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A STUDY OF THE SOCIAL-CLASS BACKGROUNDS OF FAILING  
STUDENTS IN FOUR ELEMENTARY SCHOOLS,  
MISSOULA, MONTANA

by

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B.A. Montana State University, 1956

Presented in partial fulfillment of the requirements for the degree of  
Master of Education

MONTANA STATE UNIVERSITY

1959

Approved by:

Chairman, Board of Examiners

Dean, Graduate School

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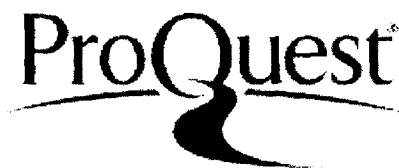


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## CHAPTER I

### INTRODUCTION

Educators have made many studies of pupil failures. They have tried to discover when and where most failures occur and which pupils are most likely to fail. There is no simple, single cause of failure. The causes for a pupil's inability to meet certain standards may be attributed to the home, the school, or to personal factors; even conditions in the community may contribute to pupil failure. Among the causes for failure listed by Lafferty, were (1) irregular attendance, (2) lack of interest, (3) poor effort, (4) lack of home study and (5) poor home conditions. These are the immediate, but not the basic causes of failure. They are often the symptoms of underlying emotional difficulties. Such difficulties may be both the cause and the result of failure. A child may become maladjusted because he worries about the economic position of his family. The necessity for becoming acquainted with the cultural background of the pupil is especially urgent for teachers who work with children of the lower socioeconomic groups.<sup>1</sup>

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<sup>1</sup> H. M. Lafferty, "Reasons for Pupil Failure," A Progress Report, American School Board Journal, 117:18-20, July, 1948; Audrey Arkola and Reynold A. Jensen, "The Cost of Failure," Educational Leadership, 6:495-499, May, 1949.

That children should be influenced by the class system is almost inevitable. From birth there are environmental differences which consciously or unconsciously prepare a child for a particular class. Davis, writing on the socialization of the child, makes the point that a child's social learning takes place in his family and in his own clique. Goals are chiefly a function of the status demands of their part of society. Class training ranges from control of his manner of eating to control of his choice of playmates. He states:

The times and places for his recreation, chores, the amount of studying, clothes, economic controls, conceptions of right and wrong, vary according to the social class of the child.<sup>2</sup>

Rosen tested the hypothesis that boys in different social classes varied in the degree of intensity of their "achievement motive." His findings supported this hypothesis. His psychological test results showed that members of the middle class tend to have considerably higher need-achievement scores than individuals in the lower social strata. The mean scores were highest in the higher social classes and became progressively lower in the lower social classes. And tests of statistical significance made on these findings indicated a clear relationship between social class position and motivation score. For example, eighty-three per cent of the

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<sup>2</sup>Allison Davis, "American Status Systems and the Socialization of the Child," American Sociological Review, Vol. VI, pp. 345-356, June, 1941.

subjects in Classes I and II, the higher social-class levels, had higher scores on the motivation scores, as compared with twenty-three per cent in Class V, a difference that is statistically significant at the .001 level. Thus Rosen has demonstrated, through the use of a technical psychological measuring instrument, that lower-class boys typically have a lower intensity of "the achievement motive" than middle-class boys. It should be noted that this is a typical difference, not an absolute one. At least a minority of the boys in the lower classes in Rosen's sample measured high on the scale of intensity of "the achievement motive"; and at least a minority of the boys in the higher classes measured low. Such results show that there is no one-to-one relationship between a social class position and any single personality configuration, or even any single motivational component thereof, such as "the achievement motive."<sup>3</sup>

The social anthropologists have found that each social class has its own cultural traits and behaviors--a social-class culture--as well as the common American culture which it shares with the other social classes. There are differences in attitudes toward education and in the amount and types of reading done in homes of different social classes. Sociologists and cultural anthropologists find that middle-class and

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<sup>3</sup>Bernard Barber, Social Stratification (New York: Harcourt, Brace and Company, 1957), pp. 314-315.

lower-class children bring to the learning situation widely disparate cultural experiences by virtue of their social-class experiences and that middle-class children adjust more easily to the typical school situation than do lower-class children. School is an extension of home to the average middle-class child. It rewards and punishes him for the same things that the home does. It is familiar ground. On the contrary, school is often a strange place to the lower-class child, with strange expectations. It often contradicts the home in its rewards and punishments. There is also more retardation of lower-class pupils, which means that they are exposed to less advanced school work, and experience more failure in their school work.<sup>4</sup>

The characteristic middle-class attitude toward education is taught by middle-class parents to their children. School is important for future success. One must do one's very best in school. Report cards are studied by the parents carefully, who give rewards for good grades, and warnings and penalties for poor grades. Lower-class parents, on the other hand, seldom push their children hard in school and in general, do not show by example or by precept that they believe education highly important. In fact, they usually show the opposite

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<sup>4</sup>Kenneth Eells, Allison Davis, Robert J. Havighurst, Virgil E. Herrick, and Ralph W. Tyler, Intelligence and Cultural Differences (Chicago: The University of Chicago Press, 1951), pp. 16-21.

attitude. With the exception of a minority who urgently desire mobility for their children, lower-class parents tend to place little value on high achievement in school or on school attendance beyond the minimum age.

According to Davis, social striving is a middle-class characteristic. In the working class, social status is not given much importance, and in the upper class it is determined by birth. In the middle class, however, status is of great consequence and has to be earned by the individual through his own efforts and achievements. Davis believes that the middle class way of life is carried on by people who are culturally motivated to suffer, to renounce, to postpone gratifications, in order to achieve. He and Havighurst state that middle-class children are brought up by their parents in such a manner that they develop a need for social approval and learn to believe that they must endure the long course of middle-class education in order to obtain it. Working-class or lower-class children whose parents are less concerned with prestige and its rewards, are less interested in becoming educated and less willing to spend the present in preparation for the future.

The social class differences described by Davis, Dollard, and Havighurst have been confirmed by Hollingshead. He found in his study of Elmtown that educational aspirations depended upon social class to such an extent that seventy-seven per cent of upper-middle class adolescents, but only

seven per cent of lower working class adolescents wanted to go to college or university. He also found large class differences in intellectual interests; descending the social scale, the percentage of Elmtown boys who never borrowed books from the public library increased from forty-three to eighty-eight per cent. Havighurst and Breeze, Schulman and Havighurst, and others have worked out correlations between intelligence quotients and socioeconomic status and obtained coefficients around 0.40.<sup>5</sup>

When the middle-class child comes to a test, he has been taught to do his very best on it. Life stretches ahead of him as a long series of tests, and he must always work himself to the very limit on them. To the average lower-class child, on the other hand, a test is just another medium of punishment, an instrument used just to reveal, or by which to be reminded that one is at the tail end of the procession. Hence this child soon learns to accept the inevitable and to get it over with as quickly as possible. Observation of the performance of lower-class children on speed tests leads one to suspect that such children often work very rapidly

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<sup>5</sup>Allison Davis and R. J. Havighurst, Father of the Man (Boston: Houghton and Mifflin, 1947), p. 149; J. Dollard, Class and Caste in a Southern Town (New Haven: Yale University Press, 1937), pp. 150-300; R. J. Havighurst and F. H. Breeze, "Relation Between Ability and Social Status in a Midwestern Community," Journal of Educational Psychology 38:241-247; A. B. Hollingshead, Elmtown's Youth (New York: John Wiley and Sons, 1949), pp. 439-453.

through a test, making responses more or less at random. Apparently they are convinced in advance that they cannot do well on the test, and often they find that by getting through the test rapidly they can shorten the period of discomfort which it produces.

Middle-class parents have gone further in school than lower-class parents; they do more reading and make more use of their academic education than do lower-class parents. Hence the middle-class child, unconsciously imitating his parents, takes on their educational roles and attitudes, while the lower-class child does the same thing with respect to his parents.

The lifelong process by which culture helps to guide, develop, limit, and evaluate all mental problem-solving has not received sufficiently serious attention from either test-makers or educators. They continually make the error of regarding middle-class culture, and even more narrowly, middle-class school culture, as the "true" culture, or the "best" culture. More than ninety-five per cent of our teachers and professors are middle-class in their socio-economic status. Like all other culture groups, teachers and professors regard that particular version of culture--those mores, social values, and emotional patterns--which they have learned from their own families, friends, and teachers, as the "best" and only "true" culture. This attitude is powerfully reflected in school curriculum, in



intelligence tests, and in teachers' judgments of their pupils. It is an attitude which is fatal to the development of the full mental capacity of either the teacher or the pupil. The belief, for instance, that the skills of reading, or of writing compositions, or of learning the usual academic materials are the primary essentials of education, destroys the real aim of education which is to learn how to think so as to solve life-problems.

Attention should be focused upon the primary role of culture, both in identifying those problems which a specific human group regards as important, and in training members of this group to think about such problems. Culture has been defined as all behavior and thought learned in conformity with a social group. Pupils coming from the top and bottom social strata live in cultures which, though alike in certain fundamental American activities, are yet different in many other cultural habits and motives. At a great many points, therefore, their cultures differ with respect to the types of problems they teach each group to recognize and to solve.<sup>6</sup>

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<sup>6</sup>W. Loyd Warner, R. J. Havighurst, and Martin B. Loeb, Who Shall Be Educated? - The Challenge of Unequal Opportunities (New York: Harper and Brothers, 1944), pp. xii, 190; Allison W. Davis and R. J. Havighurst, Father of the Man: How Your Child Gets His Personality (Boston: Houghton and Mifflin Company, 1947), pp. viii, 245; W. Lloyd Warner and Paul S. Lunt, The Social Life of a Modern Community - Yankee City Series, Vol. I (New Haven: Yale University Press, 1941), pp. xx, 440-460; James West, Plainville, U.S.A. (New York: Columbia University Press, 1945), pp. 200-238.

Vanstory attempted to show the relationship between the socioeconomic status and the scholastic achievement of thirty-six pupils enrolled in the first grade in the Efland Graded School, Efland, North Carolina. The study employed normative survey, statistical, comparative, and analogical methods of research. Questionnaires were sent out to a representative sample of the community, and interviews were conducted for the purpose of gathering useful data. Two forms of the Metropolitan Achievement, Forms R and T, were administered to the children. From an evaluation of the data for the study, it was concluded that the majority of the children in the study came from homes of very low socioeconomic status, and that this factor contributed to their low achievement in academic school work.<sup>7</sup>

Cromwell carried out a study for twenty-eight third grade students enrolled in the Kimberley Park School, Winston-Salem, North Carolina. She applied the same instruments and the same procedure for measuring results in her study, as did Vanstory. She concluded, also, that children of low socioeconomic background make less progress in their academic

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<sup>7</sup>Ava Lee Vanstory, "A Comparative Study of the Socio-economic Background with the School Achievement of Thirty-six First Grade Pupils Enrolled in the Efland Graded School, Efland, North Carolina, 1954-1955" (unpublished Master's thesis, The Agricultural and Technical College of North Carolina, Greensboro, North Carolina, 1955), 57 pp.

work in school than the children having higher socioeconomic backgrounds.<sup>8</sup>

Beaglehole contrasts middle-class attitudes toward work with those of the lower class. He maintains that the lower-class person works only hard enough to get along. The middle-class person, however, has a work compulsion and feels guilty over not doing more than his share.<sup>9</sup>

The middle-class child, according to Green, is constantly compared with other children. He reported that:

Before the child has developed a real self-awareness, he becomes part of a process of invidious comparison with other families; he uttered his first word two months earlier than the Jones' boy; he weighed so many pounds heavier at the end of his first year. At Sunday School he received the Bible for perfect attendance; at public school his grades in arithmetic were higher than two-thirds of other members of his class.<sup>10</sup>

Mead described similar pressures upon the middle-class child. According to her, the threat of loss of love

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<sup>8</sup>Vahlia Turner Cromwell, "A Comparison of the Socio-economic Status with the Scholastic Achievement of Twenty-eight Third Grade Pupils of the Kimberley Park School, Winston-Salem, North Carolina," (unpublished Master's thesis, The Agricultural and Technical College of North Carolina, Greensboro, North Carolina, 1952), 46 pp.

