express ourselves. We all thought long and hard before anyone came up with something like that. And I think it's the best idea anyone has come up with yet!! (Betty, February 11).

Though the P.M.R. sheet reports that all of the group members agreed with Greg's idea, it also indicated that morale was low.

BONERS ARK completed each activity methodically after Cindy organized it. The P.M.R. sheets report that their group functioning was satisfactory to them. After the second activity, they reported,

We are perfect. We need no better function. We all contribute our thoughts (February 3).

The random discussion on parents took place between Cindy and her boyfriend, Vincent. After this discussion, the group reported that they did not function very well. They suggested that their group functioning might improve if they were to "get better topics" (February 4).

The group's functioning progressively worsened. The first group discussion on grading was monopolized by Cindy and Vincent. The other members said little or nothing. On Thursday, the P.M.R. sheet reported,

We didn't work as a group today because we were disorganized. Everyone was split up. We were tired and did nothing (February 10).

On the last day, Graham and Vincent left when the group decided to be video taped.

CHIMO had difficulty working smoothly from the beginning. Most of the group members let Karen organize the group activities when she showed an ability and interest in assuming this responsibility. The P.M.R. sheet reported,

We didn't function as a group, really, today. There was really no feeling involved between the contributions of the group members. Each person did what they were told to and didn't care about the other members (February 2).

The random discussion on parents involved only four members of the group. Karen reported that the

...group didn't cooperate well at all.... I had a lot of difficulty trying not to take over the group and letting myself do most of the talking (February 8).

The first discussion on grading was frustrating for the members of CHIMO because Chris and Paul would not participate as they thought the topic was not interesting. The next day, Karen's journal reported,

We each gave our own views on how we would like to be graded. After one person made a suggestion the group would discuss it and come to our decision....This was one of the better days of how we functioned as a group, each of us contributed...(February 11).

THE TUMBLEWEEDS were a collection of students at cross-purposes. Most of the group activity was blocked by two students, Lisa and Rob. Lisa was upset by group work because she could not attract attention from the entire class for her foolish behaviour and deliberate ignorance. Rob, the "cool," tough class leader, exerted his negative, disruptive influence on both class and his group's activities. Marshall was concerned about doing well in his group work and tried to pull the group together for group activities. Dennis was a follower. Pat, when she was present, was also a follower and sometimes buffered Lisa from the abusive attention that she

typically encouraged.

All during the first week the members of this group sat distantly from each other and avoided work as much as possible. Most group activity centered around provoking Lisa to act foolishly. The group members were barely able to complete the three group tasks assigned to them.

Rob and Pat were absent for the entire second week, and Marshall, Lisa and Dennis reached a decision about grading on the first day that the problem was assigned. Marshall reports this improvement in group functioning.

We went to our group where we discussed what you were trying to teach and what we should be marked on (on tape). I think the group did better today than before. Everyone is getting into the discussion (February 9).

At the end of this week, Tim, one of the class leaders who was having difficulty in his group, joined the TUMBLEWEEDS.

During the group house project, groups were enthusiastic about group work. Each group had at least one day in which all members worked happily and busily on their house. Though the project also made the groups more aware of their internal conflicts, all groups except the TUMBLEWEEDS were able to overcome enough of these conflicts to present house plans to the entire class.

THE PARTNERS worked as six separate individuals attempting to share the same space without colliding. The rift between the males and females became a tug-of-power between Betty and Geoff. The group members finally agreed on six separate

cottages connected to a common area. Group members wrote that they were satisfied with this house "because it was not left up to one person like most of the projects are," but their journals told what they had not said out loud. Ginny wrote,

Something strange happened today. Greg seemed to be enjoying this all week....When it came his turn he said he didn't want his own home. It was a let down because I was looking forward to hearing his and so were the other members (February 21).

Betty's journal stated,

Ours [presentation] was really a Flop. If I hadn't done those plans of inside and the grounds of our house, our presentation would have been terrible. I liked the house because it was pretty well all my ideas and everyone went along. The outside part, everyone had a part in and also the shape of the main house and there own houses.

The way we solved problems was by the majority of people who agreed on the article. Everyone's idea for the outside of the house was pretty well all the same and wanted luxurious things. The inside part, no one was happy what was put in so we came up on the big house plus our own small cottages.

I learned that I was really a sucker to volunteer [sic] to the house and ended up doing it all (February 21).

Only Martin said that he was satisfied with the group's house.

BOMERS ARK: Almost no conflict was apparent while the group designed, drew and presented their plans. Group work was organized by Cindy, but when she was absent, Isabell was able to organize the group members so that work continued. At the end of the project, all journals reported positive feelings about the group. The P.M.R. sheet written at the end of this project stated, "We are a team. Yea us!"

(February 21).

CHIMO's house was haunted by conflict. They began by all contributing ideas, but as the house began to take shape, Paul objected to the luxurious items and then refused to work. Jerramy was either absent or went along quietly with the rest of the group. The group members had a series of disagreements about parts of the house that concerned all of the members. Just before their presentation, the group members had a fight about who would go up in front of the class and present the project. Everyone in the group reported that they were dissatisfied with their house and the group.

THE TUMBLEWEEDS were unable to reach a group agreement on their house plans. Rob typically hindered much of the group's work by rejecting almost every idea that was suggested, provoking Lisa to act foolish and giddy, or leaving the room with Tim. Marshall attempted to bring group members together when Rob left the room. One afternoon, Lisa, Pat, Dennis and Marshall agreed on a house that had a different floor for each group member. When Rob and Tim returned, they rejected that plan.

Since THE TUMBLEWEEDS did not have a house to present, they were required to prepare a statement telling the class why they had no house. Lisa reported that some of the group members did not think the project was important and by the time some of the members did agree on a house, it was too late to work out plans. Marshall's journal indicates his feelings

about the group project.

I think if we don't do any better on the next project the group should be separated. Our group is doing terrible now not everyone is showing up anymore, today we had 3 out of 6 people. I am beginning to become impatient. Maybe a new group might be okay. I tried to put the group together and I even did my floor and the whole grounds layout. I'm satisfied with my floor but most the rest of the group didn't pull their weight. We were never able to resolve the problem because of no organization. I think I have done very more than my share in this group and yet we still failed in the project. I learnt that some members will try to share and others just hold the group back (February 21).

For the next week, groups participated in activities which were intended to bring group members closer together and prepare them for independent group work. However, many students did not come to class, and when they did, they shyed away from intimacy. During this time, group conflicts became more apparent and more critical. The following describes how the groups responded to these activities.

All students were able to think of positive things to list about their groups, though some students found it difficult to think of five things. Chris and Paul (CHIMO) found it difficult to list anything. All groups sounded sincere about what they reported to the class except for the TUMBLEWEEDS who were exceptionally disruptive and negative. These statements are reported in Table 3, page 100.

Groups worked intensely to solve the NASA Man on the Moon exercise. In the author's class, all groups were able to reach a consensus though some group members clashed more



TABLE 3

## SHARING OF POSITIVE FEELINGS ABOUT GROUPS

GROUP	STATEMENT
Boners Ark	We work well together without fighting.
The Street Greasers	We've gotten to know people we wouldn't have gotten to know.
The Partners	We all have fairly open minds.
The Turtles	We've gotten to know each other better.
The Tumbleweeds	No Answer.
Chimo	People who weren't personal friends put together to solve group problems and communicate.
The Out to Lunch Bunch	Friendliness.
Uriah	The people in the group.
The Bunch of Munchers	Communication.
Carry on Thinking	The ability to discuss freely and openly.

than others. The groups which cooperated and felt comfortable working together (BONERS ARK, THE STREET GREASERS, THE TURTLES) stayed in the room chatting until the dismissal bell rang. The two groups which had much difficulty working together (THE PARTNERS, THE TUMBLEWEEDS) disappeared as soon as they completed their group consensus answers.

The groups in Sally's class worked together on the Man and the Moon exercise, but some groups had definite problems. CHIMO was unable to reach a consensus, and group members were annoyed with each other. Cheryl reports how CHIMO performed.

Paul wouldn't say what he wanted, Chris disagreed on everything and he always thought he was right; that bugs me! He'd get really mad and give up just 'cause we didn't agree with him. We didn't get our sheet finished; I didn't like that exercise (February 22).

The group was given extra time to complete their consensus answers the next day. All journals from CHIMO report that the group reached agreement, but they never turned in their answers.

Tables 4 and 5 (page 102) report the results of this group activity more specifically. Table 4 shows the order in which the groups completed the entire activity; Table 5 compares the group average scores and group consensus scores. In this activity, the lower the score, the more correct answers.

THE TUMBLEWEEDS reached a breaking point after the Man on the Moon exercise. Lisa asked the author if she would help do something about the group because she alone could not confront Rob. She said that she, Dennis and Marshall wanted to

TABLE 4

ORDER OF FINISHING THE NASA LOST  
ON THE MOON EXERCISE

Author's Class	Sally's Class
1. The Street Greasers	1. Uriah
2. Boners Ark	2. The Bunch of Munchers
3. The Partners	3. Carry on Thinking
4. The Turtles	4. The Out to Lunch Bunch
5. The Tumbleweeds	5. Chimo (did not finish)

TABLE 5

COMPARISON OF INDIVIDUAL AND GROUP SCORES ON THE NASA LOST  
ON THE MOON EXERCISE

Group Name	Group Average of Individual Scores	Group Consensus scores
Sally's Class		
Munchers	40	14
Out to Lunch	54	32
Uriah	37	26
Carry on Thinking	56.8	46
Chimo	--	--
Author's Class		
The Street Greasers	44	28
The Partners	52.5	29
The Turtles	47	33
The Tumbleweeds	51	40
Boners Ark	49.6	42

work, but the others did not seem to care about the group. The next day, THE TUMBLEWEEDS discussed their group work. The author's journal describes this discussion.

[There was] a lot of static from Rob and Tim....Rob's main argument was that wasn't he supposed to disagree if he disagreed?...I told him that I thought his disagreement was deliberate and to keep the group from working together....Once the subject was opened up, Lisa and Marshall began to tell Rob and Tim that they once had a group before Rob and Tim were there. Rob listened to Lisa a bit....I set forth the conditions. (1) They could [all] work as a group, (2) Each person (Rob, Tim, Pat) could be their own group, (3) they could form...[two new groups]. Tim seemed threatened about being his own group [and said,] "How can I be my own group? Sit here and talk to myself?" Eventually Rob said, "Ok, Tim and me will form a group"...and [then they] "claimed" Pat [who was absent]. Then Rob and Tim left. Out in the hall Sally overheard them say [to some of their friends], "We got kicked out of our group!" (February 23).

Marshall, Lisa and Dennis seemed somewhat relieved by this intervention. Marshall reported in his journal,

Our group is beginning to get back on our feet. Saying things to other members in our group helps to be not afraid to say things out of school. Our group is going to split (February 22).

The class membership dropped sharply in both classes after the Man on the Moon exercise and the interpersonal activities. Groups were not able to make a quick decision about a three-minute pleasant group activity. In the author's class, four groups chose to do nothing for three minutes; one group could not reach an agreement because one of the students insisted upon hearing a Bill Cosby record; THE PARTNERS invented a little game to play. In Sally's class

The class left en mass. Uriah ran around the halls and were the only group back in three minutes. Munchers came back two minutes late with pop, etc. from the cafeteria (February 28).

The outsiders activity had a disturbing effect on all students. The students who reported the activity in their journals said that they did not like doing such activities. Sally and the author were able to work closely with two of the groups during this activity.

Joan's journal for that day best describes what happened to THE PARTNERS.

...Our group had to stand shoulder to shoulder and the person who felt they were rejected, stood in the middle. That was Geoff. Geoff only stood in the middle for a joke, for attention. He likes that, because in our group he's always talking and we all listen to him, he's never ignored. After this our group got into a discussion, we found Greg said he didn't feel like a member of the group, he said people don't act themselves when they are in a group....We discussed how we could make Greg feel like a member of the group. We didn't come up with the answer, but I have a feeling now that the rest of the members know Greg's problem, everyone in their own little way will do their best to make him feel more comfortable, at ease, etc.... After lunch Ginny and I were talking about Greg's situation, we both feel uneasy talking to Greg too. Not because we don't like him, it's just the opposite. We're afraid he might think we're a little crazy and we don't want him to. We find it hard to make conversation. We don't know what to talk about. Although Ginny and I have both agreed to make Greg feel more like a member of the group and more at ease (February 24).

The members of BONERS ARK were shocked when Graham went into the centre of the circle and said it was impossible for him to feel "out" of the group. Cindy, Vincent and Denise were

upset by what Sally said to them during the discussion. Cindy reports,

I didn't work to my full potential because seeing as I am the group leader I have to speak up, and after being called a big-mouth and liar I kept quiet. I feel this remark wasn't necessary (February 24).

Independent Group Work. For the next few days students were listless, easily distracted and estranged from one another. Independent group projects were assigned, and groups tried to reach agreement about what they would do for three weeks. All groups were able to decide on project, but many intra-group conflicts arose during this time. Three groups never produced a project (CHIMO, URIAH, THE BUNCH OF MUNCHERS). The following describes how the four groups worked.

THE PARTNERS had many ups and downs before they were able to find a project that would succeed. Members first followed one of Geoff's suggestions, but this did not work because Geoff left the room when the actual work had to be done. The angry, frustrated group members then decided on another project which did not work because they could not get cameras to work, it rained too much that week, and then it was too late to have the films processed. At last, when group morale was at its lowest, the group decided that they could no longer depend upon Geoff for leadership. Greg brought his grandfather's glass slides of the Great Auto Race from Seattle to Hazleton, and Betty brought her contemporary slides of the same highway. The working group members tried to get together to make a sound

track, but again, no mutual time could be arranged. Greg asked a local radio station to play highway music for an hour and he dubbed the sound track from the radio. Geoff was not present when the group presented their project a few days late. THE PARTNERS all talked about how they got the idea for the project, the problems they resolved and the implications of change in means of transportation.

BONERS ARK was the first group in the class to decide on an independent communications project. They made this decision as soon as the assignments were given, even though two members were not present. The group got busy immediately making plans to go to Stanley Park to take pictures of communication. When the group was confronted about the girls making most of the important decisions, the members appeared quite disturbed and insulted.

The members of BONERS ARK worked steadily and independently without any difficulties and were able to produce a multi-media programme on the communication around them. The presentation reflected everybody's work, but the actual presentation was done by Cindy and Isabell. Graham was absent, and Corry and Vincent left as soon as the presentation ended.

CHIMO was never able to resolve enough of their difficulties to work as a group on a project. The group got stalled the first week when they could not agree upon an idea for a project. Chris and Jerramy were always absent, and Paul disagreed with everything. The girls decided to work on their

own. For the next week, they took pictures of people in rest homes. Then Chris volunteered to make a sound track, and Paul volunteered to take the film to be processed. After Chris and Paul had a serious disagreement, Paul did not come to class for a week. The girls called Paul's house several times, and Chris went to his house, but no one could reach him. Paul never produced the film. The three girls spent the last few days brooding in class; Chris went to the cafeteria; Jerramy returned to class after the project deadline was due.

THE TUMBLEWEEDS. After the group was split, Marshall, Lisa and Dennis worked together happily and effectively to complete two projects. The first one, a collage of magazine pictures on communication, was completed in a week. The group then decided that they wanted to tape a discussion. Marshall suggested the discussion be on how people could improve the area, but Lisa wanted to talk about why men think marriage is a trap. The group found a tape recorder and an empty classroom on their own, and everyday the group disappeared to have their discussions. At the end of a week, Dennis offered to play the tape for the author after the group edited out some of the "personal stuff." All group members said that this week of discussion had been valuable and that they had learned to trust each other.

Group Evaluation of Accomplishments. At the end of the programme, all of the groups were asked to complete a group self-evaluation assessing attitude, effort, projects and



improvements in group functioning (see Appendix B). All groups, except for the BUNCH OF MUNCHERS, met and completed the self-evaluation forms. The following is a synopsis of the group projects which were not discussed in this section and a brief summary of what each group reported in their self-evaluations.

BONERS ARK reported that they were a great group which did well at solving problems and working together on projects. They concluded that the more they got to know one another the better they could function.

THE STREET GREASERS learned to communicate in sign language and worked together to design a community for the deaf. They reported that their attitude was cooperative, open minded and challenging. This group had a very positive feeling about their group work and concluded their evaluation by adding, "We learnt to work together and accept each other as they are."

THE PARTNERS reported the difficulties which the group had to overcome during the programme. The group members felt that solving the problems as a group had taught some individuals "to work with people and get along." Their final accomplishment showed a change in group consciousness. "Instead of depending on just one person, like we did in the beginning, we learnt to work without him and lean on each other."

GRITSKI (formerly THE TURTLES) went to a local television station and reported what they had learned. Their evaluation tersely stated that they had overcome some of their difficulties,

i.e. agreeing on things and getting organized.

THE TUMBLEWEEDS reported that everyone in the group carried their share of the work load and "no one skipped out!" They concluded, "As we worked together we began to understand each other better so we could talk and do things better."

ROB-TIM-PAT: Tim did most of the work for the group project, a photo-essay on the communication found in store-front windows. Though Rob, Tim and Pat did not show much care in the presentation of this project, they felt that they had done most of the work asked of them. They reported that the people in the group knew each other better and now they could talk to each other more easily.

CHIMD's final evaluation reflected much disappointment with the group's history. The evaluation, written by Karen, Cheryl and Anita, reported,

We thought our group was finally operating as a group until it came to individual responsibilities. From our big project we found out that only a few of us really cared and some members accepted responsibilities and then let us down.

Their concluding remarks showed a sourness toward group work: "We got more problems than we solved as a group....We found that you can't trust anybody."

THE OUT TO LUNCH BUNCH worked happily to produce a project on what the man in the street thought about communication. They were modest about their group participation and quite proud of their accomplishments. They reported that they were "really good" at solving problems as a group "Because we got

together as a group to help Joe out of his shell....Our greatest accomplishment was getting Joe to open up."

URIAH worked together quite happily. They attempted a project that would teach the group members how to communicate, but could not express what they had learned. The group was quite open about their group functioning at the end of the programme. They described their participation as casual but felt they could try harder. Their concluding statement was that their group functioning did not improve, but rather "during the projects we slacked off because we couldn't make up our minds what we were going to do."

THE BUNCH OF MUNCHERS did not finish their group project, had several serious fights and wrote no final evaluation.

CARRY ON THINKING. Three girls did most of the work on a survey of family communication. Their brief and general evaluation reported that they tried hard and concluded that their group functioning had improved "because at first we were very shy and nobody said much."

Group Development: Statistical Results. The results of the objective assessments of group formation essentially corroborated the observations reported in the case study. These objective assessments are limited because all of the instruments, except for one, had not been validated. The Group Dimensions Description Questionnaire, the only validated instrument in this battery, was able to yield a limited amount of information because it was designed to measure the dimensions of

larger, more formally structured adult groups. (Further discussion of these limitations are found in Appendix D, Test Ten.) The following reports the results yielded by six instruments designed to assess various aspects of group development. Details for each test are given in Appendix D.

Test Three (Group Climate). An examination of pre-test and post-test factor structures showed the factor structures were named differently, i.e. the corresponding factors extracted a different proportion of variance for each variables. Factors named in the pre-test were (I) Attraction to the Group, (II) Control, (III) Group Consciousness, (IV) Group Goals and (V) Trust within the Group. Factors named in the post-test were (I) Personal Attraction to the Group, (II) Control, (III) Personal Responsibility to the Group and (IV) Group Goals. An examination of the variables which compose these factors showed that the factors on the post-test conditions reflect more personal involvement and attraction to the group, but quantitative assessment of this shift is not available (see Appendix D, Test Three).

Test Four (Group Climate). This test was originally designed to measure group cohesiveness. However factor analysis showed that the stable elements of this questionnaire were variables which described group climate. The analysis of the data indicates that there was no significant overall difference between pre-test and post-test scores.<sup>1</sup> However it

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<sup>1</sup>All references to significance in this section are at a pre-chosen level of .05.

was shown that there was a significant difference in the responses of each individual group. In the breakdown of group responses to Test Four, it was found that six groups scored higher on the post-test and four groups (BONERS ARK, THE PARTNERS, THE BUNCH OF MUNCHERS and CARRY ON THINKING) scored lower on the post-test. This variation in responses, different from the responses reported in the case study, reflects a difference in the degree to which group development occurred as reported in the case study (see Appendix D, Test Four).

Test Five (Attitude toward Group Work). The analysis of the data indicates that scores on the post-test were significantly lower than on the pre-test. Further examination of these results shows that Class 1 scored significantly lower than Class 2 on the pre-test and Class 2 scored significantly lower than Class 1 on the post-test. These results in part support the case study results because three groups in Class 2 were reported to be having conflicts and difficulty completing group projects at the end of the programme. While this test shows a less favourable attitude toward work at the end of this programme, case study results show that groups which were functioning well were favourable toward group work (see Appendix D, Test Five).

Test Seven (Trust Among Group Members). Like Test Three, an examination of pre-test and post-test factor structures shows that factors were named differently. Factors named in the pre-test were Trust concerned with (I) Personal Information and Money, (II) Money, (III) Feelings about Trust and (IV) Security.

Factors named in the post-test are Trust concerned with (I) Money and Material Possessions, (II) Confidential Information and (III) Personal Information. This rearrangement of factor structures indicates a rearrangement of trust priorities, but it cannot indicate a quantitative change (see Appendix D, Test Seven).

Test Ten (Group Dimension Description Questionnaire). The results of this questionnaire essentially support the results which were reported in the case study. All groups scored high on autonomy, flexibility, homogeneity and stability, but these conditions were built into the experimental design. All groups scored low on control, potency and stratification. Dimensions which received varied responses agree with the results reported in the case study. For example, groups which were unable to complete a group project (CHIMO, URIAH and THE BUNCH OF MUNCHERS) scored low on participation while a group which completed two (THE TUMBLEWEEDS) group projects, scored the highest. Groups which overtly showed conflicts among group members (THE PARTNERS, CHIMO and THE BUNCH OF MUNCHERS) scored low on hedonic tone; groups which were able to work well together scored high (BONERS ARK, THE STREET GREASERS, THE TUMBLEWEEDS); the remaining groups received middle-range scores. Groups which had intra-group conflicts (THE PARTNERS, CHIMO and THE BUNCH OF MUNCHERS) scored low on viscidty while all other groups scored high. Further details and the limitations of this questionnaire are given in a discussion of Test Ten found in Appendix D.

Test Thirteen (Unobtrusive Observations of Group Functioning ). This measure of group formation provided very little additional information to the case study results. Since four groups were not working together on the day of the post-test observation, the information is limited. However, three of the four groups were not observed because they were no longer working together (CHIMO, THE BUNCH OF MUNCHERS and CARRY ON THINKING). The results of these observations recorded an improvement in eye contact in five groups; and no interruptions were recorded on post-test observation of five groups. These are positive indications of an improvement in the functioning but limited because four groups are not considered.

Summary and Conclusions. The overall picture provided the quantitative measures of groups formation (Tests Four, Five, Ten and Thirteen) support the case study results. These statistical results emphasize the extremes, groups working very well and groups having great difficulty working at all. Groups which functioned smoothly and completed group projects were identified by these observations. BONERS ARK, THE STREET GREASERS and THE TUMBLEWEEDS scored high on participation, hedonic tone and viscidty. The groups which had most difficulty working together (THE PARTNERS, CHIMO and THE BUNCH OF MUNCHERS), consistently registered lower scores on group climate, participation, hedonic tone, viscidty; two of these groups were not present for the post-test Unobtrusive Observations of Group Functioning (Test Thirteen).

The measurements of qualitative change (Tests Three and Seven) showed a change in the priorities between pre-test and post-test conditions. These changes in priorities suggest more personal involvement in and attraction to group work.

In an examination of the patterns of small group formation it was found that before group formation was possible, groups had to overcome anti-group forces such as dominant, manipulative, blocking and/or resisting group members and the initial awkwardness of adolescent males and females working together had to be eased. In groups which were capable of productive, satisfying group work, effective leadership and commitment to a group purpose were evinced.

It can be concluded from the case study and statistical findings that (1) group development was primitive and relatively unsophisticated; (2) before group formation is possible in the classroom, groups must first overcome anti-group influences such as dominating and manipulative members, members who block or resist group functioning; it is also necessary for adolescent males and females to feel comfortable working together; (3) effective and productive group work is dependent upon leadership and the members' commitment to the group's goals.

Personal Development. The overall changes in behaviour and a description of personal development are reported in Sally's journal for the last day of the programme .

Whew!! Things are finally coming to a close. Today I had students write what they had learned during the past eight weeks so that I could write a comment on their



reports that was somewhat realistic. I had a number of personal interviews with kids-- Pete and Chris seem to feel they have changed quite a lot and have become aware of themselves and their relations to other people. Most kids seem to have become aware of the importance of communication, the lack of it and the difficulties of actually communicating with someone in any sincere, deep way. Most have gotten to know the other kids in their groups well-- and have therefore made new friends outside their usual circle. Inhibitions regarding talking to groups and new people seem to have broken down a lot. I think most of the kids feel better/more prepared to talk and discuss with new people and state their own ideas with less fear. A lot of frustration was encountered in groups especially regarding projects but despite this kids are aware of what they learned about working with other people and all the joys and sorrows involved. They realize that it isn't just some kids in their particular group who are difficult but that these people represent the general population in the real world. This, I think is a very important and realistic discovery to make (March 28).

At the end of the programme, all but eight students reported that they observed various improvements in themselves. These observations included improvement in communication skills, more self-awareness, more awareness of other people, learning how to work in a group and behaviour and personality changes.

Because space does not permit more than a brief summary of results, the details of this section on personal development are drawn from five students selected as exemplary. The individuals who will be discussed are (1) Ginny, a student who painstakingly looked for growth and changes in herself, (2) Lisa, a classroom behaviour problem who slowly became cooperative and involved in the programme, (3) Anita, an extremely timid student who slowly became able to work and share with

others more comfortably, (4) Arthur, an extremely skeptical student who became thoroughly involved in independent group work and (5) Rob, a student who resisted the programme, tried to briefly involve himself but found that he could not get involved.

There were eight students who reported "no changes" in themselves at the end of the programme. These students were hesitant and skeptical about the programme. Some of these students tried cautiously to involve themselves in the programme but then recoiled or showed only a minimum of cooperation in the programme. Appendix E contains the results of all confidential self-evaluations, excerpts from journals which discuss changes that students observed in themselves, essays which discuss changes in behaviour and an anecdotal report card comments which discusses changes in awareness.

Ginny, a very sensitive girl, was easily upset by confusion and risk taking. She became noticeable when she loudly voiced her objection to the questionnaires which asked about group relationships. In this objection she stated that she was confused about setting goals, the purpose of some of the activities and how to grade herself, yet her journal revealed that the listening activities were valuable to her. By the end of the second week, Ginny seemed quite self-directed and able to blend all of the week's activities into a personal goal which she wrote in her journal

Started by talking about grades, as usual.  
I feel the teacher should decide how we will be  
marked! It seems they (teachers) are leaving more

and more up to us. By the end of this course I would like to be able to express myself more clearly. I would like to be graded on how well I can express myself from when this class first started to when it ended (February 11)

Ginny became much more involved in group activities during the group house project and tried to involve Joan, her best friend, in the group work. She was disconcerted by the problems that her group was having (see pp. 96-97).

Ginny was one of the few students who became more involved in group work during the week of intense interpersonal activities. Her main concerns were for Joan, her best friend, and for Greg, a group member who felt alienated from the rest of the group. Her journal reports this change in attitude and awareness.

Guess what? I've finally noticed a change! I've noticed that instead of me trying to be a part of the group I'm trying to make others a part of the group and before I know it I feel more a part of the group. If I forget about myself and think more of how others feel I soon forget all my fears and the next thing I know I'm really participating (February 28).

Ginny was at first annoyed that the problem of how to be graded was again given to the students to solve. Her journal reports this.

We started by discussing evaluation. I always tend to get frustrated on this topic, not because I don't care but visa-versa....I'm still not sure about changes or if I'm learning anything and this makes my class time uninteresting. Hope it or I change soon! (March 2).

Each of us made up a report card as to how we would like to be marked. I'm going to try

and do my best to understand this way of learning but I'm not sure how....I think this course is stupid and somehow I think our other group members feel the same at times. The only way this affects me is to "worry me" I admit I'm not the smartest but I have tried to understand! (March 3).

Ginny went along with decisions which other group members made but seemed to take all of the group disappointments personally. One afternoon, her mother phoned the principal to complain about the teacher. This phone call upset Ginny more than the problems her group was having. In a conference with the author, Ginny apologized for causing any trouble and restated her frustrations: the members of her group were always disappointing her and she did not know what she was learning. For the next week Ginny was distant and unfriendly to the author but appeared happier and more involved with her group's project.

At the end of the programme, Ginny was keen and willing to talk about what she had accomplished during the programme. She was proud that she "finally learnt something in this course." She observed,

This class has made me think more about life and its future. I've also noticed I can take disappointments better thanks to our group.

She added the following additional comments.

...I learnt to understand life and have a better look on it. I can't really explain how I've changed but I can feel it inside. Maybe that's why I haven't thought I've learnt anything because I was looking for something on the outside.

Lisa was one of the most noticeable individuals in the programme because of her disruptive, uncooperative behaviour.

Since she got a laugh every time she disrupted the class with inane questions which asked for explanations of the obvious, she continually did this throughout the first week. She acted silly and ignorant when she was in her group and frequently left class without excusing herself.

