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## Self-descriptions and peer acceptance of creative students in high and low structured schools.

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Self-descriptions and Peer Acceptance  
of Creative Students in High and  
Low Structured Schools

A Thesis Presented

By

Judith Shortsleeves

Submitted to the Graduate School of the  
University of Massachusetts in  
partial fulfillment of the requirements for the degree of  
Master of Science

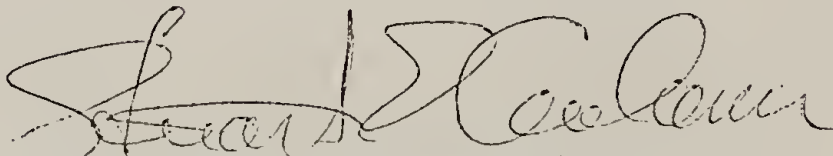
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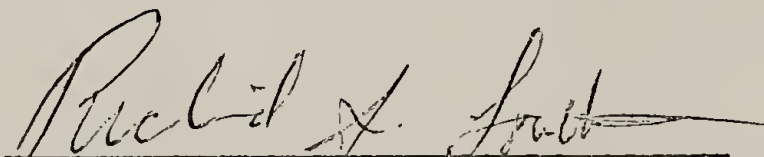
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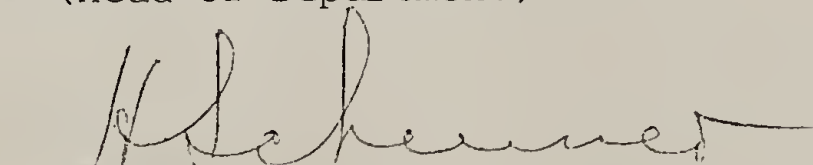
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## INTRODUCTION

The importance of personality characteristics in the study of creativity has been emphasized by many investigators (Golann, 1963; Dellas and Gaier, 1970). In this line of investigation there has been some inconsistency in the findings both in regard to the way in which creative persons describe themselves and the way in which they are judged by others. To account for the variance in results, a number of factors such as intelligence (Wallach and Kogan, 1965), sex (Kurtzman, 1967), and age (Parloff et. al., 1968) have been suggested as influencing the personality correlates of creativity. The purpose of this study is to investigate an additional factor, organizational structuredness. This study will be concerned with contrasting the self-perception and peer acceptance of high and low creative students in a high structure and low structure Junior High School.

A number of studies have shown that the self-descriptions of creative persons are more negative and less socially desirable than those of less creative persons. Barron (1963) found that creative students as determined by high scores on the Barron-Welsh Art Scale more often chose as self-descriptive adjectives such as 'gloomy,' 'unstable,' 'bitter,' 'pessimistic,' and 'irritable' than did the less creative students. In support of Barron's

results is an experiment with undergraduates by Lindgren and Lindgren (1965), which showed that creativity as indicated by productivity in brainstorming was positively correlated with tendencies to view oneself as 'asocial' and 'ornery.'

Some studies have also found that the evaluation and acceptance by others of creative persons are lower than they are for less creative persons. In a study by Barron (1963) with male graduate students, the possession of certain personality traits as rated by judges was correlated with creativity as measured by the Revised Art Scale. Creativity correlated negatively with naturalness, likeability, good judgement, and adjustment, and positively with deceitfulness. Getzels and Jackson (1962) found that teachers preferred high achievers who were high in IQ, but that they did not prefer high achievers who were high in creativity to average students. Torrence (1964) found that children with high IQ were rated by teachers as more desirable, better known or understood, more ambitious, and more hardworking or studious than high creative children. Also Torrence (1961) in describing characteristics which differentiate highly creative children from less creative ones, mentions the frequent evaluation by teachers and peers of creative children's ideas as wild or silly and of both their work and ideas as being 'off the beaten track.' Torrance contends that this kind of evaluation of creative



children's work and ideas leads to the experience of psychological estrangement by creative children.

These studies suggest that the creative person is sometimes seen as possessing socially undesirable qualities and that both creative children and their work are sometimes seen as less acceptable than less creative children and their ideas. It is possible that these more negative evaluations of creative persons in comparison to less creative persons, may lead to the type of socially negative self-descriptions by creative persons found by Barron (1963) and by Lindgren and Lindgren (1965).

In contrast to the foregoing studies are others which give a very different picture of the self-perception and the social attractiveness of the creative person. Using six divergent tests to measure creativity, Windholz (1968) found that with college students the high creative subjects were more socially active, preferred work that would help other people, and had greater social participation and a higher valuing of people than less creative peers. The findings of this study sharply contrast the studies which yield 'asocial' self-descriptions by creative persons.

Consistent with Windholz's results is a study by Cashdan and Welsh (1968) which showed that creative adolescents, as defined by high scorings on the Revised Art Scale (RA) were higher on lability, change, autonomy, and heterosexuality as measured by the Adjective Check List.

Cashdan and Welsh concluded from their study that the creative adolescent was more socially adequate than his less creative peers.

Another investigation confirming the socialibility of the creative person is one by Garwood (1964), which showed that creative male science majors were higher on social presence, socialibility, self-acceptance as measured by the CPI than were their less creative counterparts. Also Rivlin (1959) found that creative students as selected by teachers according to fourteen criteria for creativity, scored higher in social confidence than the less creative subjects. It was also found in this study that the creative students were more popular and seen as more creative.

Consistent with this positive picture of the creative person is Maslow's view of creativity and the creative personality. According to Maslow (1959), 'self-actualizing creativeness' comes from the personality and is seen as a tendency to do anything creatively, housekeeping, teaching. This type of creativeness is not one of special talent but one that covaries with psychological health. Characteristics of the self-actualizing creative person are openness to experience, expressiveness and spontaneity, and a lack of fear of the unknown. Maslow also uses Roger's phrase 'fully functioning person' to describe the self-actualizing creative person.

These studies show that there is considerable dis-

crepancy in the results of studies investigating personality correlates of creativity; especially discrepant are some of the findings regarding personality characteristics related to socialibility and social attractiveness.

Some of the discrepancy in findings may be related to the source of the data. From the studies mentioned, it can be seen that the sources of data for the description of creative vs. less creative persons are of three types: self-ratings, others-ratings, and personality tests. The more negative descriptions of creative persons tend to come from studies using either self-ratings (Barron, 1963; Lindgren and Lindgren, 1965) or others' ratings of performance evaluations (Barron, 1963; Getzels and Jackson, 1962; Torrance, 1964; Torrance, 1961), while the positive descriptions tend to come from studies (Windholz, 1968; Cashdan and Welsh, 1966; Garwood, 1964; Rivlin, 1959) which used personality tests to find the personality characteristics of creative persons. Since there is this correspondence between positive and negative descriptions of creative persons and the sources of these descriptions, some of this correspondence may result from the difference in the types of data sources used, however, other factors responsible for the discrepancies in the results of these studies must also be considered.

A number of factors have been shown to affect the personality characteristics associated with creativity.



Thus some of the variance in findings of the above-mentioned studies can be attributed to these factors. Wallach and Kogan (1965) showed that one of these factors is intelligence. They showed that the socialability of a child was not predictable from either his level of intelligence or of creativity alone, but that it depended upon the interaction of creativity and intelligence. Whether a high creative child was confident and sought out by peers depended upon the child's level of intelligence. In support of this is Barron's study (1963) with Air Force captains which showed that the personality characteristics descriptive of the creative men changed contingent upon intelligence level. Barron found that the creative low intelligent subjects using the ACL described themselves as affected, aggressive, demanding, impatient, and suggestible, while the subjects who were both creative and intelligent described themselves as clever, intelligent, independent, imaginative, and socially effective.

Another variable which has been shown to affect the personality correlates of creativity is age. Parloff et. al. (1968) showed that there was a constellation of characteristics on which creative male adolescents scored high and creative adults scored low. In this study the creative adolescents were selected from entrants to a national science project competition. On the basis of the creativeness of the independent project submitted, the students

were assigned to 'more creative' or 'less creative' groups. The adult sample consisted of mathematicians, research scientists, writers, and architects, judged for their creativity by co-workers and supervisors. Both groups were given the California Psychological Inventory (CPI) as the personality measure. The results showed much similarity in the structure of the CPI for both the creative adolescents and adults. However, on one factor (which accounted for 28 per cent of the variance with the adolescents and 23 per cent of the variance with the adults) which was called 'disciplined effectiveness' and that consisted of such characteristics as 'painstaking,' 'reliable,' 'attentive to impact on others,' 'persistent,' and 'industrious,' the creative adolescents scored high, while the creative adults scored low.

Another variable which has been shown to affect both personality factors and peer acceptance of creative persons is sex. In a study by Kurtzman (1967) ninth graders were divided into high, middle, and low creative groups by the use of the Kit of Reference Tests for Cognitive Factors (1963). Peer acceptance was measured by the Classroom Social Distance Scale by Cunningham (1951), and the personality measure used was the Junior-Senior High School Questionnaire (HSPQ). The results showed that the high creative boys were more sociable, more self-confident and had greater peer acceptance than the low creative boys.

With the girls, there was no difference in confidence among the three groups, and the high creative girls had less peer acceptance than either the middle or low creative girls.

The purpose of this study is to investigate another variable that may influence the personality characteristics associated with creativity and the peer acceptance of creative persons. This study is designed to test the effect of the degree of structuredness of an important part of the creative adolescent's environment - the school - on his self-description and his acceptance by peers.

That the school is one of the most important environmental influences for the child is a notion which is supported by investigators long in the field of education (Lippitt and Gold, 1959).

There is abundant data showing that creative persons prefer the experimental to the traditional (Barron, 1963), the complex to the simple (Barron, 1953; Barron and Welsh, 1952; Eisenman and Robinson, 1967), the unstructured to the structured (Rogers, 1954; Maslow, 1954; Maslow 1959), and activities which afford greater opportunity for self-expression to less self-involving structured activities (Golann, 1962). On the basis of these studies, it is expected that the creative student will prefer the less structured school setting, that this will be a more conducive setting for the expression of creative motivation, and

that therefore this would be a potentially more facilitating and enhancing environment for the creative student. Given a more facilitative setting, it is more likely that the creative student would have experiences that would give him a sense of success and effectiveness. On this basis it is hypothesized that the creative students in the less structured environment will have more favorable self-descriptions than the creative students in the more structured school.

With the low creative group, it is expected that there might be some tendency for more favorable self-descriptions in the high structure environment. One reason for this is that teachers in regular school settings (which with the dichotomy in this study would be seen as more toward the high structured type of setting) prefer intelligent students who are high achievers to average students but there is no preference by teachers for creative students who are high achievers to average students (Getzels and Jackson, 1962). Another reason is that the less creative group would be more equipped to deal with the high structured environment than they would the less structured environment. Getzels and Jackson (1962) found that the values between teachers and intelligent students corresponded to a high degree (.67), while there was a negative correlation (-.25) between 'personal traits preferred' and 'personal traits favored by the teacher' with the creative students. Be-



sides a more favorable reaction from teachers in the high structure environment, it might be expected that the low creative group would be better able to deal with an environment in which convergent thinking was valued above divergent and where there were not the anxieties and ambiguities of little structure.

This expectation is seen more as a tendency than a strong prediction because in this study the low structure setting simply offers more options, with structure available. The prediction in the other direction, that there will be more favorable self-descriptions by creative students in the low structure environment, can be made because of the low acceptance and poor fit of creative behavior in a high structure environment. However, for the low creative students in the low structured school, following the structure available would be an acceptable mode of behavior. It is assumed though that there would be some preference or higher evaluation of creative styles and behavior in the low structure environment, so the prediction is a tendency for there to be less favorable self-descriptions by the low creative students in the low structure school.

In regard to peer acceptance of creative students, it is expected that there will be greater peer acceptance of creative students in the less structured school than in the more traditional school. The less structured school at least theoretically offers more opportunity for the expression of creative motivation. The creative student is

therefore more likely to be successful in this type of environment than in the more structured school. There is more likelihood of the creative student's being seen by his peers as successful and of his work and ideas being seen as acceptable and creative, rather than 'wild' and 'silly,' which is sometimes the case according to Torrance (1961).

From interviews with children ages five through twelve, Gold (1958) found seventeen characteristics that appeared to be matters of concern to them. One of the four groupings of these characteristics is what Gold called 'expertness resources,' which included such things as 'smart at school,' 'has good ideas about how to have fun,' and 'good at making things.' It might be assumed that the perception of the creative child in terms of expertness resources would be higher in the less structured school. Possession of expertness resources has been shown to contribute to the child's status in the social structure of the classroom (Lippitt and Gold, 1959). The child with expertness resources is given higher status and is more highly valued. Also it has been shown that there is a positive relationship between having higher status and the attribution of valued social-emotional characteristics by peers (Gold, 1958). Thus the creative child in an environment where more independent and original ideas and work are both accepted and encouraged would probably be seen as having greater expertness resources, which would give him higher

status in the social structure of the classroom; and with higher status it is more likely that he would be attributed with highly valued social-emotional characteristics. Therefore it is expected that the creative child will have more peer acceptance in the less structured school than he will in the more structured school.

In the Kurtzman study (1967) it was found that high creative boys had greater peer acceptance than low creative boys, but that high creative girls had less peer acceptance than either middle or low creative girls. Kurtzman suggests that the reasons for this difference may be due to the greater stability and security of the creative boys which allows them to relate better to their peers. The high creative boys had more self-confidence and stability than the less creative boys, but there was no difference in either security or confidence among the high, middle, and low creative groups of girls. The low creative group of boys demonstrated greater stability and confidence than any of the girls. Kurtzman also suggests that the creative behaviors of the boys may be perceived more favorably than those of creative girls because of sex role expectations. On the basis of Kurtzman's findings and for the main reason of differential sex role expectations, it is expected that there will be sex differences in peer acceptance, with greater acceptance of creative boys in comparison with creative girls. It is also expected that there will be

less difference between the acceptance of creative boys and girls in the low structured school than in the high structure school, because of the greater general acceptance of creative expression in the low structure school. Intelligence will be controlled in this study because of variability in personality factors associated with creativity at different intellectual levels. According to Torrance (1964), at the ninth grade level there is little or no relationship between scores on tests of intelligence and group measures of creativity with the upper twenty-five per cent in intelligence. Therefore only students in the upper twenty-five per cent of intelligence, according to national norms for IQ scores, will be used.

The variable of structuredness was operationalized by using two Junior High Schools differing in structuredness. This study was done using subjects from two Junior High Schools in Western Massachusetts.

The basic experimental paradigm for this experiment consisted of a completely randomized three factor design involving sex, creativity (high and low), and structuredness (high structure and low structure schools.) The variable of creativity was determined by scores on the Revised Art Scale (RA), and structuredness was determined both by an assessment of information about the organization of the schools and by an assessment of the perceptions of the students of the school organization. The dependent vari-



ables were peer acceptance as measured by the Classroom Social Distance Scale (Cunningham, 1951), and self-descriptions as measured by the Adjective Check List (ACL) (Gough, 1960).

### Method

#### High structure vs. low structure school settings

As a basis for criteria to determine characteristics differentiating more structured from less structured schools, some of Goffman's characteristics of total institutions were used (Goffman, 1961). Several of the characteristics of total institutions are: 1. activities are carried on in a large group of others all of whom are treated alike. 2. activities are tightly scheduled. 3. activities are brought together under a plan designed to fulfill the official aims of the institution. 4. the supervision is by persons whose chief activity is surveillance. 5. the social distance between the two groups, the 'supervisors' and the 'inmates' is great, and the talk across the boundary is restricted (Goffman, pp. 1-12).

Changing the characteristics slightly to make them more applicable to a school setting, it can be seen that the first characteristic mentioned above, worded positively in terms of less structure, could be the opportunity for individual projects and individualized supervision. The second characteristic appears to be directly applicable to

school; put in terms of less structure this criteria becomes flexible scheduling.

The third characteristic is what Goffman calls an 'over-all rational plan' (p. 6). In a total institution, the activities for inmates are brought together by an over-all rational plan, which dictates the whole sequence of activities for inmates. Both where the plan comes from and the purpose of the plan indicate the hierarchical structure of the total institution. The plan is "imposed from above by a system of explicit formal rulings and a body of officials" (Goffman, p. 6). Also the plan, under which the various activities are brought together, is 'designed to fulfill the official aims of the institution' (Goffman, p. 6).

Analogous to this type of plan in a total institution are the general curriculum plans in a school system. This meets the definition of an 'over-all plan' because it is the general curriculum plans which dictate the sequence of courses which a student takes during his school career. Also it is the general curriculum plans which are designed to meet the aims of the school institution. The very broad aims or educational goals for a school might be to promote good citizenship, to foster ethical values, mental health, etc.; however, the means for reaching these goals are nothing more than the planned curriculum in the school. The planned curriculum as analogous to the type of over-all

plan that Goffman is talking about would involve such things as sequential ordering of courses, programs, and distribution requirements; in short, the programs and plans of study in the school.

To the extent that there are choices and alternatives in the various levels of plans phasing down from the over-all plan (the general goals) there would be less of a rigid structure emanating from the over-all plan. Thus the criterion for structuredness from this characteristic from Goffman would be many vs. few options within the programs and plans of study.

The various levels of plans from the over-all plan might be thought of in the following way: the general aims, the various programs of study, the groupings or phasings, the general curriculum plans, the course curriculum plans, and lesson plans.

The different levels of plans will be briefly described. The aims are the broad educational aims or goals of the school. The programs are the different programs of study designed to achieve the various aims. Examples of programs in a school might be such things as college-bound, work-study, or vocationally-oriented programs. The groupings are the various levels or phases into which students in the same grade are separated usually on the basis of grades and achievement test scores for the purpose of putting together in classes students who learn at similar rates.

The general curriculum plans are the sequentially-ordered courses designed to implement the various programs. For example, in a college-bound program there might be a general curriculum plan that involved three years of science (biology, chemistry, and physics) and three years of math (algebra, plane geometry, trigonometry, and solid geometry) and so on. The course curriculum plans are the plans of study for individual courses. And finally, the lesson plans are the plans of study usually for a single class.

The assessment of this criterion would be in terms of the alternatives and choices at each of the five levels of the plans.