<sup>9</sup>Ernest Beaglehole, "Character Structure; Its Role in Analysis of Interpersonal Relations," Psychiatry, Vol. VII, pp. 145-152.

<sup>10</sup>Arnold Green, "The Middle-Class Male Child and Neurosis," American Sociological Review, Vol. XI, pp. 31-41.

as well as loss of status keeps the child toeing the mark.<sup>11</sup>

Numerous studies have been conducted to determine the social structure of various types of communities and the social characteristics of each social class. Much has been written about these studies, as partly reviewed in this chapter. Sociologists and educators are deeply concerned about the inequalities for lower-class children in the learning situation of the schools. There is a growing awareness of the need for further studies to determine the curriculum best suited to the lower-class children in order to reduce the number of failures among them, as well as studies to determine the most effective motivation for lower-class youth for further education and for mobility. With these needs in mind, the failures in four Missoula schools prompted the following study in Missoula, Montana.

Setting of the problem. At the termination of the first quarter of school for the year 1958-1959, one hundred fifty-six children in four of the Missoula public elementary schools were reported as having done failing work in school. Such failures were reported on a form provided by School District 1, Form 1.<sup>12</sup> Many of the failing children were found to have average or better than average intelligence.

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<sup>11</sup>Margaret Mead, And Keep Your Powder Dry (New York: W. Morrow and Company, 1942), Chapter 3.

<sup>12</sup>Form I will be found on p. 13.

Many of the reasons given for failure by the teachers were those often regarded as symptoms of underlying emotional difficulties. What, then, is the assumption for these failures? Can it be assumed that low socioeconomic backgrounds of the children contribute to their less successful academic achievement? What are the socioeconomic backgrounds of these failing children? Can it be possible that these failures are due to low mental ability? A study was undertaken to determine, as nearly as possible, the answers to these questions.

Statement of the problem. It was the purpose of this study (1) to determine if there was an indication of relationship between socioeconomic background and frequency of failure, distributed by intelligence levels and sexes; (2) to compare the number of failures in four Missoula elementary schools, distributed by social class; (3) to compare the intelligence levels of failing students in four Missoula elementary schools.

Assumptions. It was assumed that Warner's Index of Status Characteristics was the best instrument to use in this study to measure the socioeconomic position of each child.<sup>13</sup> The skills involved are very few; the amount of

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<sup>13</sup>W. Lloyd Warner, Marchia Meeker, Kenneth Eells, Social Class in America (Gloucester: Peter Smith, 1957), pp. 127-154.

FORM I

MISSOULA PUBLIC SCHOOLS  
DATA CONCERNING FAILING PUPILS

Period \_\_\_\_\_ Ending \_\_\_\_\_ Teacher \_\_\_\_\_

School \_\_\_\_\_ Grade \_\_\_\_\_

Principal \_\_\_\_\_ Number of Pupils in room \_\_\_\_\_

Name of Pupil	Present Age Years-Months	Subjects	Cause Number

Suggested Causes of Failure:

- |                         |                        |
|-------------------------|------------------------|
| 1. Change of schools    | 7. Late start          |
| 2. Irregular attendance | 8. Lack of application |
| 3. Sickness             | 9. Slow                |
| 4. Foreign to English   | 10. Poor mentality     |
| 5. Absence              | 11. Lack of interest   |
| 6. Home conditions      | 12. Slow reader        |

information needed is small; the length of time necessary, brief. The data for each characteristic in the Status Index are easily acquired and do not necessarily require interviewing.

The Index of Status Characteristics is, primarily, an index of socioeconomic factors; but it can be used with a considerable degree of confidence as an index of social-class position as well.<sup>14</sup>

It was further assumed that the data taken from the school records for each child was accurate.

Delimitations. Only subjective ratings, based on exterior inspections and Warner's Rating Scales, were employed in this study. Neither interviews nor questionnaires were employed. Other information needed for the study was copied from school records.

Limitations. It was recognized that research has certain limitations imposed upon it, including such factors as instruments of measurement, the unreliability of subjective ratings, as well as that of time and money.

The limitations of the study should not go unmentioned. Only the failing pupils in four schools, grades three through eight, are included in the study.

Definition of terms.

1. Warner's Index of Status Characteristics will be

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<sup>14</sup>Ibid., p. 56.

referred to throughout the study as I.S.C.

2. In accordance with Warner's I.S.C., the community of Missoula was divided into five social classes:

- (1) Upper, symbolized as U in the study
- (2) Upper-Middle, Symbolized as UM in the study
- (3) Lower-Middle, symbolized as LM in the study
- (4) Upper-Lower, symbolized as UL in the study
- (5) Lower-Lower, Symbolized as LL in the study<sup>15</sup>

3. The existing status of the child is always that of his family.

4. Socioeconomic background refers to the position an individual or family holds with reference to standards of material possession and income.

5. Stratification is a term used to describe differences in status and other characteristics among members of a society.

6. An arrangement of the members of a society along a continuous vertical dimension shall be known in this study as social class. Class is considered to be a stratum to which members of a community are assigned by their fellow members according to such factors as (1) source of income; (2) occupation; (3) house type; (4) dwelling area.

7. Status is considered to be one's position in a

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<sup>15</sup>Warner, Meeker, Eells, op. cit., p. 56.



particular hierarchy. A student in the eighth grade, by virtue of being the best athlete, may rank high in popularity but may be a member of the lower class. A fourth grade child may be accorded low status because of his poor grades, but he may belong to the upper-middle class.

## CHAPTER II

### PROCEDURES

Collection of data. The names of the failing pupils in each of the four schools included in this study, were obtained from the records of each school.<sup>1</sup>

Other information recorded was copied from the permanent record card of each pupil who had failed, and included: (1) grade level, (2) intelligence quotient, (3) father's or mother's occupation and (4) home address.

The information above was recorded in separate notebooks labeled: (1) School A, (2) School B, (3) School C, (4) School D. Each child in each grade classification was assigned a code number. Neither the names of the children, nor the names of the schools appear in this study.

The first step in securing an I.S.C. for a child was to obtain ratings for him on each of the four status characteristics--occupation, source of income, house type, and dwelling area--which comprise the Index. The ratings on each of the four status characteristics were made in accordance with Warner's Scales I, II, III, and IV.<sup>2</sup>

All the occupational ratings were made by one person in order to secure as much uniformity in interpretation

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<sup>1</sup>See Chapter I, p. 13.

<sup>2</sup>Appendix, Scales I-IV, pp. 56-66.

as possible.

The rating for the source of income was determined by the type of job held by the child's father. Teachers furnished information regarding families receiving public relief.

The few cases reported were mothers who were widows, or in one case, a father who was nearly blind.

The ratings on house type were made by two individuals, on the basis of external inspection. The home address of each child was sought out for the purpose of making an inspection of the house in which he lived. A rating was assigned to him for house type.

For the rating on dwelling area, it was necessary to divide the community geographically into sections and to assign ratings to these various sections on the basis of the community evaluation placed upon them as desirable or undesirable places of residence. There was an inspection of the general appearance of different neighborhoods. Ratings of these neighborhoods were made in terms of social reputation and evaluation as well as appearance of housing, appearance and size of yard, condition of streets, appearance of children at play, and density of population. The entire city of Missoula was divided into subareas and assigned ratings by two people, one with an engineering background. These ratings corresponded to the general descriptions in the Warner rating plan. A map was constructed to show the different

areas and the ratings for each area.<sup>3</sup>

When these geographical areas were defined and ratings determined for them, each pupil was assigned a dwelling-area rating corresponding to that of the section of the city in which he lived.

Once the four ratings just described were completed for all the pupils in the study, it was a simple matter to compute the I.S.C. The ratings on the separate status characteristics were combined into a single numerical index by assigning to each one a weight and securing a weighted total of the separate ratings. The ratings for each of the four characteristics were multiplied by the following weights: (1) occupation, 4; (2) source of income, 3; (3) house type, 3; (4) dwelling area, 2. The four products were then added to secure a weighted total. For example, if the ratings for a given individual were 5 - 5 - 7 - 6, for occupation, source of income, house type, and dwelling area respectively, the weighted total was 68. If the ratings for any individual were all 1's, the weighted total was 12--the highest rating in the upper class. If the ratings were all 7's the weighted total was 84--the lowest in the lower class.

The I.S.C. for each child was converted into terms of social class by comparing his I.S.C. rating with the rating

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<sup>3</sup> Appendix, Scale IV, p.63 and Figure 1, p. 65.

given for each social class in Scale V.<sup>4</sup> It will be seen that the individual whose I.S.C. was computed at 29 points would very probably be in the upper-middle class. The individual whose I.S.C. was computed at 70 points would very probably be in the lower-lower class.

In all instances where the table denoted an indeterminate area, the higher social rating was assigned to the individual. For instance, the individual whose I.S.C. was computed at 63 points, would fall in an indeterminate area. The upper-lower class rating was automatically assigned to him.

As the occupations of the fathers of the children were rated, the ratings were placed in Table I,<sup>5</sup> showing the occupation, the rating, and the number of individuals in each category. When the social class of each individual was determined, the ratings on occupations, by social-class placement,<sup>6</sup> were recorded in Table II.

Tables III through VIII,<sup>7</sup> inclusive, were constructed to show the intelligence quotients, sex, school, and ratings for each of the four social characteristics--occupation, source of income, house type, dwelling area--as well as the

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<sup>4</sup> Appendix, Scale V, p. 66.

<sup>5</sup> See Chapter III, p. 24.

<sup>6</sup> See Chapter III, p. 28.

<sup>7</sup> Appendix, pp. 67-72 for basic data.

I.S.C. scores and the social-class placements assigned to the I.S.C. scores.