Near the end of the second week, Lisa became considerably more cooperative and less self-degrading. Her journal indicates this change.

I felt this (deciding how to be graded) a good thing to do, it let us tell how people feel about how they want to be graded. We can discuss on what we want done on marks and how we think she guides our work. This mean't to me a great deal, because we discussed something which I thought was important and mean't alot to everyone. Today our group worked more better they participated more. I also worked and participated more. I can start seeing more of a chance in myself in the group (February 9).

A few days later, Lisa wrote,

Our group today is working far more better we seem to be able to talk more openly. I feel I can work far more comfortable now in my group (February 14).

Lisa was in a group which had a great deal of difficulty agreeing on a group house (see pages 98-99). Her behaviour vascillated between disruption and cooperation. While she disrupted Sally's class by speaking through the vent in the door (see page 76), she initiated a group discussion about intra-group problems (see pages 101-103).

During the week of intense interpersonal activities, Lisa became more involved in her group work, acted much more settled and bravely initiated the group confrontation of Rob

and Tim. After the group split, Lisa was considerably more involved. In a personal conference which Lisa requested with the author, she said that she wanted to act differently but people expected her to act a certain way.

Though Lisa was more quiet and cooperative during the three weeks of independent group work, when some students doing a social studies project came into class with video tape recording equipment, she was provoked to dance on the tables. Afterwards, Lisa left the room; for the next week, she was quiet and uninvolved. When she became involved in group work again, she was more assertive and mature. Lisa said that she was changing and that she was quieter now.

Lisa's self-evaluation was quite positive about what she felt she had accomplished during the course. She stated first that she had "tried" to participate in the activities. She concluded her self-evaluation by observing, "I can work with my group without being embarrassed in what I say. I feel that I can now talk among people and give my ideas."

Anita, extremely quiet and shy the first week, was attentive and tried all of the activities. During the second week, she began to participate more. In her journal, she stated a goal that she set for herself.

I want to be able to talk freely and I think I can do it if there is no pressure on me. If there is pressure on me it just makes it worse and I can't think straight (February 10).

The following day, Anita reported on her participation.

Today we got into our groups and taped what our group said. The others kept talking and saying all my ideas. When I did get a chance to talk I didn't have any ideas left. I think that our group is starting to work together better and I am trying to participate more (February 11).

Anita worked very hard to participate in the group house project. She wrote in her journal that she enjoyed the activity and she was talking more. She volunteered to tell the class about the group house and wrote in her journal, "I learned how to get along with the other members" (February 21). Following the house project, Anita became quiet and shy again. She reported her feelings about English class in her journal.

Then we had to tell everyone our name and say whether we like it or not and tell the others another name we would like to have. Then we had to say something nice about everyone in our group. I didn't like this at all because it is personal. It also made the other ones that were being talked about feel awful. I don't like English too much because we are doing the same stuff over and over (February 24).

Anita was speechless about her group's failure to produce a project, and she withdrew into herself again. For the first week, she reported that she did not work because most of the group members were absent. Then she and the other girls planned and began work on a project. She reported that this was "interesting" and "fun." She does not report her feelings about the film that was taken to be processed and never seen again. Sally's journal for March 22nd reports, "Still incredibly quiet. I haven't seen her utter a word for days."

Anita wrote quite a detailed self-evaluation that explained how the problems in her group affected her.

I have learned how to get along with others and I have also learned never to rely on somebody else. Don't give somebody else an important responsibility unless you really can trust them.

Arthur appeared to feel self-conscious about the class activities and acted as if some of the activities were beneath him. By the end of the first week, however, he became more positive. Some journal entries stated that he seemed to be opening up and expressing himself more (February 9) while other entries stated that he was "still a bit withdrawn" (February 11).

Arthur worked with Joe, a very inhibited group member, to plan the group house. He appeared to participate fully, yet his journal indicated that group work meant very little to him and he still saw no changes in himself.

Arthur's attitude and involvement changed during independent group work. At the beginning of this part of the programme he reported,

...I seem to be working well within the group, though at times I retire and feel like the whole thing is ridiculous. Some of the things I just can't seem to grasp the meaning of what we are doing and why we are doing it. This still doesn't seem to apply to my life outside of school (February 28).

As the group project began to take shape, Arthur became more involved and wrote in his journal that what he was doing would have some kind of affect on his outside life. During the next week, Arthur became intensely involved in his project. He reports this change.



...Left with Lanny to go downtown at 11:30. Weather seemed to be clearing up. Continued with field survey downtown. I was shakey and unsure at interviewing at first, but I relaxed as I went along. I was surprised at the various reactions we seemed to get. This was a very interesting and educational day. This means something my outside life, but at the time I'm not really sure what... (March 10).

On March 13th, Arthur enthusiastically insisted that Sally and the author listen to one of the tapes he had collected. His journal reports the event and its significance.

...Was generally surprised at some of the interviews. In a way it is a small insight into the amazingly complicated animal called man! I was genuinely surprised at some of the people we collected on tape. This means something to me but I'm not sure what... (March 13).

For the remainder of the time, Arthur worked steadily preparing for the presentation of these tapes. During the presentation he spoke quite openly about how he worked on the project and what he had learned about communication and people.

Arthur was quite positive about what he had accomplished during the independent group project. He observed that he "was able to talk more openly with people" and seemed "better able to understand people." He added, "Our last project has helped my outside life considerably."

Rob introduced himself to the author with a refusal to complete the Self-Description Questionnaire (Test One). When he was asked to complete the section which asked him to set goals for improving his communication skills, Rob replied, "I don't think I need to improve." Later that day, Sally warned the author that Rob was one of the class leaders who might be

troublesome.

The history of Rob's personal development is one of isolating Rob from other members of the class so that he could not intimidate them from participating, and attempting to show Rob ways in which he could alter his behaviour if he so wished.

Rob attempted to disrupt class activities whenever he could. His first attempt was during the sensory awareness activities; then he refused to join his assigned group; when at last he found a group he wanted to join, he exerted a negative, disruptive influence on group work. His typical pattern of behaviour was to come to class, disrupt either class or group work, denounce the work being done and then leave the room with either Tim or Martin.

Rob was absent during the second week, during which time his group began to gel. His return was not welcomed as he was critical of everything the group members did yet too strong to be encountered by the group members. When the group members realized they could no longer function with Rob in the group, they asked the author to help them confront Rob (see page 103).

Rob volunteered to form a new group with Tim and Pat-- thus reducing his sphere of influence to two group members and occasionally Martin. For the next two weeks Rob and the other members of the group attended class sporadically.

Rob attended one of the class discussions on grading. In this large class discussion, Rob intimidated all of the students by calling them liars and challenging anyone who was

learning anything to speak. One of the more shy students spoke out; a class discussion developed; and for the remainder of the discussion, Rob was quiet.

The next day, Rob again attempted to intimidate the students who participated in class activities. This time the author confronted Rob, "If you don't like what we're doing, here, you may leave."

Rob answered, "Are you telling me to shape up or ship out?"

The author affirmed this threat, and Rob was quiet for the remainder of this class discussion. Later, Rob and Tim were asked to leave the class because they were obnoxiously eating popcorn instead of working on their group projects.

Following this confrontation, Rob requested a programme change. His counselor agreed, but none of the other English teachers would accept Rob into their classes. Rob stayed away from class for almost a week. When he returned, his behaviour was noticeably more calm and cooperative.

At the end of the programme, Rob evaluated his behaviour and reported that even though he had participated in group activities, he deserved a passing grade. The author, who also evaluated Rob's work, replied that his work was not sufficient for a passing grade. This was cause for Rob to request a long conference with the author.

In this conference, Rob admitted that he had not kept a journal or tried to do any of these activities. He said that

he had tried for a few days but felt foolish. At last he admitted that he had made no real attempt to cooperate. This was the first time that Rob had spoken honestly and undefensively to the author. The author told Rob that her decision about his grade was final but if he wished to write a statement explaining why he should receive a passing grade, it would be attached to his report card. He wrote,

I think I don't deserve a I [a failing grade] because I think I was looking at things the wrong way at the beginning. I had too much of a negative attitude till near the end and I thought I was right about everything I said, and I didn't think enough about what the whole thing was about and I thought I was the best person in the group and I was wrong.

Summary and Conclusions. Personal development during the small groups training programme was a slow and gradual process. Students were cautious and guarded about personal involvement and self-disclosure. Students demanded a considerable amount of guidance and an atmosphere of trust before they were able to identify behaviour changes and set goals for their own growth. At the end of the programme more than half of the students indicated "improvements in themselves" such as more awareness of themselves, more awareness of others, more skill at group work, improvements in communication skills and personality and behaviour changes.

It can be concluded from these results that (1) personal development is a gradual, voluntary process which requires training and readiness to take risks; (2) personal development programmes for adolescents must be designed to consider the

awkwardness, self-consciousness and inhibitions of that stage of maturation; (3) while a programme such as this has much potential, it is also fraught with danger.

Communication Skills. During the small groups training programme observations were made of the students' oral and written communication skills. These observations were made from essays written by students, interviews with the students and field notes recorded by the teachers. A significant improvement in oral communication skills was observed in the experimental group. These results are supported by observations recorded in field notes and an objective assessment of interviews with randomly selected students. Further details about the methods of observations and the results of these observations are reported in two parts, (1) written communication skills and (2) oral communication skills.

Written Communication: Methods of Observation. Students in the experimental and comparison groups were asked to write essays at the beginning and end of the programme. The first essay asked students to write a public statement about their expectations of English class discussing what they expected of themselves, their teacher and their classmates. At the end of the programme, these essays were returned to the students, and they were asked to write another essay in which they discussed how their expectations had been met (see Appendix C).

These essays were assessed according to the following procedure. Each essay was read and evaluated by three

independent judges.<sup>1</sup> Judges assessed each essay for ideas, organization, wording, flavour and usage based upon criteria described by Diederich (see Appendix C, Test Nine).

**Written Communication: Results.** These observations were analyzed according to the procedures described for Test Nine in Appendix D. The analysis of these observations indicates that the pre-test and post-test essays written by the students in the experimental group received significantly higher scores than the pre-test and post-test essays written by the students in the comparison group, but there was no significant difference between pre-test and post-test essays for either group.<sup>2</sup> This analysis also shows that scores for males and females were significantly different. Females in the experimental group scored higher than males on both pre- and post-tests; the females in the comparison group scored lower than the males on both pre-tests and post-tests. Details of this analysis are presented in Appendix D (Test Nine).

**Oral Communication: Methods of Observation.** Oral communication was observed in two ways. First, teachers conducting the programme recorded observations about oral communication in their daily journals. Second, 24 students in the experimental group and 25 students in the comparison group were chosen

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<sup>1</sup>Independent judges were students in the professional training programme at Simon Fraser University and practising English teachers. A list of these judges is given in Appendix F.

<sup>2</sup>All reference to significance in this section are at a pre-chosen level of .05.

at random for pre-test and post-test interviews with Associates to the Faculty of Education.<sup>1</sup> In these interviews students were asked to talk about how they felt about school, their English class and themselves as communicators. These interviews were then rated by two independent judges.<sup>2</sup> Judges assessed each tape for volume, articulation and enunciation, fluency, clarity, coherence, speaking to the topic and flavour based upon criteria described by the author (see Appendix C, Test Eight).

Oral Communication: Statistical Results. These observations were analyzed according to the procedures described for Test Eight in Appendix D. The analysis of these observations indicates that at the beginning of the programme experimental group interviews received significantly lower scores than comparison group interviews. These conditions, however, were reversed on post-test observations. While the interview scores of students in the experimental group showed significant improvements at the end of the programme, the interview scores of students in the comparison group showed a significant deterioration at the end of the programme.

Oral Communication: Case Study. Observations of oral communication were recorded throughout the programme. The

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<sup>1</sup> A list of Associates to the Faculty of Education who conducted interviews is given in Appendix F.

<sup>2</sup> Independent judges were students in the professional training programme at Simon Fraser University and associates to the Faculty of Education. A list of these judges is given in Appendix F.

following three details provide further information about changes which were observed.

(1) Discussions in the Author's Class. Small group and class discussions were essential to the small groups programme. Small group discussions in both classes were at first awkward and difficult, and improvement came gradually. Class discussions in Sally's class were relatively comfortable and productive compared to those in the author's class. The following describes the growth of discussion skills that took place in the author's class.

Discussion of any sort in the author's class was an impossibility at first. Students were reluctant to discuss questions in their small groups and were even more reluctant to speak out in class discussions. This condition improved very little during the first month of the programme. Then gradually, students began to talk more freely among themselves and volunteer to speak out in class discussions.

The first class discussion was painfully and awkwardly silent. Greg volunteered to report how he felt during a sensory awareness activity. This was followed by silence and then restlessness.

A few days later, more students volunteered to tell the class how they felt during the blind walk activity. One boy said that he felt scared; another said it felt like the walls were coming toward him. Still, answers were terse, and discussion of group work continued to be superficial.



During the second week an attempt was made to engage students in class discussions about the process of communication. Again, students were shy to compare the human communication system with a stereo component system. After much prodding and encouragement, six students offered answers to this question. These students were students who usually spoke out in class discussions. Then the subject of grades was introduced as a problem to be solved by the members of the class.

The response to the question, "How should you be graded?" was dead silence. Then students were asked, "What should you be graded on?" One student replied, "Journals," and then more silence followed. The author asked, "Well, what's happening in class?" There was a long pause, and the same student answered, "Groups." The author asked, "And what else?" Someone else replied, "Memory...listening," and there was a long hollow, painful silence. A list of what had been said thus far was written on the blackboard, and then someone called from the back, "Communication." Another silence followed the question, "How can these things be evaluated?" Students were told to go into their groups and decide what should be graded and how. The class discussion which followed group discussion was more fluid. More students spoke out freely and reported what had been discussed in their groups.

Unsuccessful class discussions of this sort continued until the fifth week of the programme. In an effort to clarify the purposes of the programme to the students, the author

planned more class discussions. The first of these discussions was about the purpose of some of the activities which students found confusing. Each group was assigned to discuss a different activity and then report the purpose of the activity to the class. Group discussion was intense, and answers showed more thoroughness than previously observed. This event was noteworthy because instead of selecting the group's most glib spokesman, each group sent forth one of the more shy members: Corry, Jane, Will, Tom, Dennis, Laurel and Martin.

The next day, the first smooth productive discussion was held on the subject of grading. The author began by asking, "This [a list compiled by the students] is what you said you are learning. How can it be graded?" The response was the usual silence.

The author asked, "What does this silence mean?" There was no reply. Then the author asked, "Can anyone tell me what they are worth?" After a brief pause with no reply, the author began, "I'm worth one-hundred dollars to a medical school for research purposes, \$1.39 in natural resources and chemicals, an A to one of my professors and invaluable to my friends."

Doug was the first to start the discussion. Then Rob asserted that he should get an A even though he had not learned anything and accused the members of the class of being liars "because nobody had anything to say."

Doug challenged Rob. Then Tim spoke about different kinds of A's, and the discussion moved on to include the honesty

and difficulty of grading oneself. The discussion continued comfortably, involving everyone, until the bell rang for lunch.

(2) Responses of Interviews. Students in both the experimental and comparison groups were shy and suspicious of the interviews at the beginning of the programme, but all students who were randomly selected were cooperative. The associates' comments indicated that most of the interviews were terse, rigid and formal. One girl in the experimental group asked to have her tape erased; she said that her parents insisted.

Post-test interviewing conditions were vastly different than pre-test conditions. Students in the experimental group seemed eager to be interviewed again. All students kept their scheduled appointments except Greg, who overslept, and Charlotte, a student who showed no improvement during the programme. Charlotte did not come to school on the day of the interview and refused to be interviewed at the re-scheduled appointment. The associates commented on the eagerness of the students to talk about the "experimental English class."

The students in the comparison group, however, manifest much less eagerness to participate in post-test interviewing. Some students in this group were reluctant to make appointments and asked if these interviews were mandatory. One girl requested not to be interviewed again. Seven students did not appear at the appointed time of interviewing and had to be re-scheduled.

(3) Observations Made by Students. Self-evaluations

written at the end of the programme also indicated an improvement in oral communication skills. The students' assessments of these improvements frequently made no distinction between personal development and communication skills. (These are included in Appendix E.)

In Sally's class, students elected anecdotal comments in lieu of mid-term grades. These comments were written in a conference between the student and Sally. Comments indicated that eleven students had learned to discuss their ideas more freely and openly; six anecdotal comments stated that the student had become more aware of communication, the process, problems and its importance.

Summary and Conclusions. The results of objective assessments and case study observations of oral and written communication skills indicate a significant improvement in oral communication skills in the experimental group. Objective assessment of the comparison group indicates a significant deterioration of oral communication skills. It was also observed in both the experimental and comparison groups that there was no change in written communication skills during the nine weeks of field testing.

It can be concluded from these results that (1) the small groups training programme enriched the students' oral communication skills in interpersonal relationships, in small group work and in classroom discussions; (2) the small groups training programme did not have an impact on the student's

written communication skills.

An analysis of all the data gathered from this study indicates that (1) there was an observable improvement in students' oral communication skills but no improvement in written skills; (2) students were cautious, slow and reluctant to become personally involved in the programme, but when they did, observable improvements included more awareness of themselves, more awareness of others, more skill at group work, improvement in communication skills and personality and behaviour changes; (3) before independent group work was possible, students required more specific training in group work skills than was planned in the original programme; (4) most of the instruments for observing change and growth were both irritating to the students and ineffective.

## Chapter 5

### CONCLUSIONS AND RECONSIDERATIONS

This study was begun to explore the hypothesis that training in the skills necessary to work in a small group would improve a student's oral and written communication skills and that as a result of this training there would also be an improvement in the student's attitude toward himself as a communicator. Since there was no precedence for this approach to the improvement of oral and written communication skills, a model, based upon theoretical constructs, was created. The investigation of this model was carried out in a developmental programme in order to identify the problematic and effective elements.

The literature on the teaching of composition offered little positive guidance for the development of this programme, for it was observed that most research in the teaching of composition indicated methods of instruction that had been unsuccessful. Positive findings, however, indicated that students needed to be encouraged to write to a specific audience about meaningful, familiar topics. However, it was also observed in the literature, that current English teaching practices for the most part ignored these research findings (Squire and Applebee, 1968).

Further investigation into the nature of communication

skills revealed that current methods of instruction in written communication skills conflicted with the process of human development. That is, current educational practices attempted to teach written communication to students by a language drill method. However, the literature indicated that communication was a fundamental part of the individual's total development (Piaget, Erikson and Lenneberg).

It then appeared logical that the development of oral and written communication skills should not be separated from an individual's personal development. It was also found in the literature on small groups that becoming a group member was in fact learning to communicate (Mills, 1967, pp. 19-21). Other literature on the use of groups in the classroom indicated that small groups were cohesive learning units (Kaye and Rogers, 1968). Therefore, it was hypothesized that training students to work in small groups would improve their oral and written communication skills and also their attitudes toward themselves as communicators. This hypothesis was dependent upon the condition that the small groups indeed formed.

In order to prove these hypotheses, a programme was designed to train students to work in small groups. This programme involved three phases: training, independent group work and evaluation. The first phase involved activities that provided students with insight into the group process and simultaneously focused upon self-awareness. Independent group work provided a practical learning experience in group problem

solving skills. Evaluation of the programme was evolved as part of the problem solving tasks assigned to the students.

The conditions of this study were quasi-experimental, involving two experimental and two comparison classes. One experimental class was taught by an experienced English teacher, the other by the author. At the beginning and the end of the programme, both experimental and comparison groups were compared on oral and written communication skills, attitude toward oneself as a communicator, and attitude toward English class. The small groups within the experimental group were also observed for group formation conditions. Necessary modifications and interventions were made in order to adapt the programme to the demands of the school situation and to maximize the effective elements of the programme.

Summary of Results. During the field testing of this small groups programme, effective elements and problem areas were discovered. The results of this programme indicated an improvement in oral communication skills for the students participating in the programme but no improvement in written communication skills. These results have been separated into six areas for further discussion: (1) the workability and effectiveness of the programme, (2) problem areas, (3) assessment of the programme, (4) patterns of group development, (5) patterns of personal development and (6) improvement in oral and written communication skills.

(1) The Workability and Effectiveness of the Programme.



The programme was found to be basically suitable to a classroom setting. It was also found that the teacher with relatively no training in group dynamics could facilitate such a programme. The results of this study showed that students worked best when they were carefully guided to perform specific group tasks. The students preferred tasks and projects which demanded very little introspection. As groups became more cohesive and goal oriented, more personal activities were acceptable to the students. The teacher's participation and involvement in the programme was crucial.

(2) Problem areas. Initially students rejected activities which were personal, required reflection or introspection and demanded more orientation to the programme. Students resisted personal involvement, intimacy and self-disclosure until late in the programme. This occurred only in groups which were cohesive and goal oriented. The strangeness of the programme at first disoriented students, and the anxiety about grading hindered involvement in the programme.)

(3) Methods of Evaluation. The means of evaluating growth was perhaps the weakest area of this study. These methods were annoying to the students, awkward to administer and inefficient as means of assessing the dimensions of this study. Students complained because the questionnaires and outside observers were too intruding and obtrusive. The smooth flow of class activities was frequently disrupted because these questionnaires had to be completed during class time. Though

these instruments were criticized by secondary students and revised prior to their administration to students in the programme, eight of the fourteen instruments were found to be either ambiguous to the students or impractical in the classroom. The most workable and useful means of assessing growth was found to be the interview, but that was also limited because some students were reluctant to be interviewed. It was also found that there were dimensions of development which could only be recorded and assessed subjectively, and thus valuable information was lost.

(4) Patterns of Group Development. Before group work was possible, it was necessary for groups to overcome members who blocked, resisted, dominated and/or manipulated group work. Smooth group functioning was also dependent upon males and females establishing a working relationship. The most important condition necessary to group formation was the establishment of a group purpose. In this programme, all groups, except two, were able to agree upon a group purpose.

Theodore Mills (1967) describes these patterns of group development according to the following five orders of purpose (p. 104).

1. Immediate gratification
2. To sustain conditions for gratification
3. To pursue a collective goal
4. Group self-determination
5. Growth

Of especial interest to the results of this study is Mills' discussion of the group whose purpose is the pursuit of a

collective goal. When a group goal is established, according to Mills, it is dependent upon members who have entered into the instrumental role.

In general, a person enters the instrumental role in a group when he (1) conceives of a group goal, (2) accepts it, (3) commits his personal resources, intelligence, skill, and energy toward accomplishing it, and (4) gives its accomplishment higher priority than his own goals, the group's norms, and the existing pattern of emotional relationships among members, including his own popularity and personal comfort. He is committed to the goal and prepared to act on its behalf. He evaluates both his own performance and the performance of others more in terms of effectiveness than according to conformity to rules (p. 87).

It was found in the eight groups which produced projects that some or all of the group members assumed this instrumental role.

(5) Patterns of Personal Development. It was found that students were at first reluctant to personally involve themselves in the programme, and did so slowly. However, at the end of the programme, thirty-six out of fifty-four students reported improvements which included more self-awareness, more awareness of others, more ability to work in a group, improvements in communication skills, and personality and behaviour changes. Eight students stated that there were no improvements; ten did not write the evaluation.

(6) Improvements in Oral and Written Communication Skills. Results of the tests measuring improvement in oral and written communication skills indicated significant improvement in oral communication skills for the experimental group, a deterioration of oral communication skills for the comparison group and

no improvement of written communication skills for either group.

Conclusions. In light of the results of this study, it must be concluded that the hypotheses are not yet proven. The necessary hypothesis, that the groups would form, was proven to be partially true, as was the hypothesis that oral communication skills would improve as a result of training to work in small groups. Still, it remains to be proven that training in small group work will result in an improvement of written communication skills and an improvement in a student's attitude toward himself as a communicator.

However, the results of this study are promising enough to warrant further development of this programme. It is probable that the results of this study were clouded by the problems caused by the newness of such a programme, the experimental conditions, a teacher unfamiliar to the students and the intruding, inefficient instruments. Thus much of the effort of this programme was channeled into refining the programme, adjusting the programme to the classroom and learning new teaching techniques. This study was seriously limited by the weakness of the instruments used to measure growth. It is not known how these obtrusive questionnaires and observations interfered with the course of personal and group development except that students found these observations objectionable. Some aspects of this study are inconclusive because of the ineffectiveness of the instruments. For example, the measurement of improvement of a student's attitude toward himself as a communicator

was impossible because the instrument designed to measure this change was found to be ambiguous.

Reconsiderations. The evidence of this study encourages further investigation of the hypotheses that as a result of training in the skills of working in small groups there will be an improvement in the student's oral and written communication skills as well as his attitude toward himself as a communicator. Further investigation of these hypotheses require a change in the translation of the rationale into a conceptual model and a specific programme.

The conceptual model basically required an environment which made demands upon the individual. Growth was thus the result of meeting demands which required the development of communication skills. The Small Groups Training Programme created an environment where students, by necessity, had to develop communication skills, i.e. the formation of small groups. The results of this study have affirmed the importance of necessity in the acquisition of communication skills and identified problems in the nature and the order of the specific classroom activities. The next sequence in the development of this programme therefore is the refinement of the model (Gibbons, 1970).

A refined model should be developed to overcome resistance to activities by providing students a clearer orientation to the programme and more realistic problems to be resolved. The development of written communication skills should be

precipitated by necessity. Further development also requires an evaluation procedure with fewer and more precise instruments. Promising directions for the development of effective means of testing are interviews, video tape recordings of group functioning and the FIRO-B designed by William Schutz (1967).

The field testing of this programme has made the author more aware of how much potential and danger are present in an environment which requires risk taking. It cannot be stressed strongly enough that adolescents, being at an insecure and volatile stage of development, need security and appropriately modulated growth tasks. A programme which merely provides insight about behaviour without a method, the materials and an environment where change and growth can occur does the adolescent more harm than good.

This does not imply that programmes such as this small groups training programme should be licensed only to those highly trained in group dynamics. Field testing has shown that a teacher who is sensitively aware of the potentials and the dangers of such activities can facilitate positive growth experiences.

It is the author's feeling after conducting this research that there is still much mystery in the learning of communication skills. It is the author's suggestion that further investigation consider situations which give rise to the acquisition of communication skills. The fact that survival in an

increasingly more complex technological society demands more precise, explicit communication skills cannot be stressed strongly enough. Nor can the need to break down the increasing number of barriers that keep people from establishing warm, satisfying and productive relationships with each other.

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APPENDIX A

THE SMALL GROUPS TRAINING PROGRAMME

SMALL GROUPS TRAINING PROGRAMME

Introduction. The activities listed below is the original timetable of activities planned prior to the programme's introduction in the classroom. Activities which occurred in their original form and at their scheduled time are shown in BOLD FACE TYPE. Activities which were omitted are shown (in brackets). Activities which were altered or introduced at another time in the programme are underscored. The alteration of activities and additional activities are discussed in Chapter IV.

The amount of time for the activities shown in each square are intended for a period of 75 minutes unless otherwise noted.

References are given after the description of the activity. If no reference is given, the activity was designed by the author.

PERSONAL DEVELOPMENT SKILL	INTERPERSONAL DEVELOPMENT SKILLS	SMALL GROUP TRAINING SKILLS
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INTRODUCTORY EXERCISE: in pairs, interview each other; introduce each other to another pair of students.

WHERE AM I NOW?  
A concentration exercise: sense the body's physical presence (Brown, pp. 91-93).

BREATHING EXERCISE. Concentration on rate of breathing, sensation of breathing (Zorn, p. 66)

OBSERVATION OF AN OBJECT. Study every aspect of an object placed before you, e.g. size, shape,

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PERSONAL DEVELOPMENT  
SKILLS

INTERPERSONAL  
DEVELOPMENT  
SKILLS

SMALL GROUP TRAIN-  
ING SKILLS

---

colour, noting as many details as possible (Zorn, pp. 61-62).

OBSERVATION AND RECALL. Observe an object as described in OBSERVATION OF AN OBJECT; close your eyes and try to recall as many details as possible (Zorn, p. 62).

Recall an Incident that happened when We're Ten Years Old (Zorn, p. 70-73).

Share with a group member a memorable incident that occurred at age ten.

---

CONCENTRATE ON THE TICKING OF A CLOCK (Zorn, p. 61).

BLIND WALK. In pairs, guide the person whose eyes are closed around the room

CALCULATE THE GROUP'S AVERAGE HEIGHT; FOLLOW UP QUESTIONS (Stanford and Stanford, pp. 21-22).

FREE ASSOCIATION ABOUT AN OBJECT. Select an object and think of all that can be associated with the object (Zorn, p. 62).

(Blind Sensory Walk. In pairs, guide the person whose eyes are closed to experience as many tactile sensations that you can find in the room.)

REFLECTION AT THE END OF THE DAY. Think back on all of the events that have happened today (Zorn, pp. 69-70).



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**PERSONAL DEVELOPMENT  
SKILLS**
**INTERPERSONAL  
DEVELOPMENT  
SKILLS**
**SMALL GROUP TRAIN-  
ING SKILLS**


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IMAGINE A BLANK WALL IN YOUR MIND. Everytime a thought comes to mind, erase it as if you are staring at a blank wall.

---

(Recall the Details of an Event (Zorn, pp. 70-73).

(In Pairs, Share what you Recalled.)

(In Pairs, Share a Meaningful Experience.)

MURDER MYSTERY GAME. Each group member is given a packet of clues; without showing clues, each must share information to solve the murder mystery.  
FOLLOW-UP QUESTIONS (Stanford and Stanford, pp. 23-27).