The fourth criteria would run along the dimension of teacher-centered vs. student-centered environments or what has been called the custodial vs. the humanistic ideologies of teaching; with the former there is emphasis on discipline, control, orderliness and maintaining the routine; with the latter there is greater emphasis on acceptance and elaboration of students' ideas. The fourth criterion for less structure would be the student-centered orientation.

The fifth characteristic given by Goffman can be changed to be more applicable to the educational environment by making the criterion communication linkages between students and faculty and/or administrators. In terms of this criteria, a high structure would be one which had few and ineffective communication channels; a low structure



would be one which had many and effective communication channels between students and faculty and/or administrators. Table 1 shows in summary form these five characteristics used to define high and low structure.

TABLE 1

The Five Criteria That Define Low Structure  
and High Structure

Low Structure	High Structure
1. Individual projects; individual supervision.	1. Work done in large groups, everyone treated alike.
2. Flexible scheduling.	2. Inflexible scheduling.
3. Many options in the plans and programs of study.	3. Few options in the plans and programs of study.
4. Student-centered orientation (emphasis on elaboration and acceptance of students' ideas, student initiation and student choice).	4. Teacher-centered orientation (emphasis on discipline, control, order, maintaining the routine).
5. High communication linkages (many and effective communication channels between students and teachers and/or administrators).	5. Low communication linkages (few and ineffective communication channels between students and teachers and/or administrators).

In order to assess the degree of structuredness in the two schools information was collected about each of these criteria. (See Appendix A.) The means of collecting this information and the method for assessing it are described in the procedure section.

Besides information about the structure of the setting, information about the students' perceptions of the structure of the environment would also be useful. This would be an intermediate level of data suggesting the mediational process through which the structure of the environment works to affect personality-associated dimensions such as peer-acceptance and self-description. One of the major assumptions in this study is that the environment affects personality dimensions of persons within the environment. If it can be shown that the relationships between the perceptions of the environment and the personality dimensions of the perceivers are congruent with the relationships between the type of environment (high and low structured) and certain of the personality dimensions of persons within that environment, then the latter relationships are further supported because of a recognizable mediational process between the environment and the personality through the perceptions of the individual. Therefore, besides information about the structure of the environment in terms of the five criteria mentioned earlier, there was an attempt to get information about the students' perception of this structure with the focus upon the same five criteria that will be used to assess the relative degree of structuredness of the two schools. This information is seen as back-up information to the assessment of the structure of the environment. The questionnaire designed to get this information is in

Appendix B. A description of the administration of this questionnaire and the scoring method for it are given in the procedure section.

Below is a brief description of the two schools that were used in this study.

School A is a Regional Junior High School, which has a total enrollment of 860 (as of 1/71). This school made up of grades 7, 8, and 9, was chosen and assumed to be a less structured school because of its having a number of innovative and experimental characteristics related to the five criteria. Some of these characteristics are as follows:

OLP-Optimal Learning Period: This is a period during which the student has the opportunity to chose the activity he wants to do. This can range from games, free period, to regular classroom instruction.

Independent Study Opportunity: The student has the opportunity to become involved in independent study projects. This is both offered and encouraged. The student negotiates the arrangements with the teacher.

Modular Scheduling: This is a flexible scheduling system by which varying amounts of time are allowed for the different periods.

IPC-Individualized Program Center: This center operates instead of more traditional special ed. facilities; one of the main differences between IPC and more standard-special ed. programs is that with IPC any student can chose to go to the center, rather than the center's being just for children assigned to go there because of special learning problems. Also at the IPC there are aids and paraprofessionals who can act in a tutorial capacity for those who need special help.

Phasing: With phasing, students are separated into five groupings according to learning ability. A student has classes with other students of the same phase level. With the phasing system the student can choose which phase he wishes to be in.

School B is also a Junior High School in Western Massachusetts. This school was selected because of the closeness in enrollment number (880) to School A's enrollment and also because it appeared to be a more traditional school, in the sense of its having a more standardized curriculum and fewer experimental innovations.

### Subjects

There were 120 Ss used for this study. The Ss were taken from two populations; one-half of the Ss were from School A and they were paired with students from School B. Each of the 120 Ss were in the upper 25 per cent in intelligence.

The 60 Ss from School B were those students who were the 30 highest and the 30 lowest scorers on the RA. These Ss formed the High Creative (HC) and Low Creative (LC) groups for School B.

The 60 Ss from School A were those students who most closely matched the 60 Ss from School B in grade, sex, intelligence, and RA score. These Ss formed the High Creative (HC) and Low Creative (LC) groups for School A.

### Instruments

1. Measure of Creativity. The Revised Art Scale (RA) of the Welsh Figure Preference Test (1959) was used.



This test consists of 60 design items to which a S responds 'Like' or 'Don't Like.' On the basis of the preferences of a sample of artists, 30 of the items are scored in the 'Like' direction and 30 in the 'Don't Like' direction. The more closely a subject's preferences match those of the original sample's preferences, the higher his creativity score. This test has been claimed to be a measure of the preference for complexity (Barron and Welsh, 1952), and the preference for complexity with other perceptual measures has been shown to be positively related to creativity (Eisenman and Robinson, 1967). Also there has been success in correlating the RA with independent criteria for creativity. It has been shown to successfully discriminate between creative and noncreative persons (as judged independently) in architecture (McKinnon, 1961), and art (Rosen, 1955; Barron and Welsh, 1952), and to be related to creative motivation in elementary school children (Golann, 1962).

2. Measure of Personality Characteristics. The Adjective Check List (ACL) (Gough, 1960) consists of a list of 300 adjectives commonly used to describe attributes of a person. The directions given to the subject are simply for him to check each adjective he considers to be self-descriptive. The ACL has 24 different scales

and indices which are described in the ACL Manual (Gough and Heilbrun, 1965).

• Measure of Peer Acceptance. The Classroom Social Distance Scale (CSDS) (Cunningham, 1951) provides a group social distance score which indicates the degree of acceptance or rejection of an individual by the group. With this measure each child in a classroom rates every other child in the classroom from 1 to 5 which represent 'would like to have him as one of my best friends,' 'would like to have him in my group but not as a close friend,' 'would like to be with him once in awhile, but not often or for long at a time,' 'don't mind his being in our room but I don't want to have anything to do with him,' and 'wish he weren't in our room,' respectively. This has the advantage over some sociometric ratings that each child rates all of the other students in the class, rather than just the ones he most or least likes.

• Structured Interview. This was one of the main ways of getting information about the structure of each of the schools in order to assess their relative structuredness according to each of the 5 criteria for structuredness. The outline of the information that was asked in this interview is given in Appendix A. This was an interview of approximately an hour in length held with either the principal or the assistant principal.

5. Questionnaire on the students' perception of structuredness. This questionnaire was designed for this study as an instrument to get information about how the structure of the schools is perceived differently by the HC and the LC groups, both within and between schools. This was also used to see if the differential perceptions of the structure of the schools were congruent with the more objective assessment of the differences in structuredness between the two schools. This questionnaire consists of a number of statements on each of the five criteria for structuredness, which were responded to by the Ss' indicating their agreement or disagreement on a scale of 1 to 4. This instrument was given to students in both schools who have an IQ of 115 or higher. This questionnaire with the statements ordered under the relevant criteria is given in Appendix B.

#### Procedure

The first procedural step in both schools was a screening for IQ. The IQ cut-off point selected was an Otis-Lennon score of 115.

In the guidance office in School A there were records for the Otis-Lennon Mental Ability Test for seventh graders from October 1970. For the eighth graders the most recent test date for which there was a record of scores was

September 1969. For the ninth grade the records of scores were from a testing in September 1968. A list was made of each student in each of the three grades who had an IQ of 115 or higher.

In School B the intelligence test scores in the guidance office records were from the Lorge-Thorndike intelligence test. The testing dates for the seventh, eighth, and ninth grades were October 1970, October 1969, and October 1970, respectively. The cut-off point used with these scores was a verbal score of 115. The near equivalence of the Otis scores to the Lorge-Thorndike verbal scores (at level 4 which is for grades 7, 8, and 9) has been reported by other sources (Thorndike and Lorge, 1957). Also the close correspondence between the Otis and the Lorge-Thorndike can be seen by the high correlations between these two intelligence tests. For the seventh, eighth, and ninth grades, the correlations are .85, .86, and .85 respectively (Thorndike and Lorge, 1957).

Because 142 students from School B scored above the IQ cut-off and 367 students from School A scored above the IQ screening point, the high and low creative students (as measured by the RA) in School B were matched with students from School A for grade, sex, IQ, and RA score in order to help lessen the effects of the differences in the populations. Because the School A students were going to be matched to the School B students, the RA was first adminis-

tered in School B.

Revised Art Scale in School B. To administer the RA in School B the schedules of those 142 students qualified by IQ were checked for free periods. These students were then scheduled to come to a testing room during one of their free periods. The RA testing spread over a three and a half week period with the number of Ss taking the RA at the same time varying from 25 to 2 or 3. Of the 142 that were to take the RA, 136 were successfully scheduled.

On the basis of the RA scores, the High Creative (HC) and Low Creative (LC) groups for School B were formed. The students who had the 30 highest scores formed the HC group and the 30 students with the lowest RA scores formed the LC group.

Structuredness Questionnaire in School B. All of the students in School B who had an IQ of 115 or higher were also given a questionnaire for the perception of structuredness. These questionnaires were given to homeroom teachers who distributed them to the students. The students answered the questionnaires and returned them to their homeroom teachers from whom they were collected.

The questionnaire consisted of 66 statements to each of which a S was to respond by choosing 1 of 4 alternatives on a computer answer sheet which represented 'strongly agree,' 'somewhat agree,' 'somewhat disagree,' and 'strongly disagree' respectively. One half of the statements were in



a structured direction and one-half of the statements were in an unstructured direction. Agreement with the former type of statement indicated a perception of structuredness; agreement with statements in the unstructured direction indicated a perception of low structure in the school. The responses to these statements were scored to give a perception of structuredness score. For each statement in the structured direction, the points given for response 1 (strongly agree) was 4; for response 2 (somewhat agree) 3 points; for response 3 (somewhat disagree) 2 points; and for response 4 (strongly disagree) 1 point was scored. With the scoring of statements in the unstructured direction, the point system was reversed, so that response 1 got 1 point, response 2 scored 2 points, etc.

Adjective Check List in School B. After the administration of the RA and the distribution of the questionnaires, the next procedural step was the administration of the ACL. Each of the 60 Ss in School B, (those in the HC or LC groups) was given the ACL in homeroom at the same time as the administration of the CSDS. In a particular homeroom, the Ss in the LC or HC groups were given the ACL and told to work on it while the CSDS was being administered. The directions given for the ACL were to check those adjectives which were self-descriptive. Some of the Ss were unable to finish the ACL in the nine minutes which they had in homeroom. These Ss were told to complete the ACL

during the day and to bring it to the guidance office before they left school. Of the 60 HC or LC Ss in School B, 58 completed and returned the ACL.

Classroom Social Distance Scale in School B. Information about the peer acceptance of each of the 60 HC or LC Ss was gotten by giving the CSDS in any homeroom in which there was one or more of these Ss. In each homeroom in which there was at least one S from the HC or LC groups, the check sheet for the CSDS was passed out to each student in the homeroom. On the check sheet there were the target names (the HC or LC Ss in that homeroom) and when there were less than 5 target names, several filler names were added; in order not to have any students singled out, there were always at least 5 names on the check sheet. The directions given for the CSDS were that it was a measure of social distance and that each of the 5 alternatives were to be read and then one checked for each name, with the check indicating the desired social distance from that person. Because of the nature of this measure, assurances were given that the information was confidential.

For the CSDS a student's score was derived by giving an arbitrary weight to each possible choice, multiplying total weight by the number of times the student received this rating from his classmates, summing these scores, and then dividing the total score by the number of children who did the rating. For example, if 5 students rated the subject 1, seven students 2, four students 3, and two

students 4 and one student 5, his total score would be 44 divided by 19 (the number of raters) or 2.31. A low score indicates less social distance, therefore, the lower a student's score, the greater his peer acceptance.

#### Assessment of Structuredness of Schools A and B.

The final part of the procedure involved getting the information to assess the structuredness of the school. The outline of the points of information to be gotten is given in Appendix A. One of the main ways of getting this information was through a taped interview, structured according to the outline, with either the principal or assistant principal of the school. Because of the variability in communicating information, there were other means used to collect supportive and supplementary data for each section of information in the outline. With the first section in the outline on individual vs. group, information about the number of students engaged in individual projects and tutorials was gotten directly from either the teachers or department co-ordinators. From a brief questionnaire (see Appendix D) which was sent to 25 teachers in both schools, information about the number of students in independent study and the number of classes in which independent work was an option was collected. For the second and third sections, additional information about scheduling and curriculum was gotten from guidance personnel. This was done by asking one guidance counselor



the points of information included in sections two and three of the outline of information for the assessment of structuredness. In addition to the information in the outline, other information about students' courses of study, electives, and requirements was gotten from the guidance counselor from questions asking for a description of the course planning process that students in each of the three grades go through with a guidance counselor. Specifically, the guidance counselor was asked what information, suggestions and recommendations were given to students coming to the guidance office in order to plan for the following unit of course work. Also copies of the forms given to the students who were making course-selection decisions were asked for. Supplementary information about section three was also gotten from Program of Studies booklets which the guidance counselors in both schools had. Also additional information about curriculum planning and revision was gotten from a brief set of questions given to the department co-ordinators (see Appendix E).

Additional information pertinent to section five (communication linkages between students and faculty and/or administrators) was obtained from the guidance counselor. Each point of information in section 5 in the outline was asked to the guidance counselor.

The information, from the interviews and from the additional sources, was combined and typed into a protocol

following the outline form.

#### Judgement of Structuredness by Independent Judges.

In order to assess the relative structuredness of the two schools, the information in the protocols from the schools was compared for structuredness. This assessment method involved four judges who compared the information under each criteria for the two schools.

The judges were given a set of instructions (see Appendix F) which included a description of the five criteria based upon Goffman's discussion of the characteristics of total institutions, a table showing the five criteria for high structure and the five criteria for low structure, and a rating sheet (see Appendix G).

The instructions stated that the judges were to consider the information under only one criteria (beginning with the first) at a time and to make a comparison between the information from one school under that criteria and the information from the other school under the same criterion. For each criteria the judges were asked to consider the information in the protocols and then to determine the relative structuredness of the two schools for that criteria by indicating on a scale of 1 to 100 (low structure to high structure) one mark for School A and one mark for School B. The judges also made a sixth rating for the over-all relative structuredness of the two schools.

The procedure in School A followed the same basic

steps as that in School B. In School A, after the screening for IQ from guidance office records, the students with an IQ of 115 or higher were scheduled to take the RA during their free periods.

Revised Art Scale in School A. In School A there were 367 students (out of an enrollment of 860) who had an Otis IQ score of 115 or higher. Of these 367 students, 133 complied with the request to participate in this experiment. These 133 students came to the testing place during a free period and took the RA. At this same time, these students were given the questionnaire for the perception of structuredness of the school. For each testing time, one-half of the Ss were given the RA first and the questionnaire second and the other half of the Ss received these measures in reverse order to prevent an order effect in the test-taking.

Matching Procedure. The next procedural step was the forming of HC and LC groups in School A by matching the students from School A who took the RA with the HC and LC Ss from School B.

From the 133 students from School A who took the RA and the questionnaire, 60 were selected because they most closely matched a S in the HC or LC groups from School B on the variables of sex, grade, IQ, and RA score. They became the HC and LC groups for School A.

In this matching process, sex was in each case matched and the grade level of a subject in one school was never

more than one grade different from the matched S' in the other school. In 28 of the 60 pairs, the grade level was identical. With IQ, in one case it was necessary to chose as a matched S from School A, a student whose IQ was 10 points higher than the matched S's from School B in order to get the best match on the other dimensions. In most cases, however, IQ was closely matched; the usual difference in IQ between Ss from School B and matched Ss in School A was 2 or 3 points. With the RA, the two largest separations in scores between Ss that were matched were 3 and 16 and 41 and 49. Even though the point separation in these two cases is considerable, both the low scores are definitely in a low range and both the high scores are within a high-scoring range, which reduces the seriousness of the point difference. The means for RA scores and IQ scores for the HC and LC groups in both schools are described in the results section.

ACL and CSDS in School A. After the forming of the HC and LC groups for School A, the next two steps were the administration of the ACL and the administration of the CSDS to each of these 60 Ss.

There was a group administration of the ACL. Of the 60 Ss in the HC and LC groups from School A, 36 came to the group testing situation. The remaining 24 were contacted in homeroom, given the ACL there and told to complete it during the day and to bring it to the guidance office before leaving school. Of these 24 Ss, 18 returned the ACL,

which meant that there were 54 Ss in School A who returned the ACL.

The CSDS was administered in any homeroom in which there was one or more Ss from the HC or LC groups. The HC and LC Ss were spread out in 25 different homerooms. To quicken the data collection, the homeroom teachers were asked if they would administer the CSDS. Thirteen teachers who said they would give the CSDS in their homeroom were given the forms and explicit directions for the administration of the CSDS. The CSDS was administered in the remaining homerooms by the experimenter.



## Results

structuredness.

### A. Assessment of information.

Based on information in protocols, four judges rated the two schools on a scale from 1-100 (low to high structure) for relative structuredness. Each judge made 6 ratings: one rating for each of the 5 criteria for structuredness and one rating for the over-all structuredness of the schools. Table 2 shows the results of these ratings.

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From Table 2 it can be seen that each judge rated School A lower than School B on each of the 6 ratings. The range of the means for the 6 ratings for School A was 12.50-22.50; the range for the means for School B was 73.75-90.00.

These results show that School A was unanimously judged to be a lower structured school than School B in terms of each of the criteria that was used to differentiate high and low structure.

### B. Perception of Structuredness

The questionnaires designed to assess student perception of the structuredness of the schools were given to 250 students. The dependent measure from the questionnaire was a structuredness score for each S based upon the S's response choice for each of the 66 questions in the questionnaire.

The means and N's for the completely randomized two factor analysis of variance that was performed on the scores from the questionnaire combining sex with type of structure is shown in Table 3.

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The results of this analysis are summarized in Table 4.

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From Table 4 it can be seen that this analysis yielded a significant main effect due to type of structure, which indicated that the Ss in the high structure school (School B) perceived the school as more structured than the Ss in School A perceived their school. There was no main effect due to sex. Also the interaction of sex x type of structure was not significant.