Graphic representations were constructed from the data in the tables mentioned above. Figure II shows the number of children who received failing grades in four elementary schools, Missoula, Montana, for grades three, four, and five, by social class. Figure III shows the number of children who received failing grades in four elementary schools, Missoula, Montana, for grades, six, seven, and eight, by social class.<sup>8</sup>

Table IX shows the distribution of failures by grades, schools, and intelligence quotients, ranged from highest to lowest, by intervals of 10. Graphic representations were constructed to show this distribution. Figure IV shows the failures in grades three, four, and five for each school, distributed by intelligence quotients. Figure V shows the failures in grades six, seven, and eight for each school, distributed by intelligence quotients.<sup>9</sup>

Graphic representations were constructed from the data shown in Tables III through VIII,<sup>10</sup> inclusive. Figure VI depicts one hundred fifty-six failures in four Missoula schools, distributed by social class and mental ability. Figure VII<sup>11</sup> represents the failures in grades three, four,

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<sup>8</sup>See Chapter III, p. 31.

<sup>9</sup>See Chapter III, p. 35.

<sup>10</sup>Appendix, pp67-72 for basic data.

<sup>11</sup>See Chapter III, p. 38.

and five in four Missoula schools, distributed by sex, social class, and intelligence quotients. Figure VIII<sup>12</sup> represents the failures in four Missoula schools in grades six, seven, and eight, distributed by sex, social class, and intelligence quotients.

An arbitrary percentage for the various social classes, based on studies made in various sections of the United States was assigned to various social classes in Missoula.

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<sup>12</sup>See Chapter III, p. 39.

## CHAPTER III

### EVALUATION OF THE DATA

#### The frequency distribution of occupational ratings.

Table I, pages 24-27 indicates the occupations of the fathers or mothers of the children in the study. An analysis reveals that only 39 of the 156 total individuals received the highest occupational ratings: 1, 2, 3, and 4, while 117 individuals received the lower ratings of 5, 6, and 7. The wide variety of occupations listed ranged from that of a University Professor, who received the highest rating, to the recipient of public relief, the most poorly rated.

The relationship which existed between ratings on occupational level and social-class placement is indicated in Table II, page 28. An inspection of this table shows that there was a very definite degree of correspondence between occupational rating and the social class to which the various individuals belonged. The table indicates clearly that no individual with an occupational rating of less than 2 appeared in the upper-middle class; that no individual with an occupational rating of 1, 2, 3, or 4 appeared in the lowest social-class; and that, in general, high occupational ratings tended to be associated with higher social-class placement.

One individual with a rating of 1 was in the



TABLE I

Occupation	Rating and Number in Each Category						
	1	2	3	4	5	6	7
Instructor, University	1						
Automobile Dealer		1					
Chiropractor		1					
Nurse		1					
Bowling Alley Manager		1					
Creamery Manager			1				
Cement Contractor			1				
Carpenter Contractor			1				
Furniture Mart Manager			1				
Singer Machine Shop Manager			1				
Candy Salesman				1			
Sales Clerk, Dry Goods				6			
Sales Clerk, Grocery				2			
Retail Lumber Salesman				1			
Mill Owner, Value up to \$5,000				1			
Butcher				1			
Mail Clerk				1			
Stenographer				2			
Bookkeeper				1			
Construction Foreman				1			
Forest Service Foreman				2			

TABLE I (Continued)

Occupation of Father	Rating and Number in Each Category						
	1	2	3	4	5	6	7
Railroad Engineer				3			
Railroad Conductor				1			
Carpenter (own business)				7			
Greenhouse Budding (medium skill)					1		
Bill Poster (medium skill)					1		
Operating Engineer (medium skill)					6		
Television Repairman					1		
Boiler Engineer (medium skill)					1		
Saw Filer (medium skill)					1		
Sawmill Edgerman (medium skill)					2		
Sawmill Operator (medium skill)					1		
Millwright					1		
Montana Power Lineman					2		
Welder					1		
Machinist					1		
Electrician					2		
Mechanic					10		
Carpenter					2		
Greaser (medium skill)					2		
Barber					1		
Shoemaker (medium skill)					1		

TABLE I (Continued)

Occupation of Father	Rating and Number in Each Category						
	1	2	3	4	5	6	7
Self-employed (Value to \$2,000)					1		
City Fireman					1		
Fireman, Lumber Company					1		
Restaurant Cook					6		
Railroad Carman (medium skill)					1		
Apprentice Electrician					1		
Highway Patrolman					1		
Taxidermist (medium skill)					1		
Floor Coverer (medium skill)					2		
Bartender					2		
Truck Driver						9	
Logger (medium skill)						5	
Miller (semi-skilled)						1	
Lumber Workers (semi-skilled)						1	
Hoist Driver (semi-skilled)						1	
Carrier Driver (semi-skilled)						1	
Dairy Worker (semi-skilled)						1	
Gas Station Attendant						3	
Teslow Elevators (semi-skilled)						1	
Lumber Checker (semi-skilled)						1	
Greyhound Bus Driver						1	

TABLE I (Continued)

Occupation of Father	Rating and Number in Each Category						
	1	2	3	4	5	6	7
Car Checker, Railroad						1	
Railroad Section Laborer							6
Laborer (heavy work)							26
Janitor							1
Public Relief Recipient							3
Total	1	4	5	30	54	26	36

TABLE II

RATINGS ON OCCUPATIONS, IN SOCIAL-CLASS PLACEMENT, FOR FOUR MISSOULA SCHOOLS, MISSOULA, MONTANA

SOCIAL CLASS	RATINGS OF OCCUPATION							Totals
	1	2	3	4	5	6	7	
Upper Class . . . . .								
Upper-Middle Class. .		1						1
Lower-Middle Class. .	1	3	5	16			1	26
Upper-Lower Class . .				14	52	18	4	88
Lower-Lower Class . .					2	8	31	41
Totals . . . . .	1	4	5	30	54	26	36	156

lower-middle class, while another individual with a rating of 7 was also in the lower-middle class. Despite these exceptional cases, however, a positive relationship between occupational rating and social class is indicated.

Figure II, page 30, reveals the distribution of children who received failing grades in four elementary schools in Missoula, grades three, four, and five, by social class.<sup>1</sup> It is clearly indicated that Schools B and D have the same number of failing pupils, while School A has the least. Only pupils in the two lower classes failed in School C. Schools B and D had the greatest number of failing pupils in the upper-lower class, and School C was third in this respect. It appears that there is a general tendency in these schools, for the majority of failures to fall within the two lower classes in grades three, four, and five.

Figure III, page 31 reveals the distribution of failures in grades 6, 7, and 8 for the same schools. Schools B and C have the greatest number of failures in this distribution. The upper-lower class has the greatest number of failures in Schools B, C, and D. School A has no failures in the two lower groups. Again, it is indicated that there is a tendency for the majority of failures to fall within the two lower classes.

Comparing the lower and upper grade groups in Figures II and III, respectively, it is seen that there were 80

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<sup>1</sup>Appendix, Basic Data, Tables III-VIII, pp. 67-72.