---

THE WARDROBE OF YOUR MIND. Concentrate on the question, "Who Am I?" On small pieces of paper, write down words which describe your character; arrange them in the order that suits you, the order that makes you happiest (Brown, pp. 56-57).

DISCUSSION ON PARENTS. Every group member must randomly contribute to a discussion; FOLLOW-UP QUESTIONS (Stanford and Stanford, pp. 32-33).

FISH BOWL DISCUSSION. One member from each group is briefed on what to say about how his group functioned during the DISCUSSION ON PARENTS.

WHO AM I? QUESTIONNAIRE. This questionnaire is included in Appendix B (Brown, pp. 60-61).

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**PERSONAL DEVELOPMENT  
SKILLS**


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**INTERPERSONAL  
DEVELOPMENT  
SKILLS**


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**SMALL GROUP TRAIN-  
ING SKILLS**

(Recall a Past Experience and Re-live It in Your Mind (Zorn, p. 72).)

(Share this past experience with someone in the class.)

(Responding to The Contributions of Others. One student gives his opinion on a topic; other group members tell how they agree or disagree (Stanford and Stanford, pp. 33-34).)

(Visualize an Object in Your Mind (Zorn, p. 60).)

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**ROAD MAP OF LIFE**  
Concentrate on who you are as if you are looking at a road map; concentrate on who you are now and the person you would like to be (Brown, p. 36).

**SHARE SOME OF  
THIS INFORMATION  
WITH SOMEONE IN  
YOUR GROUP.**

**SEALED ENVELOPE.**  
Write down your strengths, weaknesses, major accomplishments; set a short-termed goal that you can accomplish in six weeks.

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**Name Encounter.**  
Share your feelings about your name; what name would you choose if you could re-name yourself? (Otto, pp. 128-130).

**LISTENING EXERCISES:**  
**ONE WAY COMMUNICATION.** Describe a geometric configuration to your group who will attempt to draw this configuration. These people cannot ask questions. (Pfeifer and Jones, Vol. I., pp. 13-18).

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**PERSONAL DEVELOPMENT  
SKILLS****INTERPERSONAL  
DEVELOPMENT  
SKILLS****SMALL GROUP TRAIN-  
ING SKILLS**

---

**TWO-WAY COMMUNICATION.** This exercise is the same as the one above, except the listeners can ask for further clarification (Pfeiffer and Jones, Vol. I, pp. 13-18).

**LISTENING TRIADS.** In groups of three, two members discuss an assigned topic; one member is the discussant and the other is the listener; discussion is periodically stopped and listener paraphrases what has been said; referee listens to summary; if it is correct, discussion continues. Members of triads change roles (Pfeiffer and Jones, Vol. I, pp. 31-32).

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**RUMOR GAME.** One group member is given a story to repeat to another group member. This story is passed on to all group members. Group discusses additions, deletions and distortions (Pfeiffer and Jones, Vol. II, pp. 14-18).

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Group Discussion on  
Grading.

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PERSONAL DEVELOPMENT  
SKILLS

INTERPERSONAL  
DEVELOPMENT  
SKILLS

SMALL GROUP TRAIN-  
ING SKILLS

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Video Taped Fish Bowl Discussion of each group's decision on grading.

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Travel to a Distant Place. In your mind, travel to a distant place (Zorn, p. 60).

(Replay Video Tape of Discussion. Analysis of Group Functioning.)

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(Free Fantasy)  
(Guided Fantasy)  
(Group Fantasy)

NASA Lost on the Moon Exercise.

Individuals are asked to rate survival items after a rocket crash; group members rate same items by reaching a consensus (Stanford and Stanford, pp. 43-47).

Broken Squares.

Each group member is given an envelope which contains pieces to five broken squares; these squares must be assembled without any verbal communication or signals (Pfeiffer and Jones, Vol. I, pp. 24-30).

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Say Something Nice about yourself, about everyone in your group (Otto, pp. 217-219).

Send a Positive Non-Verbal Message to the Members of your Group.

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PERSONAL DEVELOPMENT SKILLS	INTERPERSONAL DEVELOPMENT SKILLS	SMALL GROUP TRAINING SKILLS
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Brag About Yourself

Tell someone in your group about something that you do not like about yourself.

Group House Project. Members of the group design a house that is suitable for everyone in the group. Plan this house to be presented to the entire class. (ONE WEEK to complete this project.)

(Individual Improvisations)

(Imagine your Body Size Increasing, Decreasing (Zorn, pp. 74-75).)

(Walk Slowly, observing your body as it goes through the process of walking)

(Group Improvisations)

(Group Dramatizations)

(ONE WEEK for these activities)

(Group Mood Experience. Group members make sounds to create a group mood (Otto, pp. 139-143).)

(Slow Down the Thought Process of Your Mind. Observe mental activity, paying close attention to each thought as it enters your mind (Zorn, pp. 64-65).)

(Suppress a thought. Observe thoughts as described above; block out any thought that comes to mind (Zorn, pp. 64-65).)

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**PERSONAL DEVELOPMENT  
SKILLS**


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**INTERPERSONAL  
DEVELOPMENT  
SKILLS**


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**SMALL GROUP TRAIN-  
ING SKILLS**


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(Expel an Un-  
desirable Thought  
from Your Mind  
(Zorn, p. 69).)

(Think about Some-  
one You Like, Dis-  
like (Zorn, p. 73).)

Fantasy Animal En-  
counter Select an  
animal to repre-  
sent a part of you  
that you like; an  
animal to repre-  
sent a part of you  
that you dislike;  
imagine what would  
happen if they met.

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(Recall a Peak  
Experience in Your  
Life (Otto, pp.  
89-95).)

(Share this Peak  
Experience with the  
members of your  
group.)

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(My Strength/Your  
Strength. Group mem-  
bers identify their  
strengths; identify  
strengths of other  
group members (Otto,  
pp. 270-276).)

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GROUP PROJECTS ON  
COMMUNICATION.  
(THREE WEEKS for  
this project)

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REFLECT ON PERSONAL  
GROWTH. SEALED EN-  
VELOPES.

GROUP EVALUATION

SELF-EVALUATION

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## APPENDIX B

METHODS OF EVALUATING THE SMALL GROUPS  
TRAINING PROGRAMME

1. "Who Am I?" Questionnaire
2. Journal Questions
3. Post Meeting Reaction Sheet
4. Revised Post Meeting Reaction Sheet
5. Confidential Self-Evaluation
6. Group Self-Evaluation
7. Teacher's Group Evaluation

WHO AM I? QUESTIONNAIRE<sup>1</sup>

Name \_\_\_\_\_

1. In general, school
2. Alpha Secondary School is
3. Right now group is
4. My best friend
5. Teen-agers often
6. Grade Eleven English
7. I don't like people who
8. I am at my best when
9. Right now I feel
10. People I trust
11. The best thing that could happen to me would be
12. When I don't like something I've done, I
13. When I'm proud of myself, I
14. I'm very happy that
15. I wish my parents knew
16. Someday I hope
17. I would like to

---

<sup>1</sup>George Isaac Brown, Human Teaching for Human Learning (New York; The Viking Press, 1971), pp. 61-62.



## JOURNAL QUESTIONS

1. What went on in class?
2. How you feel about what went on in class; what it meant to you.
3. How your group is working.
4. How you are working in your group.
5. Observations about yourself.
6. Changes you see in yourself.
7. How do the class activities apply to your life outside of school?<sup>1</sup>

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<sup>1</sup>This question was added after the House Project was assigned.



## REVISED POST MEETING REACTION SHEET

Group Identification \_\_\_\_\_

Date \_\_\_\_\_

Audience \_\_\_\_\_

1. What did your group do well today?
  
2. What did your group have trouble doing today?
  
3. Compared to yesterday, was your group functioning UP or DOWN?  
How so? Why?
  
4. What did you (your group) like about today? (i.e. What would you like to see repeated? omitted?)
  
5. Did EVERYONE in your group contribute to group activity today? Who? What? How? Why not?
  
6. Candid comments--use reverse side if necessary.

## CONFIDENTIAL SELF-EVALUATION

Evaluate your participation in English 11 over the past eight weeks. Take into consideration the following.

Your attendance:

Your attitude:

Your effort:

Additional comments.

Evaluate your accomplishments in English 11 over the past eight weeks. Take into consideration the following.

Your group work:

Your group projects:

Your journal:

Improvements you have observed in yourself:

Additional comments.

## GROUP SELF-EVALUATION

Group \_\_\_\_\_

Evaluate your group's participation in class activities over the past eight weeks. Take into consideration the following.

Attitude

Attendance

Effort

Additional Comments

Evaluate your group's accomplishments over the past eight weeks taking into consideration the following.

Group Projects

Solving problems as a group

Improvements in group functioning

Additional Comments

## GROUP EVALUATION BY THE TEACHER

GROUP \_\_\_\_\_

Evaluate the group's participation in class activities over the past eight weeks taking into consideration the following.

Attitude

Attendance

Effort

Additional Comments

Evaluate the group's accomplishments over the past eight weeks taking into consideration the following.

Group projects

Solving problems as a group

Improvements in group functioning

Additional comments

## APPENDIX C

## SAMPLE INSTRUMENTS

- Test One: Self-Description Questionnaire
- Test Two: Attitude Toward English Class
- Test Three: Group Climate
- Test Four: Group Cohesiveness
- Test Five: Attitude toward Group Work
- Test Six: Communication Expectation Survey
- Test Seven: Trust among Group Members
- Test Eight: Oral Communication
- Test Nine: Written Communication
- Test Ten: Group Dimensions Description Questionnaire<sup>1</sup>
- Test Eleven: Group Cohesiveness (Sentence Completion)
- Test Twelve: Recall of Group Discussion
- Test Thirteen: Unobtrusive Measures of Group Formation
- Test Fourteen: Observations of Group Functioning

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<sup>1</sup>This instrument is not included in this Appendix; it is available from the Educational Testing Service, Princeton, New Jersey.

TEST ONE: Self-Description Questionnaire

Code (use birthdate--e.g. 27/5/55) \_\_\_\_\_ Male \_\_\_\_\_ Female \_\_\_\_\_

This questionnaire is to serve 2 functions: to help you think about your relationships with others and your communication skills; and to give you a base-line for later comparison on these same items. This information will not be shared or used by others without your permission.

You are asked to write on the scale the number that best describes A. where you see yourself at present; B. where you would like to be.

SCALE:	1	2	3	4	5	6	7
	(very low level)		(below average)		(above average)		(very high level)
						A. Where I am at Present	B. Where I would like to be
<u>Communication</u>							
1.	Communicating my ideas effectively.				_____	_____	_____
2.	Listening attentively.				_____	_____	_____
3.	Being vocally expressive and clear.				_____	_____	_____
4.	Thinking before I talk.				_____	_____	_____
5.	Speaking without fear.				_____	_____	_____
<u>Task Skills</u>							
1.	Asking for ideas, opinions.				_____	_____	_____
2.	Giving ideas, opinions.				_____	_____	_____
3.	Evaluating ideas critically.				_____	_____	_____
4.	Summarizing discussions.				_____	_____	_____
5.	Being able to lead discussions.				_____	_____	_____
6.	Being able to resolve conflict in a group.				_____	_____	_____
<u>Responsiveness</u>							
1.	Willing to tell others what I feel.				_____	_____	_____
2.	Disagreeing openly.				_____	_____	_____
3.	Expressing warm feelings.				_____	_____	_____
4.	Sensing others' warm feelings.				_____	_____	_____
5.	Being able to accept closeness, affection.				_____	_____	_____
6.	Being able to accept hostility.				_____	_____	_____
7.	Feeling comfortable when there is silence.				_____	_____	_____
<u>Relation to a Group</u>							
1.	Being accepting of opposing views.				_____	_____	_____
2.	Accepting the leadership of others.				_____	_____	_____
3.	Acting dominant toward others.				_____	_____	_____
4.	Being supportive and encouraging of others.				_____	_____	_____
5.	Being able to stand up for myself.				_____	_____	_____
6.	Making quick judgements.				_____	_____	_____
7.	Being able to work as part of a group.				_____	_____	_____
8.	Being able to accept help willingly.				_____	_____	_____
9.	Being able to sense when others need help.				_____	_____	_____
10.	Willing to try new ways of doing things.				_____	_____	_____



TEST TWO: Attitude Toward English Class

Male \_\_\_\_\_ Female \_\_\_\_\_

DIRECTIONS: Listed below are several kinds of English Class activities which are sometimes assigned to be done in class or as homework. In the space provided to the left of each item, indicate the degree to which the activity is USEFUL to you by selecting the number which best describes how you feel about the activity. If you are never assigned this activity, please mark the item with the letter X.

SCALE:	<u>X</u>	1	2	3	4	5
	Never	Never	Not very	Sometimes	Useful	Very
	Assigned	Useful	Useful	Useful		Useful

1. Writing for myself (a journal, an observation or opinion, a poem, etc.).
2. Writing to be shared with other class members.
3. Writing to be read by the teacher.
4. Participating in a discussion with class members.
5. Participating in a class discussion led by the teacher.
6. Listening to other class members.
7. Listening to a lecture.
8. Telling a few class members about my feelings, experiences, opinions.
9. Telling the teacher about my feelings, experiences, opinions.
10. Choosing my own activities and projects.
11. Doing an activity or project assigned by the teacher.
12. Working on an assignment or project alone.
13. Working on an assignment or project with other class members.
14. Reading and commenting on what other class members have written.

TEST THREE: Group Climate

## GROUP IDENTIFICATION \_\_\_\_\_

DIRECTIONS: In the space provided before each item, rate your feelings about your group. Select the number that best describes how you feel about your group.

SCALE: 1            2            3            4            5  
 Never          Rarely          Sometimes      Usually          Always

- \_\_\_ 1. I feel close to the members of this group.
- \_\_\_ 2. I have trust and confidence in the other members of this group.
- \_\_\_ 3. I support and encourage other members of this group.
- \_\_\_ 4. I get a sense of accomplishment when I work in this group.
- \_\_\_ 5. I am willing to share information with other members of this group.
- \_\_\_ 6. I feel free to discuss important personal matters with other members of this group.
- \_\_\_ 7. I am interested in helping the group achieve its goals.
- \_\_\_ 8. As a member of this group, I am able to deal promptly and well with the important group problems.
- \_\_\_ 9. I am treated as an individual (by members of my group) rather than just another group member.
- \_\_\_ 10. My needs and desires are reflected in the activities of this group.
- \_\_\_ 11. I feel responsible to the group for getting the job done.
- \_\_\_ 12. I feel manipulated by other members of the group.
- \_\_\_ 13. I feel that I manipulate members of the group.
- \_\_\_ 14. I feel good about participating in this group.

TEST FOUR: Group Cohesiveness

Group Identification \_\_\_\_\_

DIRECTIONS: In the space provided before each item, rate your group by supplying the number that best describes how your group functions.

SCALE: 1                      2                      3                      4                      5  
 Never                      Rarely                      Sometimes                      Usually                      Always

- \_\_\_ 1. The members of this group enjoy working together.
- \_\_\_ 2. The members of this group share the work and co-operate.
- \_\_\_ 3. The members of this group support and encourage each other.
- \_\_\_ 4. The members of this group talk freely, giving their ideas and plans in group decisions.
- \_\_\_ 5. The members of this group think that everyone should go along with what the group decides.
- \_\_\_ 6. The members of this group show pride in the work we do as a group.
- \_\_\_ 7. When our group is criticized (i.e. individuals in the group, group ideas, group work) by members of other groups or the teacher, members of our group defend ourselves.



TEST SIX: Communication Expectation Survey

Male \_\_\_\_\_ Female \_\_\_\_\_

Group Identification \_\_\_\_\_

DIRECTIONS: Before each of the items below put a number from the following rating scale that best expresses your opinion at this time.

RATING SCALE

- 5 = All members of the group  
 4 = Any except one or two members of the group  
 3 - A slight majority of the members of the group  
 -----  
 2 = Slightly less than half of the members of the group  
 1 = One or two members of the group  
 0 = No one in the group

IN YOUR GROUP SESSIONS TODAY, HOW MANY MEMBERS OF YOUR GROUP DO YOU EXPECT WILL CANDIDLY REPORT THE FOLLOWING INFORMATION?

- \_\_\_ 1. When he does not understand something you said?  
 \_\_\_ 2. When he likes something you said or did?  
 \_\_\_ 3. When he disagrees with something you said?  
 \_\_\_ 4. When he thinks you have changed the subject or become irrelevant?  
 \_\_\_ 5. When he feels impatient or irritated with something you said or did?  
 \_\_\_ 6. When he feels hurt, rejected, embarrassed or put-down by something you said or did?

IN YOUR GROUP SESSION TODAY, TO HOW MANY MEMBERS OF YOUR GROUP WILL YOU CANDIDLY REPORT THE FOLLOWING INFORMATION?

- \_\_\_ 7. When you do not understand something he said?  
 \_\_\_ 8. When you like something he said or did?  
 \_\_\_ 9. When you disagree with something he said?  
 \_\_\_ 10. When you think he has changed the subject or become irrelevant?  
 \_\_\_ 11. When you feel impatient or irritated with

continued...

something he said or did?

- \_\_\_ 12. When you feel hurt, rejected, embarrassed or put-down by something he said or did?

IN YOUR OPINION, HOW MANY IN YOUR GROUP ARE INTERESTED IN KNOWING?

- \_\_\_ 13. When you do not understand something he said?
- \_\_\_ 14. When you like something he said or did?
- \_\_\_ 15. When you disagree with something he said?
- \_\_\_ 16. When you think he has changed the subject or becomes irrelevant?
- \_\_\_ 17. When you feel impatient or irritated with something he said or did?
- \_\_\_ 18. When you feel hurt, rejected, embarrassed or put-down by something he said or did?

FROM HOW MANY MEMBERS OF THIS GROUP ARE YOU INTERESTED IN KNOWING?

- \_\_\_ 19. When he does not understand something you said?
- \_\_\_ 20. When he likes something you said or did?
- \_\_\_ 21. When he disagrees with something you said?
- \_\_\_ 22. When he thinks you have changed the subject or become irrelevant?
- \_\_\_ 23. When he feels impatient or irritated with something you said or did?
- \_\_\_ 24. When he feels hurt, rejected, embarrassed or put-down by something you said or did?

TEST SEVEN: Trust Among Group Members

## GROUP IDENTIFICATION \_\_\_\_\_

DIRECTIONS: Please answer the following questions by listing the CODE NAMES of group members in the space provided. The code will be provided by the teacher. This information is CONFIDENTIAL and should NOT be discussed within the group. In some cases you may not list any names; in that case, please write NO ONE. Do not leave any questions unanswered.

TO WHOM IN THIS GROUP WOULD YOU

1. Lend a dollar for a few days? \_\_\_\_\_
2. Tell about a personal problem? \_\_\_\_\_
3. Lend a valuable possession? \_\_\_\_\_
4. Tell your fears? \_\_\_\_\_
5. Tell your wishes and fantasies? \_\_\_\_\_
6. Lend five dollars for a few days? \_\_\_\_\_
7. Tell about the things you like to do? \_\_\_\_\_
8. Tell a secret? \_\_\_\_\_
9. Reveal your beliefs or convictions? \_\_\_\_\_
10. Tell your answers on this questionnaire? \_\_\_\_\_
11. Show parts of your journal or diary? \_\_\_\_\_
12. Trust on a blind walk? \_\_\_\_\_

TEST EIGHT: Evaluating Oral Communication SkillsDirections to Interviewers

I am trying to find out information about

- 1) the student's ability to communicate (articulation, fluency).
- 2) the student's attitude toward school, English class and himself as a communicator.

Develop questions which open the way for students to talk about the three funnels listed below. Also open the way for students to talk about school, English and themselves.

1. Attitude toward school --> toward classmates --> toward self in school.
2. Attitude toward English class --> toward other students in English class --> attitude toward themselves in English class.
3. Attitude toward themselves as a communicator in general --> as a communicator in school --> as a communicator in English class.



TEST EIGHT: Evaluating Oral Communication Skills  
Criteria for Evaluation

VOLUME

High: Speaker's voice is audible; volume is appropriate for the situation.

Low: Speaker's voice is inaudible; volume is inappropriate for the situation.

ARTICULATION AND ENUNCIATION

High: Words are distinguishable and not confused with other words.

Low: Words are difficult to understand; speech tends to be garbled.

FLUENCY

High: Speech is moving smoothly, easily.  
 Speaker is facile and glib with his words.  
 Speaker responds thoughtfully and quickly to other speakers.  
 Speech is free of "filler" words and expressions (you know, ummm).  
 Speaker is at ease.  
 Speaker sounds comfortable with the words he selects.

Low: Speaker hesitant, stuttering, stammering.  
 Speaker is struggling to speak comfortably.  
 Speaker has difficulty keeping his word-stream flowing.  
 Speaker pauses awkwardly, adds "filler" words.

CLARITY

High: Speaker selects words that express his ideas accurately.  
 Speaker knows what he wants to say and says it.  
 Speech is free from distracting elements (excess words, colloquialisms, vague wording).  
 Speech is free of ambiguous wording.  
 Speaker does not have to clarify what he means to listener.

continued....

Speaker's emphasis is understood; listener can discern main ideas from supporting ideas.  
 Speaker's ideas seem clear to him as reflected in his voice, choice of words and construction.

Low: Speaker does not seem to know what he wants to say and is developing an idea as he is speaking.  
 Speaker uses words vaguely and ambiguously.  
 Speech is full of distracting elements (repetition, colloquialisms, fillers).  
 Speaker seems to be bluffing his way.

### COHERENCE

High: Speaker's presentation makes sense; one idea seems to follow the other.  
 Speaker's thoughts are presented in an orderly way; a logical way.  
 Speech is efficient yet complete.  
 Speaker's thoughts are organized.

Low: Speaker seems to ramble; ideas presented in a disorderly way.  
 Speaker seems to leave it up to the listener to organize message for himself.  
 Speech is too wordy or too sparse.  
 Speech is lacking emphasis.  
 Speech is disorganized.

### SPEAKING TO THE ISSUE BEING DISCUSSED

High: Speaker is in focus.  
 Speaker responds to the other speakers showing that conversation is registering.  
 Speaker responds to the ideas of the conversation or answers the questions asked.  
 Speaker holds the thread of the discussion.  
 Speaker is involved, interested.

Low: Speaker is out of focus.  
 Speaker may say whatever is on his mind.  
 Speaker seems to have other things on his mind.  
 Speaker contributes remarks that are irrelevant, not pertinent, attention-getting, inappropriate.  
 Speaker responds in a free-associative way, not necessarily building upon the topic of conversation.  
 Speaker is uninvolved, uninterested.

continued....

## FLAVOUR

High: Speech is interesting and exciting to listen to.  
Speech is characterized by effective vocabulary,  
correct analogy and imagery.  
Speech is marked by variety and wit.  
Speaker phrases ideas in an original way.  
Speaker has a style of his own; you would never  
mistake this person for anyone else.

Low: Speech is monosyllabic or a series of grunts and  
mumbles.  
Speaker uses hackneyed phrases, colloquialisms.  
Speaker repeats himself often.  
Speaker seems to be imitating some else's style.  
Speech is uninteresting.  
Speaker seems bored, is boring to listen to.

TEST EIGHT: Evaluation of Oral Communication

DIRECTIONS: Please rate each tape according to the criteria outlined on the previous sheet. Please mark an X along the line to describe the various areas of oral communication being evaluated.

VOLUME									
	Audible	_____	_____	_____	_____	_____	_____	_____	Inaudible
ARTICULATION AND ENUNCIATION									
	Clear	_____	_____	_____	_____	_____	_____	_____	Garbled
FLUENCY									
	Flowing	_____	_____	_____	_____	_____	_____	_____	Hesitating, struggling
CLARITY									
	Clean, precise	_____	_____	_____	_____	_____	_____	_____	Ambiguous, vague
COHERENCE									
	Organized	_____	_____	_____	_____	_____	_____	_____	Rambling
SPEAKING TO THE TOPIC									
	In focus	_____	_____	_____	_____	_____	_____	_____	Out of focus
FLAVOUR									
	Interesting	_____	_____	_____	_____	_____	_____	_____	Dull, flat

Total Score \_\_\_\_\_

Name of Student \_\_\_\_\_

Name of Rater \_\_\_\_\_

TEST NINE: Evaluating Written Communication Skills

Pre-Test Writing Sample: Write a public statement in which you express the expectations that you have of your English Class. Include specific expectations that you have of yourself in that class, your English teacher and other members of that class.

Post-Test Writing Sample: Write an answer to (evaluation of) your public statement in which you discuss how your expectations have been met. Discuss how you have/have not fulfilled the expectations of yourself, how your teacher has/has not fulfilled your expectations, and how your classmates have/have not fulfilled your expectations.

TEST NINE: Evaluating Written Communication Skills

Direction: Using the criteria described below, circle the number that best represents the scale position of the paper on each criterion and write the sum of the encircled numbers at the bottom.

Criteria for Evaluation<sup>1</sup>1. Ideas

HIGH. The student has given some thought to the topic and has written what he really thinks. He discusses each main point long enough to show clearly what he means. He supports each main point with arguments, examples, or details; he gives the reader some reason for believing it. His points are clearly related to the topic and to the main idea or impression he is trying to get across. No necessary points are overlooked and there is no padding.

MIDDLE. The paper gives the impression that the student does not really believe what he is writing or does not fully realize what it means. He tries to guess what the teacher wants and writes what he thinks will get by. He does not explain his points very clearly or make them come alive to the reader. He writes what he thinks will sound good, not what he believes or knows.

LOW. It is either hard to tell what points the student is trying to make or else they are so silly that he would have realized that they made no sense if he had only stopped to think. He is only trying to get something down on paper. He does not explain his points; he only writes them and then goes on to something else or he repeats them in slightly different words. He does not bother to check his facts, and much of what he writes is obviously untrue. No one believes this sort of writing--not even the student who wrote it.

2. Organization

HIGH. The paper starts at a good point, moves in a straight line, gets somewhere, and stops at a good point. The paper has a plan that the reader can follow; he is never in doubt as to where he is or where he is going. Sometimes there is a little twist near the end and that makes the paper come out

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continued....

<sup>1</sup>Paul B. Dieterich, "How to Measure Growth in Writing Ability," English Journal, April, 1966, pp. 444-445.

in a way that the reader does not expect, but it seems quite logical. Main points are treated at greatest length or with greatest emphasis; others in proportion to their importance.

MIDDLE. The organization of this paper is standardized and conventional. There is usually a one-paragraph introduction, three main points each treated in one paragraph, and a conclusion that often seems tacked on or forced. Some trivial points may be treated in greater detail than important points, and there is usually some dead wood that might better be cut out.

LOW. This paper starts anywhere and never gets anywhere. The main points are not clearly separated from one another, and they come in random order--as though the student had not given any thought to what he intended to say before he sat down to write. The paper seems to start in one direction, then another, then another, until the reader is lost.

### 3. Wording

HIGH. The writer uses a sprinkling of uncommon words or of familiar words in an uncommon setting. He shows an interest in words and in putting them together in slightly unusual ways. Some of his experiments with words may not quite come off, but this is such a promising trait in a young writer that a few mistakes may be forgiven. For the most part he uses words correctly but he also uses them with imagination.

MIDDLE. The writer is addicted to tired old phrases and hackneyed expressions. If you left a blank in one of his sentences, almost anyone could guess what word he would use at that point. He does not stop to think how to say something; he just says it in the same way as everyone else. A writer may also get a middle rating on this quality if he over-does his experiments with uncommon words: if he always uses a big word when a little word would serve his purpose better.

LOW. The writer uses words so carelessly or inexactly that he gets far too many wrong. These are not intentional experiments with words in which failure may be forgiven; they represent groping for words and using them without regard to their fitness. A paper written entirely in a childish vocabulary may also get a low rating, even if no word is clearly wrong.

### 4. Flavor

HIGH. The writing sounds like a person, not a committee. The writer seems quite sincere and candid, and he writes about

continued....

something he knows--often from personal experience. You could never mistake this writing for the writing of anyone else. Although the writer may play different roles in different papers, he does not put on airs. He is brave enough to reveal himself just as he is.

MIDDLE. The writer usually tries to appear better or wiser than he really is. He tends to write lofty sentiments and broad generalities. He does not put in the little homely details that show that he knows what he is talking about. His writing tries to sound impressive. Sometimes it is impersonal and correct but "colorless" without personal feeling or imagination.

LOW. The writer reveals himself well enough but without meaning to. His thoughts and feelings are those of an uneducated person who does not realize how bad they sound. His way of expressing himself differs from standard English, but it is not his personal style; it is the way uneducated people talk in the neighborhood in which he lives.

##### 5. Usage, Sentence Structure

HIGH. There are no vulgar or "illiterate" errors in usage by present standards of informal written English, and there are very few errors in points that have been emphasized in class. The sentence structure is usually correct, even in varied and complicated sentence patterns.

MIDDLE. There are a few serious errors in usage and certain points that have been emphasized in class, but not enough to obscure meaning. The sentence structure is usually correct in the more familiar sentence patterns, but there are occasional errors in more complicated patterns, as in parallelism, subordination, consistency of tenses, reference of pronouns, etc.

LOW. There are so many serious errors in usage and sentence structure that the paper is hard to understand.