A second analysis of variance on the scores from the questionnaire was performed in order to determine if the significant main effect due to type of structure found in the first analysis could be attributed to IQ differences between the Ss from School A and the Ss from School B. The mean IQ for the Ss from School A who took the questionnaire was 128.2; the mean IQ for the Ss from School B who took the questionnaire was 122.5. For this second analysis the Ss from both schools were divided into 2 IQ groups. Those assigned to IQ<sub>1</sub> were Ss who had an IQ of 115-119; those

assigned to  $IQ_2$  were Ss who had an IQ of 130 or higher. Ss whose IQ fell in neither of these two groups were not included in this analysis. Table 5 shows the means and N's for this analysis

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Insert Table 5 about here  
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A completely randomized three factor analysis of variance combining IQ level, type of structure, and sex was performed on the questionnaire scores reported in Table 5.

A summary of this analysis is given in Table 6.

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Table 6 shows that there was a main effect due to type of structure, indicating that the Ss in School B had significantly higher scores on the questionnaire than the Ss from School A. A significant interaction of sex x structure was also found. This interaction is shown graphically in Figure 1.

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From Figure 1 it can be seen that the significant interaction effect was due to males having higher scores on the questionnaire in School B and lower scores on the questionnaire in School A, which reflected their perceiving more structuredness in School B and less structuredness in School A than the females. It can also be seen that the difference between

the mean score for females in the low structure (164.5) was only slightly different from the mean structure score for females in the high structure school (162.8); whereas for males, the difference between the mean score in the low structure school (153.9) and the high structure school (170.4) was considerable. As reflected by the scores on the questionnaire, these results show that it was the males who perceived the structuredness of these two schools differently; for females there was almost no difference between their perception of the structuredness of School A and School B.

There were no other significant main effects or interactions from this analysis. That there was no main effect due to IQ means that the significant difference due to type of structure found with the first analysis cannot be attributed to the IQ differences between the Ss from School A and the Ss from School B. In fact there was a tendency ( $p < .10$ ) for the Ss from the  $IQ_2$  group to get higher scores on the questionnaire. Table 7 shows the number of Ss from the schools in each of the IQ groups and the N's for each group.

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From Table 7 it can be seen that there were more Ss in  $IQ_2$  group in the low structure school than there were in the high structure school; and there were fewer Ss from the low

structure school in the  $IQ_1$  group than there were in the  $IQ_1$  group from the high structure school. The distribution of the Ss in the two IQ groups for the two schools and the tendency for Ss in the higher IQ group to perceive more structuredness, indicated that the difference between the perception of structuredness scores for the Ss from School A and the Ss from School B would probably have been more pronounced had the two Ss population been matched for IQ.

#### Creativity.

A. The HC and LC groups in both schools.

In School B there were 142 students out of a total enrollment of 880 who had a verbal IQ of 115 or higher. One hundred and thirty-six of these students took the RA.

In School A there were 362 students out of a school population of 860 who had an IQ of 115 or higher. Of these 362 students, 134 took the RA.

Table 8 shows the grade and sex of the students who took the RA in each of the two schools.

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Insert Table 8 about here  
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Table 9 shows the means and standard deviations of the RA scores from both schools.

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Insert Table 9 about here  
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From Table 9 it can be seen that the means, standard deviations, and ranges of the RA scores are highly similar



for the two schools.

Figure 2 graphically displays the distributions of the RA from School A and School B.

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Insert Fig. 2 about here  
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From those Ss in School B who took the RA, the 30 highest scorers and the 30 lowest scorers formed the HC and LC groups respectively.

From the Ss in School A who took the RA, the 30 that most closely matched the HC group from School B for RA score, IQ, sex, and grade formed the HC group for School A, and the 30 Ss who most closely matched the LC group from School B on the same dimensions formed the LC group for School A. The following 2 tables show the goodness of the match between the 2 schools on these dimensions.

Table 10 shows the Ss in the LC and HC groups in both schools by sex and grade.

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Insert Table 10 about here  
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In the matching for sex and grade, sex was matched in each case and the grade level for a S was never more than one grade removed from the S he was matched with.

Table 11 shows the mean RA and the mean IQ scores for the LC and HC groups from the two schools.

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Insert Table 11 about here  
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From Table 11 it can be seen that the matching process lead to a very close match in terms of the mean IQ for the LC and HC groups from the two schools. The larger groups (136 from School B and 134 from School A) who took the RA in each of the schools were clearly separated by IQ (128.2 mean IQ for School A and 122.5 for School B); however, the matching process for the HC and LC groups reduced this difference between the two populations, thereby reducing the probability of IQ being a factor affecting any measured differences between the HC and LC groups on the two dependent variables of peer-ratings and self-descriptions.

#### B. Creativity and the perception of structuredness.

To determine if there were differential perceptions of structuredness due to level of creativity, a completely randomized three factor analysis of variance (type of structure x sex x level of creativity) was performed on the scores from the questionnaires for the ss in the HC and LC groups in both schools. The N's and means for this analysis are given in Table 12.

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Table 13 reports in summary from the results of this analysis.

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 Insert Table 13 about here  
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Table 13 shows that this analysis yielded no significant

main effects. It can also be seen that none of the interactions reached a significant level, though the interaction between sex and structure tended toward significance.

Peer Acceptance of the HC and LC Ss.

One of the major predictions in this study was that the HC Ss in the low structure school would have higher peer ratings as measured by the CSDS than the HC Ss in the high structure school. It was also predicted that the HC females would have lower peer ratings than the HC males. The dependent measure was the scores on the CSDS for the HC and LC Ss from both schools. A completely randomized three factor analysis of variance representing type of structure x level of creativity x sex was performed on the CSDS scores. Table 14 shows the means and N's for this analysis.

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Insert Table 14 about here  
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Table 15 reports the summary results for this analysis.

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From Table 15 it can be seen that the predicted results of differences in peer ratings of HC and LC Ss in the two schools were not obtained. There were no significant main effects due to sex, structure, or creativity. Also there were no significant differences in peer ratings due to any interactions.

A second analysis was done to see if the sex of the rater

affected the peer ratings of the HC and LC Ss in any systematic way. A completely randomized four factor analysis of variance representing type of structure x level of creativity x sex of rater x sex of ratee was performed on the CSDS scores. Table 16 reports the means and N's for this analysis.

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 Insert Table 16 about here  
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Table 17 shows the ANOVA table for this analysis.

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Table 17 shows that there was a significant main effect due to sex of ratee. The mean CSDS score for female ratees (number of ratings = 132) was 2.85; for male ratees the mean score was 2.66 (number of ratings = 108). The higher mean scores on the CSDS for the females in comparison to the males indicates that the males were more accepted by their peers than the females were.

The only other significant difference obtained in this analysis of the CSDS was the interaction of sex of rater by sex of ratee. This highly significant interaction is represented graphically in Figure 3 .

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From Figure 3 it can be seen that a male ratee received lower CSDS scores from males and higher CSDS scores from female raters, while female ratees got higher scores from

male raters and lower scores from female raters. This indicates that the females were more accepted by their female peers than by their male peers; and that males were more accepted by their male peers than they were by their female peers.

Self-descriptions of the HC and LC Ss.

The second major hypothesis in this study was that the HC Ss in the low structure school would have more positive self-descriptions as measured by the ACL than either the HC Ss in the high structure school or the LC Ss in the low structure school.

There were 52 Ss from School B, 26 HC and 26 LC Ss whose endorsements on the ACL were compared with the 52 matched Ss from School A. A frequency count of the endorsement of each adjective by the Ss in each of the 4 groups (Hi Structure - HC, Hi Structure - LC, Lo Structure - HC, Lo Structure - LC) was made. A 3 x 2 (structure x creativity x endorsement (yes and no) chi-square test was performed on frequencies per group for each of the 300 adjectives. There were 14 adjectives, the endorsement or nonendorsement of which differed significantly at an alpha of .05 or less over the levels of creativity and structuredness.

The first adjective that was significantly different over the groups was the third adjective on the ACL, 'adaptable.' Table 18 shows the frequency of endorsement and nonendorsement by the HC and LC groups in the two schools.



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Table 18 shows that the frequency of endorsement of the adjective 'adaptable' was greater in the low structure school for the HC group than it was in the high structure school, while with the LC group the converse was true: the frequency of endorsement was greater in the high structure school than it was in the low structure school.

The second adjective that was shown to be significantly different in terms of endorsement over the groups was the adjective 'distractible.' Table 19 shows the frequency of endorsement and nonendorsement over the groups.

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Table 19 shows that the frequency of endorsement of the adjective 'distractible' hardly changed for the HC and LC groups over structure; the significance is not due to the interaction of creativity and structure, but to the effect of level of creativity. The HC Ss checked this adjective significantly more than the LC Ss.

The adjective 'formal' was the third adjective that differed significantly over the groups. The frequency of endorsement and nonendorsement of this adjective by the 4 groups is shown in Table 20.

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 Insert Table 20 about here  
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From Table 20 it can be seen that the significance of endorsement vs. nonendorsement over the groups is attributable to the levels of creativity, with the LC group endorsing this adjective significantly more often than the HC group. Not only was this adjective checked more frequently by the HC group, but it is interesting to note that it was not checked even once by any of the Ss in the HC group.

The fourth, fifth, and sixth adjectives that were significant were 'high-strung,' 'impulsive,' and 'individualistic.' The frequency of endorsement and nonendorsement of these adjectives are presented in Tables 21, 22, and 23 respectively.

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Insert Table 21 about here  
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Table 21 shows that the adjective 'high-strung' was endorsed significantly more by the HC Ss than by the LC Ss irregardless of the level of structuredness. There was also some tendency for the HC Ss to endorse this adjective more frequently in the low structure school than the high structure school; while for the LC Ss the adjective was endorsed slightly more often in the high structure school than the low structure school.

Table 22 shows the frequency differences in endorsement and nonendorsement of the adjective 'impulsive.'

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Insert Table 22 about here  
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From Table 22 it can be seen that the adjective 'impulsive' was checked significantly more often by the HC Ss than it was by the LC Ss at both levels of structuredness. It can also be seen that the HC Ss checked this adjective less frequently in the low structure setting than they did in the high structure setting.

Table 23 shows the frequency of endorsement and non-endorsement of the adjective 'individualistic.'

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Table 23 shows that the frequency of endorsement of the adjective 'individualistic' was not contingent upon the level of structuredness. The frequency of endorsement changes significantly due to level of creativity, with the HC Ss checking this adjective significantly more than the LC Ss.

The seventh, eighth, and ninth adjectives that showed a significant difference over groups were 'leisurely,' 'loud,' and 'pleasure-seeking.'

Table 24 shows the frequency of endorsement and non-endorsement of the adjective 'leisurely.'

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Table 24 shows that the adjective 'leisurely' was checked less often by both the HC's and the LC's in the low structure school. Also there was a greater difference for the LC's in the frequency of checking the adjective

leisurely across schools than there is for the HC's.

Table 25 reports the frequency of endorsement and non-endorsement of the adjective.

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Insert Table 25 about here  
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From Table 25 it can be seen that the HC's endorsed the adjective 'loud' more frequently than the LC's did. It can also be seen that the frequency of endorsement of 'loud' decreases from high structure to low structure for the HC's, while the frequency of endorsement increases for the LC's from high structure to low structure. This means that with the LC Ss 'loud' was checked more often in the low structure school than the high structure school. The HC's checked 'loud' more often in the high structure school than they did in the low structure school.

Table 26 displays the frequencies of endorsement and nonendorsement of the adjective 'pleasure-seeking.'

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Table 26 shows that the endorsement of the adjective pleasure-seeking did not vary systematically contingent upon level of structure. It can be seen that the HC's checked this adjective significantly more often than did the LC's.

The next three adjectives that were checked in a significantly different way over groups were 'reckless,' 'suggestible,' and 'tempermental.'

Table 27 gives the frequencies of endorsement and non-endorsement of the adjective 'reckless.'

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Table 27 shows that the endorsement of 'reckless' remained constant over structure. It can also be seen that there was systematic variation over levels of creativity, with the HC Ss endorsing this adjective significantly more often than the LC Ss.

Table 28 shows the frequencies of endorsement and non-endorsement of the adjective 'suggestible.'

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From Table 28 it can be seen that the HC's checked the adjective significantly more often than the LC's. It can also be seen that the LC's endorsed 'suggestible' less frequently in the low structure school, while there was only a difference of one endorsement for the HC's between the two schools.

Table 29 displays the frequencies of endorsement and nonendorsement of the adjective 'tempermental.'

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From Table 29 it can be seen that both the HC's and the LC's checked 'tempermental' less frequently in the low structure school. For the LC group the difference in endorse-



ment in the high structure school as compared to the low structure school was pronounced. Also shown is that the HC's checked 'tempermental' more frequently than the Low Creatives.

Table 30 reports the frequencies of endorsement and nonendorsement of the adjective 'wise.'

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Insert Table 30 about here  
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Table 30 shows that the LC's endorsed 'wise' more frequently than the HC's. It can also be seen that there was a tendency for the endorsement to be less frequent for both the HC's and the LC's in the low structure school than in the high structure school.

Table 31 reports the frequency of endorsement and nonendorsement of the adjective 'withdrawn.'

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Insert Table 31 about here  
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Table 31 shows that there was no difference between the HC and LC ss in the high structure in their endorsement vs. nonendorsement of 'withdrawn.' For the ss in the low structure school there was a significant difference between the LC's and the HC's in the endorsement vs. nonendorsement of 'withdrawn,' with the HC's endorsing withdrawn significantly more than the low creatives. It can also be seen that the frequency of endorsement of 'withdrawn' increased for the HC's from the high structure school to the low

structure school, while there was a decrease in the frequency of endorsement for the LC's in the high structure as compared to the LC's in the low structure school. Finally, it can be seen that 'withdrawn' was checked significantly more often by the HC's than the LC's.

The results from the ACL are summarized by Table 32 and Table 33. Table 32 shows the adjectives that produced a significant chi-square attributable to the difference in the ratios of endorsement vs. nonendorsement for the HC and LC groups.

-----  
 Insert Table 32 about here  
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From Table 32 it can be seen that the adjectives checked more often in this kind of comparison by the HC's were 'high-strung,' 'impulsive,' 'individualistic,' 'leisurely,' 'loud,' 'pleasure-seeking,' 'reckless,' 'suggestible,' 'tempermental,' and 'withdrawn.' It can also be seen that with this type of analysis, the adjectives checked more often by the LC group were 'formal,' and 'wise.'

Table 33 shows the adjectives which produced a significant chi-square attributable to the difference in the ratios of endorsement vs. nonendorsement for the HC's in the high and the low structure and the LC's in the high and low structure.

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 Insert Table 33 about here  
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From Table 33 it can be seen that according to this analysis, the HC's checked 'impulsive,' 'leisurely,' 'loud,' and 'wise' more often in the high structure and that they checked 'adaptable,' 'high-strung,' and 'withdrawn' more often in the low structure. It can also be seen that the LC's checked 'adaptable,' 'high-strung,' 'leisurely,' 'suggestible,' 'tempermental,' and 'withdrawn' more frequently in the high structure; and that the LC's checked 'loud' more often in the low structure.

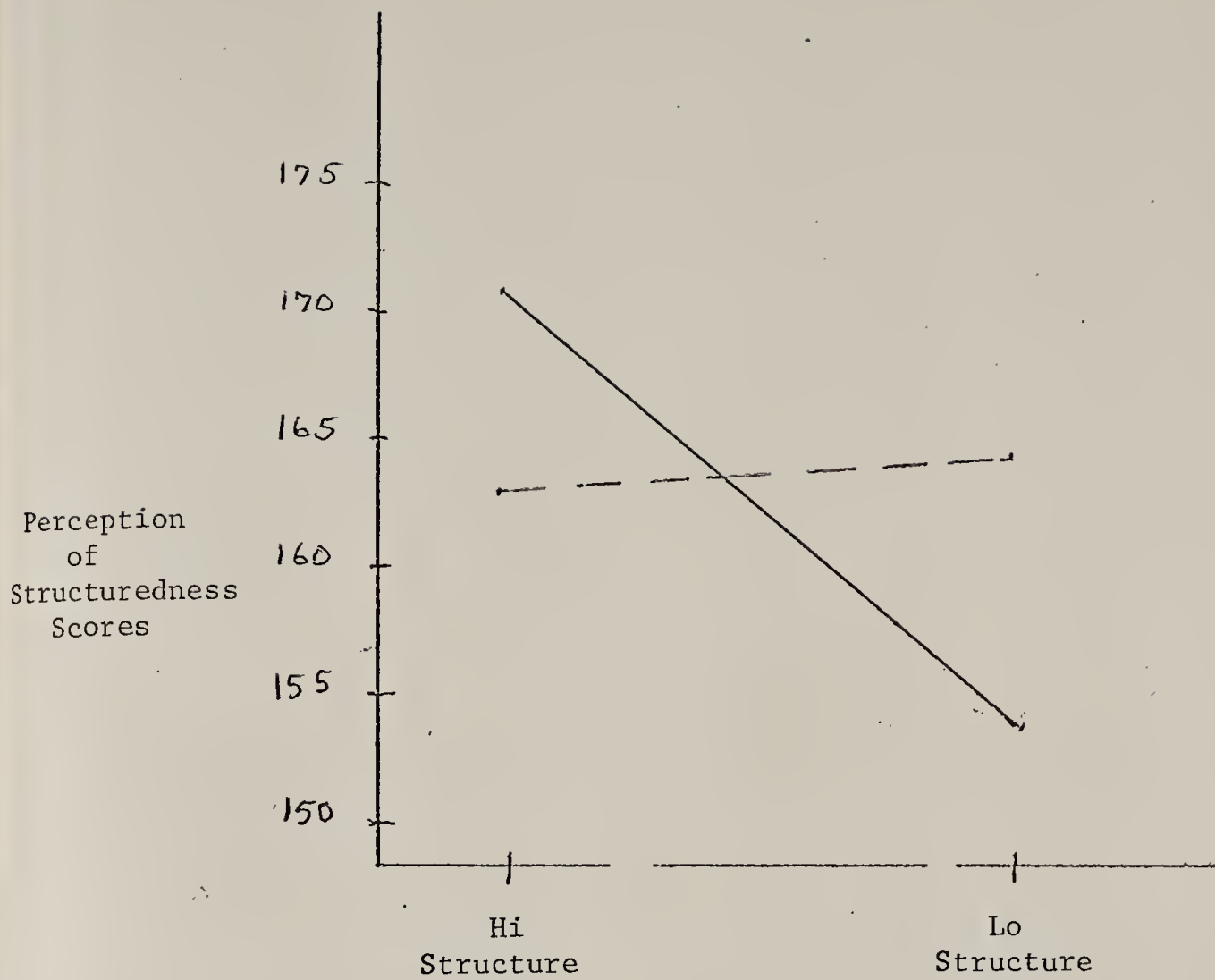


Figure 1. The interaction effect of sex by type of structure on structuredness scores for the  $IQ_1$  and  $IQ_2$  groups.