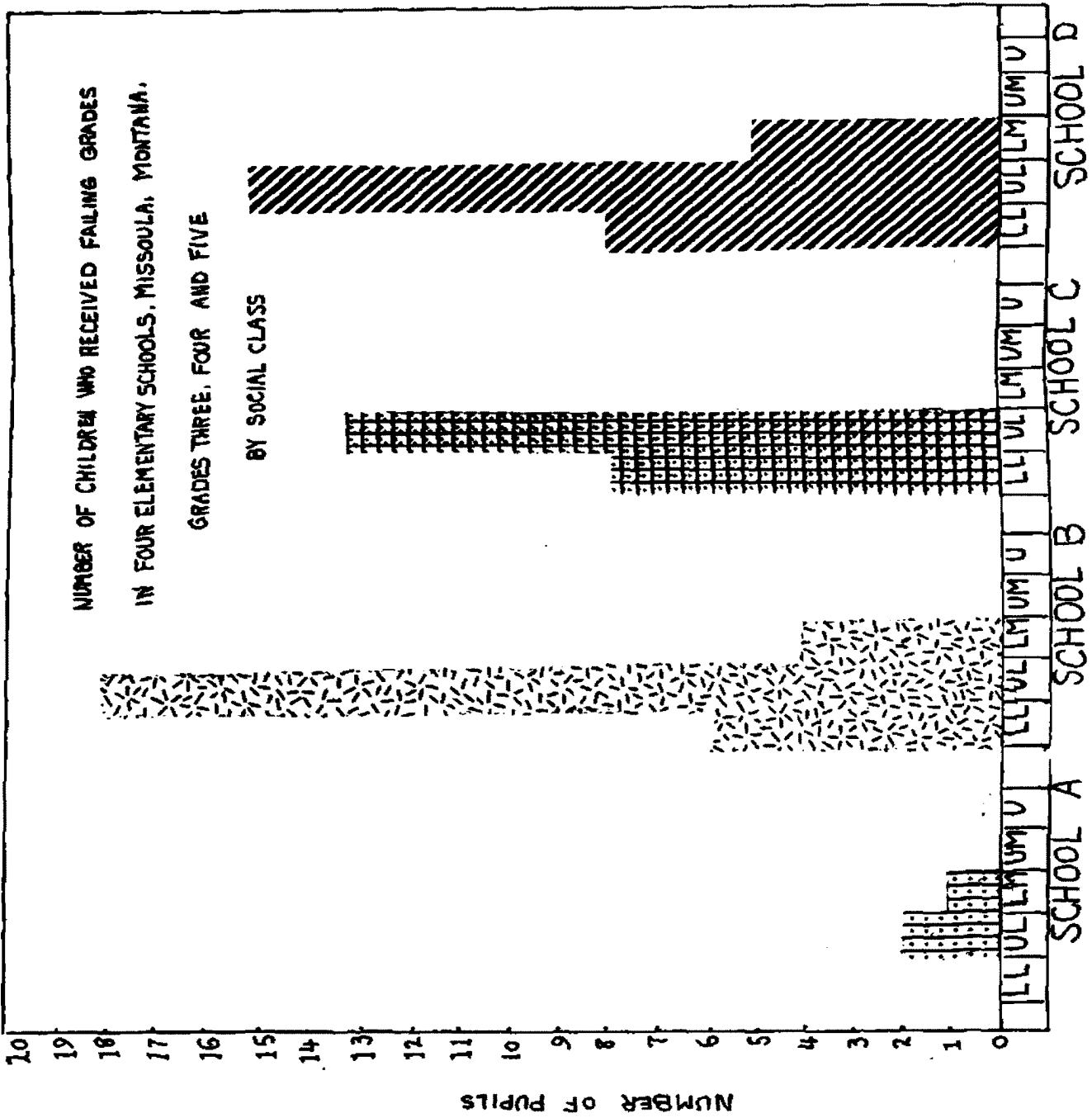


FIGURE II

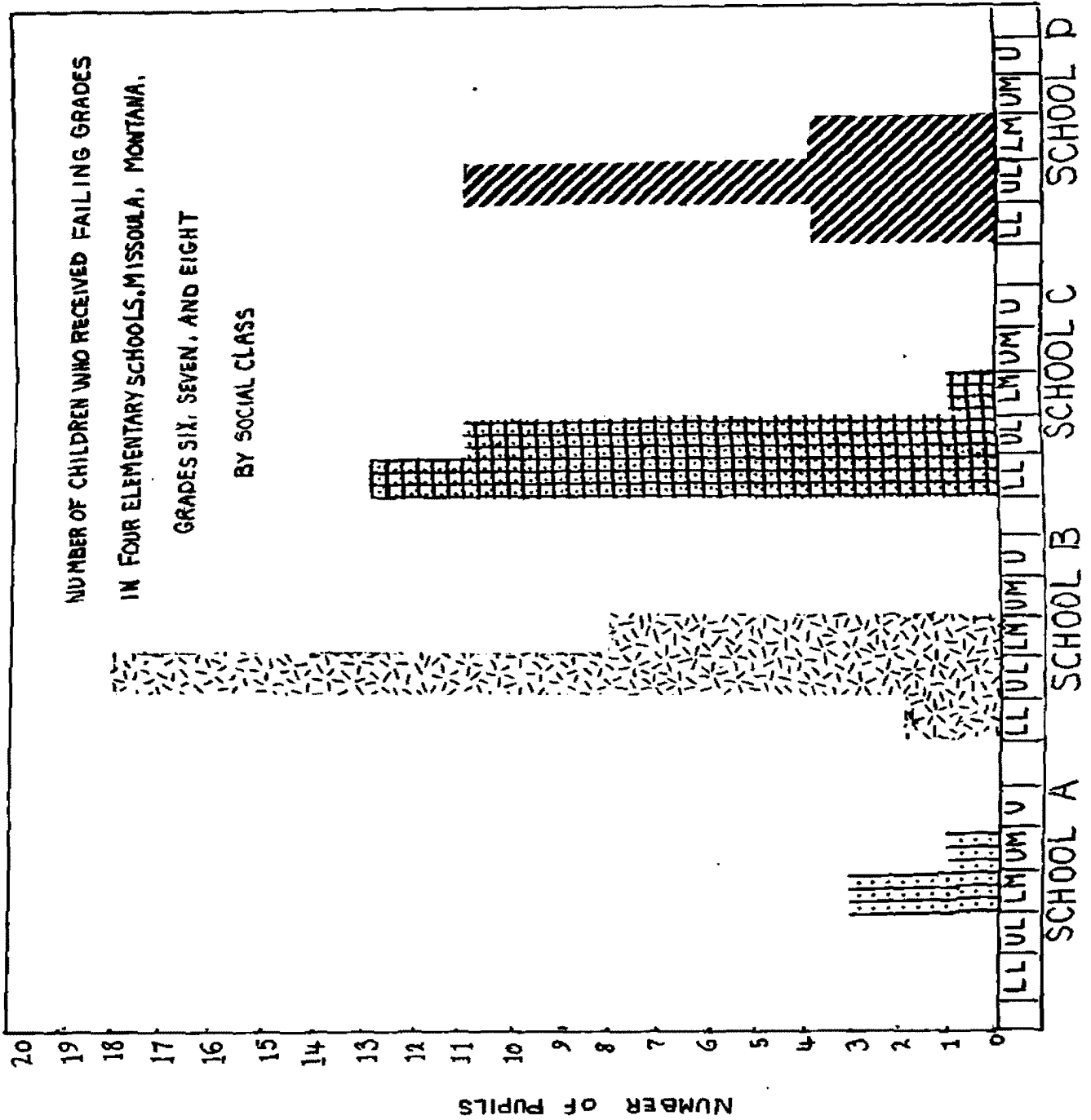


FIGURE III



failures in the lower grades. Of these 80 failures, 70 were found in the two lower classes. In the upper grades, there were 76 failures, 59 of which were found to be in the two lower classes.

One striking fact about the incidence of failure is the wide variation in the frequency of failure among different school systems, schools, and even among classes in the same school. These differences are possibly too large to be explained entirely on the basis of real differences in the school population; rather, they point to varied standards and policies.<sup>2</sup>

Differences in failure rates might also be attributed to differences in attitudes toward children among teachers themselves. In a recent study of highschool teachers, it was found that there was a correlation between scores on the Minnesota Teacher Attitude Inventory, which ranks teachers on the basis of their interest in children and on the number of students whom that teacher fails. Teachers with high scores on the test were less likely to fail students.<sup>3</sup>

The range in ability for the 156 failing students in

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<sup>2</sup>Hollis L. Caswell, Non-Promotion in Elementary Schools, Field Studies, No. 4, Nashville, Tennessee: George Peabody College for Teachers, Division of Survey and Field Studies, 1933, 100 pp.

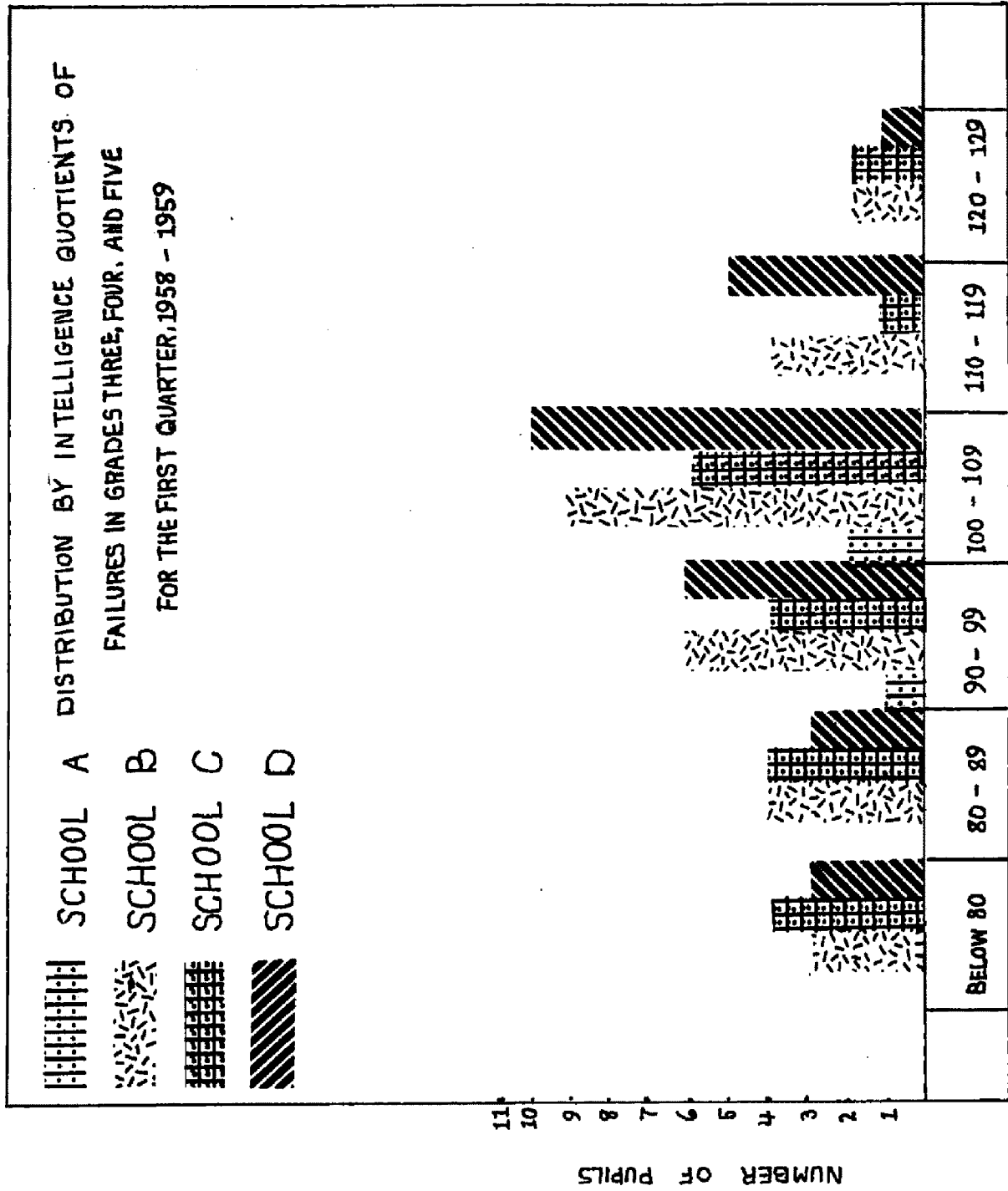
<sup>3</sup>Patrick D. Rocchio and Nolan C. Kearney, "Teacher-Pupil Attitudes As related to Non-Promotion of Secondary School Pupils." Educational and Psychological Measurement 16: 244-252; Summer, 1956.

the four Missoula schools was 71 I.Q. points. Figures IV and V,<sup>4</sup> pages 34 and 35, relating the number of pupil failures to the intelligence quotient levels for each of the schools, reveals that 46 children have intelligence quotients of 89 and below, while 110 children have intelligence quotients of 90 and above. The failures of the 46 children mentioned may be attributed, in part, to low mental ability. Of the 110 children mentioned, 92 had intelligence quotients between 90 and 109, while 18 had intelligence quotients between 110 and 129. Within the limits of intelligence quotients 90-109, School A had six failures, equally distributed between the lower grades and the upper grades; School B had 41 failures, with a distribution of 21 for the lower grades, and 20 for the upper grades; School C had 29 failures, with a distribution of 13 for the lower grades and 16 for the upper grades; School D had 34 failures with a distribution of 22 for the lower grades, and 12 for the upper grades. The last-mentioned school was the only one with a ratio of almost 2 to 1 lower grade failures to uppergrade failures.

Within the limits of intelligence quotients 110-129, School A had no failures; School B had 6 failures in the lower grades; School C had 5 failures, with a distribution of 3 in the lower grades, and 2 in the upper grades; School D had 7 failures, with a distribution of 6 in the lower grades, and 1 in the upper grades. Again, School D had a

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<sup>4</sup>Appendix, Basic Data, Table IX, p. 73.