TEST NINE: Evaluation of Written CommunicationRATING SHEET

Reader \_\_\_\_\_

Student \_\_\_\_\_

		<u>Low</u>		<u>Middle</u>		<u>High</u>	
Ideas	1	2	3	4	5	6	7
Organization	1	2	3	4	5	6	7
Wording	1	2	3	4	5	6	7
Flavour	1	2	3	4	5	6	7
Usage	1	2	3	4	5	6	7

Sum of ratings \_\_\_\_\_

TEST ELEVEN: Group Cohesiveness (Sentence Completion)

GROUP IDENTIFICATION \_\_\_\_\_

DIRECTIONS: Complete the following statements.

1. When working together, our group \_\_\_\_\_

2. Whenever we discuss something in our group \_\_\_\_\_

3. When everyone else agrees, I \_\_\_\_\_

4. If someone in our group disagrees, he/she should \_\_\_\_\_

5. Other groups think our group \_\_\_\_\_

6. The teacher thinks our group \_\_\_\_\_

7. When anyone says something about our group \_\_\_\_\_

8. Our group treats non-group members \_\_\_\_\_

TEST TWELVE: Recall of Group Discussion

Group Identification \_\_\_\_\_

Name \_\_\_\_\_

1. List the main points of discussion or major decisions in your group as you recall them.

2. Who made each main point or major decision?

TEST THIRTEEN: Unobtrusive Measures of Group Functioning

Group Identification \_\_\_\_\_ Date \_\_\_\_\_

		TALKING						INTERRUPTIONS					
3 Min.	A												
	B												
	C												
	D												
	E												
	F												

Key: X = Interrupter

O = Interrupted

		EYE CONTACT											
20 Res- ponses	A												
	B												
	C												
	D												
	E												
	F												

Key: / = Full, Comfortable Eye Contact

• = Glance

continued....

BODY LANGUAGE

COMMENTS

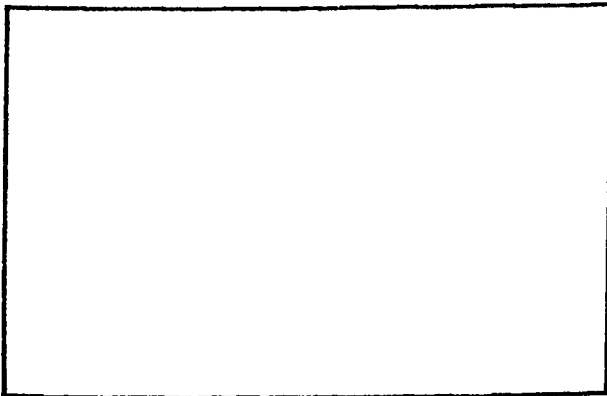


Diagram of Group

COMMENTS ON ATMOSPHERE (Activities of group members during meeting, co-operation, functioning, etc.)

TEST FOURTEEN: Observations of Group Functioning

Group Identification \_\_\_\_\_

Observer \_\_\_\_\_ Date \_\_\_\_\_

1. Describe behaviour of group members FIGHTING group activity. (Observable hostility, attacking specific members, blocking, dividing the group, ridiculing, resistance, self-agrandizement.)
  
2. Describe behaviour of group members AVOIDING group activity. (Observable withdrawal, expressed boredom; light-veined humour, fantasy, facetiousness, tension-releasing laughter; inappropriate, over-intellectualized, over-generalized statements; irrelevant behaviour, statements.)
  
3. Describe behaviour of group members SUPPORTING group activity. (Expressions of intimacy, warmth and supportiveness and encouragement; support of another person's idea; expression of commitment and warmth directed toward the total group; use of "we" and "us.")
  
4. Describe behaviour of students ELICITING GUIDANCE and DIRECTION to perform group activity. (Appeal to group members or someone other than group member for support and direction; appeal for structure and organization; appeal for external authority; expressions of weakness or inadequacy.)

continued....

5. Describe the ORGANIZATION of the group. (Leadership, shared leadership, manipulation, co-optation, roles, chaos, disorganization.)

6. Describe how members of the group PERFORM the task assigned to them. (Assess quality, efficiency; group goals before individual goals? individual goals before group goals?)

7. Describe any turning-points in group activity. (Who facilitated? How?)

8. Describe any group members "dropping-in" or "dropping-out" of group activity. (Who? Why?)

## APPENDIX D

STATISTICAL PROCEDURES; DISCUSSION, EVALUATION  
OF INSTRUMENTS AND TABLE RESULTS

1. Instruments Yielding Data for Statistical Interpretation
  - a) Tests Four, Five, Eight, Nine
    - i. Discussion
    - ii. Tables
      - a. Test Four: Tables 1a through 1f
      - b. Test Five: Tables 2a through 2f
      - c. Test Eight: Tables 3a through 3k
      - d. Test Nine: Tables 4a through 4i
  - b) Group Dimensions Description Questionnaire
    - i. Discussion and Evaluation
    - ii. Tables and Graphs
      - a. Composite Group Scores: Tables 5a through 5k
      - b. Table 6
      - c. Overlays of Individual Scores: Tables 7a through 7k
2. Non-Statistical Data
  - a) Discussion
  - b) Tables 8a through 8k
3. Instruments Showing a Shift in Factor Structure
  - a) Discussion
  - b) Tables
    - i. Test Three: Table 9
    - ii. Test Seven: Table 10
4. Instruments which Proved to Be Ambiguous after Factor Analysis
  - a) Discussion
  - b) Tables
    - i. Test One: Tables 11a through 11d
    - ii. Test Two: Tables 12a and 12b
    - iii. Test Six: Tables 13a and 13b



## 1. INSTRUMENTS YIELDING DATA USEFUL FOR STATISTICAL INTERPRETATION

The following section reports the data yielded from statistical operations performed on Tests Four, Five, Eight, Nine and Ten. The same statistical operations were performed on Tests Four, Five, Eight and Nine and will be presented first. Information gathered from Test Ten will conclude this section.

Statistical Procedures for Tests Four, Five, Eight and Nine. Pre-test and post-test answers for each test were independently factor analyzed on the computer. In each analysis the procedure was as follows.<sup>1</sup> The computer programme was set to extract all of the factors with eigenvalues greater than 1.00. The programme was also set to determine factor loadings greater than  $\pm 0.20$ .

The factor structure of each test was examined for its stability on both pre-test and post-test conditions. Variables were considered if their factor loadings were very high on one factor loading and low on other factor loadings. The significance of the factor loading is arbitrarily determined, as described by Fruchter (1954, p. 151): "Loadings of .2 or less are usually regarded as insignificant, loadings of .2 to .3 as low, .3 to .5 as moderate, .5 to .7 as high, and above .7 as very

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<sup>1</sup>Chi-squares were performed on the observations made by independent judges on Tests Eight and Nine. The results showed no significant differences between independent observations; these observations were thus pooled as multiple observations.

high." Variables which loaded on the same factor and which received high factor loadings on both pre-test and post-test were considered stable. Exception to this was made in Test Five where factors with a pre-test loading were considered if they loaded above .60 and their loading became greater or other loadings decreased on the post-test.

The stable factors for each test were again factor analyzed blocking out all unstable variables. These new factor structures were again examined for their stability according to the procedure described above.

These stable factors were once more factor analyzed, pooling pre-test and post-test variables. The complete estimation method, as described by Harman (1970, p. 350), was employed to obtain estimates of factor scores. The unrotated factor matrix was used in the calculation of regression coefficients.

Univariate analysis of variance (which is a multi-variate procedure) using factor scores for each test was performed on the computer. Sources of variation for each test included general evaluation, differences between experimental groups, differences between small groups and differences between males and females. The computer programme was also set to calculate the mean levels for each source of variation.

Results of Statistical Analysis. Factor analysis of each test showed that only one stable factor was present on both pre-tests and post-test conditions. An inspection of the variables contributing to these single factors indicates that on Tests

Five, Eight and Nine, this factor was a general factor (Rummel, 1970, p. 326), i.e. attitude toward group work, oral communication and written communication respectively. The single factor extracted from Test Four has been re-named "Group Climate." Further details about this factor analysis and the results of analysis of variance are presented in Tables 1a through 4k.

TABLE 1a

PRE-TEST AND POST-TEST SCORES ON TEST FOUR (GROUP COHESIVENESS)  
FOR EXPERIMENTAL GROUP

Variables	Pre-Test		Post-Test	
	$\bar{X}$	S.D.	$\bar{X}$	S.D.
1	3.78	0.62	3.83	0.75
2	3.76	0.76	3.60	1.15
3	3.51	0.85	3.51	0.78
4	3.80	0.83	3.96	0.83
5	2.76	0.90	3.89	1.23
6	3.51	0.52	3.62	0.88
7	3.58	1.22	4.09	1.18

TABLE 1b

FACTOR LOADINGS: VARIMAX ROTATION OF TEST FOUR (GROUP COHESIVENESS)  
ON PRE-TEST AND POST-TEST CONDITIONS FOR EXPERIMENTAL GROUP

Variables	Pre-Test		Post-Test		Communi- nalities
	Factor Loadings		Factor Loadings		
	Factor I	Factor II	Factor I	Factor II	
1	-0.86 <del>‡</del>	-0.20	-0.87 <del>‡</del>	-0.20	0.79
2	-0.88 <del>‡</del>	-0.01	-0.89 <del>‡</del>	-0.00	0.77
3	-0.78 <del>‡</del>	0.00	-0.83 <del>‡</del>	-0.16	0.71
4	-0.87 <del>‡</del>	-0.12	-0.84 <del>‡</del>	0.04	0.71
5	-0.14	-0.63	0.19	-0.87	0.80
6	-0.12	-0.64	-0.58	-0.52	0.61
7	0.09	-0.72	-0.43	-0.55	0.50
Eigenvalues	3.00	1.28	3.67	1.22	-----
% - Age of Single Variance	42.91%	18.29%	52.37%	17.38%	-----
% - Age of Total Variance	61.20%		69.75%		-----

~~‡~~ Stable Variables

TABLE 1c  
 GROUP CLIMATE: REVISED VERSION OF TEST FOUR (GROUP COHESIVENESS)

Variables	Pre-Test		Post-Test	
	Factor Loading Factor I	Communi- nalities	Factor Loading Factor I	Communi- nalities
1	-0.89	0.79	-0.89	0.80
2	-0.88	0.77	-0.87	0.76
3	-0.77	0.59	-0.84	0.71
4	-0.87	0.76	-0.89	0.79
Eigenvalues	2.91	-----	3.05	-----
% - Age of Single Variance	72.76%	-----	76.24%	-----
% - Age of Total Variance	72.76%	-----	76.24%	-----

TABLE 1d  
GROUP CLIMATE: FACTOR LOADINGS GENERATED FROM UNROTATED  
FACTOR ANALYSIS OF POOLED STABLE FACTOR LOADINGS

Variable	Factor Loading
1	-0.89
2	-0.87
3	-0.81
4	-0.88

TABLE 1e

ANALYSIS OF VARIANCE FOR REVISED VERSION OF TEST FOUR (GROUP CLIMATE)

Source	Sum of Squares	Degrees of Freedom	Means Squared	F
Pre-Test vs. Post-Test (T)	0.03	1	0.03	0.24
Experimental Classes (C)	3.08	1	3.08	26.99 *
Small Groups (G)	4.61	4	1.15	10.11 *
T x C	0.28	1	0.28	2.44
T x G	0.70	4	0.17	1.53
G & C	2.07	4	0.52	4.54 *
T x C x G	1.94	4	0.49	4.26 *
Error	34.75	76	0.11	0.00

\* P &lt; .05



TABLE 1F  
 STANDARDIZED FACTOR SCORES ON REVISED TEST FOUR (GROUP CLIMATE)  
 ON PRE-TEST AND POST-TEST CONDITIONS FOR EXPERIMENTAL GROUP

Classification	Pre-Test ( $\bar{x}$ )	Post-Test ( $\bar{x}$ )
Small Group 1	0.48	0.27
Small Group 2	0.18	0.85
Small Group 3	-0.10	-0.34
Small Group 4	0.25	0.85
Small Group 5	0.79	1.52
Small Group 6	-1.33	-1.04
Small Group 7	0.45	0.56
Small Group 8	-0.84	0.07
Small Group 9	0.00	-1.87
Small Group 10	0.56	0.32

TABLE 2a  
 PRE-TEST AND POST-TEST SCORES ON TEST FIVE (ATTITUDE TOWARD GROUP WORK)  
 FOR EXPERIMENTAL GROUP

Variables	Pre-Test		Post-Test	
	$\bar{x}$	S.D.	$\bar{x}$	S.D.
1	4.98	1.66	4.94	1.25
2	4.64	2.23	4.33	1.95
3	4.58	2.16	4.37	1.92
4	5.10	1.93	4.62	1.70
5	5.20	1.96	4.67	1.87
6	5.64	1.67	5.27	2.20
7	5.04	2.08	4.54	2.10
8	4.88	2.11	4.54	1.67
9	4.76	1.78	4.35	1.20
10	4.98	1.86	4.37	1.54
11	4.94	1.42	4.14	1.62
12	5.34	1.90	4.60	2.24

TABLE 2b

FACTOR LOADINGS: VARIMAX ROTATION OF TEST FIVE (ATTITUDE TOWARD GROUP WORK)  
ON PRE-TEST AND POST-TEST CONDITIONS FOR EXPERIMENTAL GROUP

Variables	Pre-Test				Post-Test				
	Factor Scores		Commu- nalities	Factor I	Factor Scores		Factor I	Factor II	Commu- nalities
	Factor I	Factor II			Factor I	Factor II			
1	0.24	0.77	0.63	0.83	0.86	0.74	0.74	0.74	
2	-0.60	0.13	0.38	-0.36	0.74	0.68	0.68	0.68	
3	-0.28	0.63	0.48	-0.48	0.72	0.74	0.74	0.74	
4	-0.75	0.22	0.60	-0.76	0.31	0.67	0.67	0.67	
5	-0.53	0.34	0.40	-0.56	0.40	0.47	0.47	0.47	
6	-0.71	0.13	0.53	-0.29	-0.01	0.09	0.09	0.09	
7	-0.44	0.74	0.73	-0.62	0.55	0.68	0.68	0.68	
8	-0.64	0.60	0.78	-0.63	0.53	0.69	0.69	0.69	
9	-0.53	0.61	0.64	-0.67	0.49	0.69	0.69	0.69	
10	-0.83	0.15	0.72	-0.72	0.35	0.64	0.64	0.64	
11	-0.52	0.67	0.72	-0.76	0.30	0.67	0.67	0.67	
12	-0.82	0.22	0.73	-0.86	0.14	0.77	0.77	0.77	
Eigenvalues	5.96	1.37	--	6.45	1.08	--	--	--	
% - Age of Single Variance	49.69%	11.42%	--	53.78%	9.04%	--	--	--	
% - Age of Total Variance	61.11%		--	62.82%		--	--	--	

≠ Steble Variables

TABLE 2C  
ATTITUDE TOWARD GROUP WORK: REVISED VERSION OF TEST FIVE

Variables	Pre-Test		Commu- nalities	Post-Test	
	Factor Loadings Factor I			Factor Loadings Factor I	Commu- nalities
4	0.74	0.55	-0.81	0.67	
8	0.88	0.77	-0.82	0.67	
9	0.80	0.64	-0.83	0.68	
10	0.82	0.68	-0.82	0.67	
11	0.80	0.64	-0.81	0.65	
12	0.85	0.72	-0.85	0.73	
Eigenvalues	4.00	--	4.07	--	
% - Age of Single Variance	66.61%	--	67.79%	--	
% - Age of Total Variance	66.61%	--	67.79%	--	

TABLE 2d

ATTITUDE TOWARD GROUP WORK; FACTOR LOADINGS GENERATED  
FROM FACTOR ANALYSIS OF POOLED STABLE  
FACTOR LOADINGS (UNROTATED MATRIX)

Variables	Factor Loading
4	-0.79
8	-0.85
9	-0.82
10	-0.83
11	-0.81
12	-0.86

TABLE 2e  
ANALYSIS OF VARIANCE FOR REVISED TEST FIVE (ATTITUDE TOWARD GROUP WORK)

Source	Sum of The Squares	Degree of Freedom	Means Squared	F
Pre-Test vs. Post-Test Experimental Classes (T)	0.43	1	0.43	6.14 *
Sex (C)	0.00	1	0.00	0.03
Sex (S)	0.37	1	0.37	5.29 *
T x C	0.47	1	0.47	6.77 *
T x S	0.14	1	0.14	1.98
C x S	0.01	1	0.01	0.19
T x C x S	0.02	1	0.02	0.33
Error	81.97	94	0.07	0.00

\* p. < .05

TABLE 2f  
STANDARDIZED FACTOR SCORES ON REVISED TEST FIVE (ATTITUDE TOWARD GROUP WORK)  
FOR EXPERIMENTAL GROUP ON PRE-TEST AND POST-TEST CONDITIONS

Classification	Pre-Test ( $\bar{x}$ )	Post-Test ( $\bar{x}$ )
Evaluation	0.22	-0.24
Experimental Class 1	-0.04	-0.12
Experimental Class 2	0.48	-0.47

TABLE 3a

PRE-TEST AND POST-TEST SCORES ON TEST EIGHT (ORAL COMMUNICATION)  
FOR EXPERIMENTAL AND COMPARISON GROUPS

Variables	Pre-Test				Post-Test			
	Experimental Group		Comparison Group		Experimental Group		Comparison Group	
	$\bar{X}$	S.D.	$\bar{X}$	S.D.	$\bar{X}$	S.D.	$\bar{X}$	S.D.
1	3.95	2.55	5.40	1.62	4.67	1.97	4.64	1.90
2	3.72	1.65	5.10	1.47	4.70	1.31	4.64	1.32
3	3.50	1.65	4.55	2.68	4.20	1.36	1.14	1.36
4	3.58	1.54	4.57	2.48	3.93	1.47	3.91	1.42
5	3.70	1.31	4.62	2.57	4.28	1.30	4.24	1.28
6	4.05	1.05	4.74	2.57	4.45	1.65	4.41	1.62
7	3.33	2.12	4.14	3.41	3.93	1.92	3.81	2.11

TABLE 3b

FACTOR LOADINGS: UNROTATED FACTOR MATRIX OF TEST EIGHT (ORAL COMMUNICATION)  
ON PRE-TEST AND POST-TEST CONDITIONS FOR EXPERIMENTAL AND COMPARISON GROUPS

Variables	Pre-Test						Post-Test					
	Experimental Groups			Comparison Groups			Experimental Groups			Comparison Groups		
	Factor Loadings	Communality	Factor Loadings	Communality	Factor Loadings	Communality	Factor Loadings	Communality	Factor Loadings	Communality	Factor Loadings	Communality
1	0.83	0.69	-0.55	0.31	-0.75	0.57	-0.75	0.57	-0.75	0.57	-0.75	0.57
2	0.86	0.74	-0.68	0.46	-0.90	0.81	-0.90	0.81	-0.90	0.81	-0.90	0.81
3	0.87	0.76	-0.91	0.82	-0.88	0.79	-0.89	0.79	-0.89	0.80	-0.89	0.80
4	0.91	0.83	-0.93	0.87	-0.92	0.85	-0.91	0.85	-0.91	0.83	-0.91	0.83
5	0.89	0.79	-0.92	0.86	-0.90	0.76	-0.87	0.76	-0.87	0.76	-0.87	0.76
6	0.82	0.67	-0.91	0.83	-0.90	0.80	-0.89	0.80	-0.89	0.80	-0.89	0.80
7	0.83	0.69	-0.92	0.85	-0.87	0.75	-0.86	0.75	-0.86	0.75	-0.86	0.75
Eigenvalues	5.16	--	4.99	--	5.32	--	5.31	--	5.31	--	5.31	--
% - Ace of Single Variance	73.67%	--	71.42%	--	76.04%	--	75.80%	--	75.80%	--	75.80%	--
% - Ace of Total Variance	73.67%	--	71.42%	--	76.04%	--	75.80%	--	75.80%	--	75.80%	--

∗ Stable Variables



TABLE 3c

ORAL COMMUNICATION: FACTOR LOADINGS GENERATED FROM UNROTATED  
FACTOR ANALYSIS OF POOLED STABLE FACTOR LOADINGS

Variable	Factor Loadings
1	-0.73
2	-0.82
3	-0.90
4	-0.92
5	-0.91
6	-0.88
7	-0.88

TABLE 3d

ANALYSIS OF VARIANCE FOR TEST EIGHT (ORAL COMMUNICATION) ON PRE-TEST CONDITIONS  
FOR EXPERIMENTAL AND COMPARISON GROUPS

Source	Sum of Squares	Means Squared	Degrees of Freedom	F
Pre-test: Experimental Group (T) vs. Comparison Group (C) (S)	0.76	0.76	1	7.09 *
Classes	0.04	0.04	1	0.40
Sex	0.12	0.12	1	1.09
T x C	0.00	0.00	1	0.00
T x S	0.19	0.19	1	1.73
C x S	0.24	0.24	1	2.23
T x C x S	0.04	0.04	1	0.39
Error	64.52	0.12	74	0.00

\*  $p < .05$

TABLE 3e

STANDARDIZED FACTOR SCORES ON TEST EIGHT (ORAL COMMUNICATION)  
FOR EXPERIMENTAL AND COMPARISON GROUPS  
ON PRE-TEST CONDITIONS

Classification	( $\bar{x}$ )
Experimental Groups	-0.37
Comparison Groups	0.25

TABLE 3f

ANALYSIS OF VARIANCE FOR TEST EIGHT (ORAL COMMUNICATION) ON POST-TEST CONDITIONS FOR EXPERIMENTAL AND COMPARISON GROUPS

Source	Sum of Squares	Means Squared	Degrees of Freedom	F
Post-test: Experimental Group (T) vs. Comparison Group (C) (S)	0.75	0.75	1	6.60 *
Classes	0.02	0.02	1	0.15
Sex	0.00	0.00	1	0.02
T x C	0.02	0.02	1	0.18
T x S	0.00	0.00	1	0.03
C x S	0.38	0.38	1	3.31
T x C x S	0.01	0.01	1	0.08
Error	73.77	0.11	74	0.00

\*  $p < .05$

TABLE 3g

STANDARDIZED FACTOR SCORES ON TEST EIGHT (ORAL COMMUNICATION) ON POST-TEST CONDITIONS FOR EXPERIMENTAL AND COMPARISON GROUPS

Classification	X
Experimental Groups	0.31
Comparison Groups	-0.31

TABLE 3h

ANALYSIS OF VARIANCE FOR TEST EIGHT (ORAL COMMUNICATION) ON PRE-TEST AND POST-TEST CONDITIONS FOR EXPERIMENTAL GROUP

Sources	Sums of Squares	Mean Squared	Degrees of Freedom	F
Pre-Test -				
Post-Test	2.03	2.03	1	7.06 *
Experimental Classes	0.25	0.25	1	0.87
Small Groups	0.28	0.07	4	0.25
T x C	0.03	0.03	1	0.12
T x G	0.30	0.08	4	0.26
C x G	2.31	0.58	4	2.01
T x C x G	0.56	0.14	4	0.50
Error	53.82	0.29	60	0.00

\*  $p < .05$ 

TABLE 3i

STANDARDIZED FACTOR SCORES ON TEST EIGHT (ORAL COMMUNICATION) ON PRE-TEST AND POST-TEST CONDITIONS FOR EXPERIMENTAL GROUP

Experimental Group	$\bar{x}$
Pre-Test	-0.43
Post-Test	0.20

TABLE 3j  
ANALYSIS OF VARIANCE FOR TEST EIGHT (ORAL COMMUNICATION) ON PRE-TEST AND  
POST-TEST CONDITIONS FOR COMPARISON GROUP

Source	Sum of the Squares	Means Squared	Degrees of Freedom	F
Pre-Test vs. Post-Test	0.62	0.62	1	4.92 *
Comparison Classes (T) (C) (S)	0.06 0.00 0.00	0.06 0.00 0.00	1 1 1	0.46 0.01 0.01
Sex T x C T x S C x S T x C x S	0.00 0.00 0.37 0.01	0.00 0.00 0.37 0.01	1 1 1 1	0.02 2.94 0.06 0.00
Error	75.92	0.13	76	

\*  $p < .05$

TABLE 3k  
STANDARDIZED FACTOR SCORES ON TEST EIGHT (ORAL COMMUNICATION)  
ON PRE-TEST AND POST-TEST CONDITIONS FOR COMPARISON GROUP

Experimental Group	$\bar{x}$
Pre-Test	0.25
Post-Test	-0.31

TABLE 4a  
 PRE-TEST AND POST-TEST SCORES ON TEST NINE (WRITTEN COMMUNICATION)  
 FOR EXPERIMENTAL AND COMPARISON GROUPS

Variables	Pre-Test		Post-Test					
	Experimental Group	Comparison Group	Experimental Group	Comparison Group				
	X	S.D.	X	S.D.				
1	4.43	1.15	3.95	2.51	4.38	2.03	3.43	2.60
2	4.17	1.21	3.58	2.45	4.15	1.73	3.15	3.31
3	4.02	0.93	3.80	2.30	4.02	1.57	3.42	2.74
4	4.40	1.33	3.79	2.20	4.20	1.85	3.29	2.29
5	3.76	0.89	3.65	2.31	3.98	1.27	3.50	2.76

TABLE 4b

FACTOR LOADINGS: UNROTATED FACTOR MATRIX OF TEST NINE (WRITTEN COMMUNICATION)  
ON PRE-TEST AND POST-TEST CONDITIONS FOR EXPERIMENTAL AND COMPARISON GROUPS

Variables	Pre-Test					Post-Test				
	Experimental Groups		Comparison Groups			Experimental Groups		Comparison Groups		
	Factor Loadings	Factor I	Communalities	Factor I	Communalities	Factor Loadings	Factor I	Communalities	Factor I	Communalities
1	-0.86	✓	0.74	0.92	✓	0.85	-0.93	✓	0.86	0.86
2	-0.86	✓	0.73	0.90	✓	0.80	-0.92	✓	0.85	0.77
3	-0.88	✓	0.78	0.91	✓	0.84	-0.93	✓	0.86	0.85
4	-0.86	✓	0.73	0.93	✓	0.87	-0.90	✓	0.81	0.85
5	-0.75	✓	0.56	0.92	✓	0.85	-0.91	✓	0.83	0.75
Eigenvalues	3.54		--	4.21		--	4.21		--	--
% - Age of Single Variance	70.79%		--	84.16%		--	84.16%		--	81.46%
% - Age of Total Variance	70.79%		--	84.16%		--	84.16%		--	81.46%

✓ Stable Variables

TABLE 4c  
WRITTEN COMMUNICATION: FACTOR LOADINGS GENERATED  
FROM UNROTATED FACTOR ANALYSIS  
OF POOLED STABLE FACTOR LOADINGS

Variables	Factor Loading
1	-0.92
2	-0.90
3	-0.92
4	-0.91
5	-0.87



TABLE 4d

ANALYSIS OF VARIANCE FOR TEST NINE (WRITTEN COMMUNICATION) ON PRE-TEST CONDITIONS  
FOR EXPERIMENTAL AND COMPARISON GROUPS

Sources	Sum of Squares	Means Squared	Degree of Freedom	F
Pre-Test: Experimental Group vs. Control Group	0.31	0.31	1	9.38 *
Classes (T)	0.57	0.57	1	1.70
(C)	0.02	0.02	1	0.57
(S)	0.12	0.12	1	3.48 *
Sex T x C	0.37	0.37	1	11.19 *
T x S	0.01	0.01	1	0.24
C x S	0.03	0.03	1	0.80
T x C x S	0.03	0.03	1	0.80
Error	233.05	0.03	248	0.00

\*  $p < .05$ 

TABLE 4e

STANDARDIZED FACTOR SCORES ON TEST NINE (WRITTEN COMMUNICATION)  
ON PRE-TEST CONDITIONS FOR EXPERIMENTAL AND COMPARISON GROUPS

Classification	Experimental Group	Comparison Group
Evaluation	0.17	-0.22
Males	-0.09	-0.06
Females	0.44	-0.39

TABLE 4f  
 ANALYSIS OF VARIANCE FOR TEST NINE (WRITTEN COMMUNICATION) ON POST-TEST CONDITIONS  
 FOR EXPERIMENTAL AND COMPARISON GROUPS

Source	Sum of Squares	Means Squared	Degrees of Freedom	F
Post-Test Experimental Group vs. Comparison Group	0.69	0.69	1	22.94 *
Classes	0.05	0.05	1	1.62
Sex	0.01	0.01	1	0.19
T x C	0.01	0.01	1	0.35
T x S	0.49	0.49	1	16.20 *
C x S	0.03	0.03	1	0.83
T x C x S	0.02	0.02	1	0.58
Error	215.46	0.03	247	0.00

\*  $p < .05$

TABLE 4g  
 STANDARDIZED FACTOR SCORES ON TEST NINE (WRITTEN COMMUNICATION)  
 ON POST-TEST CONDITIONS FOR EXPERIMENTAL AND COMPARISON GROUPS

Classification	Experimental Group	Comparison Group
Evaluation	0.29	-0.30
Males	0.01	-0.08
Females	0.56	-0.26

TABLE 4h  
 ANALYSIS OF VARIANCE FOR TEST NINE (WRITTEN COMMUNICATION)  
 ON PRE-TEST AND POST-TEST CONDITIONS  
 FOR EXPERIMENTAL GROUP

Sources	Sum of the Squares	Means Squared	Degrees of Freedom	F
Pre-Test vs. Post-Test (T)	0.06	0.06	1	0.65
Experimental Classes (C)	0.00	0.03	1	0.28
Small Groups (G)	0.34	0.09	4	0.92
Sex (S)	2.98	2.98	1	32.02 *
T x C	0.17	0.17	1	1.84
T x G	0.09	0.02	4	0.25 *
C x G	2.74	0.68	4	7.35 *
T x C x G	0.08	0.02	4	0.23
T x S	0.00	0.00	1	0.00
C x S	0.45	0.45	1	4.78 *
T x G x S	0.01	0.01	1	0.15
G x S	0.08	0.02	4	0.20
T x G x S	0.43	0.11	4	1.15
C x G x S	0.95	0.24	4	2.56
T x C x G x S	0.16	0.04	4	0.42
Error	129.44	0.09	237	0.00

\* p < .05

TABLE 41  
 MULTIVARIATE ANALYSIS OF VARIANCE FOR TEST NINE (WRITTEN COMMUNICATION)  
 ON PRE-TEST AND POST-TEST CONDITIONS  
 FOR COMPARISON GROUP

Sources	Sum of the Squares	Means Squared	Degrees of Freedom	F
Pre-Test - Post-Test	0.01	0.01	1	0.26
Comparison Classes (T)	0.12	0.12	1	2.32
(C)	0.30	0.30	1	5.75 *
(S)	0.05	0.05	1	1.01
Sex	0.01	0.01	1	0.11
T x C	0.00	0.00	1	0.01
T x S	0.00	0.00	1	0.01
C x S	0.00	0.00	1	0.05
T x C x S	0.00	0.00	1	0.00
Error	291.74	0.05	226	0.00

\*  $p < .05$

Test Ten: Procedure, Limitations and Results. The "Group Dimensions Description Questionnaire" by J.K. Hemphill and C.M. Westie (Educational Testing Service, 1956) was administered to the experimental classes at the end of the programme. These questionnaires were scored according to the following procedure. "Each response has a weight in the determination of the raw score of the dimension which it describes." The responses of each individual were expressed in "stanine" scores.<sup>1</sup>

The thirteen dimensions measured by this questionnaire are defined by Hemphill (pp. 2-4) as follows.