\_\_\_\_\_. Males  
----- Females

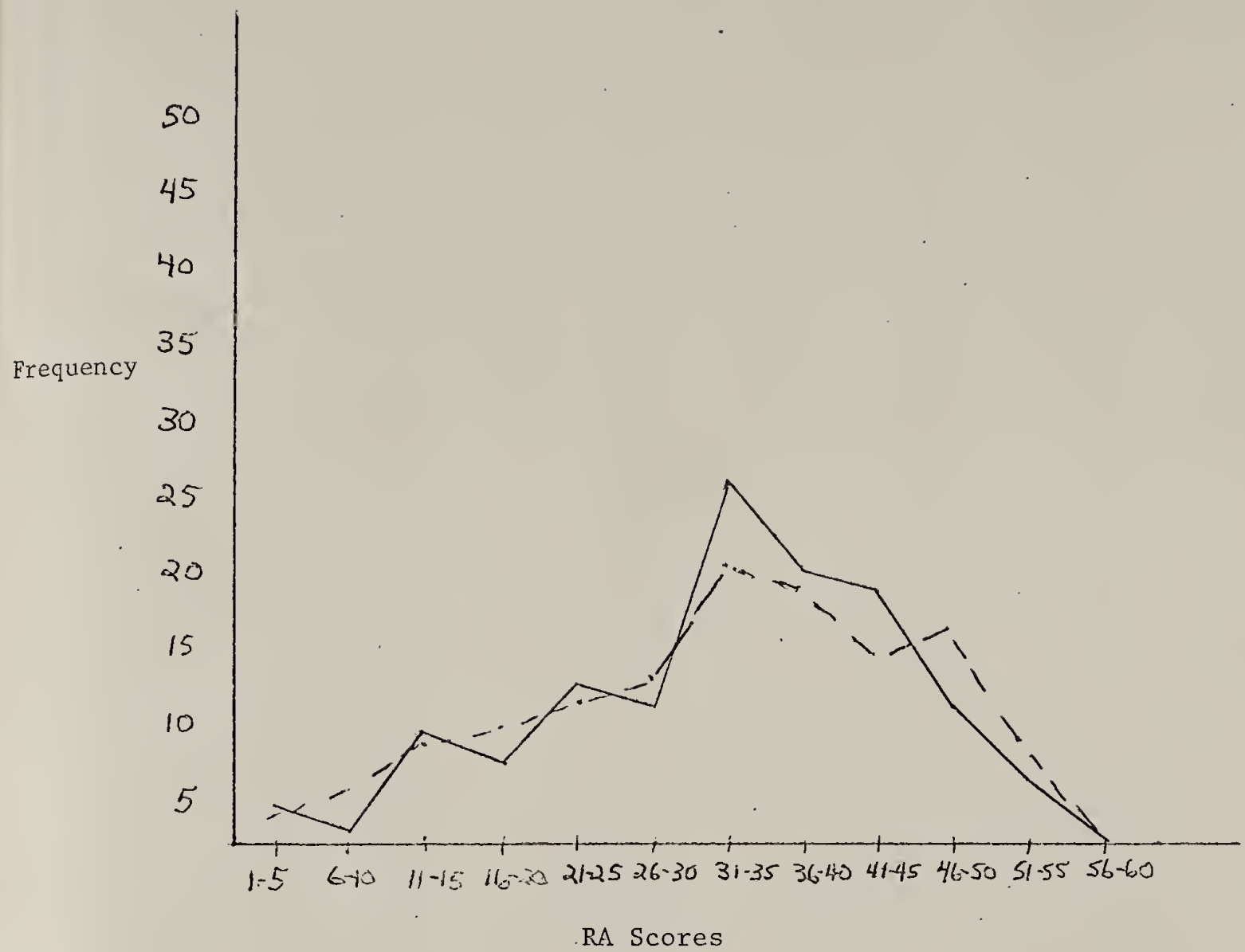


Figure 2. The distributions of RA scores for School A and School B.

----- School A  
\_\_\_\_\_ School B



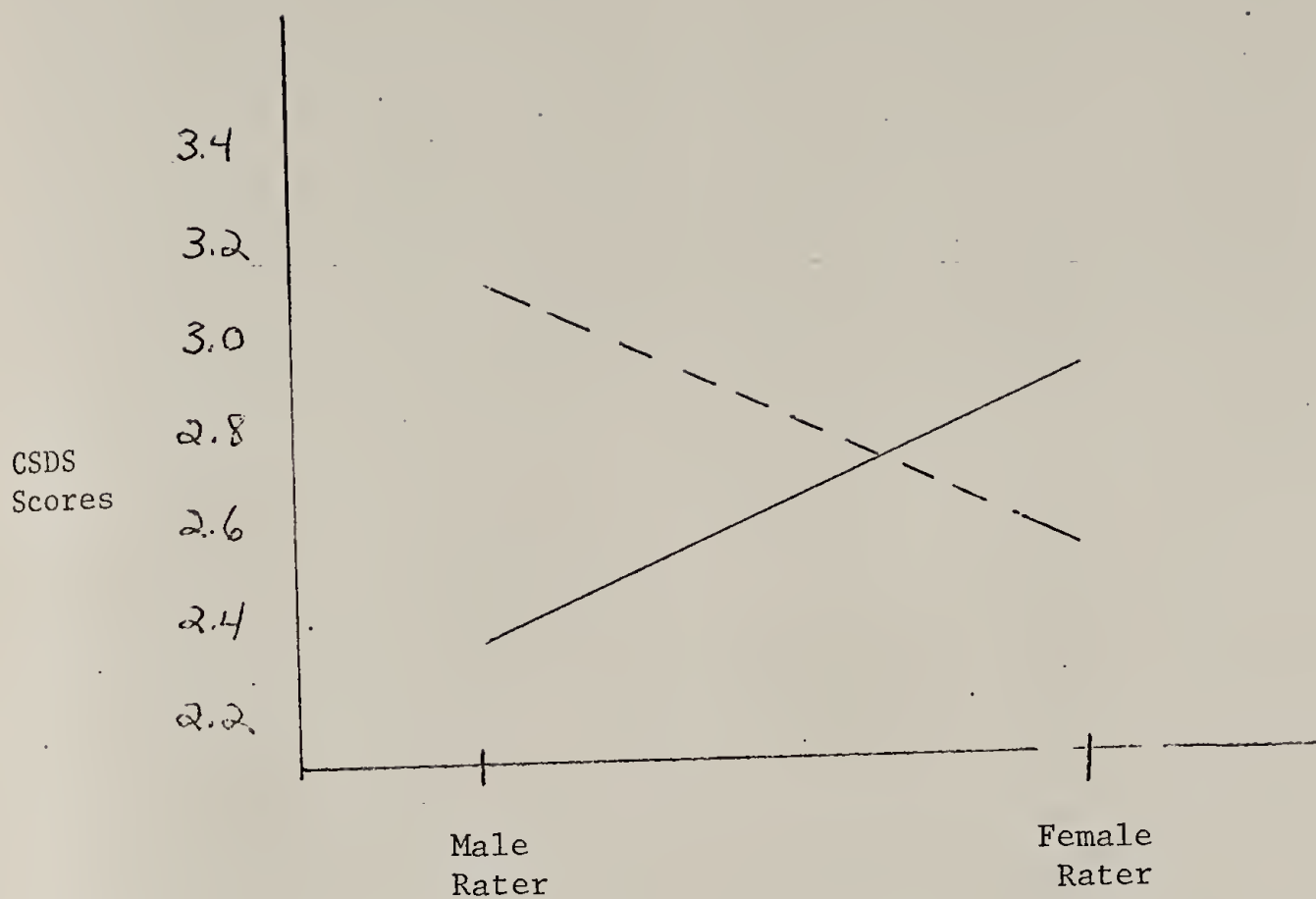


Figure 3. The interaction of sex of rater by sex of ratee with the CSDS scores.

————— Male Ratee  
----- Female Ratee

Table 2. Judges' ratings of the structuredness of the two schools.

	School A					School B				
	Judge 1	Judge 2	Judge 3	Judge 4	Mean	Judge 1	Judge 2	Judge 3	Judge 4	Mean
Criteria 1	15	30	25	15	21.25	70	80	70	75	73.75
Criteria 2	10	20	45	15	22.50	85	90	65	85	81.25
Criteria 3	27	20	20	15	20.50	80	90	90	85	86.25
Criteria 4	30	10	35	15	22.50	90	90	80	87	86.75
Criteria 5	10	10	20	10	12.50	90	90	85	95	90.00
Over-all	20	10	15	12	16.75	80	90	80	95	86.25

Table 3. Means and N's for the questionnaire scores.

	N	Mean	SD		N	Mean	SD
M	52	166.77	14.36		58	155.35	17.45
F	65	164.09	18.00		75	163.20	28.30
Total	117	165.43			133	159.28	

Table 4. Summary of the analysis of variance of the questionnaire scores.

SV	df	SS	MS	F
Scx	1	6.68	6.68	1.12
Structure	1	37.86	37.86	6.33*
Sex X Structure	1	27.68	27.68	4.63
S/AB	12	71.76	5.98	

\*  $p < .05$





Table 6. Summary of the analysis of the questionnaire scores from the  $IQ_1$  and  $IQ_2$  groups.

	SV	df	SS	MS	F
IQ	(A)	1	87.84	87.84	4.99
Structure	(B)	1	110.31	110.31	6.27*
Sex	(C)	1	4.27	4.27	< 1
IQ X Structure	(AB)	1	11.16	11.16	< 1
IQ X Sex	(AC)	1	14.95	14.95	< 1
Structure X Sex	(BC)	1	168.48	168.48	9.58*
IQ X Structure X Sex	(ABC)	56	43.22	43.22	2.46
	S/ABC	56	985.04	17.59	

\* $p < .05$

\*\* $p < .01$

Table 7. The means and N's of the structuredness scores by IQ group and type of structure.

	High Structure		Low Structure			
	N	Mean	N	Mean	N	Mean
$IQ_1$	45	164.41	32	154.70	77	159.6
$IQ_2$	20	168.75	49	163.68	69	166.2

Table 8. The number of Ss who took the RA from School A and School B by grade and sex.

	7		8		9		
	M	F	M	F	M	F	Total
School A	25	26	24	31	10	18	134
School B	13	19	18	19	25	42	136

Table 9. The means and standard deviations of the RA scores from both schools.

	N	Mean	SD	Range
School A	134	32.5	12.4	2-55
School B	136	32.0	12.2	1-55

Table 10. The LC and HC Ss by grade and sex.

	LC						HC					
	7		8		9		7		8		9	
	M	F	M	F	M	F	M	F	M	F	M	F
School A	6	7	5	6	5	1	3	3	7	9	1	7
School B	3	4	7	3	6	7	5	2	2	2	4	15

Table 11. The mean RA and mean IQ scores for the LC and HC groups.

	LC				HC			
	Mean RA	SD	Mean IQ	SD	Mean RA	SD	Mean IQ	SD
School A	15.9	5.7	123.0	6.2	42.8	9.35	122.5	5.38
School B	15.7	5.9	123.8	6.4	47.1	3.80	121.3	5.34

Table 12. Means and N's for the questionnaire scores of the LC and HC groups.

		School B		School A	
		(High Structure)		(Low Structure)	
		N	Mean	N	Mean
High C	M	9	160.44	11	157.18
	F	15	163.47	19	165.63
Low C	M	11	169.27	16	148.00
	F	11	154.27	14	160.98



Table 13. Summary of the analysis of variance of the questionnaire scores of the HC and LC groups.

	SV	df	SS	MS	F
Sex	(A)	1	11.67	11.67	1
Structure	(B)	1	29.84	29.84	1
Creativity	(C)	1	26.33	26.33	1
Sex X Structure	(AB)	1	141.28	141.28	4.65
Sex X Creativity	AC	1	23.83	23.83	1
Structure X Creativity	(BC)	1	23.74	23.74	1
Sex X Structure X Creativity	(ABC)	1	61.82	61.82	2.04
	S/ABC	56	1700.72	30.37	

Table 14. Means and N's for the CSDS scores.

		School B		School A	
		(High Structure)		(Low Structure)	
		N	Mean	N	Mean
High C	M	11	2.39	11	2.81
	F	19	2.80	19	2.78
Low C	M	16	2.67	16	2.70
	F	14	2.87	14	2.80
		60		60	

Table 15. Summary of the analysis of variance of the CSDS scores for the HC and LC male and female ratees.

	SV	df	SS	MS	F
Sex (of ratee)	(A)	1	.98	.98	3.67
Structure	(B)	1	.32	.32	1.20
Creativity	(C)	1	.17	.17	1
Sex X Structure	(AB)	1	.41	.41	1.54
Sex X Creativity	(AC)	1	.00139	.00139	1
Structure X Creativity	(BC)	1	.27	.27	1
Sex X Structure X Creativity	(ABC)	1	.25	.25	1
	S/ABC	56	15.12	.27	

Table 16. Means and N's for the CSDS scores including male and female raters.

			High Structure		Low Structure	
			F Rater	M Rater	F Rater	M Rater
			Mean	Mean	Mean	Mean
High C	M	11	2.77	2.26	3.12	2.48
Low C	F	19	2.64	2.95	2.54	3.06
	M	16	2.93	2.37	2.98	2.39
	F	14	2.56	3.36	2.50	3.19

Table 17. Summary of the analysis of variance using CSDS scores for HC and LC groups and male and female ratees and raters.

	SV	df	SS	MS	F
Structure	(A)	1	.5	.5	1
Sex of rater	(B)	1	.0005	.0005	1
Sex of ratee	(C)	1	1.98	1.98	5.38*
Creativity	(D)	1	.19	.19	1
Structure X Sex of Rater	(AB)	1	.002	.002	1
Structure X Sex of Ratee	(AC)	1	.67	.67	1
Structure X Creativity	(AD)	1	.50	.50	1.37
Sex of rater X Sex of ratee	(BC)	1	19.39	19.39	52.66**
Sex of rater X Creativity	(BD)	1	.40	.40	1.08
Sex of ratee X Creativity	(CD)	1	.14	.14	1
Structure X Sex of rater X Sex of ratee	(ABC)	1	.06	.06	1
Structure X Sex of ratee X Creativity	(ACD)	1	.07	.07	1
Structure X Creativity X Sex of rater	(ADB)	1	.04	.04	1
Sex of rater X Sex of ratee X Creativity	(BCD)	1	.99	.99	2.71
Structure X Sex of rater X Sex of ratee X Creativity	(ABCD)	1	.14	.14	1
	S/ABCD	240	88.80	.37	

\*p .05

\*\*p .01



Table 18. Frequency of endorsement and nonendorsement of the adjective adaptable.

	High Structure		Low Structure	
	Yes	No	Yes	No
High C	13	13	19	7
Low C	18	8	9	17

Table 19. Frequency of endorsement and nonendorsement of the adjective distractible.

	High Structure		Low Structure	
	Yes	No	Yes	No
High C	12	14	11	15
Low C	4	22	4	22

Table 20. Frequency of endorsement and nonendorsement of the adjective formal.

	High Structure		Low Structure	
	Yes	No	Yes	No
High C	0	26	0	26
Low C	5	21	3	23

Table 21. Frequency of endorsement and nonendorsement of the adjective 'high-strung'.

	High Structure		Low Structure	
	Yes	No	Yes	No
High C	5	21	7	19
Low C	2	24	0	26

Table 22. Frequency of endorsement and nonendorsement of the adjective 'impulsive'.

	High Structure		Low Structure	
	Yes	No	Yes	No
High C	17	9	8	18
Low C	7	19	5	21

Table 23. Frequency of endorsement and nonendorsement of the adjective 'individualistic'.

	High Structure		Low Structure	
	Yes	No	Yes	No
High C	17	9	15	11
Low C	8	18	9	17

Table 24. Frequency of endorsement and nonendorsement of the adjective 'leisurely'.

	High Structure		Low Structure	
	Yes	No	Yes	No
High C	16	10	14	12
Low C	10	16	6	20

Table 25. Frequency of endorsement and nonendorsement of the adjective 'loud'.

	High Structure		Low Structure	
	Yes	No	Yes	No
High C	14	12	8	18
Low C	4	22	11	15

Table 26. Frequency of endorsement and nonendorsement of the adjective 'pleasure-seeking'.

	High Structure		Low Structure	
	Yes	No	Yes	No
High C	19	7	20	6
Low C	11	15	13	13

Table 27. Frequency of endorsement and nonendorsement of the adjective 'reckless'.

	High Structure		Low Structure	
	Yes	No	Yes	No
High C	11	15	11	15
Low C	4	22	4	22

Table 28. Frequency of endorsement and nonendorsement of the adjective 'suggestible'.

	High Structure		Low Structure	
	Yes	No	Yes	No
High C	10	16	9	17
Low C	6	20	1	25

Table 29. Frequency of endorsement and nonendorsement of 'tempermental'.

	High Structure		Low Structure	
	Yes	No	Yes	No
High C	15	11	11	15
Low C	10	16	2	24

Table 30. Frequency of endorsement and nonendorsement of 'wise'.

	High Structure		Low Structure	
	Yes	No	Yes	No
High C	11	15	4	22
Low C	16	10	14	12

Table 31. Frequency of endorsement and nonendorsement of 'withdrawn'.

	High Structure		Low Structure	
	Yes	No	Yes	No
High C	7	19	10	16
Low C	7	19	0	26



Table 32. Adjectives showing a significant difference  
in endorsement vs. nonendorsement over structure  
by the HC and LC groups.