INTELLIGENCE QUOTIENTS

FIGURE IV

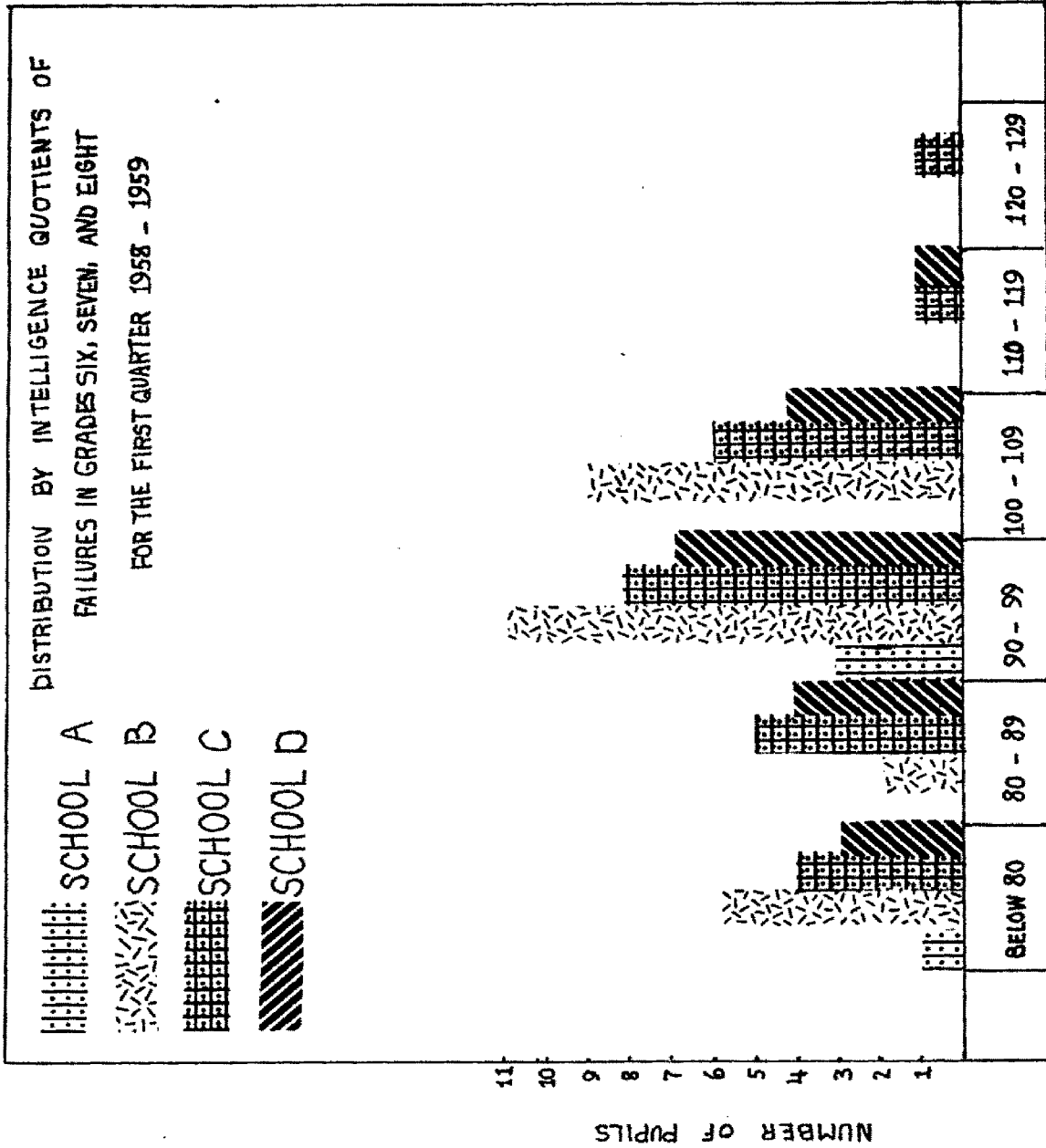


FIGURE V

larger proportion of failures in the lower grades, with a ratio of 6 to 1 in lower-grade failures to upper-grade failures.

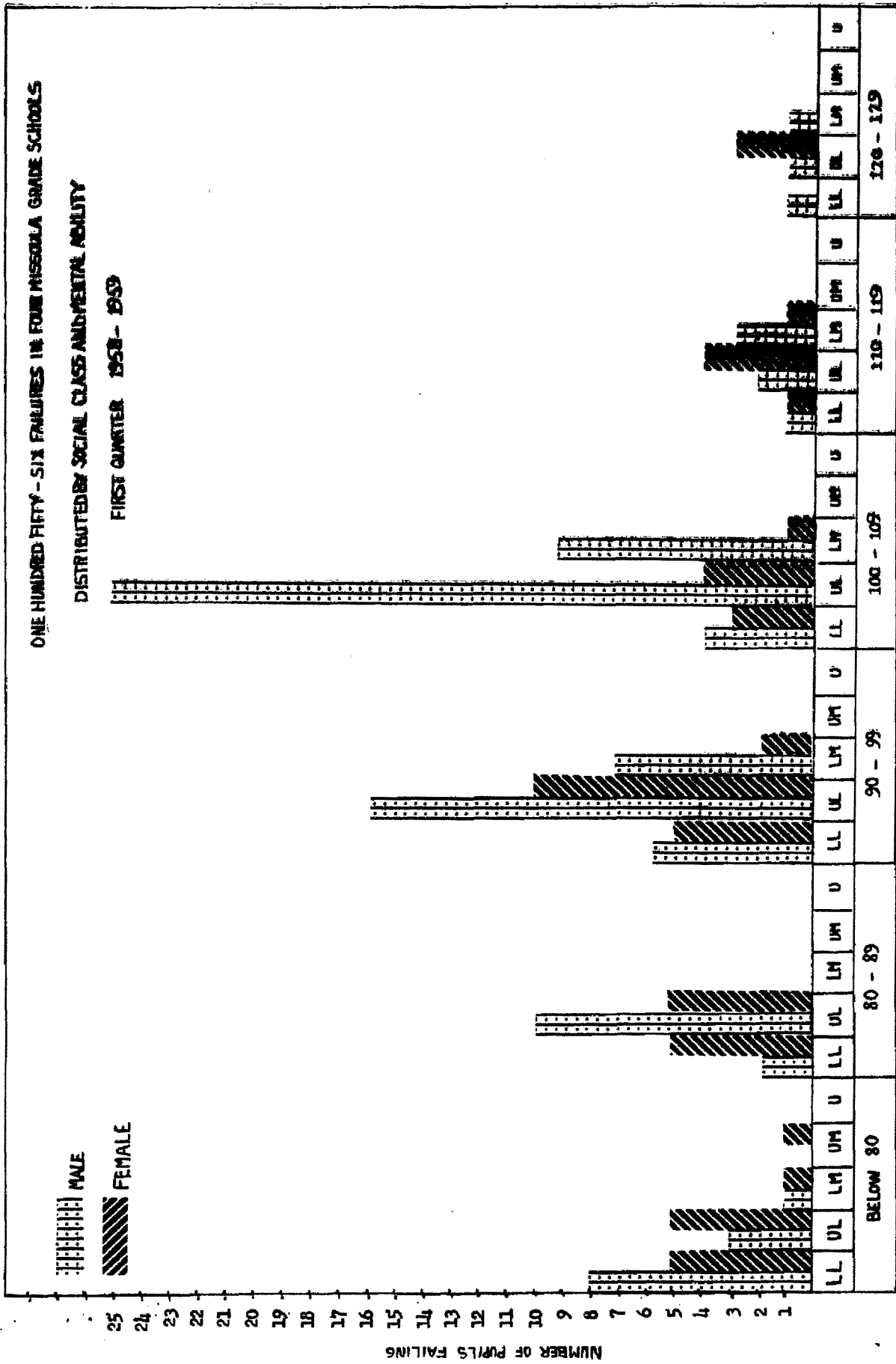
In view of these data, it was decided to investigate the relationship between frequency of failure and social-class status for the various intelligence levels; also, to determine the frequencies of failure for each sex.

Evaluation of the distribution of failures by social class, sex, and mental ability. The major relationships which are apparent in Tables III-VIII<sup>5</sup> may be seen more clearly in Figures VI-VIII, which present some of the data in graphic form. Here the order of class differences in frequency of failure is arranged by levels of intelligence and by sex. Figure VI reveals that the group with intelligence quotients from 90-99 had 47 failures, while the other group with intelligence quotients from 100-109 had 46 failures. The ratio of frequency of failure of boys to girls was approximately 5 to 1 in the last group, while in the first group, the ratio of failure of boys to girls was approximately 2 to 1.

Of the failing boys, with intelligence quotients from 90-99, 22 were in the two lower classes, and 8 were in the lower-middle class, while 15 girls were in the two lower classes, with but 2 in the lower-middle class. Thus it

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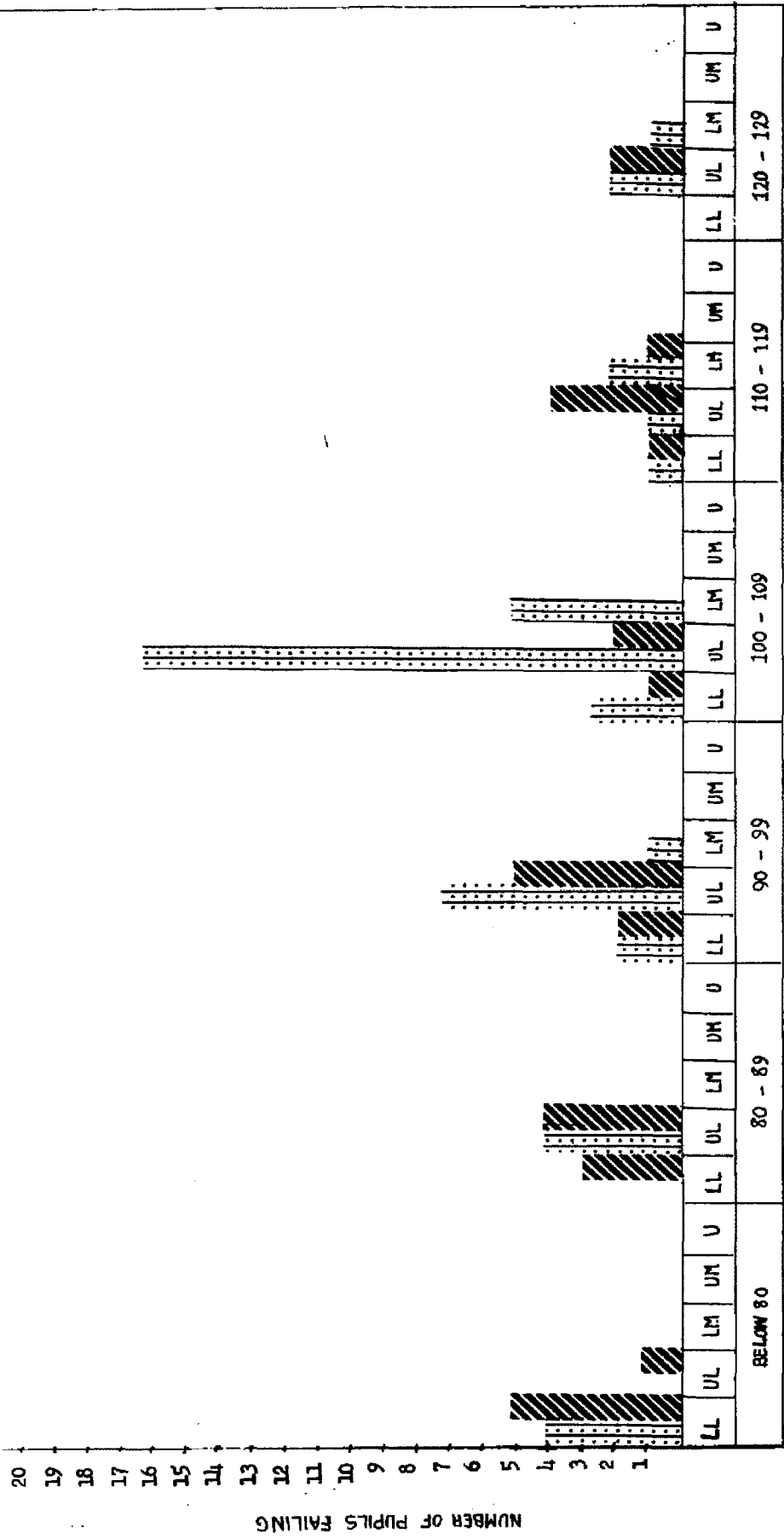
<sup>5</sup> Appendix, Basic Data, pp. 67-72.