1. Autonomy is the degree to which a group functions independently of other groups and occupies an independent position in society. It is reflected by the degree to which a group determines its own activities, by its absence of allegiance, deference and/or dependence relative to other groups.

2. Control is the degree to which a group regulates the behavior of individuals while they are functioning as group members. It is reflected by the modifications which group members impose on complete freedom of individual behavior and by the amount of intensity of group-derived government.

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<sup>1</sup> Stanine Distributions based upon research by Hemphill and Westie (Hemphill, 1967, pp. 5-6).

<u>Stanine Scores</u>	<u>Assigned to raw scores that are earned by</u>
9 (High Score)	the highest 4% of the standard population
8	the next lower 7% of the standard population
7	the next lower 12% of the standard population
6	the next lower 17% of the standard population
5	the next lower 20% of the standard population
4	the next lower 17% of the standard population
3	the next lower 12% of the standard population
2	the next lower 7% of the standard population
1 (Low Score)	the lowest 4% of the standard population

3. Flexibility is the degree to which a group's activities are marked by informal procedures rather than by adherence to established procedures. It is reflected by the extent to which duties of members are free from specification through custom, tradition, written rules, regulations, codes of procedure, or even unwritten but clearly prescribed ways of behaving.

4. Hedonic Tone is the degree to which group membership is accompanied by a general feeling of pleasantness or agreeableness. It is reflected by the frequency of laughter, conviviality, pleasant anticipation of group meetings, and by the absence of griping and complaining.

5. Homogeneity is the degree to which members of a group are similar with respect to socially relevant characteristics. It is reflected by relative uniformity of members with respect to age, sex, race, socio-economic status, interests, attitudes and habits.

6. Intimacy is the degree to which members of a group are mutually acquainted with one another and are familiar with the most personal details of one another's lives. It is reflected by the nature of topics discussed by members, by modes of greeting, forms of address, and by interactions which presuppose a knowledge of the probable reaction of others under widely differing circumstances, as well as by the extent and type of knowledge each member has about other members of the group.

7. Participation is the degree to which members of a group apply time and effort to group activities. It is reflected by the number of kinds of duties members perform, by voluntary assumption of non-assigned duties and by the amount of time spent in group activities.

8. Permeability is the degree to which a group permits ready access to membership. It is reflected by absence of entrance requirements of various kinds, and by the degree to which membership is solicited.

9. Polarization is the degree to which a group is oriented and works toward a single goal which is clear and specific to all members.

10. Potency is the degree to which a group has primary significance for its members. It is reflected by the kind of needs which a group is satisfying or has the potentiality of satisfying, by the extent of re-adjustment which would be required of members should

the group fail, and by the degree to which a group has meaning to members with reference to their central values.

11. Stability is the degree to which a group persists over a period of time with essentially the same characteristics. It is reflected by the rate of membership turn over, by frequency of reorganizations and by constancy of group size.

12. Stratification is the degree to which a group orders its members into status hierarchies. It is reflected by differential distribution of power, privileges, obligations and duties and by asymmetrical patterns of differential behavior among members.

13. Viscosity is the degree to which members of the group function as a unit. It is reflected by absence of dissension and personal conflict among members, by absence of activities serving to advance only the interests of individual group members, by the ability of the group to resist disrupting forces, and by the belief of the part of the members that the group does function as a unit.

Interpretation of the results of this questionnaire, in light of these definitions, should consider the following limitations.

Autonomy: All groups, in the sense of the questionnaire's definition, were high on autonomy.

Control: Groups did not govern themselves as defined by this questionnaire.

Flexibility: All groups, in the sense of this questionnaire's definition, were high on flexibility.

Hedonic Tone: No limitations.

Participation: Group formation was such that groups could not exist without the full participation of group members.

Permeability was irrelevant to this experiment.

Polarization contained questions which were ambiguous to the students.

Stability was interpreted by the students to mean "attendance."

Stratification: No limitations.

Viscosity: No limitations.

The results of this questionnaire are reported in tables 5a through 7k. Tables 5a through 5k are graphs of composite stanine scores; Tables 7a through 7k show an overlay of individual stanine scores for each group.





TABLE 5b

COMPOSITE STANINE SCORES FOR GROUP TWO (THE STREET GREASERS)

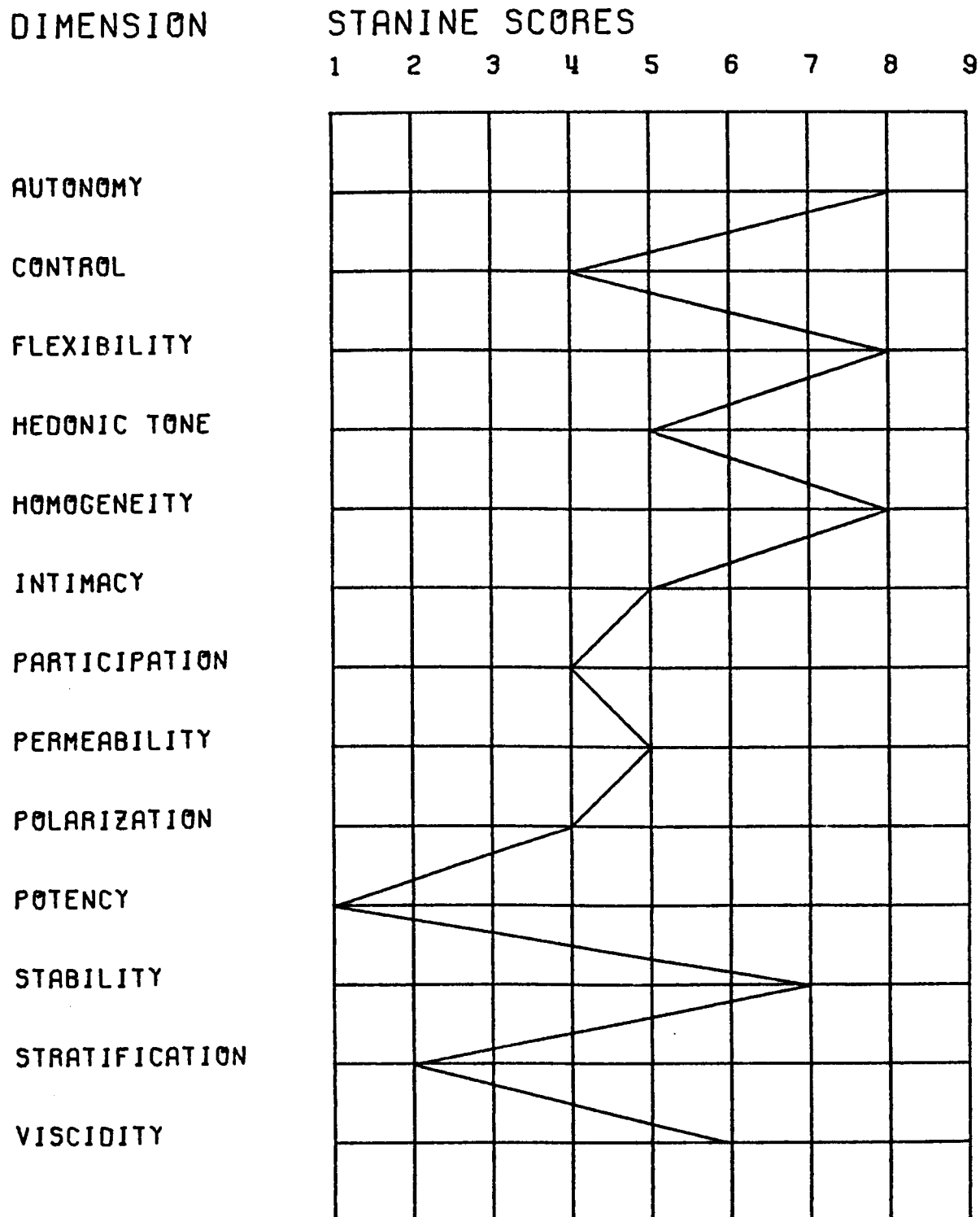




TABLE 5d

COMPOSITE STANINE SCORES FOR GROUP FOUR (THE TURTLES)

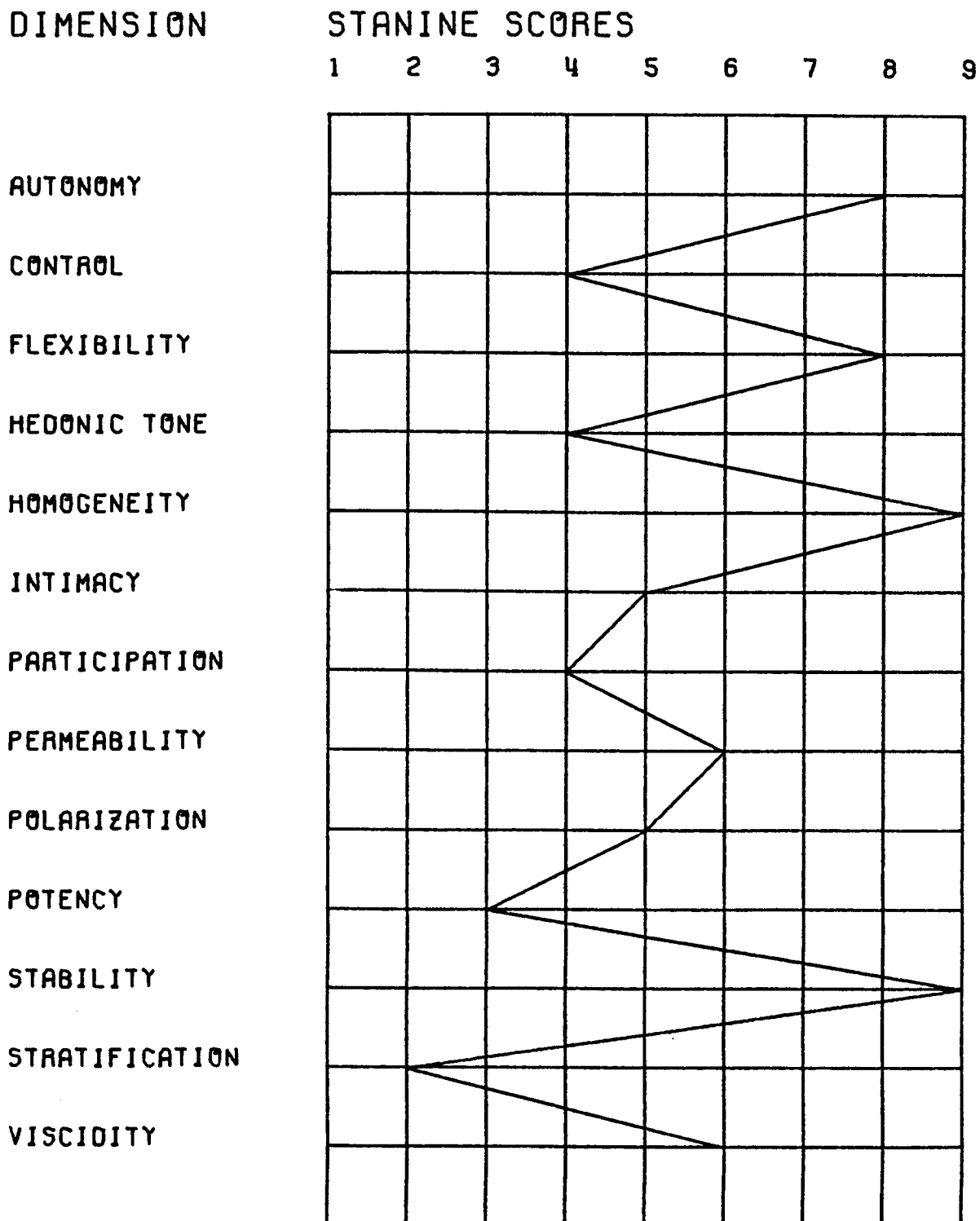


TABLE 5e

COMPOSITE STANINE SCORES FOR GROUP FIVE (THE TUMBLEWEEDS)

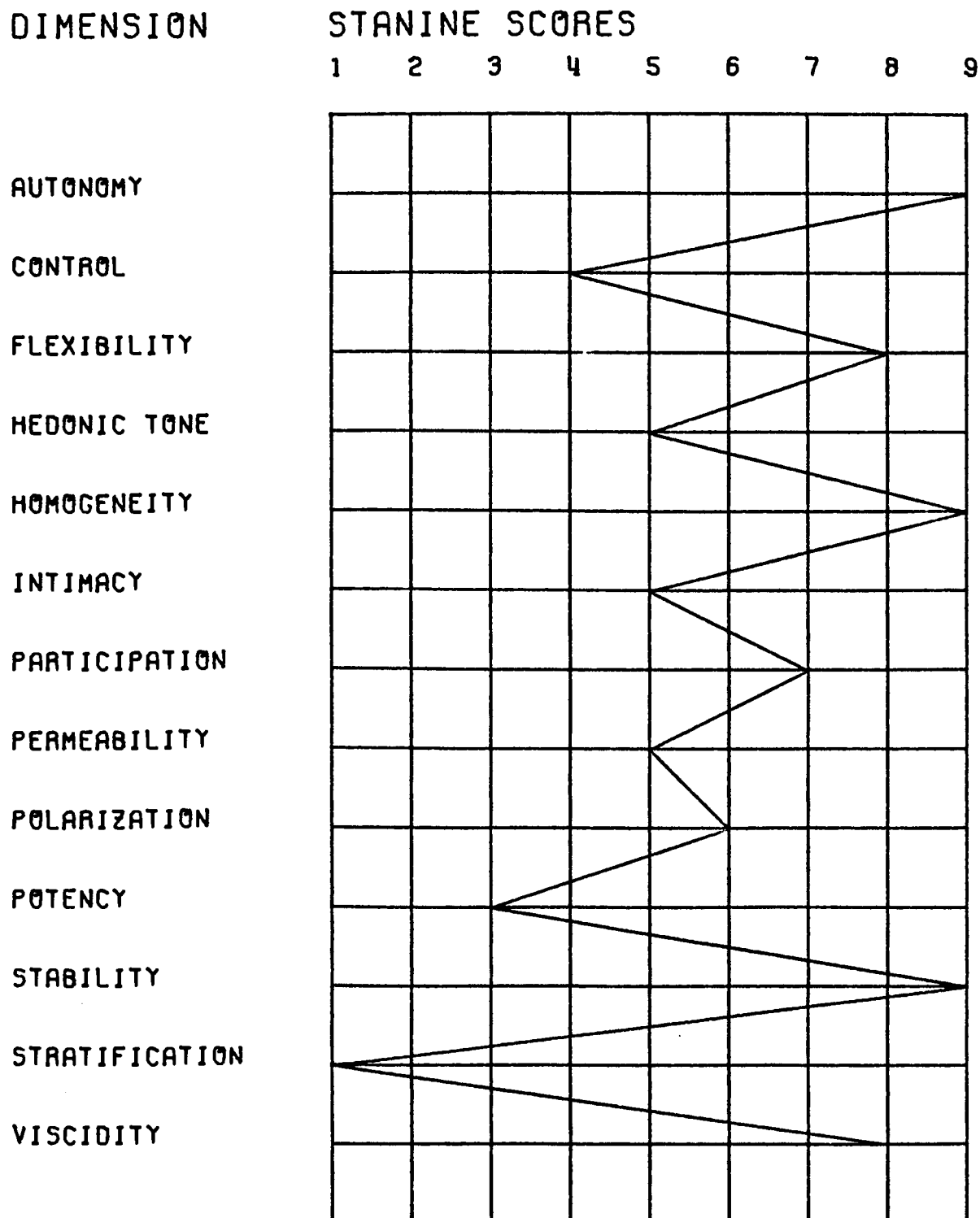


TABLE 5F

COMPOSITE STANINE SCORES FOR GROUP SIX (CHIMO)

DIMENSION

STANINE SCORES

1 2 3 4 5 6 7 8 9

AUTONOMY

CONTROL

FLEXIBILITY

HEDONIC TONE

HOMOGENEITY

INTIMACY

PARTICIPATION

PERMEABILITY

POLARIZATION

POTENCY

STABILITY

STRATIFICATION

VISCIDITY

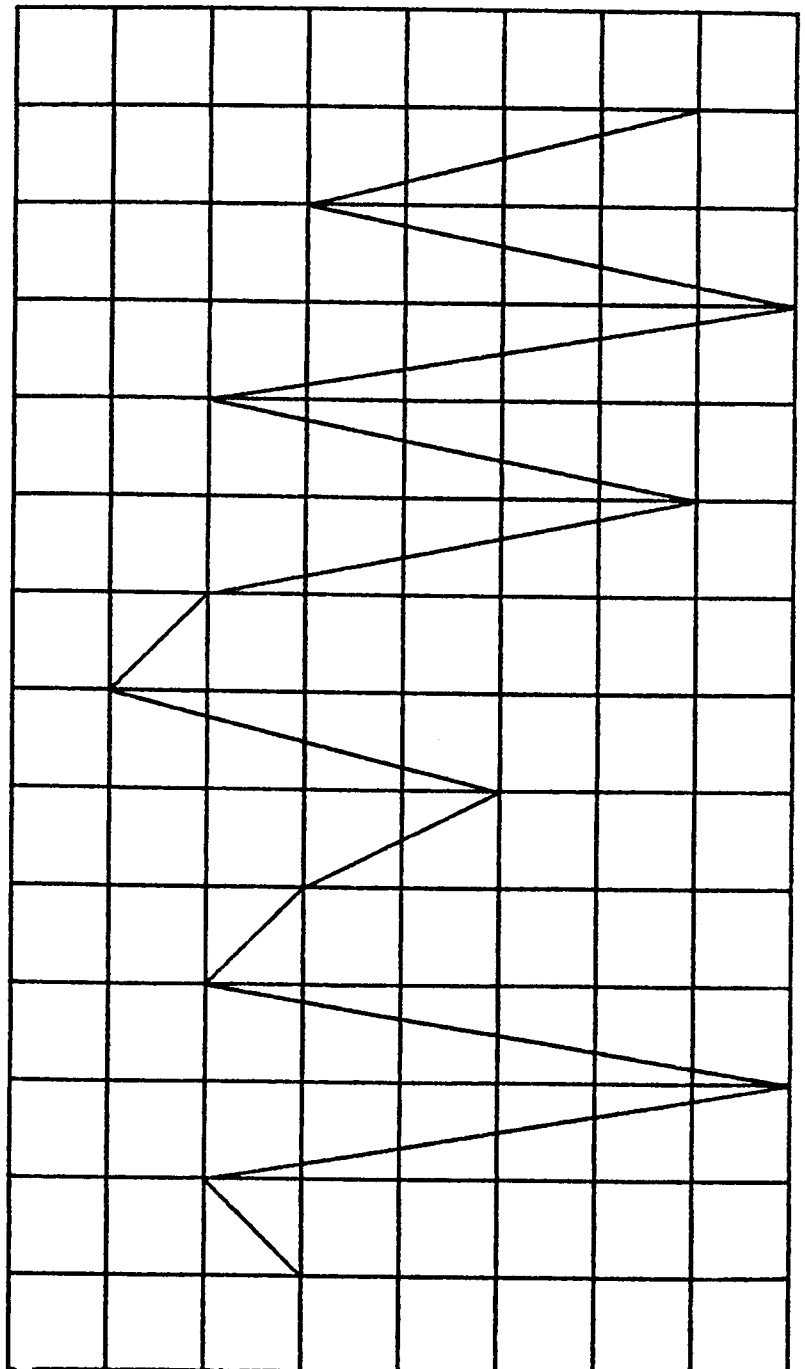


TABLE 5g

COMPOSITE STANINE SCORES FOR GROUP SEVEN (THE OUT TO LUNCH BUNCH)

DIMENSION

STANINE SCORES

1 2 3 4 5 6 7 8 9

AUTONOMY

CONTROL

FLEXIBILITY

HEDONIC TONE

HOMOGENEITY

INTIMACY

PARTICIPATION

PERMEABILITY

POLARIZATION

POTENCY

STABILITY

STRATIFICATION

VISCIDITY

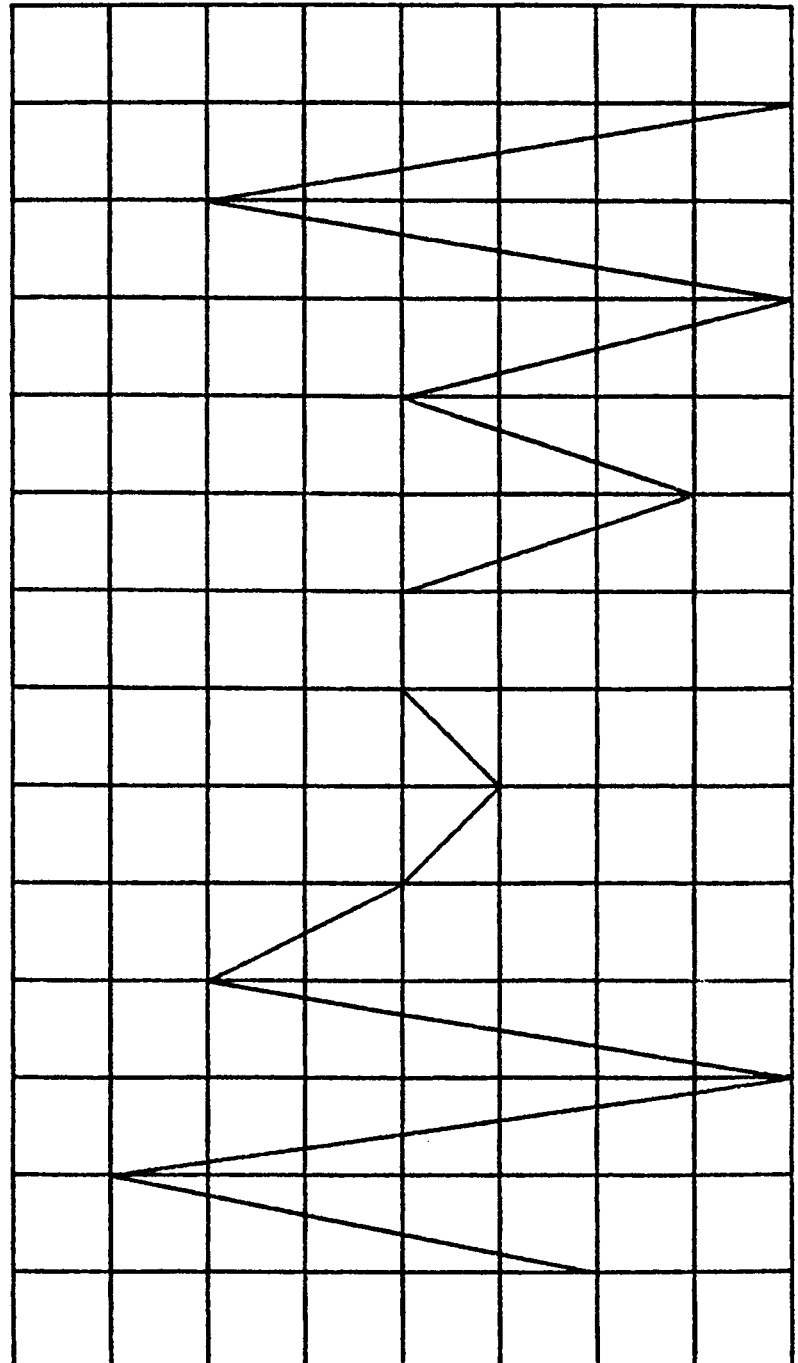


TABLE 5h

COMPOSITE STANINE SCORES FOR GROUP EIGHT (URIAH)

DIMENSION

STANINE SCORES

1 2 3 4 5 6 7 8 9

AUTONOMY

CONTROL

FLEXIBILITY

HEDONIC TONE

HOMOGENEITY

INTIMACY

PARTICIPATION

PERMEABILITY

POLARIZATION

POTENCY

STABILITY

STRATIFICATION

VISCIDITY

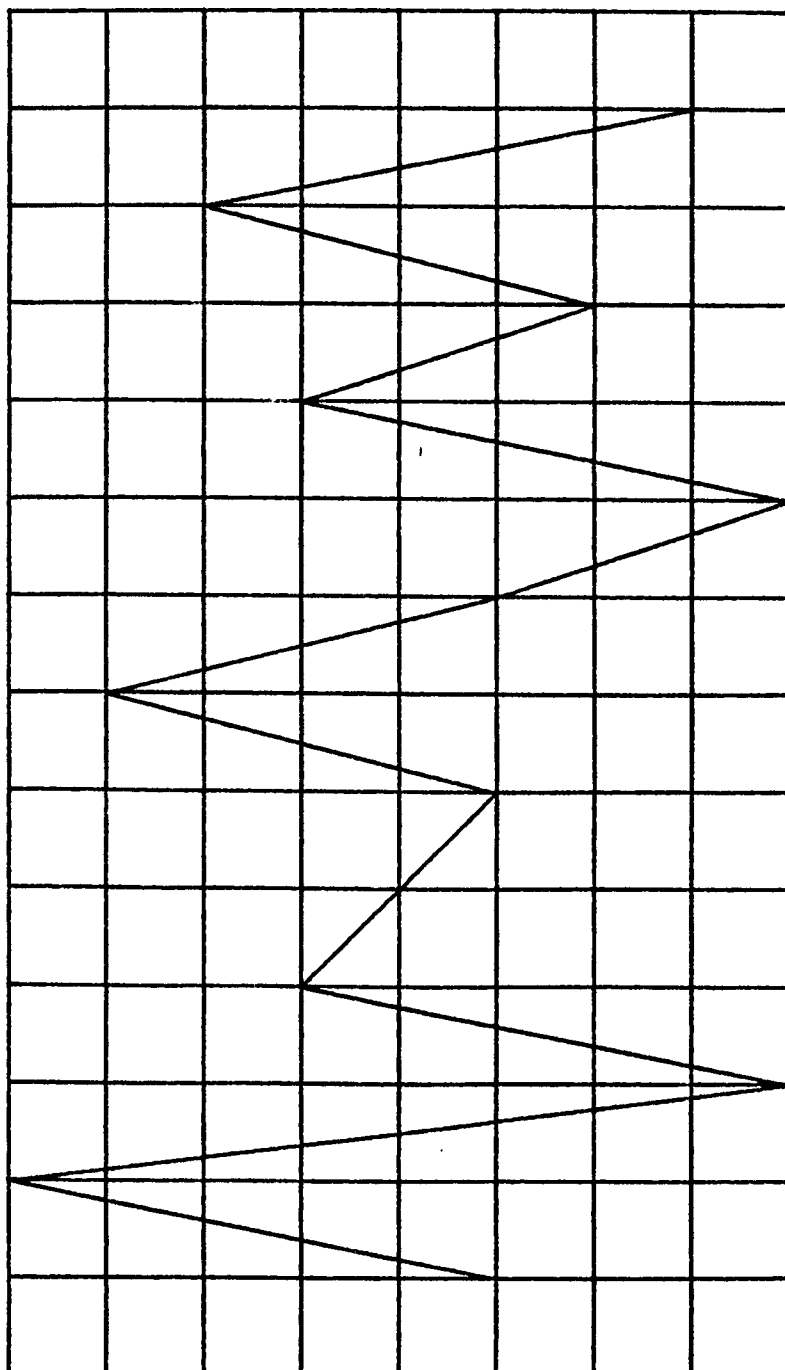




TABLE 5i

COMPOSITE STANINE SCORES FOR GROUP NINE (THE BUNCH OF MUNCHERS)