Adjectives checked more by HC's	Adjectives checked more by LC's
high-strung	formal
impulsive	wise
individualistic	
leisurely	
loud	
pleasure-seeking	
reckless	
suggestible	
tempermental	
withdrawn	

Table 33. Adjectives showing a significant difference in endorsement vs. nonendorsement by structure for the HC and LC groups.

	Checked more in High Structure	Checked more in Low Structure
HC	impulsive	adaptable
	leisurely	high-strung
	loud	with-drawn
LC	adaptable	loud
	high-strung	
	leisurely	
	suggestible	
	tempermental	
	withdrawn	

### Discussion

The two methods devised to differentiate high and low structuredness yielded consistent differences in structuredness between the two Junior High Schools.

With the assessment of information about the schools, the four judges unanimously rated School B as more structured than School A both in terms of the five criteria for structuredness and for over-all structuredness.

The scores from the questionnaires showed that the students in School B perceived their school as more structured than did the students who took the questionnaire in School A. This result makes the difference in structuredness between the two schools fairly convincing because it was yielded from the questionnaire scores which were derived from the choices made on a four-point scale of agreement. Since there was a significant difference in the perception of the structuredness of the two schools when there were only four discriminations of structuredness possible, the difference seems convincing.

That both methods for determining relative high and low structuredness lead to the finding that School B was more structured than School A adds reliability to this finding.

#### Creativity and Structuredness.

From the RA scores for the 136 students from School B and the 133 students from School A, it was found that there was little difference in the distributions of these scores

for the two populations. It might be thought that there would be a relationship between structuredness of the environment and creativity. If the assumption can be made that low structure, which in this study has been defined primarily as an emphasis on individualized treatment and high number of options, allows creative behaviors, while high structure, in which there is emphasis on standardized treatment and routine, depresses creative behavior, then it seems that there would be more creative behavior in the low structure than in the high structure, and that this would be reflected in a higher number of high RA scorers in the low structure than the high structure. That this was not the finding in this study could be due to the assumption being a mistaken one, the level of validity of the RA, or differences between the group of students from School A who took the RA and the students from School B who took the RA. In School B the students who took the RA represented nearly the whole population (136/142) of students in the school with an IQ above the cut-off point, while in School A, the students who took the RA were only a sample of the population (133/367) within the school with an IQ of 115 or higher. Another difference was that the students in School A who took the RA were volunteers, because both the teachers and students put the test-taking on a volunteer basis. When a notice was sent to a homeroom saying that certain students were to go to the testing place during a particular free period,

the students asked if they had to go and they were told that it was their choice. In School B, when the same kind of notices were sent to homerooms neither the teachers nor the students saw choice in the request. These differences between the students who took the RA in one school and those who took it in the other may have contributed to the outcome of the RA distributions of the two schools.

Secondly, it may be that only when some certain degree of difference in structuredness is reached would there be a difference in creative behavior due to level of structuredness.

Also the lack of difference between the distributions of the RA scores in the two schools may be due not to the assumption being a false one but rather the level of validity of the RA as a measure of creativity. A more direct test of the assumption that there is more creative behavior in low structure than there is in high structure would be to set behavioral criteria for creativity and then with sample groups from high and low structured schools determine if more students engage in creative behaviors in the low structure school than in the high structure school.

Differences in the perception of structuredness due to the variables of creativity, sex and IQ.

It was found that the level of creativity (high or low) of students did not differentially affect the perceptions of structuredness as reflected by the scores on the



questionnaire. The high creative group did not perceive more or less structuredness than the low creative group.

There was, however, a tendency for sex combined with level of creativity to affect the perception of structuredness. With the HC males there was little difference between the way they perceived the structuredness of School A (mean score 157) and the structuredness of School B (160), however, the LC males were sensitive to the differences in structuredness, perceiving the low structure school as less structured (mean score 148) than the high structure school (169). There was not this difference in sensitivity to structuredness between the HC and LC females. The HC females perceived little difference between the two schools (mean scores 163 and 165); this was also true for the LC females (154 mean score for high structure; 160 mean score for low structure).

What makes this result of differential perceptions of structuredness of the two schools by LC males but not by HC males or by HC and LC females interesting is the way it fits in with the effects of sex and IQ on the perception of structuredness.

It was found that males in general tended ( $p < .10$ ) to more sensitively register the differences in structuredness than females. Males saw the high structure school as more structured (166) than the low structure school (155); while females perceived almost no difference between the high

structure school (164) and the low structure school (163).

What this means in relation to the finding that LC males tend to perceive differences in structuredness while HC males do not is that the characteristic of low creativity for males accentuates the tendency that males were found to have to be sensitive to differences in structuredness; there was a greater difference between the structuredness scores for the LC males (169 and 148) than there was for males in general (166 and 155). With the HC males, however, the tendency to register differential perceptions of structuredness decreases from the level of males in general. The HC males, like females in general and both high and low creative females, did not perceive the structuredness of the two schools differently (160 and 157 mean scores for high and low structure respectively).

What makes this result more interesting is the relation between IQ level and perception of structuredness. In general there was a tendency ( $p < .10$ ) for the high IQ group ( $IQ_2$ ) to perceive more structuredness than the low IQ group ( $IQ_1$ ) as reflected by the mean scores of 159 and 166 for the two groups. This tendency was created by both males and females in the  $IQ_2$  group perceiving more structuredness than the ss in the  $IQ_1$  group. Also the males perceived the high structure school as more structured than the females perceived it; and the males perceived the low structure school as less structured than the females perceived it;

this created a significant sex by type of structure interaction. Like the LC males compared to all the males who took questionnaire, the males in the higher IQ group registered the difference in structuredness between the two schools more sensitively than did the males in the lower IQ group. However, for the females, IQ level did not lend acuteness to the perception of structuredness.

The results concerning the perception of structuredness and the variables of sex, creativity, and IQ can be stated in summary form as follows:

1. There was a tendency for males to more sensitively register differences in the structuredness of the schools than females.
2. There was a tendency for males and females in the higher IQ group to perceive more structuredness.
3. With females differences in level of creativity did not affect the perception of structuredness.
4. With females differences in IQ level did not make the perception of structuredness more sensitive (i.e., the female in  $IQ_2$  did not perceive more structure in the high structure school and less structure in the low structure than the females in  $IQ_2$ ).
5. Females appeared not to register the structuredness of the environment; this was true for the females in general who took the questionnaire and it also held for the HC and LC females, and for females averagely

intelligent and bright females.

6. With males differences in level of creativity affected the perception of structuredness. LC males registered the differences in structuredness between the two schools more accurately than all the males who took the questionnaire; while the HC males made almost no differentiation between the structuredness of School A and School B.

7. With males, differences in IQ level affected the perception of structuredness. Brighter males were more sensitive to differences in structuredness.

Some of these results seem interesting enough to suggest some speculative reasons for their occurrence. That males are more aware of the structuredness of the environment than females may be due to the sex role difference of males being more functionally or instrumentally oriented than females who would be more socially and interpersonally oriented than males. The instrumental orientation for the male would involve manipulating and controlling the environment which would necessitate exploration of the structuredness. The more interpersonal orientation of the female would not to the same degree or in such a direct way demand an awareness of the structuredness of the environment. Though this result was only a tendency, the finding that females did not register accurate differences in structuredness of the schools was a consistent one for females regard-



less of creativity level or IQ level, which adds more weight to the finding.

The results showing that bright males are more aware and perceptive about the structuredness and that high creative males are less sensitive to structuredness than males in general suggests that for males high intelligence sharpens the tendency to articulate the structuredness of the environment, while high creativity perhaps turns the focus on different cues and different aspects of the perceptual field. The similarity between HC males and females in general of not differentially perceiving levels of structuredness may suggest that to some degree the HC males may be in other ways similar to females; it is possible that HC males share with females a more social orientation toward the environment than males in general. This idea is supported by research which has found the high creative to be more sociable than the low creative person (Rivlin, 1959; Cashdan and Welsh, 1966).

#### Creativity and Peer Acceptance.

There was no difference between the peer acceptance of HC and LC Ss. A significant difference in peer acceptance that was found was the greater peer acceptance of males than females when the sex of the rater was considered; this difference in peer acceptance by sex was produced by males rating females higher on the CSDS (3.16) than females rated males (2.95) which means that males had less peer



acceptance of females than females had of males, a finding which could be interpreted as reflecting the stronger affiliative needs of females and also perhaps the greater social concern of females than males.

The second significant finding that males were more accepting of male peers than female peers and that females were more accepting of female peers than male peers hardly seems surprising for Junior High Schoolers.

#### Creativity and Self-Descriptions.

There were 14 adjectives on the ACL that were found to be significantly different due either to level of creativity or level of creativity by type of structure. That there were only 14 adjectives found to be significant means that fewer than the number that would be predicted to be significant at the chance level with an alpha of .05 were found. However, the particular adjectives that were found to be significant fit in with other findings about differential personality characteristics associated with high and low creative persons, which makes it reasonable to assume that the adjectives found to be significant are not just random adjectives from the ACL.

The findings that HC's more often than LC's checked the adjectives 'impulsive,' 'individualistic,' 'loud,' 'pleasure-seeking,' 'tempermental,' and 'withdrawn' while the LC's more frequently endorsed 'formal' and 'wise' are consistent with findings from several studies on the descriptions of

creative persons (Torrence, 1961; Barron, 1963; Barron and Welsh, 1952).

The HC's saw themselves as 'adaptable' in the low structure but not in the high structure, and the LC's saw themselves as 'adaptable' in the high structure and not the low structure. Also the HC's saw themselves as more 'impulsive' and 'loud' in the high structure, than the low structure.

These changes in self-descriptions provide some support for the idea that the self-perceptions of high and low creative persons are influenced by the level of structuredness. The change in the endorsement of 'adaptable' by structure may be a particularly strong indicator of this. One of the purposes of this study was to try to determine if some of the inconsistent findings about the social adequacy of the creative person could be attributed to the structuredness of the environment (specifically in this case, only a part of the environment, the school). If feelings of adequacy can be seen as being derived from adapting to the environment, then considering oneself adaptable or not directly affects a view of one's self as adequate or not. Thus the differences in endorsement of the adjective 'adaptable' may indicate that creative people feel differently about themselves in a low structure environment and a high structure environment. This may in turn suggest that some of the inconsistency in findings about the personality

characteristics of creative persons may be affected by the structuredness of the environment.

The results may indicate that the behavior of high and low creative persons is interpreted differently in different levels of structuredness. The HC student's behavior may be interpreted as 'adaptable' in the low structure but as 'impulsive' in the context of high structure.

It might also be noted that the only adjective which changed over creativity and structure and not by level of creativity alone was 'adaptable.' The other adjectives which were differentially endorsed by the HC and LC groups by structure were also differently endorsed due to level of creativity alone. This may indicate that there are some fairly stable characteristics of high and low creative persons and that there are characteristics which are influenced by structuredness.

Finally it must be said that the results from the ACL are taken more as suggestive than conclusive in light of the number of significant results to be expected statistically.

## Summary and Conclusions

The purpose of this study was to investigate the effect of organizational structuredness on peer ratings and self-descriptions of high and low creative Junior High students.

In order to establish the difference in structuredness between two Junior High Schools, two methods were used. Structuredness was defined by five criteria derived from Goffman's characteristics of total institutions (Goffman, 1963). Information gathered for both schools about each of these criteria was rated by four judges for relative structuredness. The second method involved giving students from both schools a questionnaire devised to assess the students' perception of structuredness of the school in terms of the five defining criteria for structuredness. With both methods, one school was determined to be more structured than the other.

The hypothesis that HC students would have greater peer acceptance in the low structure school than the LC students and that the LC students would have more peer acceptance in the high structure school than the HC students was not found. The only difference in peer acceptance found was that boys accepted boys more than girls and girls accepted girls more than boys.

The second main hypothesis that HC students would have more positive self-descriptions in the low structure school and poorer ones in the high structure school than the LC

students was confirmed to some extent by the finding that HC students described themselves as adaptable in the low structure but not in the high structure, and that LC students described themselves as adaptable in the high structure but not in the low structure. This result was taken only as suggestive because of the possibility of this finding being a chance result.

There were other interesting findings concerning the perception of structuredness and the variables of sex, IQ, and creativity. For males, the perception of structuredness seems to become more acute with high intelligence and less acute with high creativity. Females tend to be insensitive to differences in structuredness regardless of creativity level or intelligence level. These findings were interpreted in part as reflecting the difference between instrumental vs. social sex roles for boys and girls respectively.



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## APPENDICES

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## Information to Assess Structuredness

1. Individualized vs. group (projects and supervision)
  - 1.1 Number of options or possibilities for independent study.
  - 1.2 Number of students who select the independent study options in the different subject areas.
  - 1.3 Opportunity for tutorials.
    - 1.31 Number of tutors available.
    - 1.32 Number of students engaged in tutorials.
2. Flexible vs. inflexible scheduling.
  - 2.1 Comparison of the general scheduling pattern of the two schools.
    - 2.11 Number of periods in the school day.
    - 2.12 Length of periods.
    - 2.13 Number of variations possible in scheduling.
      - 2.131 Time variations. Variations in length of periods.
      - 2.132 Subject variations. Variations in the subject-area content during periods.
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      - 2.134 Scheduling outside of the school day.
      - 2.135 Other variations.
        - 2.1351 Changes in scheduling for special days.
        - 2.1352 Changes in scheduling for special weeks.
  - 2.2 Choice of the present scheduling system.
    - 2.21 Major considerations and reasons for choosing this scheduling system.
    - 2.22 Satisfaction with the present system.
    - 2.23 Dissatisfaction with the present system.
    - 2.24 Revisions undergone.
    - 2.25 Revisions being considered.
  - 2.3 Percentage of unstructured scheduling time.
    - 2.31 Standard amount of unstructured time for all students or privilege or honor system to determine the number of free periods for students.
    - 2.32 Possibilities within unstructured time (how restricted is the student in using his unstructured time).
      - 2.321 Limits (for example not leaving school grounds).
      - 2.322 Number of created options.
      - 2.323 Possibility for students to create options for unstructured time.
    - 2.33 Amount of faculty time that is unstructured.
3. Many vs. few options within the programs and plans of study.
  - 3.1 The broad aims or goals of the course of education of this Junior High School.
    - 3.11 The aims.
    - 3.12 Persons who define these aims.
  - 3.2 The various educational programs offered. For example, college-bound programs, vocationally-oriented programs, special groups (slow-learning groups, etc.).

Appendix A (cont.)

- 3.3 3.21 Number and description of programs
- 3.22 Groupings within programs i.e. phasing
  - 3.221 Number of groups.
  - 3.222 Reason for grouping.
  - 3.223 Criteria to establish groups.
- 3.3 The curriculum plans to implement the various programs.
  - 3.31 Concept and function of curriculum plans.
  - 3.32 Planning of curriculum.
    - 3.321 Major considerations in the planning.
    - 3.322 Persons involved in the planning.
    - 3.323 Structuredness and detail of the curriculum.
    - 3.324 Student voice in curriculum planning.
  - 3.33 Standardization of the curriculum.
    - 3.331 Number of alternatives to standard curriculum.
      - 3.3311 Number of required courses within a particular phase and a particular program.
      - 3.3312 Within a particular program and a particular phase, the number of sequentially-ordered courses.
      - 3.3313 Number of electives with a program and a phase.
      - 3.3314 Sequential course recommendations (from guidance counselors) within a program and a phase.
    - 3.332 Students' role in deciding among the alternatives.
- 3.4 Course curriculum plans.
  - 3.41 What dictates a course curriculum plan.
  - 3.42 Planning of course curriculum.
    - 3.421 Major considerations in the planning.
    - 3.422 Persons involved in the planning.
    - 3.423 Structuredness and detail of the course curriculum.
    - 3.424 Student voice in course curriculum planning.
- 3.5 Lesson plans
  - 3.51 Relationship between lesson plans and course curriculum (how closely tied).
  - 3.52 Requirement that teachers' lesson plans be submitted to the office.
  - 3.53 Detail and structuredness of the lesson plans.
- 3.6 Checks on the following of plans and curriculum.
- 3.7 Revision of plans and curriculum
  - 3.71 Programs.
  - 3.72 Curriculum plans.
    - 3.721 Ways in which faculty free to revise curriculum.
    - 3.722 Identifiable body students can go to to change or revise curriculum.
    - 3.723 How often curriculum revised.
  - 3.73 Course curriculum.
- 4. Student-centered vs. teacher-centered.

Information pertinent to this criteria is covered by various questions under other criteria. The questions or points relevant to the student-centered vs. teacher-centered dimension are 1.1, 2.133, 2.323, 3.324, 3.3252, 3.425, 3.722.

5. Communication linkages between students and faculty and/or administrators (high and low).
  - 5.1 Student participation or voice in committees that have teachers on them.
  - 5.2 How students' opinions about various issues are found out.
  - 5.3 Number of legitimate channels students have for making their opinion known.
  - 5.4 Conception of the role of the student.
  - 5.5 Efficacy of student-governing bodies.

## Directions:

98

Print your name, age, sex (M or F), and grade on the answer sheet. The following is a questionnaire about this school. Answer each question not in the way that you would like things to be, but the way you actually see things as they are in this school.

Put your answers on the computer answer sheet. If you strongly agree with the statement on the questionnaire, then blacken in 1 on the answer sheet. If you somewhat agree with the statement, blacken in 2. If you somewhat disagree with the statement, blacken in three. If you strongly disagree with the statement, blacken in four. (Do not use category 5 on the answer sheet). This means that the answer blocks for each statement represent the following:

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4
Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree

For example, with the statement 'I like red better than blue.' If you strongly agreed with this statement your answer would be

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4

It is important that you be serious and honest in answering these statements.



often

23. The curriculum should be revised more<sup>often</sup> than it is.
24. I know what the general educational goals of this school are.
25. Teachers often take time out from the lesson plan to talk about other things.
26. My program of courses fits my learning needs.
27. Getting a certain amount of classwork done is very important in my classes.
28. Students' needs and concerns are considered in curriculum planning.
29. Most teachers stick to classwork and do not get sidetracked.
30. There are too many required courses.
31. Little class time is spent discussing outside student activities rather than class-related material.
32. Each semester I have a number of electives.
33. Suggestions from students for topics for discussion would not be welcomed by the teachers of my classes.
34. Even though there are electives, with the recommendations from the guidance counselors, I don't have much choice about what to take.
35. Suggestions from students for topics or areas of instruction in my classes would not be welcomed by teachers.
36. If I made suggestions about something in the curriculum that I thought should be revised, these suggestions would be seriously listened to.
37. Students help decide when tests will be given.
38. Students have little to say about the way classes are run.
39. Students' suggestions are followed by teachers.
40. A point of view from a student that is different from a teacher's is unacceptable.
41. Most of my teachers know students very well.
42. Teachers take a personal interest in students.
43. Most teachers I know are more like authorities than friends.
44. Students discuss their ideas a lot in the classes I have.