INTELLIGENCE QUOTIENTS  
**FIGURE VI**

DISTRIBUTION BY INTELLIGENCE QUOTIENTS OF  
 FAILURES IN GRADES THREE, FOUR, AND FIVE  
 IN FOUR MISSOURI SCHOOLS FOR THE  
 FIRST QUARTER 1958 - 1959

 FEMALE  
 MALE



INTELLIGENCE QUOTIENTS

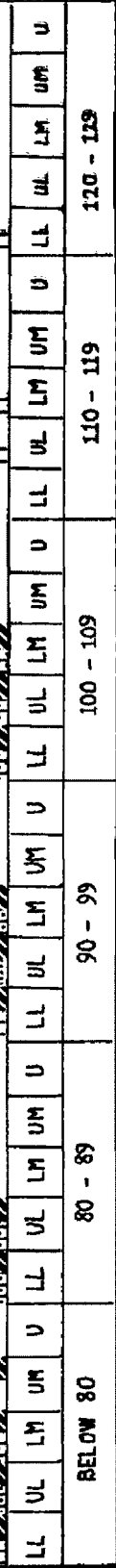
FIGURE VII

- DISTRIBUTION BY INTELLIGENCE QUOTIENTS OF  
 FAILURES IN GRADES SIX, SEVEN AND EIGHT  
 IN FOUR MISSOULA SCHOOLS FOR THE  
 FIRST QUARTER 1958 - 1959

 FEMALE  
 MALE

NUMBER OF PUPILS FAILING

20  
19  
18  
17  
16  
15  
14  
13  
12  
11  
10  
9  
8  
7  
6  
5  
4  
3  
2  
1



INTELLIGENCE QUOTIENTS  
 FIGURE VIII



appears that there is no appreciable difference between boys and girls as to frequency of failure and social class.

In the group with intelligence quotients ranging from 100-109, 29 boys were in the two lower classes, 9 were in the lower-middle class, while 7 girls were in the two lower classes, and 1 in the lower-middle class. It is evident that more boys than girls, who came from the lower social classes, failed in their school work.

From the group with intelligence quotients from 80-89, 12 boys and 10 girls were in the two lower classes. There was apparently little difference here between the sexes in the number of failures.

Little sex difference was found among pupils with intelligence quotients below 80 for the lower social classes.

Fewer failures were found in the two higher social class groups, although in the group with intelligence quotients from 110-119, more girls failed than boys in the two lower classes. In the lower-middle class group, however, 3 boys failed, while only 1 girl failed. The group with the highest intelligence quotients had 2 boys and 3 girls in the two lower classes who failed, and 1 boy in the lower-middle class who failed.

Some studies have shown that more boys fail in school work than girls.<sup>6</sup> It is well known that girls mature more

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<sup>6</sup> Roger T. Lennon and Blythe C. Mitchell, "Trends in Age-Grade Relationship: A Thirty-Five-Year Review," School and Society, 82: pp. 123-125, October 15, 1955.

rapidly than boys; tests do not show, however, marked differences between boys and girls in intelligence. Some investigations have shown slightly higher achievement among girls, but not enough to account for the differences in the number of boys and girls failed.<sup>7</sup> Many studies have pointed to various factors besides intelligence and achievement that influence teachers' marks; among these are: attitude, neatness, degree of interest, personality, speech, appearance of written work, and quantity of accomplishment. It is probable that differences in personality and classroom behavior, not measured in tests of intelligence or achievement, help to explain the greater proportion of failures among boys. Some of these characteristics have been mentioned as those typical of lower-class children.

Figures VII and VIII represent graphically the differences between the lower grades and the upper grades in the distribution of failures by social class and sex for the various intelligence-quotient ranges. Attention is called to the group with intelligence quotients 110-129. No girl failures appear in the upper grades; only 3 boy failures are reported. In contrast, for the same group in the lower grades, 7 girl failures are reported in the two lower classes, while only 4 boys failed. More children failed in the lower grades with intelligence quotients from 100 to 109 than in the upper grades. In this same group, lower grade boys had

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<sup>7</sup>Caswell, op.cit., 100 p.

more failures than upper grade boys, and the opposite was true for the girls.

The upper grades had more failures in the group with intelligence quotients from 90 to 99, in contrast to the group just described. Almost twice the number of that shown for lower grade boys failed in the upper grades. The girls in the lower grades in this group were just about equal in number.

For those with intelligence quotients below 89, almost twice the number shown for lower-grade boys failed in the upper grades. The girls in the lower grades in this group were about equal in number as compared with the upper-grade girls.

The implication of these data indicates that the failures in the four schools in Missoula occurred more frequently in the lower socioeconomic groups, with a greater incidence of failure among boys than girls. Of the total number of failures reported for the four schools, about 30 per cent of the failures occurred below the intelligence quotient of 90, while 70 per cent of the failures occurred above the intelligence quotient of 90. Thus it is revealed that degree of intelligence is apparently not a very important factor contributing to frequency of failure in these four schools. There is an implication here that some other factors are responsible for the incidence of failure among the children who are capable mentally.

An evaluation of the social structure of Missoula, Montana. Studies of small cities show that there is a social-class pattern that is rather similar across the country, with regional variations.<sup>8</sup>

The actual percentage distribution in any particular distribution in any community depends upon the age and the economic character of that community. A community in a coal-mining or steel-mill area is likely to have a high proportion of upper-lower class people, while one with a university is likely to have a high proportion of upper-middle class people.

Havighurst and Neugarten have reported the class structure in middle-sized communities from studies made in various communities with populations from 5,000 to 100,000. The percentage ranges show how a given class varies in size.<sup>9</sup> The percentages for each class are listed below.

<u>Social Class</u>	<u>Percentages</u>
Upper	1 to 3%
Upper Middle	7 to 12%
Lower Middle	20 to 35%
Upper Lower	25 to 40%
Lower Lower	15 to 25%

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<sup>8</sup>Robert J. Havighurst and Bernice L. Neugarten, Society and Education (Boston: Allyn and Bacon, Inc., 1957), pp. 17-18.

<sup>9</sup>Ibid.

From the distribution shown in the chart on page 43 it was assumed that the distribution of the population of Missoula, Montana, would be distributed in much the same pattern for the various social classes. Percentages for each class in Missoula were arbitrarily assigned, as listed below.

<u>Social Classes in Missoula</u>	<u>Percentages</u>
Upper	2.2%
Upper Middle	10.5%
Lower Middle	30.3%
Upper Lower	35.3%
Lower Lower	21.7%

Missoula is a city of about 30,000 people; outlying districts outside the city limits contribute an additional 9,500.<sup>10</sup> The city serves numerous small towns and farmers use it as their market. While Missoula is not considered a manufacturing city, numerous small industries are flourishing. It is the seat of government for Missoula County, and the Montana State University is located here. Two railroads run almost parallel through the town, and many people who work for the railroad reside here.

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<sup>10</sup>This information was furnished by the Missoula Chamber of Commerce.

Barber has reported the class structure in Jonesville and Yankee City. The percentages for each social class are listed below for each study.<sup>11</sup>

<u>Social Class</u>	<u>Jonesville Percentages</u>	<u>Yankee City Percentages</u>
Upper	3%	3%
Upper Middle	11%	10%
Lower Middle	31%	28%
Upper Lower	41%	34%
Lower Lower	14%	25%

Jonesville, located in the Middle West, is an example of a typical five-class community. The farmers use it as their market, and it is the seat of government for Abraham County. Its population of over 6,000 people is supported by servicing the needs of the farmers and by one large and a few small factories.<sup>12</sup> Thus, in certain respects, Missoula resembles Jonesville. The percentages for the different social classes in Jonesville parallel very closely the percentages for social classes assumed for the city of Missoula.

Yankee City was a New England study of a town of about 17,000 population. The social-class structure for this city differs from that of Jonesville and of that assumed for

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<sup>11</sup>Bernard Barber, Social Stratification (Harcourt, Brace and Company, 1957), p. 116.

<sup>12</sup>W. Lloyd Warner, Marchia Meeker, Kenneth Eells, Social Class In America (Gloucester: Peter Smith, 1957), p. 17.

Missoula, in that the upper class status is based on an old-family tradition. Cities large and small in the states west of the Alleghenies sometimes have class systems which do not possess an old-family upper class. Yankee City is an old city, formerly a shipping center and now an industrial community.

While Yankee City was a New England town, yet a similar class system was discovered in the Midwest and described in the study, Plainville, U. S. A.<sup>13</sup> Plainville was a town with a population of 275 people, depending upon the produce and trade of about 200 farms in a cornbelt area.

Missoula might be considered a composite of both Jonesville and Plainville. There are a few old families in Missoula who are regarded very highly by their fellow men. There are a few who are considered wealthy, but who do not have the high status of the old families of the city. There are those who work for salaries, and those who work for wages; others are employed infrequently, and a very few live on public charity.

An evaluation of the failures in the four schools of Missoula. In order to compare the percentage of failures in the experimental group with the assumed percentages for the social classes of Missoula, the figures on the following page should be examined.

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<sup>13</sup>James West, Plainville, U.S.A. (New York: Columbia University Press, 1945), pp. 115-141.

<u>Social Class</u>	<u>Assumed Percentages</u>	<u>Percentages of Failure</u>
Upper	2.2%	0 %
Upper Middle	10.5%	0.6%
Lower Middle	30.3%	16.6%
Upper Lower	35.3%	56.4%
Lower Lower	21.7%	26.3%

It is quite apparent that the lower-middle, the upper-lower, and the lower-lower classes have a very high percentage of failures, compared with no failures for the upper class, and but 0.6% failure for the upper-middle class. This state of affairs, however, is quite in keeping with the findings of other studies. Social anthropologists relate the poor achievement of lower class children to their socioeconomic backgrounds. The findings in this study made here in Missoula tend to corroborate those found in studies made in other places.



## CHAPTER IV

### SUMMARY AND RECOMMENDATIONS

Restatement of the problem. It was the purpose of this study (1) to determine if there was an indication of relationship between socioeconomic background and frequency of failure for various intelligence levels, and for each sex; (2) to compare the number of failures in four Missoula elementary schools, distributed by social class; (3) to compare the intelligence levels of failing students in four Missoula elementary schools.

Summary. The implications of this study tend to indicate that (1) in general, for the various levels of intelligence, the majority of failing students came from the lower-lower and upper-lower classes; (2) over half the total number of failures in the four schools included in the study, were found within the levels of intelligence quotients 90 to 109; (3) below the intelligence level of 89, about 16 per cent of the total failures occurred in the upper grades, while about 13 per cent occurred in the lower grades; (4) in the lower grades, about 31 per cent of the total failures were boys, while in the upper grades, about 34 per cent of the total failures were boys.

Warner, Havighurst, and Loeb have revealed the implication of recent research on the social-class structure

of American society for the motivation of school learning. In our present American schools teachers tend to expect lower-class children to follow a value system which, in many instances, is in opposition to the one they follow outside the school.<sup>1</sup>

The fact that writers of textbooks and teachers in general have come from a fairly restricted middle-class environment may account to a great extent for the limiting of the content of elementary-school reading materials and of the books used in other subjects which are largely middle-class in character. Elementary school books do not deal with homes as they are known by a large percentage of American children. In so far as background experience is an important factor contributing to school learning it is apparent that the work of the schools has not adequately capitalized on the wide range of background experience existing in most classrooms.