DIMENSION

STANINE SCORES

1 2 3 4 5 6 7 8 9

AUTONOMY

CONTROL

FLEXIBILITY

HEDONIC TONE

HOMOGENEITY

INTIMACY

PARTICIPATION

PERMEABILITY

POLARIZATION

POTENCY

STABILITY

STRATIFICATION

VISCIDITY

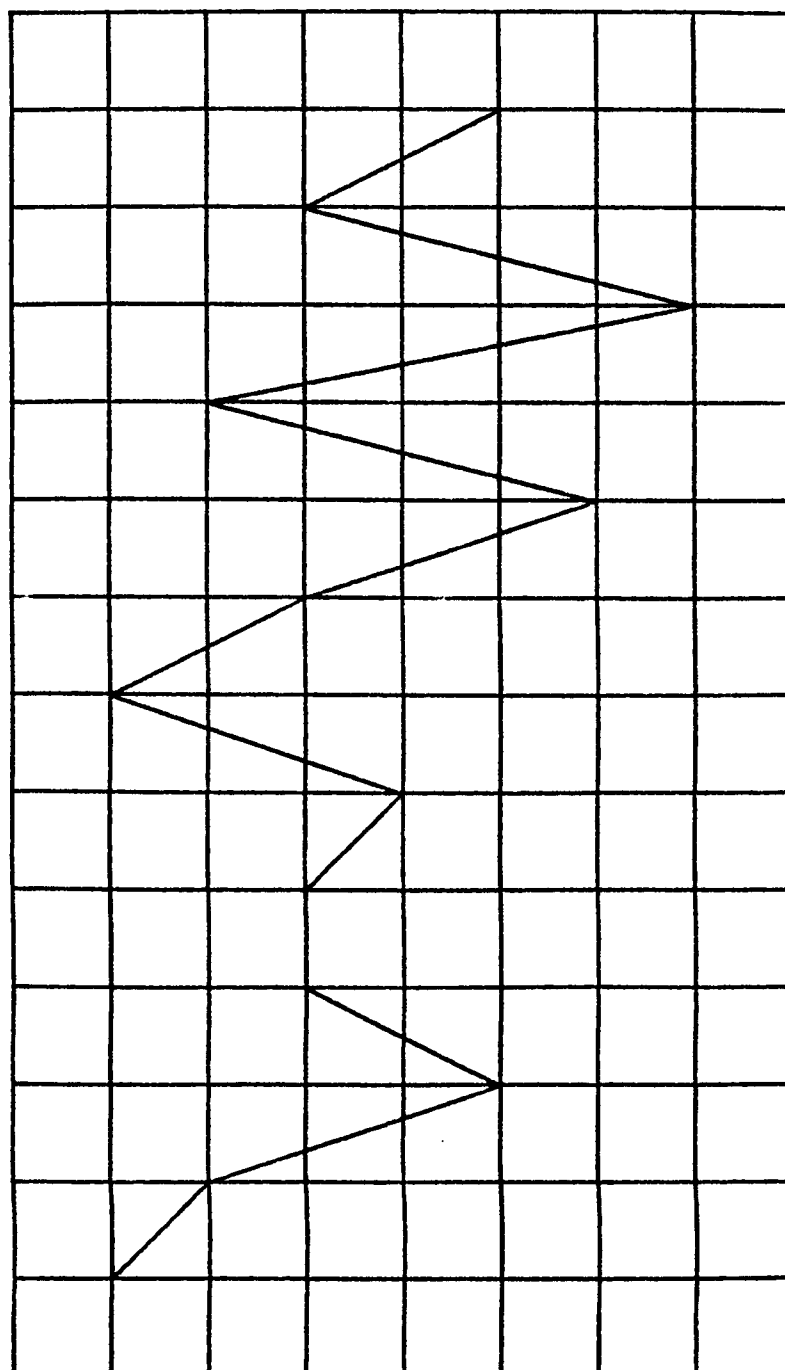


TABLE 5j

COMPOSITE STANINE SCORES FOR GROUP TEN (CARRY ON THINKING)

DIMENSION

STANINE SCORES

1 2 3 4 5 6 7 8 9

AUTONOMY

CONTROL

FLEXIBILITY

HEDONIC TONE

HOMOGENEITY

INTIMACY

PARTICIPATION

PERMEABILITY

POLARIZATION

POTENCY

STABILITY

STRATIFICATION

VISCIDITY

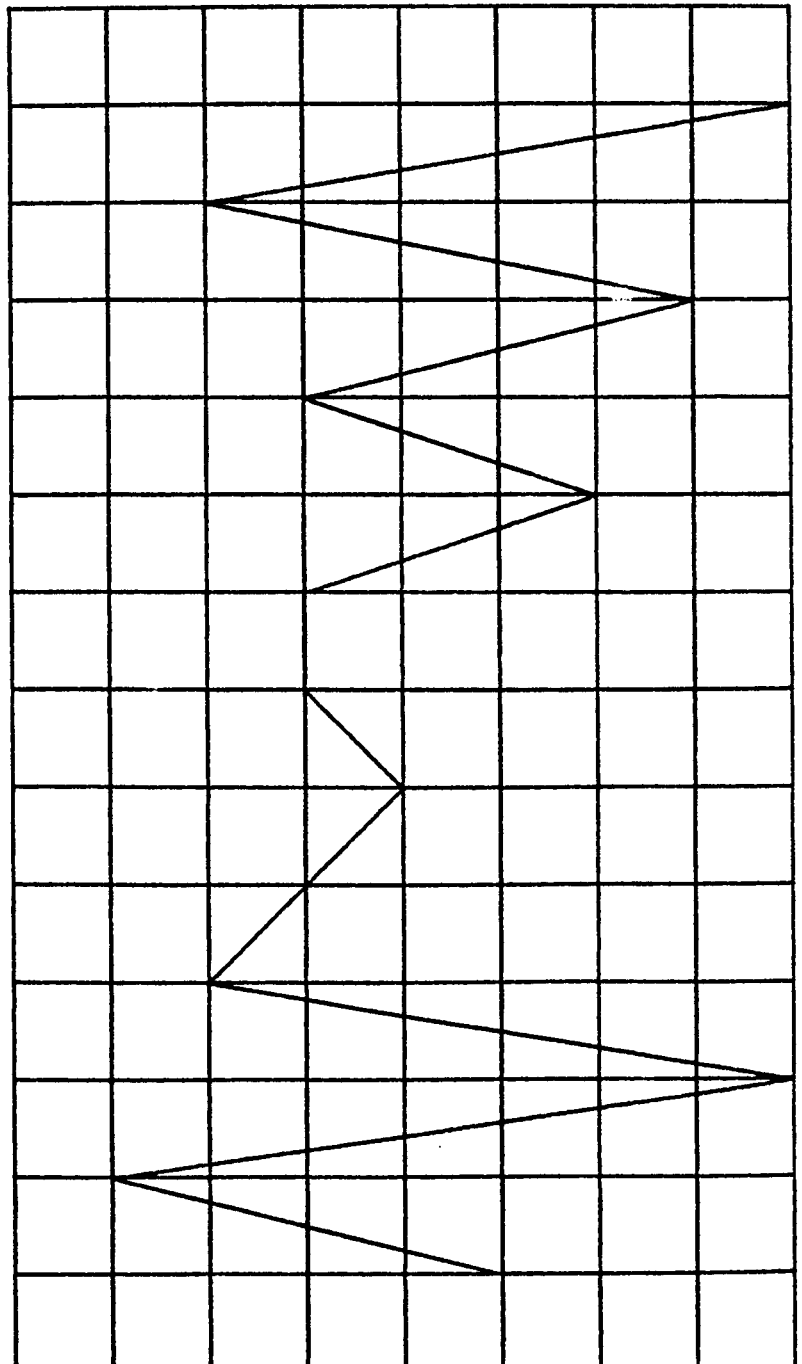


TABLE 5k

COMPOSITE STANINE SCORES FOR GROUP ELEVEN (ROB-TIM-PAT)

DIMENSION

STANINE SCORES

1 2 3 4 5 6 7 8 9

AUTONOMY

CONTROL

FLEXIBILITY

HEDONIC TONE

HOMOGENEITY

INTIMACY

PARTICIPATION

PERMEABILITY

POLARIZATION

POTENCY

STABILITY

STRATIFICATION

VISCIDITY

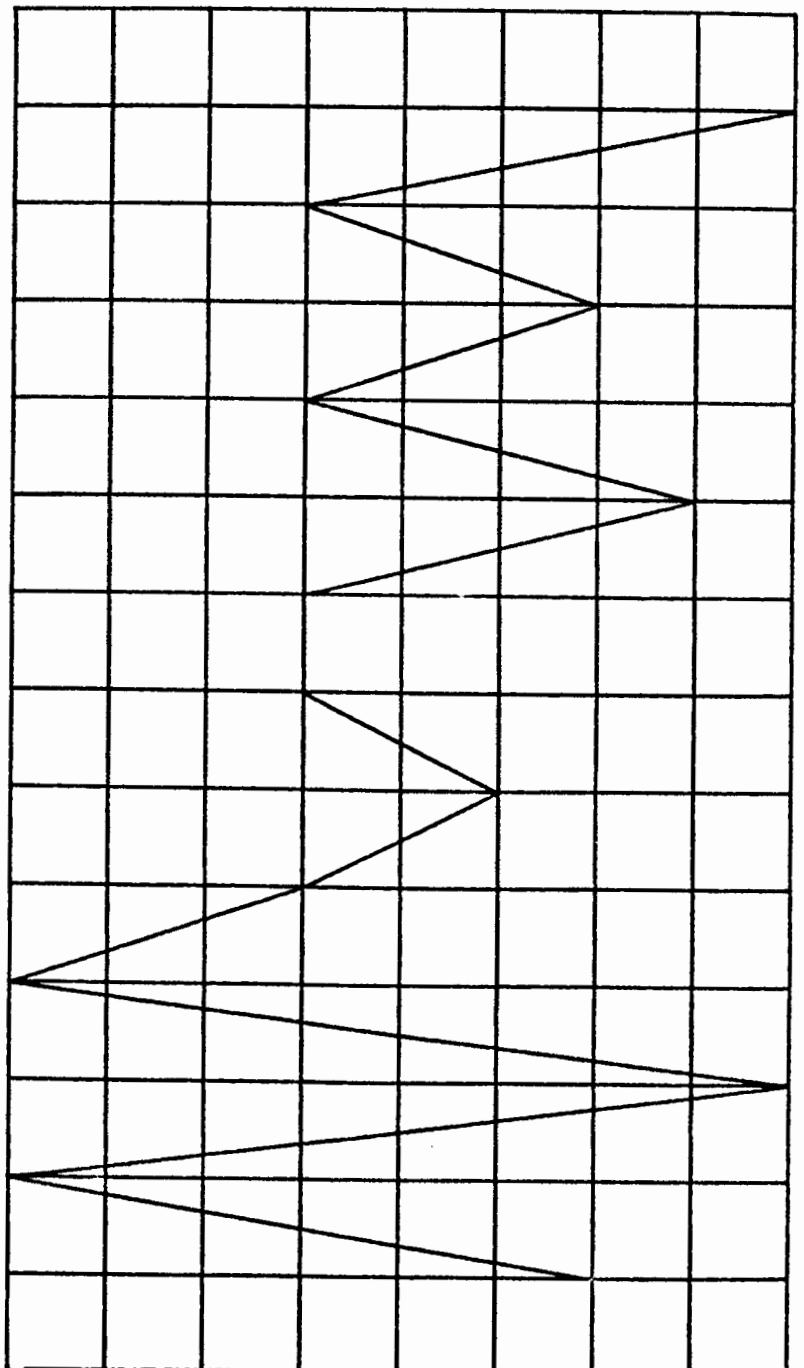


TABLE 6  
SUMMARY OF STANINE SCORES FOR GROUP DIMENSIONS PROFILES

Group	Stanine Scores										
	Boners Ark	Street Greasers	The Partners	The Turtles	The Tumbleweeds	Rob Tim Pat	Chimo	The out to lunch bunch	Uriah	The Bunch of Munchers	Carry on Thinking
Autonomy	8	8	9	8	9	9	8	9	8	6	9
Control	2	4	4	4	4	4	4	3	3	4	3
Flexibility	8	8	9	8	8	7	9	9	7	8	8
Hedonic Tone	7	5	3	4	5	4	3	4	4	3	4
Homogeneity	9	8	8	9	9	8	8	8	9	6	7
Intimacy	7	5	5	5	5	4	3	5	4	4	4
Participation	4	4	4	4	7	4	2	5	2	2	4
Permeability	6	5	5	6	5	6	6	6	6	5	5
Polarization	5	4	6	5	6	4	4	5	5	4	4
Potency	2	1	4	3	3	1	3	3	4	4	3
Stability	9	7	8	9	9	9	9	9	9	6	9
Stratification	1	2	2	2	1	1	3	2	1	3	2
Viscosity	7	6	3	6	8	7	4	7	6	2	6

TABLE 7a

OVERLAY OF STANINE SCORES FOR GROUP ONE (BOMERS ARK)

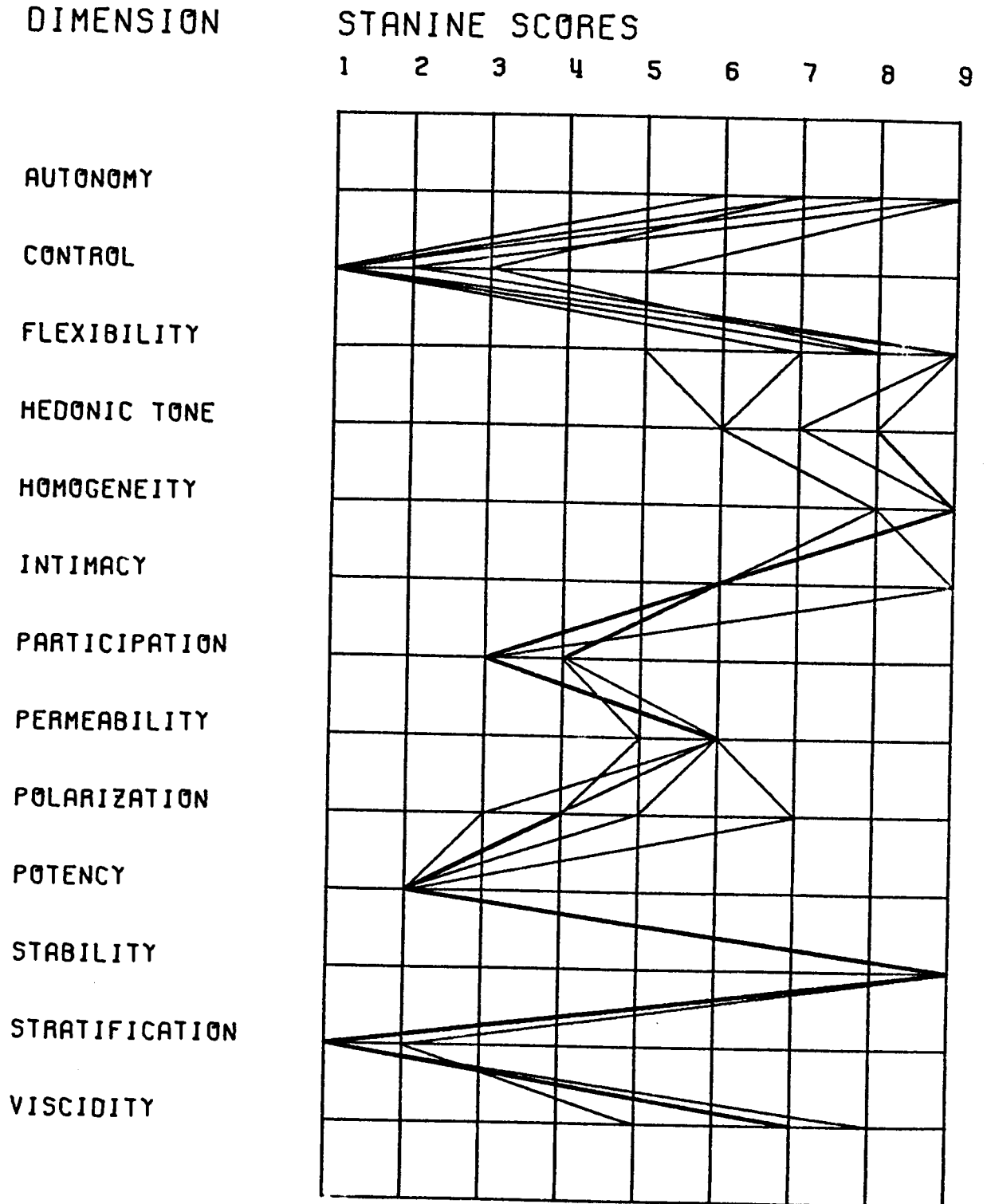




TABLE 7c

OVERLAY OF STANINE SCORES FOR GROUP THREE (THE PARTNERS)

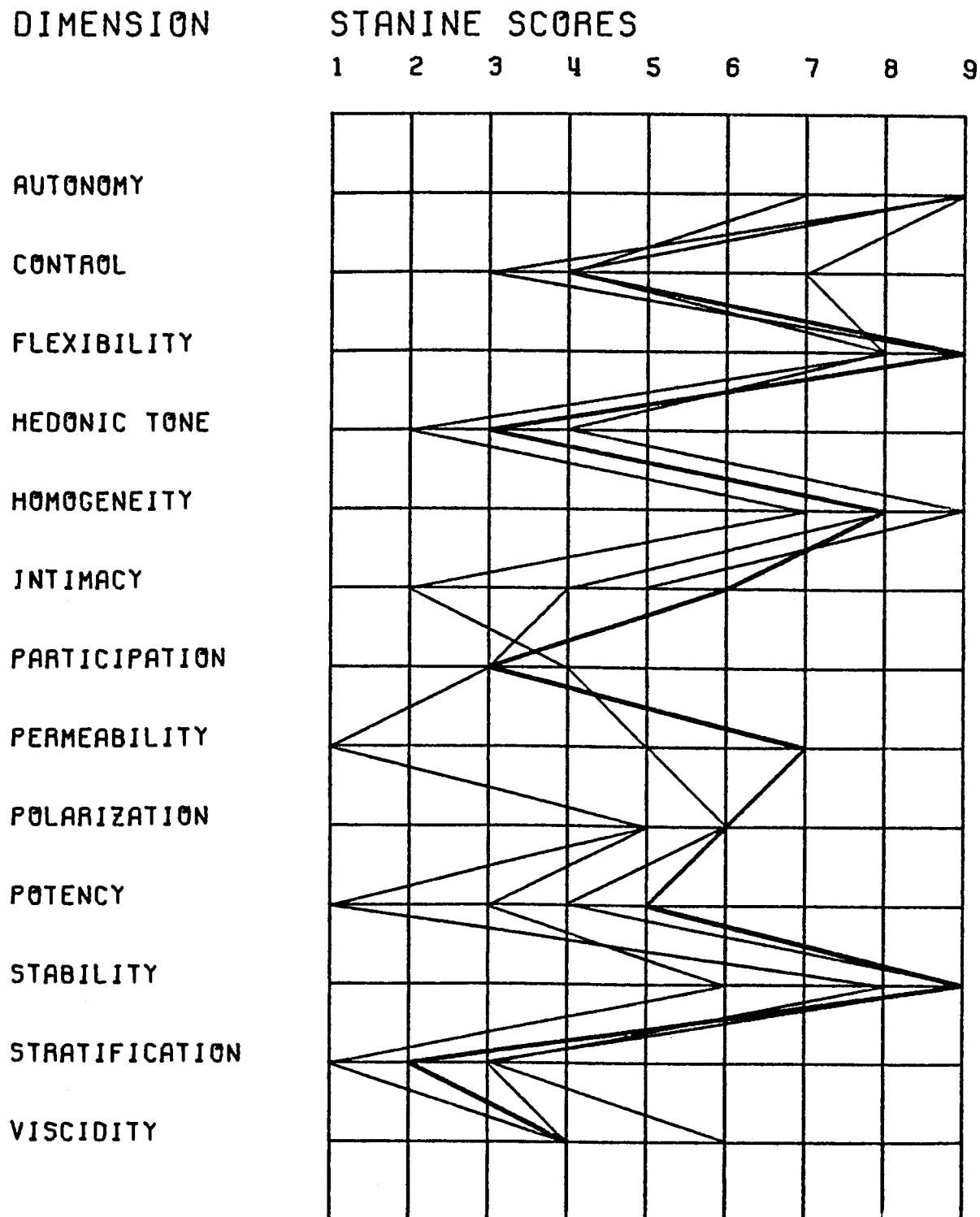


TABLE 7d

OVERLAY OF STANINE SCORES FOR GROUP FOUR (THE TURTLES)

DIMENSION

STANINE SCORES

1 2 3 4 5 6 7 8 9

AUTONOMY

CONTROL

FLEXIBILITY

HEDONIC TONE

HOMOGENEITY

INTIMACY

PARTICIPATION

PERMEABILITY

POLARIZATION

POTENCY

STABILITY

STRATIFICATION

VISCIDITY

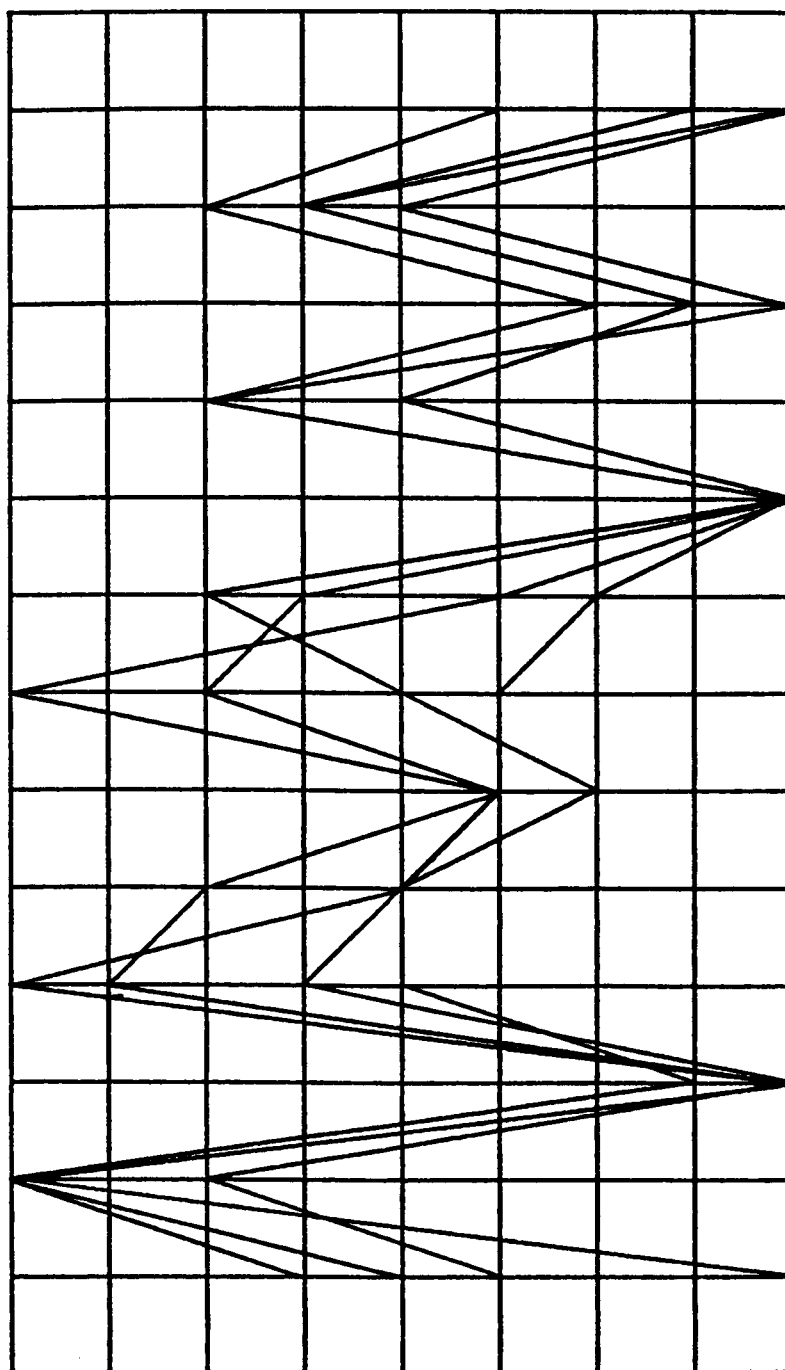








TABLE 7g

OVERLAY OF STANINE SCORES FOR GROUP SEVEN (THE OUT TO LUNCH BUNCH)

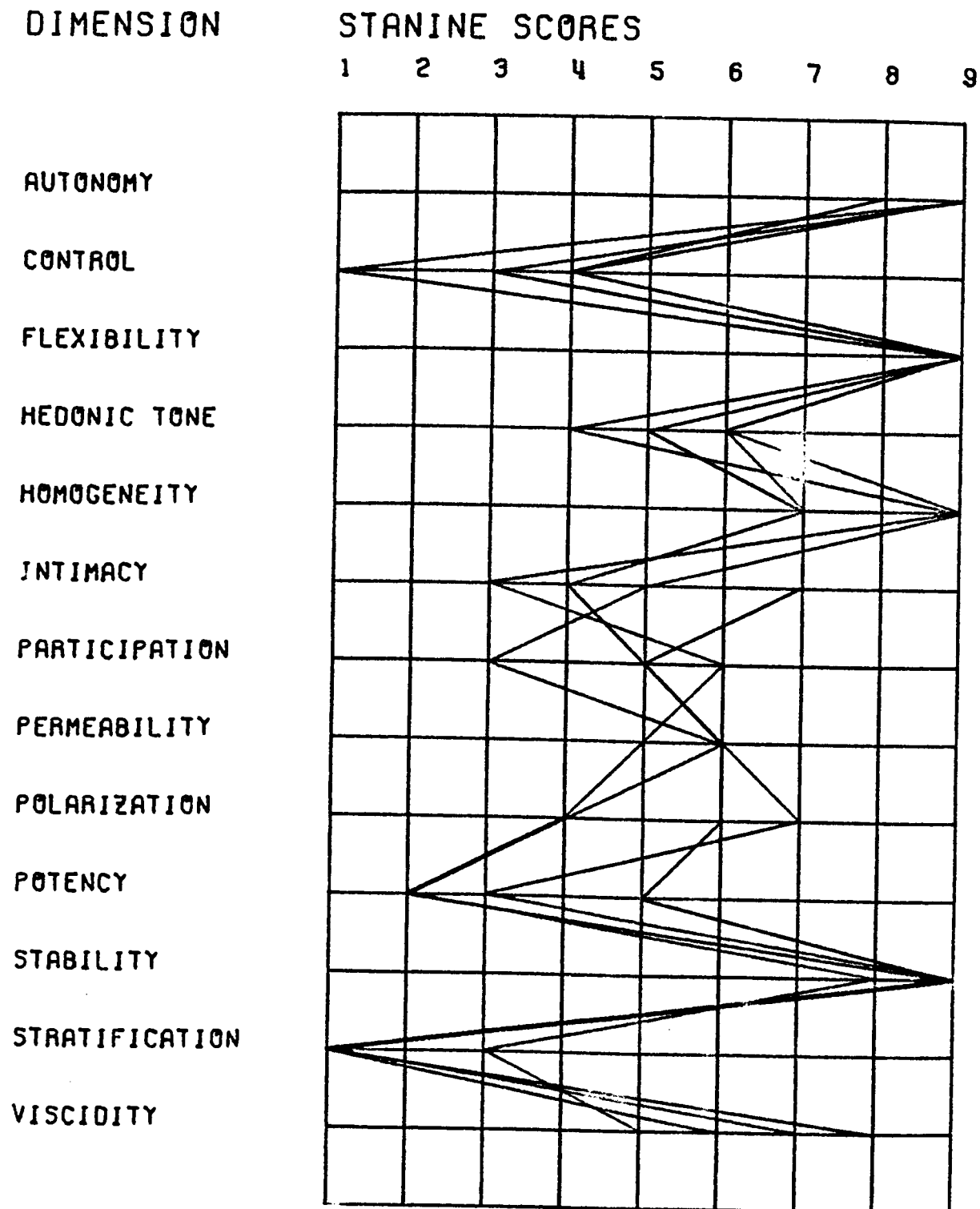


TABLE 7h

OVERLAY OF STANINE SCORES FOR GROUP EIGHT (URIAH)