45. Most teachers like students to talk with each other during class about what's going on.
46. One of the most important things for a teacher is to be able to control the class.
47. Students are treated like individuals in my classes.
48. It's the teachers that make all the decisions around here.
49. Students usually wait to be called on before speaking in class.
50. If I disagree with the material being presented I feel free to express my disagreement.
51. After a student talks in class the teacher fits the student's statements into his (the teacher's) own terms.
52. When I'm answering a question in class I have to be careful of the way I word my answer.
53. I seldom stay after class to talk something over with the teacher.
54. If you want to talk about something to a teacher even though he is busy, he will find time to talk with you.
55. Teachers spent little time talking with students about their problems.
56. Outside of class teachers do not take time to talk with students.
57. Teachers try to find out from students what students' opinions are about various issues.
58. Students do not participate on committees that have faculty members on them.
59. The principal and the assistant principal try to find out from students what students' opinions are about various issues.
60. There are a number of ways for students to make their opinions known to teachers and administrators.
61. Nothing can be put into effect by the student government without being approved by the administration.
62. Not only are there the channels for 'getting heard', but opinions from students are welcomed.
63. The student government is a powerful organization in terms of being able to get things that students want done.

64. My idea of teachers is that they are all pretty much alike.
65. One idea that teachers have of students is that it is they who are being educated and therefore the students really have important things to say about their education.
66. When I get older I could never imagine myself being like one of my teachers.
67. How many extracurricular activities are you in? Choose one of the following and indicate your answer on the answer sheet:
- 1 if 0 or 1 activities
  - 2 if 2 or 3 activities
  - 3 if 4 or 5 activities
  - 4 if 6 or 7 activities
  - 5 if more than 7 activities

## Key to Questionnaire on the Perception of Structuredness

Listed under each criterion for structuredness are the numbers from the questionnaire of the questions that are relevant to that criterion. After the number of each question there is indicated whether that statement is in the high or low structured direction. An S after the number indicates that that statement is in the structured direction. A US after the number that the statement is in the unstructured direction. To derive a structuredness score structured statements were scored in the following way: response 1 (Strongly agree) 4 points, response 2 (somewhat agree three points), response 3 (Somewhat disagree) 2 points, response 4 (Strongly disagree) 1 point. For responses to statements in the unstructured direction, 1,2,3,and 4 points were given for responses 1, 2, 3, and 4 respectively.

## Characteristic 1 Individualized vs. groups

## Questions 1-10

1. S
2. US
3. S
4. S
5. US
6. S
7. US
8. US
9. S
10. US

## Characteristic 2 Flexible vs. inflexible scheduling

## Questions 11-20

11. S
12. S
13. US
14. S
15. US
16. S
17. S
18. US
19. US
20. US

## Characteristic 3 Many vs. few options within the programs and plans of study. Questions 21-36.

21. S
22. US
23. S
24. US
25. US
26. US
27. S
28. US
29. S
30. S
31. S
32. US
33. S
34. S
35. S
36. US

Characteristic 4 Student-centered vs. teacher-centered.  
Questions 37-52

- 37. US
- 38. S
- 39. US
- 40. S
- 41. US
- 42. US
- 43. S
- 44. US
- 45. US
- 46. S
- 47. US
- 48. S
- 49. S
- 50. US
- 51. S
- 52. S

Characteristic 5 Communication linkages (high and low)  
Questions 53-66

- 53. S
- 54. US
- 55. S
- 56. S
- 57. US
- 58. S
- 59. US
- 60. US
- 61. S
- 62. US
- 63. US
- 64. S
- 65. US
- 66. S

*individual teachers*

To:

From: Judy Stockslager

Purpose: Information for psychological experiment

Would you please list on this paper the names of any students you have in your classes who are doing independent study or independent projects for you.

Do you offer the option of doing independent work in your classes?

Yes \_\_\_\_\_ No \_\_\_\_\_ (check one)

If yes, in how many of your classes? \_\_\_\_\_

After you fill this out would you have a student during some free time

to help with \_\_\_\_\_

Thank you for your help.



To:

department co-ordinators

From: Judy Shortleaves

Purpose: Information for psychological experiment

How often are there curriculum meetings with you and the teachers in your department?

How often are there curriculum meetings with you, teachers in the department, and administrators?

Is it standard procedure for the principal or other administrator to attend the curriculum meetings in your department?

Yes \_\_\_\_\_

No \_\_\_\_\_

(check one)

How often are curriculum plans revised (i.e. the sequence of courses in the department)?

How often are individual course curriculum plans revised?

After you fill this out, would you have a student during some free time

bring it to \_\_\_\_\_

Thank you for your co-operation

Appendix F  
Instructions to Judges

Your general task is to rate the information on two Junior High Schools in terms of structuredness.

Structuredness is defined by five criteria derived from Goffman's characteristics of total institutions (Asylums, Goffman, pp. 1-12). Each criteria is a dimension that goes from low structure to high structure. The five criteria are: individual vs. group (projects and supervision), flexible vs. inflexible scheduling, many vs. few options in the different programs and plans of study, student-centered vs. teacher-centered orientations, and communication linkages between students and faculty and/or administrators (high vs. low).

The meaning of these five criteria and the interpretation that you are to give them in the ratings can best be understood by turning to the characteristics of total institutions from which these criteria were derived. The characteristics of total institutions that were taken from Goffman's discussion were those that seemed in some way to apply to educational institutions. These were: 1. activities are carried on in a large group of others all of whom are treated alike. 2. activities are tightly scheduled. 3. activities are brought together under a plan designed to fulfill the official aims of the institution. 4. the supervision is by persons whose chief activity is surveillance. 5. the social distance between the two groups, the 'supervisors' and the 'inmates' is great, and the talk across the boundary is restricted (Goffman, pp 1-12.).

Changing the characteristics slightly to make them more applicable to a school setting, it can be seen that the first characteristic mentioned above, worded positively in terms of

less structure, could be the opportunity for individual projects and individualized supervision. Thus the criteria from this characteristic is individual vs. group (projects and supervision). The second characteristic appears to be directly applicable to school; put in terms of less structure this becomes flexible scheduling, and the criteria for this characteristic is flexible vs. inflexible scheduling.

The third characteristic is what Goffman call an 'over-all rational plan' (p.6). In a total institution, the activities for inmates are brought together by an over-all rational plan, which dictates the whole sequence of activities for inmates. Both where the plan comes from and the purpose of the plan indicate the hierarchical structure of the total institution. The plan is "imposed from above by a system of explicit formal rulings and a body of officials" (Goffman, p.6). Also the plan, under which the various activities are brought together, is 'designed to fulfill the official aims of the institution' (Goffman, p.6).

Analogous to this type of plan in a total institution are the general curriculum plans in a school system. This meets the definition of an 'over-all plan' because it is the general curriculum plans which dictate the sequence of courses which a student takes during his school career. Also it is the general curriculum plans which are designed to meet the aims of the institution. The very broad aims or educational goals for a school might be to promote good citizenship, to foster ethical values, mental health, etc.; however the means for reaching these goals are nothing more than the planned curriculum in the school. The planned curriculum as analogous to the type of over-all plan that Goffman is talking about would involve such things

as sequential ordering of courses, programs, and distribution requirements; in short, the programs and plans of study in the school.

To the extent that the broad educational aims or goals of the school dictate the general curriculum plans and the general curriculum plans dictate the course curriculum and the lesson plans would there be a strict and tight hierarchical structuring such as that described by Goffman. To the extent that there are choices and alternatives in the various levels of plans phasing down from the over-all plan (the general goals) would there be less of a rigid structure emanating from the over-all plan. The five levels of plans are the broad aims or goals of the school, the programs (i.e. college-bound, work-study, etc.), the curriculum plans to implement the programs (i.e. the sequence of courses for the various programs), the individual course curriculum plans, and the lesson plans. The criteria for structuredness from this characteristic from Goffman would be many vs. few options within these different levels of programs and plans of study. The assessment of this criteria would be in terms of the alternatives and choices at each of the five levels of the plans.

The fourth characteristic (supervision by persons whose chief activity is surveillance) is described by Goffman in the following way.

The handling of many human needs by the bureaucratic organization of whole blocks of people-- whether or not this is a necessary or effective means of social organization in the circumstances-- is the key fact of total institutions. From this follow certain important implications.

When persons are moved in blocks, they can be supervised by personnel whose chief activity is not guidance or periodic inspection (as in many employer-employee relations) but rather surveillance-- a seeing to it that everyone does what he has been clearly told is required



of him, under conditions where one person's infraction is likely to stand out in relief against the visible constantly examined compliance of the others.

(Goffman, pp.6-7.).

Central to the interpretation of this characteristic is 'a seeing to it that everyone does what he has been clearly told is required of him.' (Goffman, p.7). In relation to the third criteria this would mean that the primary role or purpose of teachers is to make sure that bureaucratic plans and expectations are carried out, and the student's role becomes defined in terms of these expectations. This fourth criteria would run along the dimension of student-centered vs. teacher-centered or what has been called the humanistic vs. the custodial ideologies of teaching. With the former there would be the centrality of the student's role with emphasis on student choice, student initiation of plans, and acceptance and elaboration of students' ideas by teachers. ; with the latter there is greater emphasis on seeing to it that students play out the bureaucratic expectations of them; there is emphasis on maintaining the routine designed to perpetuate the bureaucracy, and there is emphasis on maintaining discipline and control. This criteria is being called the student-centered orientation vs. the teacher-centered orientation.

For the fifth characteristic, Goffman says that the social distance between the two groups, the 'supervisors' and the 'inmates', is great, and that talk between the two groups is restricted. This means that there are few communication channels between the groups and the communications that there is is restricted. The criteria from this characteristic is communication linkages between students and faculty and/or administra-



tors (high vs. low).

The way you are to read the information in the protocols is to read only the information under one criteria at a time, first for one school and then for the other school, starting with the information under criteria one. Then turn to the rating sheet and indicate your judgement of the relative structuredness of the two schools in terms of that criteria by marking on scale one one mark for School A and one mark for School B. Label one mark A, the other B.

Go back to the protocols and read the information under criteria 2; read all the information under # 2 for one school and then read all the information under # 2 for the other school. Turn again to the scoring sheet and indicate your judgement of the relative structuredness of these two schools in terms of the second criteria.

Do the same for each of the other three criteria.

You are also to make a sixth rating, one that represents your judgement of the relative over-all structuredness of the two schools.

If at any time you feel unsure of the meaning of a criteria, go back to the earlier part of these instructions where the interpretation of the criteria is described.

Also the diagram on the following page may help you keep track of how low and high structure are being defined. Refer to it at any time.

The Five Criteria that Define Low Structure and  
High Structure

## Low Structure

1. Individual projects  
individual supervision
2. Flexible scheduling
3. Many options in the plans  
and programs of study.
4. Student-centered orienta-  
tion (emphasis on elaboration  
and acceptance of students'  
ideas; student initiation and  
student choice.).
5. Communication linkages (high)  
(many and effective communication  
channels between students and  
teachers and/or administrators).

## High Structure

1. Work done in large groups  
Everyone treated alike.
2. Inflexible scheduling.
3. Few options in the plans  
and programs of study.
4. Teacher-centered orienta-  
tion (emphasis on disci-  
pline, control, order,  
maintaining the routine).
5. Communication linkages (low)  
(few and ineffective commun-  
ications channels between  
students and teachers and/or  
administrators).

1. Individual vs. group (supervision and projects).

1	10	20	30	40	50	60	70	80	90	100
low structure					high structure					

2. Flexible vs. inflexible scheduling.

1	10	20	30	40	50	60	70	80	90	100
low structure					high structure					

3. Many vs. few options in the plans and programs of study.

1	10	20	30	40	50	60	70	80	90	100
low structure					high structure					

4. Student-centered vs. teacher-centered orientations.

1	10	20	30	40	50	60	70	80	90	100
low structure					high structure					

5. Communication linkages between students and faculty and/or administrators (high vs. low).

1	10	20	30	40	50	60	70	80	90	100
low structure					high structure					

6. Over-all structuredness of the schools.

1	10	20	30	40	50	60	70	80	90	100
low structure					high structure					

## Appendix H

## INFORMATION TO ASSESS STRUCTUREDNESS

## SCHOOL A

## 1. Individualized vs. group (projects and supervision)

1.1 Number of options or possibilities for independent study. (This information was gotten from a questionnaire sent to 25 teachers. Of the 25 questionnaires, sent out there were 12 respondents.

There were 2 questions asked for this point of information; the first question was 'Do you offer the option of doing independent work in your classes?', and the second question was 'If yes, in how many of your classes!)

-- Number of teachers who offer the option of doing independent work (12 respondents) responses

Positive 11	Negative 1
-------------	------------

-- Number of classes in which these teachers offer the independent work option (11 respondents) responses

Number of classes	Number of teachers making this response
-------------------	---

All	6
-----	---

3	1
---	---

2	1
---	---

1	1
---	---

'Anywhere it is necessary'	1
----------------------------	---

'All but phase 2'	1
-------------------	---

Other general information pertinent to 1.1

- Phase 5. One important characteristic of phase 5, the highest phase level in School A, is the emphasis on independent learning. Included in the Program of Studies booklet for School A is a description of the 5 phase levels. The expectations for the student in phase 5 are the following:

- "1. have developed or expressed a sincere interest in the particular field of knowledge related to the course which he selects.
2. undertake work of considerable depth and variety.
3. assume a major portion of the responsibility for his own achievement.
4. demonstrate a sophistication in the expression of original thought and critical analysis.
5. prepare a number of independent projects through the use of the library and other resource centers.
6. pursue some part of the learning activities in the course on a completely independent basis."

(Program of Studies, p. 10)

- Though independent learning is stressed in phase 5, it may be done in any of the phase levels. According to the Program of Studies booklet, "Independent study



may be arranged within any phase level if such is approved by a member of the teaching staff. In some cases, such study may replace formal classroom sessions." (p. 5).

- Also in some subject-areas the channels for doing independent work are formalized. In science, for instances, the unit of study changes every 4 weeks. A week prior to the change to a new unit, a student has the opportunity to submit a contract for independent study for that unit. If the contract is approved, then the student works on that project in place of the new unit.

In art, there are art open lab programs in which a student can participate only if he submits a contract for a lab project.

- 1.2 Number of students who select the independent study option in the different subject areas. (This information was gotten from the same questionnaire as in 1.1. Again there were 12 teachers, out of 25, who responded to the questionnaire. For this point, the questionnaire asked the teacher to list the names of any students in his classes who were doing independent study or independent projects for him.)

- The number of teachers who listed some students: 9.

- The number of teachers who listed no students: 3.
- The responses of those 9 teachers who listed some students:
  - 3 students listed  
"also in each class each student is doing a project."
  - 13 students listed. Written in ( ) next to the list 'sampling only'. "Science units change every 4 weeks. Every student has the opportunity to submit a contract for independent study one week prior to each change. Satisfactory projects are approved in lieu of the next unit."
  - "all math students in my classes except phase 1 grades 7-8, do independent work once a week."
  - "the math department uses the resource center extensively for this. One day a week for one period all classes work here independently. I require 4 contracts (short term, specific objective studies) a quarter from each of them."
  - 8 students listed.
  - "every student in my general music classes spends from two to three periods a week in independent work."
  - 53 students listed. "Contracts for oral reports in 2 classes necessitate independent preparation time in resource centers."

-- 2 students listed.

-- 1 student listed.

### 1.3 Opportunity for tutorials

#### 1.31 Number of tutors available

-- There used to be a fairly large number of student tutors from a nearby university who went to School A on a regular basis, weekly or biweekly, to help students who were having learning problems in a subject. Now there are fewer student tutors, about 22 from the university, but there are interns, aids, and para professionals, approximately 36-40 of these people in the school, who give help to students. Also the Open Lab Program has a built-in tutoring service; at any period in the day a student can find a teacher to go to for help.

1.32 Number of students engaged in tutorials. In School A there is an Individualized Program Center which operates in place of more traditional special educational facilities. The number of students who, because of learning problems, are getting special learning programs through the Individualized Program Center is approximately 15.

## 2. Flexible is inflexible scheduling

### 2.1 Comparison of the general scheduling pattern for the two schools:

-- see the following page for the general scheduling system for School A.

#### 2.11 Number of periods in the school day.

-- 8 time periods, 7 letter periods

#### 2.12 Length of periods

-- regular periods: 45 minutes

double periods: 90 minutes

#### 2.13 Number of variations possible in scheduling.

##### 2.131 Time variations. Variations in length of periods.

-- On two school days, 6 of the 7 letter periods (A-H) are 45 minutes in length; the remaining period is a double period, 90 minutes long. The other 3 days have 5 45 minute periods and 2 double periods.

##### 2.132 Subject variations. Variations in the subject-area content during periods.

-- for each day of the week the letter period during a particular time period is repeated only twice. (The exception to this is period 11:30 - 12:45, during which time E is held 3 times, Mon., Wed., and Fri.)

	M	T	W	T	F	
8:14	A	D	C	B	A	8:59
9:03	B	A	D	C	B	9:49
9:52	C	A	D	C	B	10:37
10:41	D	C	B	A	D	11:26
11:30	E	H	E	H	E	12:45
12:49	H	F	G	E	F	1:34
1:38	H	F	G	E	G	2:23
2:27	F	G	F	G	H	3:12

Schedule for School A

8 - 8:10 Morning homeroom

attendance

reading of announcements

morning exercises

When open lab in E period, lunch 3rd part of E, open  
lab 1st and 2nd part of E

E 1st 11:26 - 11:51

2nd 11:55 - 12:15

3rd 12:20 - 12:45



- also the order of the letter periods are different each day of the school week.