Research has clearly indicated the importance that practice or repetition has for effective learning. Things to be learned must be practiced again and again under favorable conditions of motivation. Many things taught in school, such as reading, writing, and arithmetic, require continuous practice over long periods of time for any sort of full development. Middle-class children tend to carry on more

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<sup>1</sup>W.Lloyd Warner, Rober J. Havighurst, and Martin B. Loeb, Who Shall Be Educated? The Challenge of Unequal Opportunities, (New York: Harper and Brothers, 1944), pp. xii and 190.

academic practice outside school, in the home, and under the supervision of parents. Relatively speaking, in a large majority of cases, children from lower-class homes do not have such an opportunity nor the stimulus for practice of school work at home. Consequently, an important aspect required for effective learning is inadequately provided for many pupils.<sup>2</sup>

Conclusions. The problem of class, and the possible relationship of class to learning situations for the children of different social classes in the schools, has not been solved by this study. Findings which involve human personality are usually very complex. The factors involved in any individual's adjustment to a social situation are in themselves complex. When we recognize that the causes of academic failure are multitudinous and combined in many complicated patterns, we are merely verifying the discoveries made in biology, psychology, sociology, nutrition, and health. It can be hoped that adequate diagnosis of the causes of failure may lead to more effective use of available time. It can be hoped that such findings may lead gradually to readjustments in educational philosophy and practice in the early levels which will, in turn, reduce the probability of

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<sup>2</sup>Kenneth Eells, Allison Davis, Rober J. Havighurst, Virgil E. Herrick, and Ralph Tyler, Intelligence and Cultural Differences (Chicago: The University of Chicago Press, 1951), pp. 42-47.

maladjustments. Accurate diagnosis is always the first step toward effective treatment or toward prevention of any maladjustment.

A most urgent problem for the public schools is to learn the motivational structure of lower-class children and adolescents. About two-thirds of our elementary school pupils have been trained in lower-class families and neighborhoods; at least one-third of our school population comes from the bottom group within the lower class. It is hoped that teachers reading this study will be convinced of the necessity of understanding the problems of children who represent different social environments. Such an understanding should tend to reduce the bias that is sometimes reflected in the assignment of grades, and in the development of undesirable teacher-student relations.

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**APPEND IX**



SCALE I  
SCALE FOR RATING OCCUPATION

Rating Assigned to Occupation	Professionals	Proprietors and Managers	Business Men	Clerks and Kindred Workers etc.	Manual Workers	Protective and Service Workers	Farmers
1	Lawyers, engineers, doctors, dentists judges, high-school superintendents, veterinarians, ministers (graduated from divinity school), chemists, etc., with post-graduate training, architects	Businesses valued at \$75,000 and over	Regional and Divisional Managers of large financial and industrial enterprises	Certified Public Accountants			Gentlemen farmers
2	High-school teachers, trained nurses, undertakers, chiropodists, chiropractors, newspaper editors, ministers (some training), librarians (graduate)	Businesses valued at \$20,000 to \$75,000	Assistant managers and office and department managers, assistants to executives, etc.	Accountants, salesmen of real estate, of insurance, postmasters			Large farm owners, farm owners
3	Social workers, grade-school teachers, optometrists, librarians (not graduate), undertaker's assistants, ministers (no training)	Businesses valued at \$5,000 to \$20,000	All minor officials of businesses	Auto salesmen, bank clerks and cashiers, postal clerks, secretaries, to executives, supervisors of railroad, telephone, etc.	Contractors		

W. Lloyd Warner, Marcia Meeker, and Kenneth Eells, Social Class In America (Gloucester: Peter Smith, 1957), p. 140-41.

SCALE I (Continued)  
SCALE FOR RATING OCCUPATION

Rating Assigned to Occupation	Professional Proprietors and Managers	Business Men	Clerks and Kindred Workers etc.	Manual Workers	Protective and Service Workers	Farmers
4	Businesses valued at \$2,000 to \$5,000	Stenographers, bookkeepers, rural mail clerks, railroad ticket agents, sales people in dry goods stores, etc.	Factory foremen, electricians, plumbers, carpenters, watchmakers	Dry cleaners, butchers, sheriffs, railroad engineers and conductors		
5	Businesses valued at \$500 to \$2,000	Dime store clerks, hardware salesmen, beauty operators, telephone operators	Carpenters, plumbers, electricians (apprentice), timekeepers, linemen, telephone or telegraph, radio repairmen, medium-skill workers	Barbers, firemen, butcher's apprentices, practical nurses, policemen, seamstresses, cooks in restaurants, bartenders		Tenant farmers
6	Businesses valued at less than \$500		Molders, semi-skilled workers, assistants to carpenters, etc.	Baggage men, night policemen and watchmen, taxi and truck drivers, gas station attendants, waitresses in restaurants		Small tenant farmers
7			Heavy labor, minors, migrant work, odd-job men	Janitors, scrub-women, newsboys		Migrant farm laborers

W. Lloyd Warner, Marcia Meeker, and Kenneth Bells, Social Class in America (Gloucester: Peter Smith, 1957), p. 140-41.

SCALE II

SOURCE OF INCOME

CLASSIFICATION

1. Inherited wealth. Families were so classified who lived on money made by a previous generation. This includes money derived from savings and investments or business enterprises inherited from an earlier generation. Inherited wealth is frequently referred to as "old money" in contrast to "new money." This source of income has the highest prestige since it implies that there has been money in the family for several generations.

2. Earned wealth. Families or individuals were so classified if they lived on savings or investments earned by the present generation. This category implies considerable wealth, for the individual lives on interest from capital and has amassed sufficient money so that he does not need to work. This source of income applies most frequently to men who have made a large amount of money and are able to retire and live comfortably on their earnings. They differ from individuals who are retired because of old age and live on pensions, etc. In the present case, it is not that they are too old to work, but they no longer need to work. One gains prestige in American society by being a successful business man and making a large fortune. Therefore, these individuals are given a higher rating than those who work for a living.

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W. Lloyd Warner, Marcia Meeker, and Kenneth Eells, Social Class in America (Gloucester: Peter Smith, 1957), pp. 139-142.

SCALE II (Continued)

3. Profits and fees. This includes money which is paid to professional men for services and advice. It also includes money made by owners of businesses for sale of goods and royalties paid to writers, musicians, etc.

4. Salary. This is a regular income paid for services on a monthly, or yearly, basis. This category also includes the commission type of salary paid to salesmen.

5. Wages. This is distinguished from salary since the amount is determined by an hourly rate. It is usually paid on a daily or weekly basis.

6. Private relief. This includes money paid by friends or relatives for the sake of friendship or because of family ties. It also includes money given by churches, associations, etc., when the agency does not reveal the names of those getting help. People receiving this form of income usually have no money themselves and only through this help are saved the shame of asking for public relief.

7. Public relief and non-respectable income. This includes money received from a government agency or from some semi-public organization which does not mind revealing the names of those getting help. A non-respectable income includes money made from illegal occupation as gambling, prostitution, and bootlegging (during prohibition.

People living on life insurance policies, social security

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W. Lloyd Warner, Marcia Meeker, and Kenneth Eells, Social Class in America (Gloucester: Peter Smith, 1957), pp. 139-142.

SCALE II (Continued)

benefits, or old age pensions were assigned the source of income on which they were dependent while they were working.

In general, if a person received income from more than one source, the chief source of income was used. However, there were some cases in which it was known that an individual's income was derived equally from two sources. In such cases it was possible to split the difference between the value assigned for two sources. This was done chiefly for members of the upper class who were working but were known to have inherited considerable wealth. It was also applied to business men who had a salary (4) and also had invested considerable money and derived part of their income from interest on earned wealth (2).

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W. Lloyd Warner, Marcia Meeker, and Kenneth Eells, Social Class in America (Gloucester: Peter Smith, 1957), pp. 139-142.

SCALE III

HOUSE TYPE

CLASSIFICATION

1. Excellent houses. This includes only houses which are very large single-family dwellings in good repair and surrounded by large lawns and yards which are landscaped and well cared for. These houses have an element of ostentation with respect to size, architectural style, and general condition of yards and lawns.

2. Very good houses. Roughly, this includes all houses which do not quite measure up to the first category. The primary difference is one of size. They are slightly smaller, but still larger than utility demands for the average family.

3. Good houses. In many cases they are slightly larger than utility demands. They are more conventional and less ostentatious than the two higher categories.

4. Average houses. One -and-a-half to two-story wood-frame and brick single-family dwellings. Conventional style, with lawns well cared for but not landscaped.

5. Fair houses. In general, this includes houses whose condition is not quite as good as those given a 4 rating. It also includes smaller houses in excellent condition.

6. Poor houses. In this, and the category below, size is less important than condition in determining evaluation. Houses in this

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W. Lloyd Warner, Marcia Meeker, and Kenneth Fells, Social Class in America (Gloucester: Peter Smith, 1957), pp. 139-142.

SCALE III (Continued)

are badly run down but have not deteriorated sufficiently that they cannot be repaired. They suffer from lack of care but do not have the profusion of debris which surrounds houses in the lowest category.

7. Very poor houses. All houses which have deteriorated so far that they cannot be repaired. They are considered unhealthy and unsafe to live in. All buildings not originally intended for dwellings, shacks, and over-crowded buildings. The halls and yards are littered with junk, and many have an extremely bad odor.

Using this classification, houses intended for one family but converted into multiple-family dwellings were handled as they had been in the first case; each dwelling unit was given a rating one point lower than the rating arrived at on the basis of the total structure. Apartments in regular apartment buildings were not limited to one rating but ranged from good housing to bad housing. It should be emphasized that in ranking apartments the total size of the structure was less important than the condition and the way the building was kept up, because of the single fact that an apartment building was large did not make it a desirable place to live; a small apartment building may be considered a very good place to live. The best way to rank apartments seemed to be on a basis of the size of living unit per individual family and the building's exterior condition.

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W. Lloyd Warner, Marcia Meeker, and Kenneth Eells, Social Class in America (Gloucester: Peter Smith, 1957), p. 150.

SCALE IV

DWELLING AREA

CLASSIFICATION

1. Very high. In Jonesville, as in most towns and small cities, this includes but one area. Residents, aware that this area has a high status reputation, remark that "no one can live here unless his family has lived in the community at least three generations." The best houses in town are located in such an area. The streets are wide and clean and have many trees.

2. High. Dwelling areas felt to be superior and well above average but a little below the top. There are fewer mansions and pretentious houses in such districts than in the first. However, the chief difference is one of reputation.

3. Above average. A little above average in social reputation and to the eye of the scientific observer. This is an area of nice but not pretentious houses. The streets are kept clean and the houses are well cared for. It is known as a "nice place to live" but "society doesn't live here."

4. Average. These are areas of workingmen's homes which are small and unpretentious but neat in appearance. In these areas live the respectable people in town who don't amount to much but never give anybody any trouble."