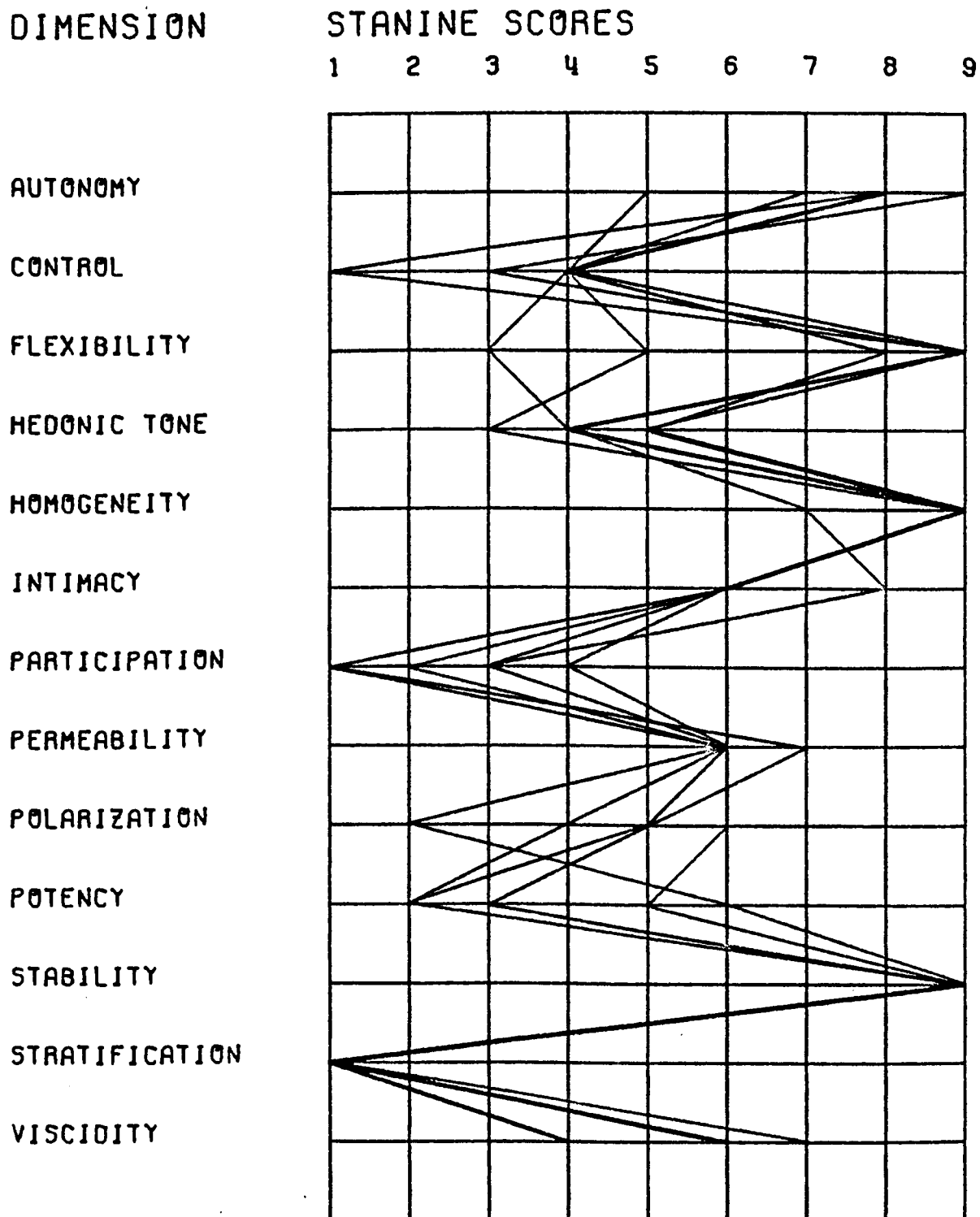


TABLE 71

OVERLAY OF STANINE SCORES FOR GROUP NINE (THE BUNCH OF MUNCHERS)

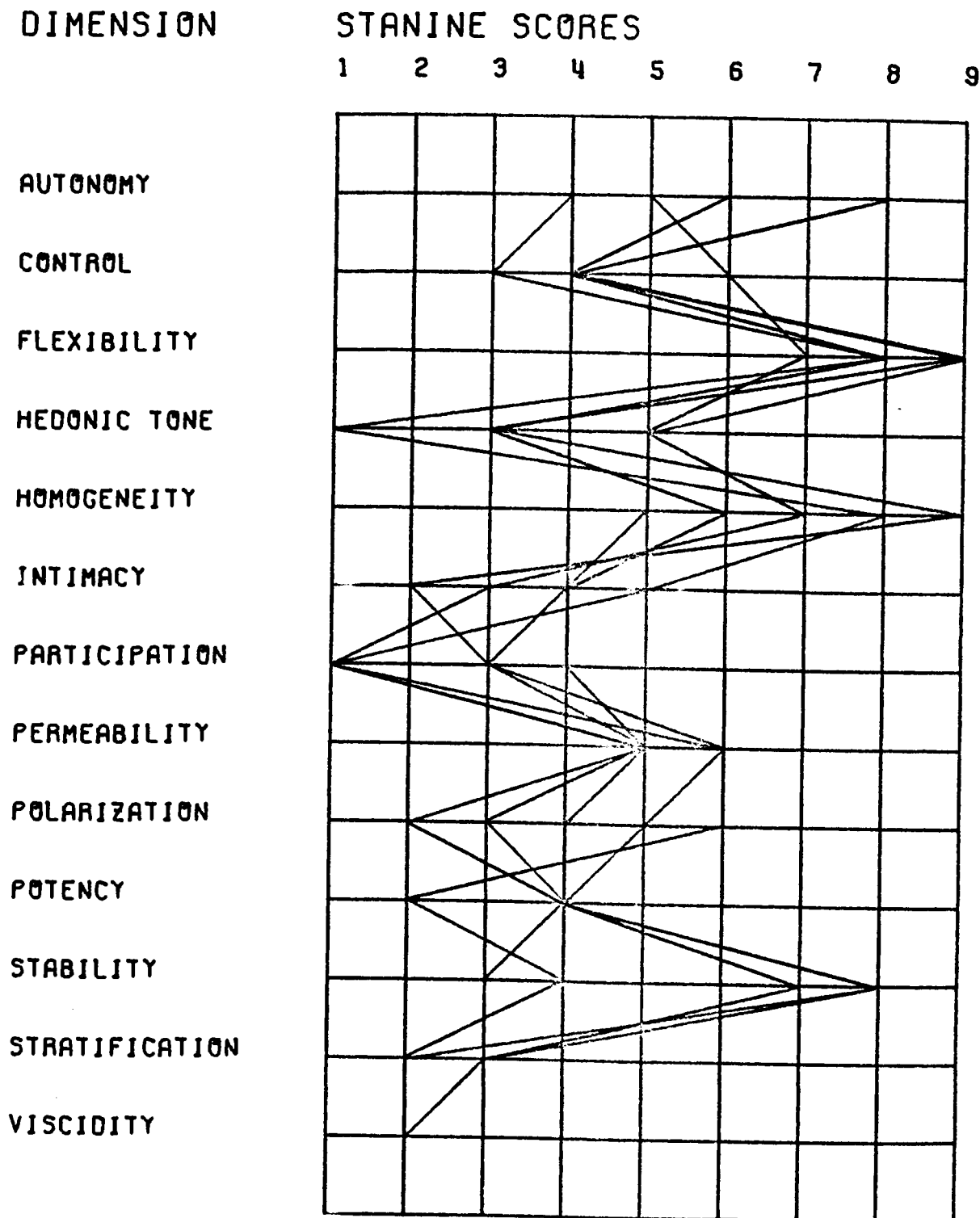


TABLE 7j

OVERLAY OF STANINE SCORES FOR GROUP TEN (CARRY ON THINKING)

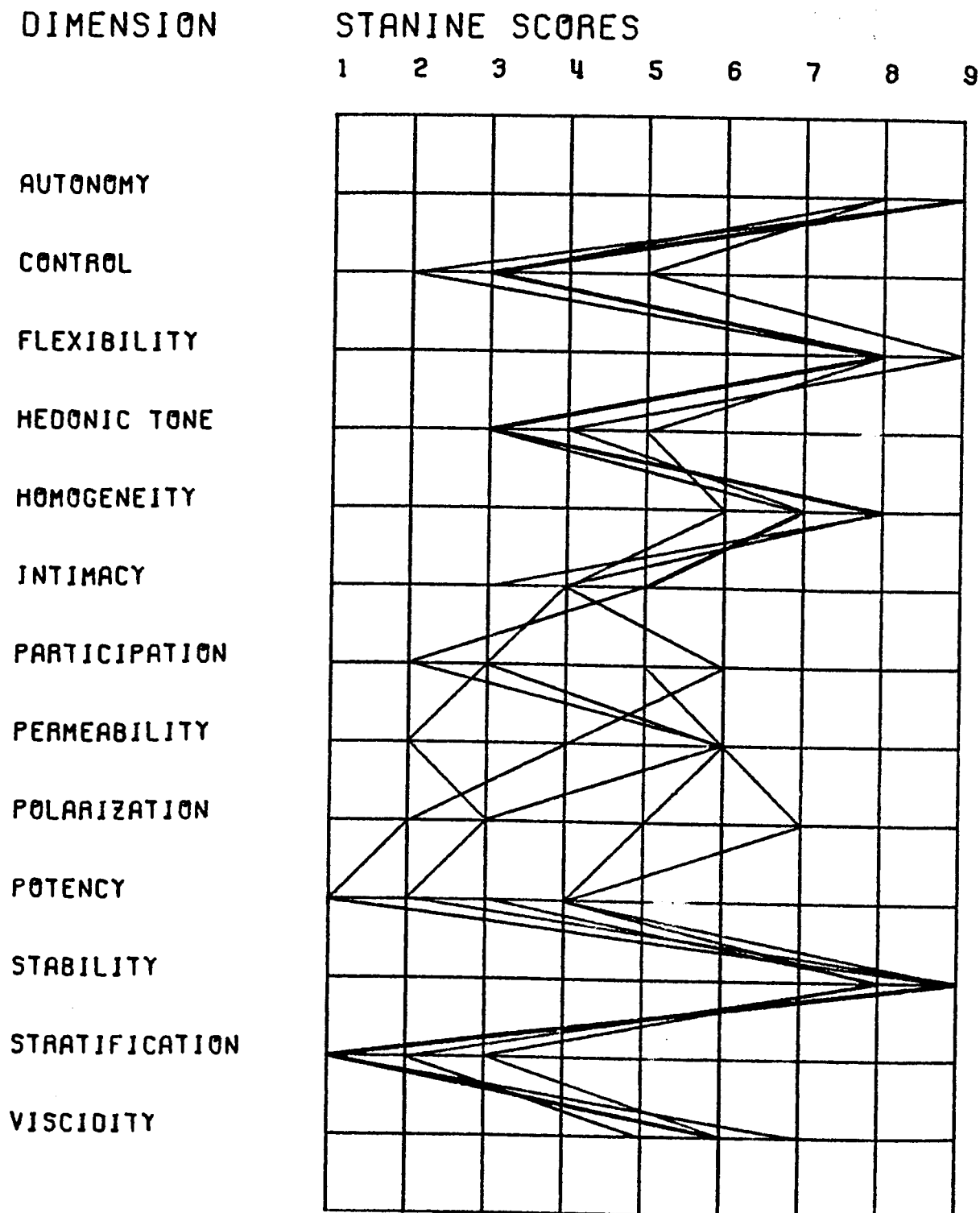


TABLE 7k

OVERLAY OF STANINE SCORES FOR GROUP ELEVEN (ROB-TIM-PAT)

DIMENSION

STANINE SCORES

1 2 3 4 5 6 7 8 9

AUTONOMY

CONTROL

FLEXIBILITY

HEDONIC TONE

HOMOGENEITY

INTIMACY

PARTICIPATION

PERMEABILITY

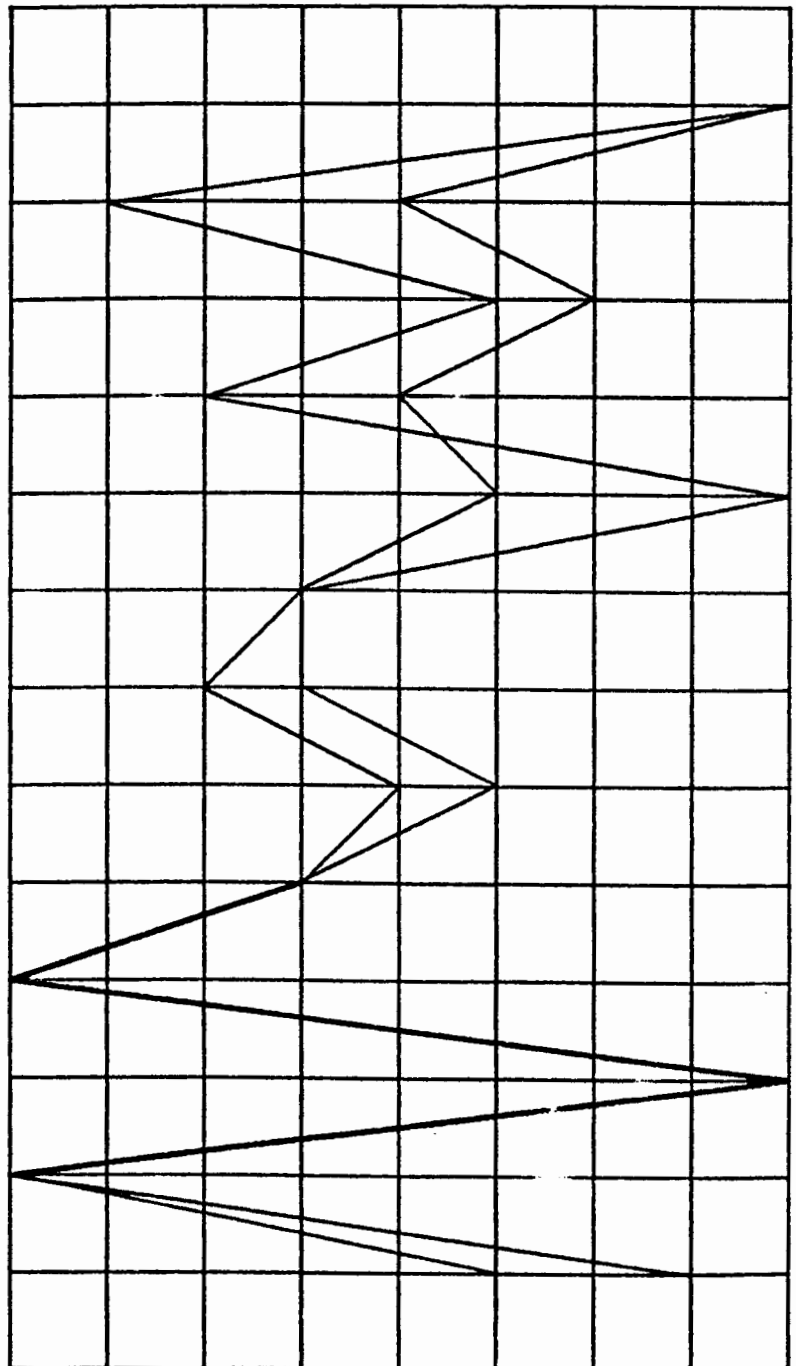
POLARIZATION

POTENCY

STABILITY

STRATIFICATION

VISCOIDITY



## 2. NON-STATISTICAL INFORMATION

Test Thirteen (Unobtrusive Observations of Group Functioning) recorded information about conversation patterns, eye contact and atmosphere during group work. All ten groups were observed at the beginning of the programme; six groups were observed at the end of the programme. The groups which were not observed were not present on the day planned for observation. One group was away editing a tape for presentation; three groups were no longer working together because of intra-group conflicts.

Tables 8a through 8j present the information gathered from Test Thirteen.



TABLE 8a

## UNOBTRUSIVE MEASURES OF GROUP FORMATION FOR GROUP #1 (BONERS ARK)

Group Member	Pre-Test Observation			Post-Test Observation		
	Talking Responses (3 minutes)	Inter-ruptions (3 minutes)	Eye Contact (20 responses)	Talking Responses (3 minutes)	Inter-ruptions (3 minutes)	Eye Contact (20 responses)
1	7	2	4	5	0	4
2	4	1	1	1	0	4
3	10	1	1	7	0	2
4	11	1	3	2	0	3
5	7	1	2	3	0	3
6	8	3	1	9	0	4
Total	47	9	12	27	0	20
Observer's Comments	Everything centers around Group Member #4; alot of laughter; everyone participating.			High energy; alot of laughter and teasing. No one seems to be left out; friendly to each other.		

TABLE 8b

UNOBTRUSIVE MEASURES OF GROUP FORMATION FOR GROUP #2 (THE STREET GREASERS)

Group Member	Pre-test Observation			Post-test Observation		
	Talking Responses (3 minutes)	Inter-ruptions (3 minutes)	Eye Contact (20 responses)	Talking Responses (3 minutes)	Inter-ruptions (3 minutes)	Eye Contact (20 responses)
1	4	0	2	10	0	5
2	3	0	1	-	-	-
3	7	0	2	-	-	-
4	9	0	-	8	0	2
5	5	0	2	6	0	4
6	-	-	-	7	0	2
Total	28	0	7	31	0	13
Observer's Comments	Relaxed but hard-working atmosphere; no interruptions, no arguments.			An outsider is talking alot of the time; everyone is adding to discussion; very easy atmosphere; many smiles.		

TABLE 8c

## UNOBTRUSIVE MEASURES OF GROUP FORMATION FOR GROUP #3 (THE PARTNERS)

Group Members	Pre-Test Observation			Post-Test Observation		
	Talking Responses (3 minutes)	Inter-ruptions (3 minutes)	Eye Contact (20 responses)	Talking Responses (3 minutes)	Inter-ruptions (3 minutes)	Eye Contact (20 responses)
1	2	0	5	11	0	5
2	2	0	0	0	0	0
3	4	0	3	2	0	0
4	4	0	4	-	0	-
5	5	0	3	3	0	3
6	7	0	5	9	0	4
Total	24	0	20	25	0	12
Observer's Comments	Two girls are doing all of the work; one boy is talking to another group.			One boy is entertaining the three girls; one boy is asleep.		

TABLE 8d  
UNOBTRUSIVE MEASURE OF GROUP FORMATION FOR GROUP #4 (THE TURTLES)

Group Members	Pre-Test Observation			Post-Test Observation		
	Talking Responses (3 minutes)	Inter-ruptions (3 minutes)	Eye Contact (20 responses)	Talking Responses (3 minutes)	Inter-ruptions (3 minutes)	Eye Contact (20 responses)
1	12	1	4	6	0	5
2	6	0	1	3	0	5
3	9	8	5	8	0	5
4	4	1	5	8	0	5
Total	31	10	20	25	0	20
Observer's Comments	Group Member #1 makes all of the decisions.			Everyone is participating; chatting not much is being done.		

TABLE 8e

## UNOBTRUSIVE MEASURE OF GROUP FORMATION, GROUP #5 (THE TUMBLEWEEDS)

Group Members	Pre-Test Observation			Post-Test Observation		
	Talking Responses (3 minutes)	Inter-ruptions (3 minutes)	Eye Contact (20 responses)	Talking Responses (3 minutes)	Inter-ruptions (3 minutes)	Eye Contact (20 responses)
1	7	2	2	6	0	3
2	6	0	0	-	-	-
3	4	0	4	8	0	5
4	5	0	3	7	0	5
Total	22	2	9	21	0	13
Observer's Comments	<p>All eyes are on Group Member #1; Group Member #3 trying to do group report but no one will help him. Group Member #2 left the group 3 times.</p> <p>Relatively quiet; easy atmosphere. Cooperation; enjoy being together.</p>					

TABLE 8f

UNOBTRUSIVE MEASURES OF GROUP FORMATION FOR GROUP #6 (CHIMO)

Group Member	Pre-Test Observation			Eye Contact (20 responses)	Post-Test Observation
	Talking Responses (3 minutes)	Interruptions (3 minutes)			
1	19	8		3	No Observations
2	0	0		0	
3	12	0		6	
4	1	0		0	
5	7	2		1	
6	4	0		0	
Total	43	10		10	
Observer's Comments	Group Member #4 is sleeping; Group Member #2 speaks only when spoken to. Group Member #1 talks to anyone as long as he has his way.				

TABLE 89

UNOBTUSIVE MEASURES OF GROUP FORMATION FOR GROUP #7 (THE OUT TO LUNCH BUNCH)

Group Members	Pre-Test Observation			Eye Contact (20 responses)	Post-Test Observation
	Talking Responses (3 minutes)	Interruptions (3 minutes)			
1	12	1		1	Group members are working on project.
2	7	1		0	
3	6	2		0	
Total	25	4		1	
Observer's Comments	A lot of awkward silence; Group is almost non-functional.				

TABLE 8h

UNOBTRUSIVE MEASURES OF GROUP FORMATION FOR GROUP #8 (URIAH)

Group Members	Pre-Test Observation			Post-Test Observation		
	Talking Responses (3 minutes)	Inter-ruptions (3 minutes)	Eye Contact (20 responses)	Talking Responses (3 minutes)	Inter-ruptions (3 minutes)	Eye Contact (20 responses)
1	1	1	0	3	0	1
2	-	-	-	5	4	1
3	4	0	3	9	1	5
4	6	0	4	4	0	2
5	6	0	3	8	0	4
6	11	2	3	5	0	3
Total	28	3	13	34	5	16
Observer's Comments	<p>Group Member #2 is taking notes. Group Member #1 is leaning away from the group; he doesn't seem to care. Girls are very serious about their work.</p>			<p>Two conversations are going on at once; Group Member #2 is the centre of one conversation. It is 1st period in the morning, and all members are present. Comfortable and chatty atmosphere.</p>		



TABLE 81  
UNOBTRUSIVE MEASURE OF GROUP FORMATION FOR GROUP #9 (BUNCH OF MUNCHERS)

Group Members	Pre-Test Observation			Eye Contact (20 responses)	Post-Test Observation
	Talking Responses (3 minutes)	Interruptions (3 minutes)			
1	12	3		1	No Observations.
2	1	1		0	
3	3	3		0	
4	13	1		3	
5	7	0		2	
Total	36	8		6	
Observer's Comments	Good communication between Group Members #3 and #4. Group is not paying attention to Group Member #2. Group Members #1 and #3 are fooling around.				

TABLE 8j  
UNOBTRUSIVE MEASURES OF GROUP FORMATION FOR GROUP #10 (CARRY ON THINKING)

Group Members	Pre-Test Observation			Eye Contact (20 responses)	Post-Test Observation
	Talking Responses (3 minutes)	Interruptions (3 minutes)			
1	0	0		0	No Observations.
2	12	1		1	
3	5	1		1	
4	-	-		-	
5	12	1		3	
6	-	-		-	
Total	29	3		5	
Observer's Comments	Everyone is leaning to look at what Group Member #5 is drawing; alot of work being done. Alot of open disagreement, comfortable silence. Group Member #5 is leaning away.				

### 3. INSTRUMENTS WHICH SHOWED SHIFTS IN FACTOR STRUCTURE

Factor analysis of Tests Three and Seven showed that the factor structures on pre-test and post-test conditions were different. The data is reported here in order to show the shifts in factor structure.

Tests Three and Seven were factor analyzed according to the procedures described for Tests Four, et al.

The naming of the factors was done according to the following procedure. Variables which had high loadings (.50 to .70) on one factor and low loadings (below .30) on the other factors were considered (Fruchter, 1954, p. 110). Multiple factor loadings were considered only where they had high loadings on one factor and had other loadings close to zero. Variable. which had a very high loading (above .70) on one factor and loadings no higher than .35 on other loadings were also named as significant.

Tables 9 and 10 show the results of this analysis of factor structures.

TABLE 9

FACTOR LOADINGS: VARIMAX ROTATION OF TEST THREE (GROUP CLIMATE)  
ON PRE-TEST AND POST-TEST CONDITIONS FOR EXPERIMENTAL GROUP

Variables	Pre-test					Post-Test					
	Factor Loadings for each Name					Factor Loadings for each Name					
	Attrac- tion to the Group	Control	Group Con- scious- ness	Group Goals	Trust in Group	Commu- nalities	Personal Attrac- tion to Group	Control	Personal Respon- sibility Group	Group Goals	Commu- nalities
1. I feel close to the members of this group.	-0.30	-0.07	-0.11	-0.40	0.66*	0.70	0.77*	-0.14	-0.07	0.33	0.76
2. I have trust and confidence in the other members of this group.	-0.09	-0.13	0.17	-0.06	0.81*	0.71	0.60	-0.21	0.23	0.31	0.68
3. I support and encourage other members of this group.	0.02	0.05	0.70	0.37	0.16	0.65	0.57	0.40	0.34	0.20	0.66
4. I get a sense of accomplishment when I work in this group.	-0.79*	0.00	0.20	-0.14	0.04	0.69	0.78*	0.08	0.30	0.05	0.75
5. I am willing to share information with other members of this group.	-0.67*	-0.07	-0.02	-0.01	0.29	0.53	0.21	-0.08	0.84*	0.05	0.77
6. I feel free to discuss important personal matters with other members of this group.	-0.46	0.11	0.07	0.06	0.60	0.58	0.81*	-0.07	0.17	-0.01	0.71
7. I am interested in helping this group achieve its goals.	-0.56*	0.10	0.64*	-0.13	0.01	0.75	0.14	-0.05	0.74*	-0.13	0.78
8. I am able to deal promptly and well with the important group problems.	-0.24	-0.09	0.83*	0.16	0.11	0.79	0.59	0.32	0.18	-0.07	0.79
9. I am treated as an individual.	0.00	0.11	0.50	-0.37	0.43	0.59	0.17	-0.01	-0.01	0.11	0.77
10. My needs and desires are reflected in the activities of this group.	-0.16	0.19	-0.04	-0.68*	0.34	0.65	0.13	0.02	0.11	0.89*	0.82
11. I feel responsible to the group for getting the job done.	-0.14	-0.16	0.19	-0.80*	-0.06	0.72	0.11	0.18	0.71	0.39	0.69
12. I feel manipulated by other members of the group.	0.02	-0.85*	0.12	0.08	0.15	0.76	-0.26	0.79*	0.05	0.23	0.76
13. I feel that I manipulate members of the group.	-0.01	-0.85*	-0.16	-0.08	-0.07	0.76	0.08	0.85*	-0.06	-0.13	0.76
14. I feel good about participating in this group.	-0.68	0.05	0.18	-0.43	0.24	0.74	0.71*	-0.10	0.03	0.04	0.71
Eigenvalues	4.45	1.60	1.31	1.22	1.04	--	4.92	1.82	1.53	1.15	--
% - Age of Single Variance	31.80%	11.37%	9.36%	8.74%	7.45%	--	35.15%	12.96%	10.96%	8.22%	--
% - Age of Total Variance	68.74%					67.29%					--

\* Significant Factor Loading

TABLE 10

FACTOR LOADINGS: VARIMAX ROTATION OF TEST SEVEN (TRUST AMONG GROUP MEMBERS)  
ON PRE-TEST AND POST-TEST CONDITIONS FOR EXPERIMENTAL GROUP

Variables	Pre-Test				Post-Test			
	Factor Loading for Each Name		Communalities		Factor Loading for Each Name		Communalities	
To whom in this group would you	Psnl Info & Money	Money	Feelings About Trust	Security	Money and Material Possessions	Confide & Money	Psnl Info & Money	Communalities
1. Lend a dollar for a few days?	0.74*	-0.85*	-0.12	0.03	-0.82*	-0.05	0.30	0.75
2. Tell about a personal problem?	-0.68	-0.08	0.04	-0.50	-0.01	0.78*	0.26	0.73
3. Lend valuable possession?	-0.24	-0.63	0.33	-0.28	-0.70*	0.17	0.14	0.64
4. Tell your fears?	-0.78*	0.14	0.10	-0.18	-0.16	0.47	0.63	0.66
5. Tell your wishes and fantasies?	-0.78*	0.08	-0.00	0.14	-0.25	-0.08	0.71*	0.63
6. Lend five dollars for a few days?	0.01	-0.80*	-0.03	-0.28	-0.86*	-0.02	0.10	0.74
7. Tell about the things you like to do?	-0.58	-0.22	-0.29	0.03	-0.54	0.15	0.50	0.47
8. Tell a secret?	-0.08	-0.26	-0.01	-0.84*	-0.20	0.83*	0.01	0.77
9. Reveal your beliefs and convictions?	-0.71*	-0.12	-0.17	-0.14	-0.05	0.26	0.82*	0.57
10. Tell your answers on this questionnaire?	-0.03	0.09	-0.92*	-0.09	-0.63	0.45	-0.04	0.87
11. Show parts of your Journal or diary?	-0.38	-0.22	-0.43	0.26	-0.61	0.22	0.17	0.45
12. Trust on a blind walk?	-0.53	-0.47	0.09	0.32	-0.55	0.01	0.50	0.61
Eigenvalues	2.39	2.05	1.32	1.10	4.74	1.60	1.22	--
% - Acc of Single Variance	28.25%	17.66%	10.99%	9.15%	39.52%	13.33%	10.19%	--
% - Acc of Total Variance			65.44%			63.04%		--

\* Significant Factor Loading

#### 4. TESTS WHICH WERE AMBIGUOUS

Factor analysis was performed on Tests One, Two and Six according to the procedure described for Tests Four, et al. The factor analysis of these tests showed that there were no stable factors in both pre-tests and post-test situations. Tables 11a through 11d, 12a and 12b, and 13a and 13b report the results of this factor analysis.