#### 2.133 Student-controlled time and subject variations.

- It would be relatively easy for a student to get permission to miss a class if the classwork were independent work, so that the student could make it up on his own or if the same class met at another time when the student had a free period. This means that the student could alter his time scheduling considerably.
- As far as subject variations go, a student can change his schedule any time up to two weeks before the closing of marks. This includes both the phase level and the units (subjects). A change in scheduling can be done in any of several ways: student-initiated or through a teacher, parent or guidance counselor recommendation.

#### 2.134 Scheduling outside the school day.

- There are not really very many curriculum-connected schedulings outside the school day. Sometimes there might be a Saturday or an after school course-connected field

trip, but they are rare. There are of course, the extracurricular clubs and athletics that are scheduled after school.

#### 2.135 Other variations

##### 2.1351 Changes in the scheduling for special days.

-- There are sometimes changes in scheduling for special assemblies. Also for curriculum days when teachers meet and classes are suspended. There are some things that are held in the High School that are gone to by a large number of students here, for instances, a speaker, an assembly, a science demonstration, a fair. This means that the schedules of these students have to be changed for that day.

##### 2.1352 Changes in scheduling for special weeks.

-- The scheduling system changes for a two-week period, the last two weeks of school, when Mini courses are given. The courses offered

during this Mini-Course period vary from yoga to gourmet cooking. This year there are 236 course selection possibilities; this number will reduce somewhat depending upon what teachers can do and upon how many student sign up for the different courses. During the Mini course period there are 4 classes during the day, with each class one and one-half hours long.

## 2.2 Choice of the present scheduling system

### 2.21 Major considerations and reasons for choosing this scheduling system.

- The primary reasons are the educational opportunities inherent in this system.

There is variation with the schedule; each day of the week the periods are ordered differently. The double period has great advantages in music, science lab, and shop programs.

### 2.22 Satisfaction with the present system.

- The assistant principal said that the scheduling system was very satisfactory for the reasons above (i.e. 2.21).

### 2.23 Dissatisfaction with the present system

- There are a number of dissatisfactions that

have been raised by teachers about the scheduling system. With math, for example, it is difficult to teach math for 80 minutes. Only a certain amount of new material can be presented per session. Therefore the double period necessitates spending time going over problems, and doing homework and other activities, some of which could be done as well outside of class, which means that class time is not being spent efficiently or to the best advantage. On the other hand, because it is necessary to do alternate activities, such as using the resource center, classes are more varied. Another dissatisfaction is that a teacher can get a 7-period day, which is a heavy load of teaching.

#### 2.24 Revision undergone.

-- The present scheduling system has been in effect for 4 years and has not been changed during that time.

#### 2.25 Revision being considered.

-- None.

#### 2.3 Percentage of unstructured time.

2.31 Standard amount of unstructured time for all students or privilege or honor system to determine

the number of free periods for students.

- With the ninth graders, 281 of them have 1 free period, while 134 of them have 2 free periods. With the seventh graders, only 54 have more than 1 free period. The free periods are not based on any type of privilege system, but are dictated solely by the selection of courses.

2.32 Possibilities within unstructured time (how restricted is the student in using his unstructured time).

2.321 Limits (for example not leaving school grounds).

- Every student must account for his free periods by signing into an open lab. Students must attend 3 open labs a week. This is kept track of by the lab attendance being sent to the homeroom teachers. Also a student cannot leave school grounds, unless he has a specific assignment at the high school, which has been approved. Also students are not to linger in corridors during their free periods.

2.322 Number of created options.

- There are approximately 36 different



open lab options, ranging from quiet study, games room, pool, subject-matter help session, to rap sessions. The number of open lab options varies depending upon what lab experiences teachers wish to offer.

2.323 Possibility for students to create options for unstructured time.

-- This is definately a possibility for students as long as they can get a teacher to sponsor it. Just recently a group of students, interested in drama, got a teacher to assist they in an open lab.

2.33 Amount of faculty time that is unstructured.

-- Normally each teacher has 2 free periods during the day.

3. Many vs. few options within the program and plans of study.

3.1 The broad aims or goals of the course of education of this Junior High School.

3.11 The aims.

-- See the following page which is from the Program of Studies booklet, and which states the philosophy and objectives of School A.

-- According to the assistant principal, the aims

## 1. Educational Philosophy of Our School

Our school system is dedicated to two major goals:

- a. the development of the individual in accordance with his abilities and interests, and
- b. the development of citizenship: to awaken the interest and to create the desire in each pupil to be loyal and effective in strengthening and perpetuating the American system of democracy.

In dedicating ourselves to these goals, we recognize that we must consider each pupil as an individual and that we must take him from whatever level of achievement he has reached to whatever level he can attain in our educational programs. We must always keep the individual in sight, and, toward that end, we do not expect that each student should learn the same things or develop the same skills as every other student in his "group". Nor can we expect every student's rate of learning to be the same.

## 2. Educational Objectives of Our School

In order to implement our stated philosophy, our Junior High programs are designed to:

- a. develop the ability to express and interpret ideas and feelings (reading, writing, listening, speaking);
- b. develop such other basic understandings and skills as are useful in daily living (mathematics, science, industrial arts, home economics);
- c. promote good physical and mental health (physical education, science, guidance, health services, home economics, cafeteria, athletics);
- d. develop social understandings and tolerance, ethical standards, and worthwhile values (social studies, extracurricular activities, etc.);
- e. develop an awareness and appreciation of aesthetics (art, music);
- f. encourage intellectual curiosity, independent thinking, and creative thinking;
- g. develop good study habits;
- h. encourage wise use of leisure time;
- i. provide students with a coordinated transition between elementary school and Senior High; and
- j. provide students with exploratory experiences in a number of subject matter areas, experiences that will prove helpful when students are faced with self-determination of their interests and aptitudes.

are to give students the broadest experience which is educationally possible; to provide him with the various subject areas; to help students bridge the gap between elementary and high school; to provide him with the opportunity to grow socially and emotionally; to encourage students to seek out 'who am I' and 'where am I going!' With phase levels to have every student feel a certain amount of success.

### 3.12 Persons who define these aims.

-- It starts with teachers. Teachers reflect what they have experienced in the classroom as they can talk about student aims and this is brought into department level and it goes from the department chairman to administrators, who submit their opinions and recommendations to the central office; and the central office brings them to the school committee. More recently there has been concern with getting parents in on the development of aims and objectives and also on the evaluation of curriculum.

### 3.2 The various educational programs offered.

For example, college-bound programs, vocationally,

oriented programs, special groups (slow-learning groups, etc.)

### 3.21 Number and description of programs:

- Work-study program in which there is less time spent in school; often the student in this program, goes for half a day. The course credit requirements are altered.
- Early student program. For a student who wants to graduate early it is possible for him, if he is qualified, to choose as some of electives courses from the high school. By doing this he is able to complete his high school requirements earlier and to graduate earlier.
- There is no label for others (i.e. college bound) because programs reflect the needs of the students; the programs are tailored-made.

### 3.22 Groupings within programs, i.e. phasing.

#### 3.221 Number of groups.

- 5

#### 3.222 Reason for grouping.

- To give a student the opportunity to achieve at a level which is commensurate with his ability, which makes successful experiences possible for every student.



### 3.223 Criteria to establish groups.

- There are several: teacher recommendations, achievement scores, and grades.

## 3.3 The curriculum plans to implement the various programs.

### 3.31 Concept and function of curriculum plans.

- To provide the basic core of material that students should have that would prepare him for high school courses; to provide the experiences necessary to carry out the aims of the school.

### 3.32 Planning the curriculum.

#### 3.321 Major considerations.

- same as 3.31.

#### 3.322 Persons involved in the planning.

- School committee members are involved.

Guidelines are offered by the superintendent of schools; and department heads, and teachers and administrators all take part in the planning.

#### 3.323 Structuredness and detail of the curriculum.

- There is an attempt to develop curriculum plans as much as possible and as specifically as possible. The objectives must be defined. There are objective



banks being developed now; these are files kept by teachers which have in them cards stating the objective/objectives of a particular lesson or a series of lessons.

### 3.324 Student voice in curriculum planning.

-- There is no formal channel for students, but there are a couple of ways in which students can influence the curriculum planning. The objective banks are open to students. Also there are plans to have parents review performance objectives, so students' opinions would be indirectly expressed in that.

### 3.33 Standardization of the curriculum.

#### 3.331 Number of alternatives to standard curriculum.

3.3311 Number of required courses within a particular phase and a particular program.

-- In School A, the year is divided into quarter units for credit. Doing 4 units (a year's work) in a subject means that 4 credits would be earned. The credits required are as follows:

Social Studies	8 credits
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English	12 credits
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Math	8 credits
------	-----------

Physical Education	8 credits
--------------------	-----------

Block	8 credits
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(the lab block is 12 weeks of art, 12 weeks of music, and 12 weeks of either shop or home economics).

What this means is that in the seventh and eighth grades a standard curriculum of English, math, science, social studies, block, and gym is followed. Each of these subject areas is required for every (with the exception of those in the Individualized Program Center) seventh and eighth grader. In ninth grade only English is required.

-- see the following sheets, the first showing the subject areas and the required units, and the second one showing a sample of the first unit selections for a seventh grader.

3.3312 Within a particular program and a particular phase, the number of

AREA	PHASES	REQUIRED UNITS	ELECTIVE UNITS	COMMENTS
English (required)	3 & 4	Language study. Mythology and Folklore.	Non-fiction A Non-Fiction B Fiction A Fiction B	Test-out procedure is available.
	1 & 2	Comprehensive course.	None except on independent study basis.	Where needed special reading help is sche- duled.also.
Mathematics (required)	1,2,3,4	Comprehensive course.	None except on independent study basis.	Test-out pro- cedure is available.
Science (required)	1,2,3,4	None	Nine different units each last- ing one month.	Test-out pro- cedure is available.
Social Studies (required)	1,2,3, 4,5	Introductory unit on Geogra- phic Concepts and Terms.	Five different units each last- ing approximate- ly six weeks.	Test-out pro- cedure is available.
Foreign Language (recommended but not re- quired)	3 & 4	Comprehensive course.	French or Spanish	Test-out pro- cedure is available.
Lab Block	X	Twelve weeks in each of three areas: 1. Art 2. Music 3. Shop or Home Economics	None	
Physical Education (required)	X	Comprehensive course that meets on a daily basis.	None	

SPECIAL ACTIVITIES: The following extra-curricular activities are avail-  
able for the student's personal choice: BAND, ORCHESTRA, ATHLETICS and  
CHORUS. The organization of clubs for special interests is encouraged.

Subject Area	Unit Selections in Appropriate Phase	Comment
English (required)	Language unit	Followed by elective units
Mathematics (required)	Math	No unit choices available
Science (required)	Introduction	or other elective unit
Social Studies (required)	Geography	Followed by elective units
Foreign Language (recommended but not required)	French I	or Spanish (Latin or German are ordinarily elected on higher grade levels)
Physical Education (required)	Phys. Ed.	No unit choices available
Art (block required)	Ind. Arts for six weeks (or Art or Music or Home Economics)	Followed by six-week periods in each of other art areas for <u>both</u> boys and girls.

sequentially-ordered courses.

- all of the major subject areas (math, science, English, social studies) are sequentially-ordered.

3.3313 Number of electives within a program and a phase.

- In the seventh and eighth grades, the only subject-area elective is a language. However with 3 of the 4 major subject areas (social studies, English, science) there are elective units. In social studies, the year is divided into 4 sections, each lasting one marking term. The first day of each section students elect their choice from a selection of at least 3 units for that section.

In English there are also elective units which are described on the sheet showing subject areas, required units, elective units, etc.

In science, the year is divided into 8 sections each lasting about a month. At the beginning of each



section, students choose 1 out of 3 units offered for that section. The paper on the following page clearly shows the elective possibilities for a seventh grader.

3.3314 Sequential course recommendations (from guidance counselors) with a program and a phase:

-- This is a little difficult to describe because recommendations change according to phase level and according to perception of a student's interest. There are a couple of things that are fairly standard recommendations. For phase 3 and higher, it is standard to recommend a language in 7th grade and the continuation of a language in 8th grade if work is satisfactory at that phase. Other fairly standard recommendations are a continuation of the major subject areas for those at a good level of achievement in the upper phases. Also there are recommendation to take high school

courses made to student who are at a high level of achievement in the upper phases and whose interests would seem to be served by such courses.

3.332 Students role in deciding among the alternatives.

-- This is answered by 3.3313, 3.3311.

3.4 Course curriculum plans.

3.41 What dictates a course curriculum plan.

-- Primarily future learning needs and preparation for high school.

3.42 Planning of course curriculum.

3.421 Major considerations.

-- Answered by 3.41.

3.422 Persons involved in the planning.

-- There are specialists of instructional materials such as the director of the resource center who is consulted about the instructional aids in the resource center. Then there are the department members who are involved in some capacity. The heaviest responsibility for planning is on the teachers teaching the course along with the department co-ordinator.

These people determine what the objectives of the course will be at each phase level.

3.423 Frequency of curriculum meetings.

(This information was gotten from a questionnaire sent to the 5 department chairman of the major subject areas. The question asked 'How often are there curriculum meetings with you and the teachers in the department.' There were 4 respondents).

Responses:

- 'We have numerous meeting but all could not be interpreted as strictly curriculum meeting.'
- 'Every week'.
- 'Nearly every day'.
- 'Every 3-4 weeks'.

3.424 Structuredness and detail of the course curriculum.

- There is an attempt to be as specific about this as possible. With the objective banks, there are written statements of the objectives. Also there is an attempt to work out the classroom experiences and presentations that will meet these objectives.

3.425 Student voice in course curriculum planning.

-- see 3.323.

-- There is no formalized way for this, but teachers and students can discuss the matter, which happens often.

### 3.5 Lesson plans.

#### 3.51 Relationship between lesson plans and course curriculum.

-- There is an attempt to break down large course objectives into lesson objectives; this is all done through the use of the objective bank; this means that there is a definite relatedness between lesson plans and course curriculum.

#### 3.52 Requirement that teachers' lesson plans be submitted to the office.

-- none.

#### 3.53 Detail and structuredness of the lesson plans.

-- the lesson plans in the objective bank are put on 5X8 cards with statements of the main objectives for the class.

### 3.6 Checks on the following of plans and curriculum.

-- There is the supervision of interns; the objective banks are open to any teachers or department coordinators. Also there are frequent meetings in any department in which there are discussions of classroom planning. These all make for certain

guidelines being followed, but there is not a more formal check system used.

### 3.7 Revision of plans and curriculum.

#### 3.71 Programs

-- There are the work-study and the early student programs. These are assessed on a regular yearly basis. They are sometimes modified to better accomodate individual student needs.

#### 3.72 Curriculum plans.

##### 3.721 Ways in which faculty free to revise curriculum.

-- This is something which varies from department to department. Decision about changes in curriculum are always made with department co-ordinators.

##### 3.722 Identifiable body students can go to change/revise curriculum.

-- There is no identifiable body for this. The best idea is for students to talk with teachers.

##### 3.723 How often curriculum revised.

(This information was gotten from a question on a questionnaire which asked 'How often are curriculum plans revised i.e. the sequence of courses in the department?')



4 out of the 5 department chairmen responded).

Responses:

-- 'yearly'

-- 'every unit' (this would be 4 times a year).

-- 'very often'

-- 'once since I've been here (2 years)'

### 3.73 Course curriculum

(Information about the revision of course curriculum was gotten from a question which was asked to the 5 major subject department chairmen. 'How often are individual course curriculum plan revised?' 4 department co-ordinators responded).

Responses:

-- constantly

-- every year

-- every day

-- annually at least

### 4. Student-centered vs. teacher-centered.

Information pertinent to this criteria is covered by various questions under other criteria. The questions or points relevant to the student-centered vs. teacher-centered dimension are 1.1, 2.133, 2.323, 3.324, ~~3.3252~~, 3.425, 3.722.

### 5. Communication linkages between students and faculty and/or

administrators.

5.1 Student participation or voice in committees that have teachers on them.

-- There are a number of such committees. The student council, the student lounge committee, the Student Rights Committee, the Student Open Lab Committee, the Teacher Evaluation (by students) Committee. There is also the Student School Committee, which meets with the superintendent of schools.

These are all very active committee. Currently the Student Rights Committee is preparing a students Bill of Rights.

5.2 How students opinions about various issues are found out.

-- The office is always open to students; requests come from the student council, and there is a suggestion box.

5.3 Number of legitimate channels students have for making their opinions known.

-- 5.1

5.4 Conception of the role of the student.

-- A human being who is growing physically, socially, emotionally. Our concern is to provide him with as many experiences possible to help him develop in these different ways. We attempt to stay in the background and yet to provide those guidelines which

are necessary at this age level.

#### 5.5 Efficacy of student-governing bodies.

(things which students have put into effect in the past 1½ years).

- There has been the recognition of the Student Lounge Committee, which has raised money and created a student lounge area.
- Concern on the part of the students for the rules and regulations governing the library caused a curriculum meeting to be spent on this.
- There have been changes in the Open Lab check system because of requests from students.
- Also there have been a multitude of small requests which have been acted on.

## Appendix I

## INFORMATION TO ASSESS STRUCTUREDNESS

## SCHOOL B

## 1. Individual vs. group (projects and supervision)

## 1.1 Number of options or possibilities for independent study.

-- According to the principal, independent projects are options in science; and in certain social studies classes teachers offer independent work; while in math only remedial work is individualized; in English there is none except for some reading assignments.

-- From a question sheet that was sent to 25 teachers and which asked (1) to check if the option of doing independent work was offered by the teacher and (2) if the answer was yes; then in how many of his classes, the following information was gotten.  
(There were 19 respondents).

-- Number of teachers who offer the option of independent work

Yes: 8

No: 11

-- Of the teachers saying 'yes', the number of classes in which they offered the independent work option was:

Responses	Number of teachers making this response
all	2
1	1
2	1
3	4

## 1.2 The number of students who select the independent study options in the different subject areas.

(This information was also gotten from a question sheet which asked 25 teachers to list the names of any students in their classes who were doing independent projects for them. There were 19 respondents).

-- The number of students who select the independent study option.