TABLE 11a  
 FACTOR LOADINGS: VARIMAX ROTATION OF TEST ONE (SELF-DESCRIPTION QUESTIONNAIRE)  
 ON PRE-TEST CONDITIONS FOR EXPERIMENTAL GROUP

Variables	Factor Loadings								Communi- nalities
	I	II	III	IV	V	VI	VII	VIII	
1	0.23	-0.12	-0.42	0.13	0.60	0.03	0.12	-0.21	0.68
2	-0.03	-0.22	-0.12	-0.05	-0.17	0.08	0.02	0.74	0.54
3	0.10	-0.14	0.08	0.08	0.82	-0.13	0.20	0.10	0.79
4	0.12	-0.10	-0.03	0.14	0.22	0.07	0.06	0.78	0.71
5	0.46	-0.49	0.00	-0.16	0.19	-0.18	0.42	0.20	0.73
6	0.01	-0.06	-0.86	-0.01	0.05	-0.13	0.12	-0.03	0.78
7	-0.16	-0.34	-0.55	-0.13	0.09	0.09	0.47	0.10	0.72
8	-0.15	-0.36	-0.41	0.27	-0.24	-0.15	0.54	0.09	0.77
9	-0.02	-0.10	-0.19	0.17	0.27	0.09	0.71	-0.06	0.66
10	0.34	-0.01	-0.12	-0.05	0.01	-0.03	0.82	0.08	0.81
11	0.31	0.01	-0.71	-0.09	0.06	0.08	0.34	0.23	0.78
12	0.78	-0.06	-0.40	-0.05	0.10	-0.11	-0.04	-0.18	0.83
13	0.22	-0.40	-0.41	0.10	0.53	-0.10	-0.17	0.19	0.74
14	0.80	-0.14	-0.26	-0.06	0.04	0.03	0.11	0.26	0.81
15	0.81	-0.07	0.08	0.31	0.08	0.01	0.14	0.08	0.80
16	0.51	-0.11	0.21	0.14	0.16	0.06	0.15	0.01	0.78
17	-0.13	-0.51	0.05	0.26	0.13	0.17	-0.15	0.44	0.60
18	0.05	-0.49	0.15	-0.23	0.15	0.56	-0.32	0.20	0.79
19	0.27	-0.19	0.03	0.34	0.10	0.20	0.38	0.49	0.66
20	-0.04	0.03	0.07	0.17	-0.20	0.86	0.10	0.14	0.85
21	0.17	-0.73	-0.00	-0.08	0.22	0.10	0.20	0.09	0.68
22	0.50	-0.32	-0.24	0.02	0.05	0.40	0.29	-0.30	0.74
23	0.23	-0.72	-0.31	0.33	0.08	-0.02	0.01	0.02	0.78
24	0.01	-0.72	-0.12	0.17	0.04	0.04	0.17	0.26	0.67
25	0.30	-0.05	-0.20	0.50	0.12	0.17	0.44	0.16	0.65
26	0.06	-0.24	-0.19	0.81	0.15	0.11	0.04	0.09	0.80
27	0.53	0.02	-0.14	0.52	-0.02	-0.12	0.04	0.34	0.70
28	0.20	-0.50	0.03	0.35	-0.13	-0.17	0.05	0.50	0.71
Eigen- values	7.18	3.19	2.45	1.94	1.54	1.48	1.13	1.11	--
% - Age of Single Variance	27.92%	11.38%	8.73%	6.91%	5.50%	5.29%	4.05%	3.96%	--
% - Age of Total Variance	73.72%								--

TABLE 11b

FACTOR LOADINGS: VARIMAX ROTATION OF TEST ONE (SELF-DESCRIPTION QUESTIONNAIRE)  
ON PRE-TEST CONDITIONS FOR COMPARISON GROUP

Variables	Factor loadings								VIII	IX	Commu- nalities
	I	II	III	IV	V	VI	VII	VIII			
1	0.36	-0.23	-0.02	0.63	0.08	-0.29	-0.20	0.19	0.31	0.83	
2	0.30	-0.42	-0.33	0.02	-0.29	-0.05	-0.10	-0.31	-0.45	0.76	
3	0.04	-0.19	0.07	0.60	0.05	-0.01	0.10	-0.31	-0.18	0.72	
4	0.06	-0.07	-0.38	-0.01	-0.75	-0.37	-0.08	0.12	-0.20	0.78	
5	0.16	-0.04	-0.73	0.70	-0.11	0.20	-0.38	0.10	-0.01	0.67	
6	0.02	-0.04	-0.53	-0.03	-0.24	-0.06	-0.11	0.13	-0.36	0.76	
7	0.03	-0.27	-0.08	0.59	-0.11	0.09	-0.15	-0.06	-0.15	0.77	
8	0.12	-0.02	-0.08	0.10	-0.05	-0.87	0.05	-0.05	-0.15	0.82	
9	0.12	-0.07	-0.04	0.68	-0.32	-0.23	-0.20	-0.04	-0.04	0.70	
10	-0.13	-0.07	0.02	0.89	0.06	-0.00	0.04	-0.04	0.02	0.70	
11	0.17	-0.33	-0.37	0.34	0.36	-0.05	-0.13	-0.31	-0.15	0.82	
12	0.72	-0.24	-0.23	0.10	-0.12	-0.15	0.01	0.19	0.02	0.66	
13	0.57	-0.17	-0.15	0.45	-0.11	-0.01	0.07	0.40	0.02	0.71	
14	0.15	-0.76	-0.07	0.25	-0.06	-0.01	-0.14	0.27	-0.01	0.76	
15	-0.03	-0.80	-0.09	0.10	-0.22	-0.09	-0.13	0.40	-0.13	0.87	
16	0.11	-0.86	-0.16	0.27	-0.04	0.04	0.01	0.08	0.00	0.82	
17	0.22	-0.23	-0.16	0.21	-0.67	0.40	-0.22	0.04	-0.14	0.85	
18	0.05	-0.11	-0.07	0.05	0.03	-0.15	0.04	0.15	-0.85	0.79	
19	-0.23	-0.27	0.10	0.37	-0.23	-0.06	-0.60	0.09	-0.13	0.71	
20	0.13	-0.05	-0.08	0.12	-0.03	0.09	-0.90	0.16	0.10	0.88	
21	-0.61	-0.15	-0.16	-0.16	-0.13	-0.00	0.10	0.36	0.30	0.69	
22	0.00	-0.26	0.16	0.09	-0.57	0.14	-0.06	0.40	0.18	0.64	
23	0.20	-0.19	-0.27	0.40	-0.24	-0.06	0.28	0.44	0.28	0.72	
24	0.19	-0.15	-0.74	0.14	0.06	-0.11	0.11	0.32	0.16	0.79	
25	0.09	-0.15	-0.41	0.10	-0.12	-0.07	-0.29	0.71	0.02	0.82	
26	0.03	-0.07	-0.17	0.07	-0.21	0.12	-0.23	0.81	-0.17	0.83	
27	0.01	-0.44	-0.04	-0.15	0.04	-0.03	0.04	0.74	-0.01	0.77	
28	-0.10	-0.14	-0.42	0.06	-0.56	0.00	0.09	0.02	0.25	0.60	
Eigen- values	7.98	2.59	2.29	1.91	1.76	1.45	1.30	1.28	1.03	--	
% - Age of Single Variance	28.48%	9.27%	8.17%	6.83%	6.28%	5.18%	4.66%	4.56%	3.68%	--	
% - Age of Total Variance	77.10%										



TABLE 11c  
 FACTOR LOADINGS: VARIMAX ROTATION OF TEST ONE (SELF-DESCRIPTION QUESTIONNAIRE)  
 ON POST-TEST CONDITIONS FOR EXPERIMENTAL GROUP

Variables	Factor Loadings										Communalities
	I	II	III	IV	V	VI	VII	VIII	IX	X	
1	-0.25	0.15	0.09	0.46	-0.06	0.02	-0.51	0.16	0.08	-0.23	0.65
2	-0.12	0.19	-0.02	0.02	0.81	-0.13	0.13	0.17	0.14	-0.06	0.76
3	-0.17	0.04	-0.48	0.39	0.04	-0.15	0.07	0.42	0.05	-0.13	0.68
4	-0.09	-0.07	-0.05	-0.03	0.01	0.03	0.11	-0.00	0.92	0.21	0.84
5	-0.56	-0.13	-0.13	0.05	-0.29	-0.17	-0.17	0.19	0.22	0.35	0.61
6	0.01	0.23	-0.26	0.03	0.04	-0.39	-0.45	0.16	0.11	-0.40	0.69
7	-0.35	-0.12	-0.50	0.18	0.04	-0.16	-0.35	0.02	0.23	-0.15	0.68
8	-0.61	0.12	0.00	0.29	0.02	-0.44	0.08	-0.06	0.09	0.39	0.68
9	-0.45	0.08	0.07	0.23	0.19	0.07	0.26	-0.67	0.03	-0.35	0.83
10	-0.87	0.04	-0.09	-0.02	0.04	0.13	0.07	-0.10	0.09	-0.34	0.80
11	-0.86	0.07	-0.08	0.17	-0.04	0.03	0.04	0.09	-0.08	-0.38	0.68
12	-0.12	0.23	-0.60	0.28	-0.37	0.02	-0.10	-0.09	-0.07	-0.15	0.80
13	-0.26	0.06	-0.78	-0.14	-0.13	0.02	-0.06	-0.04	0.19	-0.16	0.80
14	-0.07	0.79	0.02	-0.06	-0.10	0.10	0.01	-0.01	-0.02	-0.37	0.79
15	-0.01	0.83	-0.10	0.01	0.00	0.06	-0.23	0.24	0.04	-0.03	0.82
16	-0.08	0.76	-0.02	0.27	0.17	-0.16	0.17	0.05	-0.07	-0.05	0.77
17	0.08	0.11	-0.78	0.00	0.09	0.24	0.21	0.12	-0.07	-0.37	0.77
18	-0.18	0.01	-0.03	0.04	0.03	0.03	0.78	0.01	0.19	-0.18	0.71
19	-0.20	0.02	-0.21	0.03	-0.09	0.05	-0.01	0.04	-0.04	-0.96	0.84
20	0.20	0.20	-0.01	0.04	0.10	-0.07	0.18	-0.27	-0.06	-0.72	0.73
21	-0.39	0.13	-0.40	-0.31	-0.20	0.08	-0.03	-0.06	-0.31	-0.39	0.72
22	-0.02	0.26	-0.08	0.23	-0.23	-0.15	-0.05	-0.69	0.00	-0.36	0.81
23	-0.41	0.07	-0.10	-0.06	-0.24	0.70	0.20	0.11	0.05	-0.12	0.80
24	-0.30	0.06	-0.13	0.20	-0.75	-0.02	0.20	0.27	0.21	-0.38	0.87
25	-0.09	0.01	-0.08	0.88	-0.13	-0.15	-0.04	-0.08	0.09	-0.31	0.84
26	-0.18	0.12	-0.09	0.77	0.00	0.26	0.02	-0.21	-0.20	-0.11	0.81
27	-0.19	0.28	-0.55	0.33	0.01	0.41	-0.16	-0.22	0.03	0.09	0.77
28	-0.04	0.06	0.05	0.34	0.08	0.46	-0.10	-0.09	0.23	-0.61	0.77
Eigen-values	5.46	2.83	2.37	2.09	1.86	1.61	1.52	1.26	1.77	1.14	--
% - Age of Variance	19.51%	10.11%	8.48%	7.47%	6.63%	5.75%	5.41%	4.49%	4.20%	4.07%	--
% - Age of Total Variance											--

76.12%

TABLE 11d  
 FACTOR LOADINGS: VARIMAX ROTATION FOR TEST ONE (SELF-DESCRIPTION QUESTIONNAIRE)  
 ON POST-TEST CONDITIONS FOR COMPARISON GROUP

Variables	Factor Loadings							Communalities	
	I	II	III	IV	V	VI	VII		
1	-0.32	-0.16	0.77	-0.05	-0.17	-0.16	0.02	0.78	
2	-0.31	-0.27	0.29	0.36	-0.48	-0.16	-0.22	0.69	
3	-0.32	0.07	0.62	0.34	-0.17	-0.16	-0.08	0.67	
4	0.20	0.05	0.29	0.22	-0.49	0.08	-0.56	0.73	
5	-0.82	0.06	0.32	-0.01	0.18	-0.11	0.01	0.82	
6	-0.22	-0.45	0.09	-0.05	0.69	-0.18	-0.25	0.83	
7	-0.34	0.05	0.81	0.01	0.08	-0.22	-0.10	0.85	
8	-0.04	0.06	0.81	0.17	-0.13	0.20	-0.08	0.75	
9	-0.03	-0.16	0.58	0.25	-0.09	0.62	0.10	0.82	
10	-0.17	0.00	0.77	0.20	-0.08	-0.02	-0.03	0.68	
11	-0.48	0.03	0.43	0.36	0.12	0.25	-0.44	0.82	
12	-0.03	-0.24	0.23	0.27	0.05	-0.34	0.08	0.80	
13	-0.68	-0.14	0.42	-0.07	0.25	-0.34	-0.01	0.84	
14	-0.13	-0.41	0.09	0.65	0.18	-0.39	-0.14	0.82	
15	-0.05	-0.19	0.14	0.86	-0.12	0.13	-0.15	0.85	
16	-0.15	-0.23	0.28	0.72	-0.06	-0.14	0.05	0.70	
17	-0.64	-0.17	0.24	0.02	-0.18	0.07	-0.13	0.54	
18	-0.06	-0.04	0.19	-0.03	-0.80	-0.02	-0.12	0.70	
19	0.02	-0.64	0.19	0.06	-0.24	-0.52	0.11	0.78	
20	0.17	-0.75	-0.08	0.10	-0.14	0.08	0.26	0.70	
21	-0.47	-0.02	0.23	0.51	0.07	-0.08	0.48	0.78	
22	-0.55	-0.18	0.08	0.43	-0.31	-0.08	0.08	0.64	
23	-0.56	-0.00	0.64	0.21	-0.04	-0.19	0.06	0.80	
24	-0.82	-0.08	0.13	0.28	0.01	0.17	0.15	0.83	
25	-0.06	-0.62	0.38	0.28	-0.11	-0.30	-0.23	0.77	
26	-0.15	-0.79	-0.12	0.23	0.19	-0.08	-0.15	0.78	
27	-0.05	-0.62	-0.03	0.35	-0.04	-0.20	-0.39	0.72	
28	-0.36	-0.74	-0.02	0.06	0.21	0.07	0.12	0.75	
Eigenvalues	8.92	3.89	2.81	1.83	1.41	1.29	1.07	--	
% - Acc of Variance	31.84%	13.90%	10.04%	6.55%	5.05%	4.60%	3.81%	--	
% - Acc of Total Variance	75.79%							--	--

TABLE 12a  
 FACTOR LOADINGS: VARIMAX ROTATION OF TEST TWO (ATTITUDE TOWARD ENGLISH CLASS)  
 ON PRE-TEST CONDITIONS FOR EXPERIMENTAL AND COMPARISON GROUPS

Variables	Experimental Group					Comparison Group					Communalities
	Factor Loadings					Factor Loadings					
	I	II	III	IV	V	I	II	III	IV	V	
1	-0.01	-0.09	0.33	-0.74	-0.26	0.15	-0.23	0.73	0.25	-0.02	0.75
2	-0.44	-0.03	0.22	-0.21	-0.54	0.77	0.09	0.58	-0.01	0.20	0.65
3	0.19	0.64	-0.17	-0.44	0.01	0.15	-0.30	0.67	-0.02	0.06	0.80
4	-0.67	-0.21	-0.31	-0.26	-0.29	0.29	0.19	0.74	0.77	0.02	0.75
5	-0.37	0.10	-0.10	-0.39	-0.40	-0.07	-0.06	0.47	0.69	-0.10	0.52
6	-0.26	-0.07	-0.05	-0.70	0.11	0.01	-0.09	0.58	0.16	-0.91	0.87
7	-0.10	0.11	0.83	-0.12	-0.09	-0.02	-0.83	0.83	0.04	-0.09	0.71
8	-0.85	-0.08	0.03	-0.04	-0.17	-0.01	0.00	0.77	0.62	-0.30	0.61
9	-0.58	0.27	-0.06	0.09	-0.54	-0.14	-0.66	0.36	0.44	0.27	0.79
10	0.07	-0.16	0.07	0.02	-0.94	0.30	-0.43	0.27	0.59	0.17	0.66
11	-0.01	0.88	0.02	0.04	0.04	0.12	-0.61	0.74	0.44	-0.12	0.55
12	0.05	0.73	0.26	0.35	0.04	0.12	-0.51	0.73	-0.22	-0.05	0.70
13	-0.45	0.36	-0.41	-0.32	0.11	0.72	-0.05	0.62	0.05	-0.11	0.55
14	-0.80	-0.07	0.26	-0.15	0.20	0.64	-0.19	0.77	0.35	-0.37	0.72
Eigen-values	3.60	2.04	1.55	1.34	1.16	3.40	1.85	1.72	1.38	1.25	--
% - Age of Single Variance	25.73%	14.59%	11.09%	9.59%	8.28%	24.30%	13.24%	12.30%	9.94%	8.95%	--
% - Age of Total Variance	69.28%					68.63%					--

TABLE 12b  
 FACTOR LOADINGS: VARIMAX ROTATION ON TEST TWO (ATTITUDE TOWARD ENGLISH CLASS)  
 ON POST-TEST CONDITIONS FOR EXPERIMENTAL AND COMPARISON GROUPS

Variables	Experimental Group										Comparison Group				Commu- nalities
	Factor Loadings										Factor Loadings				
	I	II	III	IV	V	VI	III	II	III	IV	I	II	III	IV	
1	0.35	0.26	-0.04	-0.42	-0.65						0.62	0.09	-0.13	0.31	0.50
2	-0.14	0.05	-0.02	0.10	-0.78						0.03	-0.83	-0.06	-0.02	0.69
3	-0.20	-0.02	0.12	-0.79	0.07						0.72	0.04	0.18	-0.25	0.62
4	-0.69	0.05	-0.26	-0.21	-0.32						0.13	0.00	-0.80	0.10	0.67
5	-0.28	0.02	-0.23	-0.54	-0.11						0.57	-0.23	-0.21	-0.08	0.43
6	-0.57	-0.16	-0.66	-0.02	-0.08						0.28	-0.02	-0.76	-0.22	0.71
7	-0.04	0.14	-0.76	-0.04	0.15						0.28	-0.08	-0.03	-0.78	0.69
8	-0.24	-0.01	-0.60	-0.21	-0.48						-0.04	-0.01	-0.66	0.24	0.50
9	0.07	0.10	-0.63	-0.50	-0.24						0.45	0.05	-0.10	0.72	0.70
10	-0.13	0.85	-0.08	-0.12	-0.06						0.61	-0.39	-0.00	-0.06	0.52
11	0.10	0.47	-0.33	-0.46	0.09						0.42	0.13	0.41	0.08	0.36
12	-0.21	0.60	0.02	0.11	-0.48						0.16	-0.63	0.19	-0.61	0.82
13	-0.82	0.26	0.09	-0.20	0.08						0.63	0.13	-0.29	-0.01	0.49
14	0.03	0.50	-0.59	0.22	-0.13						-0.06	-0.88	-0.05	-0.09	0.78
Eigen- values	3.83	1.67	1.43	1.34	1.17						2.89	2.56	1.82	1.21	--
% - Age of Single Variance	27.38%	11.94%	10.20%	9.57%	8.37%						20.60%	18.28%	13.03%	8.62%	--
% - Age of Total Variance				67.47%									60.53%		--



TABLE 13b

FACTOR LOADINGS: VARIMAX ROTATION OF TEST SIX (GROUP EXPECTATION SURVEY)  
ON POST-TEST CONDITIONS FOR EXPERIMENTAL GROUP

Variables	Factor Loadings						Communalities
	I	II	III	IV	V	VI	
1	-0.24	0.02	-0.14	0.79	0.20	0.01	0.75
2	0.23	0.50	-0.04	0.07	0.65	0.07	0.73
3	-0.41	0.22	0.18	0.63	0.17	0.30	0.76
4	-0.37	0.30	-0.32	0.29	0.45	0.13	0.64
5	-0.23	0.04	-0.24	0.17	0.58	0.44	0.67
6	-0.01	0.00	0.13	0.16	0.80	0.09	0.69
7	-0.23	0.06	0.01	0.64	0.04	0.04	0.77
8	0.04	0.36	-0.69	0.14	-0.08	0.27	0.70
9	-0.51	0.02	-0.10	0.38	0.08	0.38	0.57
10	-0.30	0.24	-0.06	0.31	0.38	0.54	0.69
11	-0.10	0.23	-0.14	0.03	0.24	0.83	0.84
12	-0.02	0.04	-0.16	0.03	0.62	0.46	0.62
13	-0.01	0.60	-0.14	0.06	-0.03	0.28	0.75
14	-0.15	0.79	-0.03	0.02	0.01	0.15	0.67
15	-0.15	0.74	-0.03	0.34	0.11	0.05	0.71
16	-0.19	0.51	-0.58	-0.06	0.27	0.14	0.72
17	-0.35	0.61	-0.30	-0.15	0.28	-0.02	0.69
18	-0.28	0.59	-0.04	0.01	0.45	-0.13	0.64
19	-0.64	0.37	0.42	0.24	-0.23	0.12	0.84
20	-0.66	0.25	0.34	-0.07	-0.10	0.33	0.74
21	-0.76	0.08	0.16	0.24	0.08	0.04	0.68
22	-0.74	0.26	-0.27	0.09	-0.10	0.15	0.73
23	-0.90	0.03	-0.15	0.24	0.16	-0.01	0.75
24	-0.78	0.06	-0.13	0.24	0.12	0.01	0.71
Eigen-values	8.10	3.18	2.19	1.29	1.18	1.11	--
% - Age of Single Variance	3.73%	13.26%	9.13%	5.36%	4.93%	4.62%	--
% - Age of Total Variance							--

## APPENDIX E

## SAMPLES OF INFORMAL DATA

1. Confidential Self-Evaluation: Responses to the Question, "What Improvements have you observed in yourself?"
2. Excerpts from Student Journals.
3. Post-Test Essays Assessing Personal Development.
4. Anecdotal Comments Attached to Mid-Term Report Card.

CONFIDENTIAL SELF-EVALUATION: RESPONSES TO THE  
QUESTION, "WHAT IMPROVEMENTS HAVE YOU OBSERVED  
IN YOURSELF?"

I can talk to people better now especially the kids  
in our group.

--Louise

Some understanding of people and I'm happier.

--Chris

I try to understand people more, but in some cases,  
you just can't no matter how hard you try.

--Gwen

Some

--Nancy

More confident, happier, friendlier.

--Cheryl

I have found I stick to my way and don't let the girls  
decide everything.

--Ron

None

--Charlotte

I have learned to control some of my anger toward the  
----- girls.

--Dave

More patience -- with people like Joe. I think I know  
myself a little better.

--Lanny

I am now more open to discuss things. I have found  
that this has helped me alot.

--Annette

I have not and do not look at myself differently.

--Tyrone

I have become more of a listener and less of a talker.

--Karen

I haven't really noticed any real improvements in myself.  
Just that I know I can pretty well get along with anyone I  
have to. And that I can do any work someone gives to me.

--Pat



...I learnt my mouth is too big, I'm always talking, and I learnt to control it, which also helped in my everyday life.

--Ellen

I can do other things better now because this class has taught me to do it this way.

--Tim

A bit more honest. Looking outward instead of inward.

--Greg

I don't think there have been any improvements.

--Rob

I have tried to accomplish new things without trouble.

--Will

I feel more able to work in a group (believe it or not!!)

--Doug

I feel much more sure of myself. I feel I could fit in better with others when I try.

--Denise

None because I do almost the same type of work in another class and it would be difficult to compare.

--Sally

I think I can get along with other people better.

--Corry

I think I have gotten over most of my shyness towards others.

--Laurel

Making friends is easier.

--Brian

I think I have learned more about participating in a group.

--Isabel

I have changed alot, I look at things in a better outlook, work better with a group of people than I use to, participate more in class activities and I speak up a little more often than I use to.

--Joan

Attitude, Remember a little communication

--Geoff

I can communicate ideas better, talk easier, understand better and try new things without worrying about what I'll get out of it.

--Martha

I feel I can talk to people better now, and I can tell my group my problems whereas other people, I can't. And I can listen to the other members problems.

--Marshall

I have seen some great improvements. I can talk more freely and express my ideas in comfort.

--Cindy

There are little improvements like talking freely in our groups, being a little more responsible.

--Martin

No Answer

--Dennis

I have seen many improvements. Somehow I've opened up more. Usually I become discouraged very easily if I don't get my own way but this time I stuck it out and put an interest in my group work. More patience.

--Betty

Remember better.

--Jane

I've felt that I can express myself better but other than that there's nothing.

--Vincent

No improvements, I think I've stayed the same.

--Jennifer

No improvements.

--Jill

I am more self-confident and sincere. I am learning to compromise and to get along with other people. I don't jump to snap judgments about people like I used to.

--Loretta

## EXCERPTS FROM STUDENT JOURNALS

As the days wore on, I saw myself getting more involved in my group and liking English more as a whole. I started to like being with my group than the group I wanted to in with, my Friends. I started to open up more with my feelings, opinions and ideas to my group. I wanted to get to know the kids better. Before, I had no desire even to be in the group.

All, I learned that I wanted to learn more about the kids and I did. I learned that you can't tell what a person's like by their looks and rumors. You have to find out for yourself....

--Betty, Journal Summary

...The changes I see in myself are, It is easier to write my journal out or to explain in a little more detail.

--Martin, March 14

...We are now at the point where we are just about finished editing the tape and will be ready to present it on Tuesday March 12. The group is working fantastic. This system has opened up for me and also at work. Things couldn't be better.

--Annette, March 20

I enjoyed this project in English but I don't think I would like it as a whole year course. It really made you think about things.

I feel I have gotten to know myself better.

In the beginning of my journal I just wrote down what we did and not how I felt about it. But at the time, I never knew how I felt about it till now when we have finished the course. When we finished I then stopped and thought about what we had done and then I realized that there was a change in myself and my work. Also I can not express my feelings in writing....

This was a very interesting experiment I have done for the English department or who arranged it. But I feel I have done it for the good of myself.

--Dana

POST-TEST ESSAYS ASSESSING  
PERSONAL DEVELOPMENT

...It was a first for me and I think it is a good way of doing it. It helped me quite a bit and I can feel the change within myself. I am glad that what I expected in the first copy didn't go through Because I can dig it!

--Brian

...In this English class I just didn't do as well as I thought. I guess it was just such a change I don't really know. It wasn't that I didn't enjoy the class I just didn't put as much effort into it as I thought I would.

--Pat

I do not think I have improved my writing ability because I have not had much chance to do so other than my journal. I have tried to put my ideas down in picture form though, and by looking back at them they seem to be nothing more than a confused mess. I do think I have learned little things but I don't think they've been taught to me.

--Greg

...But there was alot more in this English class than what I had first hoped for. For myself I got more confidence in alot of things, like talking to people in my group I would have liked to get to know the rest of the class better but I suppose its better to know a few people good and be able to understand and talk than know alot and not really get to know each other.... I found myself learning things that I don't have to use just in school like spelling but instead of stuff like that will help me get along easier out of school and with people which to me is far more useful than being able to spell. The course wasn't what I expected but what I'd hope for. I like a class where I learn something that I know I'll use, otherwise I let it go in one ear and out the other and I think this has happened here.

--Martha

Speaking out in this class has been fairly free and easy. Most of the activities we have done have been in our groups....We are able to speak out from our seats and many of the things we have done in English have been interesting. Some of it has been of use.

I have definitely learned to get along better with people as a group and have learned some more about organization, contribution, participation....

--Isabell

I got to know so many people that I had gone to school with all my life but really never bothered to get to know them.

--Laurel

I feel that I have not understood half the stuff that we have already done. It's sorta like we are doing elementary work in English. Also, I feel that my expectations have not been met. I don't think that course in English is very interesting at the moment....

--Charlotte

...I wanted to learn to speak out better and to express myself in writing. I have learned to speak out better because of our group work, I have also learned to express myself better in writing because of the daily entrys in our journal.

--Cheryl

I don't think that this English course did fulfill my expectations....But I don't think I put much into this course because sometimes I thought it was boring so it didn't keep my interest all the time....

--Jean

...I have found that I have participated in the projects and oral work, and the questionnaires that had been handed out to us. I feel that if the teachers had taken part in all the experènces and projects that we did I have really noticed a change in the members in our group. When we first began in our group, nobody would hardly even talk especially Joe, but all of a sudden everyone became alive and took more interest in what we have been doing.

--Annette

In English not all of my expectations have been met, but I must say that I am able to talk to people better than before. I feel I can express my feelings better now. I am not scared to disagree with what someone else has said.

--Sheila

...I was made more aware of most of the people in my class. I got to know and understand myself and the people in my group better. Working on a group project really helped everyone get to know each other better....

--Lanny

I have found out that everything I have expected is not so. What we did is an entirely different line of work than what had been experienced before. Communication was the name of the for these two months. Although it was repulsive at first I gradually got myself to like it. People play a major role in this communication thesis and it was fun encountering different personalities as people are. It proves that you must learn to respect other peoples opinions to get along with them. We got away from the usual English class and it was a nice change. You began to discover what makes people tick i.e. their problems ideas etc. Thank you for a wonderful two months.

--Joe

ANECDOTAL COMMENTS ATTACHED TO  
MID-TERM REPORT CARD.

This course has changed me as a person.  
I am more expressive.  
I have a better personality.  
I am more carefree but still responsible.  
I am alot happier with myself as a person.  
I can enjoy myself with friends better.  
This course has changed me to be a better person.  
I can get along with people better.

--Graham

## APPENDIX F

1. Interviewers
2. Outside Observers
3. Independent Judges of Oral and Written  
Communication Samples

## INTERVIEWERS

Glen Beard  
Joy Budnik  
Sue Dux  
Maurice Gibbons  
Daphne Miles-Pickup  
Maureen O'Sullivan  
Sander Postol  
Gloria Snivley  
Harry Stephens



## OUTSIDE OBSERVERS

Jean Cunningham  
Wally Eggert  
Anita J. LoSasso  
Maureen O'Sullivan  
Faith Trent

INDEPENDENT JUDGES OF ORAL AND WRITTEN  
COMMUNICATION SAMPLES

Nancy Bawden  
Ronald Burl  
Robert Christolphi  
Claire Demas  
Lee Emery  
Donald Erickson  
Robert Johnston  
Dennis Lavalé  
Peter Norman  
Terry Shaw  
Sally Smith  
Helen Tuma