Responses	Number of teachers making this response
none	17
some	2

The responses of these teachers indicating that some students select the independent study option.

-- "Most of my students have done independent study projects during the year, however, the outstanding one are . . . ." (and there were 9 students listed.)

-- "In the areas involving skills development, which is the reason for the Reading Classes, nearly all work is individualized. Students work at their own level and pace. There is very little project work, and no homework except continual free reading."

## 1.3 Opportunity for tutorials

### 1.31 Number of tutors available

-- none



1.32 Number of students engaged in tutorials.

-- None as such. There are some students who get extra help from their teachers. There are remedial reading classes, which are fairly individualized and which could be considered to be tutorial for that.

2. Flexible vs. inflexible scheduling.

2.1 Comparison of the general scheduling pattern of the two schools.

-- see the following page which shows the schedule for School B.

2.11 Number of periods in the school day.

-- 6

2.12 Length of periods.

-- First 3 periods 55 minutes

period 4 96 minutes

last 2 periods 41 minutes

2.13 Number of variations possible in scheduling.

2.131 Time variations. Variations in the length of periods.

-- see 2.12

2.132 Subject variations. Variations in the subject-area content during periods.

-- There are a number of variations because there is a 6 period day, 7 scheduled

Schedule for School B

Period	A	B	C	D	E	F	Time
1	1	2	3	4	5	6	8:14- 9:09
2	2	3	4	5	6	7	9:13-10:07
3	3	4	5	6	7	1	10:11-11:05
4	4	5	6	7	1	2	11:09-12:45
5	5	6	7	1	2	3	12:49- 1:30
6	6	7	1	2	3	4	1:34- 2:15

8:00-8:09 Attendance and morning announcements

8:09 Opening exercises

8:10 Passing bell

4th Period 1st lunch 11:05-11:35

2nd 11:40-12:10

3rd 12:15-12:45

2:15 P.M. announcements

2:20 Dismissal

<u>M</u>	<u>T</u>	<u>W</u>	<u>T</u>	<u>F</u>
<u>A</u>	B	C	D	E
F	A	B	C	D
E	F	A	B	C
D	E	F	A	B
C	D	E	F	A
B	C	D	E	F
<u>A</u>				

periods, and 6 different day-schedule patterns. This means that the same schedule of classes on a particular day of the week is not repeated for 6 weeks. For example, if a Monday is an A day, then the class schedule for that day is 1, 2, 3, 4, 5, 6. Monday will not be another A day with this same schedule for 6 weeks. See the diagram at the bottom left of the page showing the schedule for School B.

2.133 Student-controlled time and subject variations.

-- None according to the principal.

2.134 Scheduling outside of the school day.

-- There is nothing required that is scheduled outside the school day. There are extra-curricular activities scheduled then, clubs, band, athletics and so forth.

2.135 Other variations.

2.1351 Changes in scheduling for special days.

-- There is sometimes a longer homeroom period in the morning for special occasions. Occasionally the day is extended to make up for lost

time, for example, time lost due to a bomb scare. There might be the making up of snow days lost by going on Saturday. For assemblies or workshops (Note: workshops are teachers' meetings held in the afternoon. School problems such as drugs, timing, and uncontrollable classroom behavior are talked about) the afternoon schedule is changed.

2.1352 Changes in scheduling for special weeks.

-- None

## 2.2 Choice of the present scheduling system.

2.21 Major considerations and reasons for choosing this scheduling system.

-- The major consideration was to get more classroom space, because there was overcrowding and difficulty in getting classes into classrooms. This type of scheduling frees up the classroom for 2 periods a day. Two-fifths more teachers can use the classroom besides the regularly assigned teacher.

2.22 Satisfaction with the present system.

-- For the reasons this scheduling system was

started (the reasons in 2.21), it is satisfactory.

2.23 Dissatisfaction with the present system.

- There are unsatisfactory side-effects which have lead to the consideration of going back to a 6 period schedule. The dissatisfaction with the scheduling is caused by the extra study periods it creates. This is a problem because there are too many free periods for some students.

2.24 Revisions undergone.

- None

2.25 Revisions being considered.

- To go back to the 6 period day, however this would be a difficult decision because it would mean that teachers would have to waive their free period every day.

2.3 Per centage of unstructured scheduling time.

2.31 Standard amount of unstructured time for all students or a privilege or honor system to determine the number of free periods for students.

- The number of free periods depends upon the classes and clubs a student has.
- For seventh and eighth graders not taking French there are 6 free periods a week. Also School B is in the tri-mester system and there is no third subject to go along with industrial arts,



so for one-third of the year there are 5 extra free periods, which means 11 free periods for those not taking French.

2.32 Possibilities within unstructured time (how restricted is the student in using his unstructured time).

2.321 Limits (for example not leaving school grounds).

-- According to the principal: the free periods are structured and closely supervised. The limits on behavior vary with the study supervisor. Some insist on study; others allow talk and playing games.

-- Shortly after the interview with the principal, there was an announcement made over the P.A. by the vice-principal. He said that no longer would gum-chewing, talking, or card-playing be allowed in the studies (i.e. the free periods); he said that these periods were only for quiet study.

2.322 Number of created options

-- During free periods, students in School B have to report to a particular study hall

room and stay there for the period under the conditions described above (2.321).

There is the option for a small number of people (10 per study hall) to go to the library on a pass. Also recently the art teacher has started to allow a few people from the study (3 or 4) to go to the art room on a pass for the study period.

2.323 Possibility for students to create options for unstructured time.

-- When the principal was asked if it were possible for students to create options for unstructured time he answered that it probably would be possible, but there is no history of this happening.

2.33 Amount of faculty time that is unstructured.

-- Each teacher has one free period each day.

3. Many vs. few options within the programs and plans of study.

3.1 The broad aims or goals of the course of education of this Junior High School.

3.11 The aims

-- See on the following page a description of the aims of School B which was taken from the Program of Studies booklet. (Note: this was taken

.....	1
.....	2
.....	3
.....	4 - 8
Planning	5
Requirements	5 - 6
.....	6
es Above	6
Than Four	6
.....	6
.....	6
.....	7
For Players	7
.....	7 - 8
.....	9 - 12
.....	9
.....	10 - 11
.....	12
.....	13 - 41
.....	14
.....	15 - 18
.....	19 - 24
.....	25 - 28
.....	29 - 32
.....	33
.....	35 - 36
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.....	48 - 56
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.....	53

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school and the vocational high school

## THE JUNIOR HIGH SCHOOL

The particular function of the junior high school is to provide transition for the pupil's academic, social and physical growth between the general elementary school and the specialized high school. Upon leaving his neighborhood elementary school the pupil entering the junior high school comes into a fuller contact with his community than at any time in his previous experience.

The organization and departmentalization of the junior high school and the student's place within it require a new adjustment of him. The three years spent in these grades are designed to provide an exploratory experience for him so that he may determine his individual interests and abilities as well as to facilitate the greatest possible growth and development within the pupil's capacity.

With knowledge gained of himself and the world around him a pupil may more readily make intelligent

academic choices and social adjustments in the senior high school.

In the junior high school program English, mathematics, social studies, and science are stressed for all pupils. In grade seven all pupils follow a common program which includes, in addition to the subjects mentioned above, art, music, guidance, industrial arts for boys, and household arts for girls. In grade eight some choice of electives is possible, e.g., French I or Reading and Geography. In grade nine students may choose electives in college preparatory subjects, commercial work, industrial arts and household arts in preparation for specialization in senior high school. Thus, the junior high school program, in addition to continuing and reviewing the fundamentals studied in the elementary grades, provides opportunities for exploratory and tryout experiences looking toward the senior high school.

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from School B's 1968-1969 Program of Studies booklet, which was the most recent Program of Studies booklet which they had.)

- According to the principal: to act as a middle school between elementary and senior high school, to increase basic skills, to start some specialization; to give an education which is sound for them at the present as well as preparing them for later education.

### 3.12 Persons who define these aims.

- According to the principal: the teachers decide this. Plus the tests (Iowa) indicate what basic skills are needed.

### 3.2 The various educational programs offered.

For example, college-bound programs, vocationally-oriented programs, special groups (slow-learning, etc.)

#### 3.21 Number and description of programs.

- There are 3 programs: the college-bound, the general, and the remedial. The college-bound program involves a student's taking a language in the 7th and 8th grades, and then taking the certified electives in 9th grade.

In the general program, language is generally not taken in the 7th or 8th grades and the



general rather than certified courses are elected in the 9th grade.

In the remedial program, no language is taken, all general courses are taken, Reading courses (to increase the level of basic skills) are taken, and in the 9th grade, more electives are selected from the 4th group (i.e. Jr. Business Training, Art, Home Economics, and Industrial Arts).

### 3.22 Groupings within programs i.e. phasing

#### 3.221 Number of groups.

- In the seventh grade there are 3 groups; in the eighth grade there are 4 groups (top group, above average, below average, and slow learner); in the ninth grade the students are mixed up by electives.

#### 3.222 Reason for grouping.

- According to the principal: because students learn best with those of similar ability.
- According to the guidance counselor: there is the greatest success with those of similar ability.

#### 3.223 Criteria to establish groups.

- There are 2: teacher evaluation and tests (Iowa and Lorge-Thorndike).

### 3.3 The curriculum plans to implement the various programs.



### 3.31 Concept and function of curriculum plans.

- According to the principal: the core of basic skills and also preparation for further education.

### 3.32 Planning of curriculum.

#### 3.321 Major considerations in the planning.

- See 3.31.

#### 3.322 Persons involved in the planning.

- According to the principal: the planning is up to the department involved with the approval of the administration.
- According to the guidance counselor, in math and science, the co-ordinator sets up the curriculum plans and little latitude is given to teachers. There is more (latitude given) in English and social studies.

#### 3.323 Structuredness and detail of the curriculum.

- According to the principal: there is the hope for structuredness in order to develop the program of study.  
Have tried to have teachers write out their curriculum plans, but this has not been done in a standard way, and therefore couldn't be put to use.

#### 3.324 Student voice in curriculum planning.

-- According to the principal: it would be possible for a student to see the co-ordinator of a department. Also some students are involved in discussions about curriculum because of the self-evaluation meetings. (Note: the self-evaluation committee has been meeting monthly for several months. The aim of the committee is to assess the school, its role in the community, the academic level of its students, the educational and job background of parents, etc. There are no regular student members on the committee, but students have been called on to participate in certain aspects of the committee's investigations.)

### 3.33 Standardization of the curriculum.

#### 3.331 Number of alternatives to standard curriculum.

3.3311 Number of required courses within a particular phase and a particular program.

-- See the following page which shows the program for School B. This was taken from the Program of Studies booklet.

## JUNIOR HIGH SCHOOL PROGRAM

GRADE SEVEN	Periods	GRADE NINE	Periods
English		English	6
Social Studies		Mathematics	6
Mathematics		Algebra I	
Science		Survey of Algebra	
Physical Education		Mathematics	
Guidance		Physical Education	2
Home Ec. / Ind. Arts		Typing	2
Art		Study	2
Music			
Con. French			
Reading			18
		Electives: (Select 18 periods)	
		Social Studies	6
		•American Government	
		American Government	
		•Ancient and Medieval History	
		Science	6
		•Biology	
		•ESI Physical Science	
		•Physical Science	
		General Science	
		Languages	6
		•French I	
		•French II	
		•Latin I	
		Jr. Business Training	6
		Art	6
		Home Economics	6
		Industrial Arts	6
GRADE EIGHT	Periods		
English			
Social Studies			
Mathematics			
Science			
Physical Education			
Home Ec. / Ind. Arts			
Electives:			
French I			
Reading			
Geography			
Art			
Music			
Study			

NAME

PROGRAM FOR GRADE 9 (1950-1952)

PLACEMENT (Basic Placement, Transfer and Study)

Required

PEOPLE

People

2

2

Mathematics

\* Algebra I

Survey of  
Algebra

Gen. Math

Soc. Studies

\* U.S. Hist. & Civ. Gov.

American  
Government

American  
Government  
(General)

Sciences

\* Biology

\* Introduction  
to Phys. Sci.

Physical  
Science  
(General)

General  
Science

Language

\* French I

\* French II

Other

\* Arts

Music

Art

Counselor

Parent's Signature

COMMENTS ON PARENT'S SIGNATURE

-- in the 7th grade all courses are required, with the exception of French. In the 8th grade it is again a standard program, with 1 elective (either French, Reading, Geography, Art, Music or study). In 9th grade there are 18 required credits hours, 2 major subjects (English and math) plus physical education, typing and study.

3.3312 Within a particular program and a particular phase, the number of sequentially-ordered courses.

-- The only elected sequentially-ordered courses are French 1 and French 2.

3.3313 Number of electives with a program and a phase.

-- In 7th grade 1 elective  
In 8th grade 1 elective  
In 9th grade 3 electives.

3.3314 Sequential course recommendations (from guidance counselors) with a program and a phase.

--- In the 7th grade though there is



ostensibly 1 elective, what happens is that the top 2 groups take French and the 'low' group takes reading.

In the eighth grade, though there is 1 elective, the top 2 groups take French and Introductory Physical Science rather than general science. For the 9th grade, the updated choices are shown on the page following the program sheet. English and math are required, so the student must pick 1 course in each of 3 of the remaining 4 categories. The courses that have an \* are certified courses. Students in the college-bound program would choose from these courses; while the other students would take the unasterisked courses. For a student in the college-bound program, in the 9th grade, the realistic choices he has are 1 out of 2 science courses, 1 out of 2 social studies courses. For any student in the college-bound program, algebra 1

is recommended and so is the continuation of French.

3.332 Students' role in deciding among the alternatives.

-- According to the principal, the student's role comes in in choosing electives.

3.4 Course curriculum plans.

3.41 What dictates a course curriculum plan.

-- According to the principal, the information deemed necessary for further courses.

3.42 Planning of course curriculum.

3.421 Major consideration in the planning.

-- Principal: 3.41, the level of the students.

3.422 Persons involved in the planning.

-- Principal: the member of the department with the approval of the administration. Each teacher fairly free to decide emphasis in a subject. (see 3.322)

3.423 Frequency of curriculum meetings.

(Information through questionnaire to 5 department heads.

Question: How often are there curriculum meetings with you and the teachers in your department? 4 Respondants).

-- Responses

- 'Once a month and more if needed'
- 'So far only 3 with the high school we  
3 Jr. High informally discuss curriculum  
frequently.'
- 'Quarterly, Without present situation I  
have daily contact with all teachers in  
the department.'
- 'Monthly'

3.424 Structuredness and detail of the course  
curriculum.

- Principal: varies with the department.  
The plans come from the departmental curriculum  
meetings.

3.425 Student voice in course curriculum planning.

- Principal: there is some student voice  
through the self-evaluation committee.

### 3.5 Lesson plans.

3.51 Relationship between lesson plans and course  
curriculum (how closely tied).

- Principal: varies with teachers and departments.

3.52 Requirement that teachers lesson plans be sub-  
mitted to the office.

- Principal: no requirement that lesson plans  
be submitted to the office.

3.53 Detail and structuredness of lesson plans.

-- Principal: one department co-ordinator requires lesson plans. But in general lesson plans are expected to be written up at least briefly, and when absence is expected, a detailed lesson plan should be left.

### 3.6 Checks on the following of plans and curriculum.

-- Principal: co-ordinators of departments visit classrooms. The frequency depends up the number of years of teaching; new teachers are seen often while tenured teachers are seen only 1 or 2 times a year.

### 3.7 Revision of plans and curriculum.

#### 3.71 Programs

-- The division of students in college, general, and remedial has been altered only in minor ways, for example the elemination of the remedial grouping in the ninth grade, over the past 5 years.

#### 3.72 Curriculum plans.

3.721 Ways in which faculty free to revise curriculum.

-- See 3.322 and 3.422.

3.722 Identifiable body students can go to change or revise curriculum.

-- None.

3.723 How often curriculum revised.

(Information from questionnaire sent to 5 department co-ordinators. Question: How often are curriculum plans revised [i.e. the sequence of courses in the department. 4 respondents]).

#### Responses

- 'Not often, last time - 3 years ago'
- 'Not often - have been without a Language Co-ordinator until this fall.'
- 'Reviewed yearly'
- 'Constantly in the last nine years, it is fairly stable at the moment.'

Because the guidance office is responsible for keeping up on curriculum changes in order to advise students and update the Program of Studies booklet, the guidance counselor was asked how often the curriculum in the various departments was changed. Guidance counselor: 3-4 years since change in social studies; 2 years in English; 5 years in math; changes more often in science; not sure of the last changes in the language department.

#### 3.73 Course curriculum.

Frequency of change information from questionnaire



sent to 5 department co-ordinators. Question:

How often are individual course curriculum plans revised? 4 Respondants.)

Responses

-- 'As needed and as money for new programs becomes available.'

--- 'Seldom'

-- 'Reviewed and revised yearly as needed'

-- 'As needed'

#### 4. Student-centered vs. teacher-centered.

Information pertinent to this criteria is covered by various questions under other criteria. The questions or points relevant to the student-centered vs. teacher-centered dimension are 1.1, 2.133, 2.323, 3.324, 3.3252, 3.425, 3.722.

#### 5. Communication linkages between students and faculty and/or administrators (high and low).

5.1 Student participation or voice in committees that have teachers on them.

-- Principal: the self-evaluation committee and a special committee to deal with the gum chewing problem.

5.2 How students' opinions about various issues are found out.

-- Guidance counselor: through student council.

-- Principal: student council and self-evaluation

committee (if a faculty member in one of the committees connected with the self-evaluation project decides that he wants students to sit in on a committee then they can.)

5.3 Member of legitimate channels students have for making their opinions known.

-- Principal: student council.

-- Guidance counselor: student council.

5.4 Conception of the role of the student.

-- Principal: hopefully student is one who wants to learn and finds the school the best place to get the learning. To learn more about himself and his abilities and develop skills so he has something salable when he goes out to earn his living.

5.5 Efficacy of student governing bodies.

-- Principal: becoming more effective with more backing from students and with more understanding from faculty that maybe the students should have some voice in things. This is less convenience for the administration.

-- Guidance counselor: this would mean the student council. They tried to get gum-chewing ok'ed. Other projects, one three years ago, was a slop day to raise money for school containers for corridors. In the last two years, there has been money-raising in the same way for record players. These are both the projects of the vice-principal.