5. Below average. All the areas in this group are undesirable because they are close to factories, or because they include the

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W. Lloyd Warner, Marcia Meeker, and Kenneth Eells, Social Class in America (Gloucester: Peter Smith, 1957), p. 153.



SCALE IV (Continued)

business section of town, or are close to the railroad. There are more run-down houses here because there are people living in these areas who "don't know how to take care of things." They are more congested and heterogeneous than those above. It is said that "all kinds of people live here, and you don't know who your neighbors will be."

6. Low. These areas are run-down and semi-slums. The houses are set close together. The streets and yards are often filled with debris, and in some of the smaller towns like Jonesville, some of the streets are not paved.

7. Very low. Slum districts, the areas with the poorest reputation in town, not only because of unpleasant and unhealthy geographical positions--for example, being near a garbage dump or a swamp--but also because of the social stigma attached to those who live there. The houses are little better than shacks. The people are referred to by such terms as "squatters along the canal," and are said to be lazy, shiftless, ignorant, and immoral. This general reputation is assigned to most people living in such sections regardless of their abilities or accomplishments.

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W. Lloyd Warner, Marcia Meeker, and Kenneth Eells, Social Class in America (Gloucester: Peter Smith, 1957), p. 153

STREET MAP  
of  
**MISSOULA**  
MONTANA

For Free Distribution  
COURTESY OF  
MISSOULA CHAMBER OF  
COMMERCE

307 N. Main Telephone 64623

**Origin of the Name "Missoula"**

According to the Rev. Lawrence B. Palfreys, S.J., author of "Indian and White in the Northwest," the name, "Missoula" came from the Flathead Indian term "mis-sou-le-ka," meaning "by or near the cold, chilling waters." French-Canadian settlers interpreted the term as "Porte d'Enfer" or "Gate of Hell" and applied the name to the canyon just east of the city. English-speaking settlers changed the name to "Hell's Gate." The Indian name of the locality was applied as a result of early Indian fighting in the area. The Flatheads and other western tribes used this canyon as a passageway to the buffalo country to the east. The Blackfoot and Piegan tribes often waylaid these trading parties in the canyon which was heavily forested at the time. Reference: "Indians and White in the Northwest," L. B. Palfreys, S.J. (The author was an early-day Catholic Missionary who was a witness to the transformation of this area from a wilderness to civilization.)

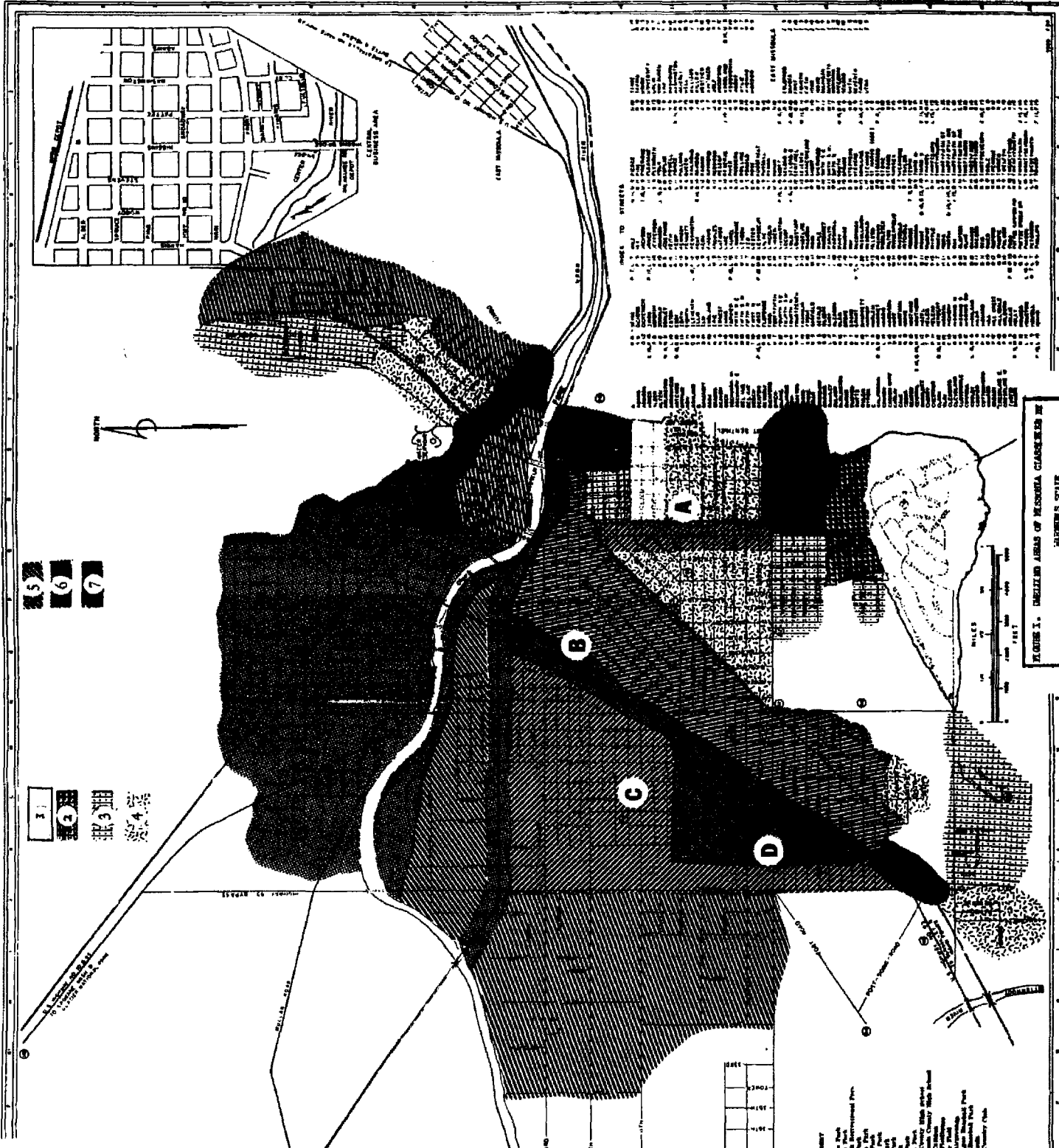


FIGURE 1. DESIGNATED AREAS OF MISSOULA CLASSIFIED BY  
MERRILL'S SCALE

- INDEX TO PARKS OF MISSOULA
- 1. Shoshone County Courthouse
  - 2. Wood Lake Park
  - 3. Park at Washington (Bridges)
  - 4. Park at Washington (Bridges)
  - 5. Park at Washington (Bridges)
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  - 99. Park at Washington (Bridges)
  - 100. Park at Washington (Bridges)

SCALE V

SOCIAL-CLASS EQUIVALENTS FOR I.S.C. RATINGS FOR OLD  
AMERICANS, JONESVILLE

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Weighted Total of Ratings	Social-Class Equivalents
12-17	Upper Class
18-22	Upper Class probably, with some possibility of Upper-Middle Class
23-24	Indeterminate: either Upper or Upper-Middle Class
25-33	Upper-Middle
34-37	Indeterminate: either Upper-Middle or Lower-Middle Class
38-50	Lower-Middle Class
51-53	Indeterminate: either Lower-Middle or Upper-Lower Class
54-62	Upper-Lower
63-66	Indeterminate: either Upper-Lower or Lower-Lower
67-69	Lower-Lower Class probably, with some possibility of Upper-Lower Class
70-84	Lower-Lower Class

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W. Lloyd Warner, Marcia Meeker, and Kenneth Eells, Social Class in America (Gloucester: Peter Smith, 1957), p. 127.

The better social-class rating was assigned to individuals when I.S.C. ratings fell within indeterminate areas.

TABLE III

INTELLIGENCE SCORES, SEX, SCHOOL AND SOCIAL CHARACTERISTICS  
OF THIRD GRADE PUPILS IN FOUR MISSOULA SCHOOLS

PUPIL NUMBER	INTELLIGENCE QUOTIENT	SEX	SCHOOL	OCCUPATION WEIGHT (4)	SOURCE OF INCOME WEIGHT (3)	HOUSE TYPE WEIGHT (3)	DWELLING AREA WEIGHT (2)	I.S.C. RATING	SOCIAL CLASS
1	129	M	B	4	5	4	6	55	Upper-Lower
2	125	M	B	4	4	4	5	50	Lower-Middle
3	121	F	C	6	5	5	5	64	Upper-Lower
4	121	F	D	5	5	4	6	59	Upper-Lower
5	118	F	B	4	4	5	5	53	Lower-Middle
6	115	F	D	5	5	5	5	60	Upper-Lower
7	115	F	B	5	5	3	5	54	Upper-Lower
8	114	M	B	4	4	4	5	50	Lower-Middle
9	112	F	C	5	5	5	6	62	Upper-Lower
10	110	M	D	5	5	5	5	60	Upper-Lower
11	108	M	A	5	5	5	4	58	Upper-Lower
12	107	M	B	6	5	4	5	61	Upper-Lower
13	107	M	A	3	4	3	4	41	Lower-Middle
14	106	F	B	7	5	6	5	71	Lower-Lower
15	102	F	B	5	5	5	6	62	Upper-Lower
16	101	M	B	4	5	4	6	55	Upper-Lower
17	100	M	B	5	5	4	5	57	Upper-Lower
18	99	M	B	3	4	4	5	46	Lower-Middle
19	99	F	B	6	5	4	5	61	Upper-Lower
20	95	M	D	5	5	6	6	65	Upper-Lower
21	93	F	D	5	4	5	5	57	Upper-Lower
22	92	M	D	7	5	5	6	70	Lower-Lower
23	90	M	B	5	5	6	6	65	Upper-Lower
24	89	M	B	5	5	5	5	60	Upper-Lower
25	88	F	B	7	5	6	5	71	Lower-Lower
26	88	M	D	5	5	5	5	60	Upper-Lower
27	73	F	D	7	5	5	5	68	Lower-Lower

TABLE IV

INTELLIGENCE SCORES, SEX, SCHOOL AND SOCIAL CHARACTERISTICS  
OF FOURTH GRADE PUPILS IN FOUR MISSOULA SCHOOLS

PUPIL NUMBER	INTELLIGENCE QUOTIENT	SEX	SCHOOL	OCCUPATION WEIGHT (4)	SOURCE OF INCOME WEIGHT (3)	HOUSE TYPE WEIGHT (3)	DWELLING AREA WEIGHT (2)	I. S. C. RATING	SOCIAL CLASS
1	111	M	D	6	5	6	5	67	Lower-Lower
2	110	M	D	3	4	4	6	48	Lower-Middle
3	108	M	D	2	4	4	5	42	Lower-Middle
4	106	F	B	4	4	5	6	55	Upper-Lower
5	104	M	B	4	5	4	6	55	Upper-Lower
6	103	M	D	5	5	6	6	65	Upper-Lower
7	102	M	D	7	5	6	5	71	Lower-Lower
8	102	M	B	5	5	4	5	57	Upper-Lower
9	101	M	D	4	3	4	4	45	Lower-Middle
10	100	M	C	6	5	6	6	69	Lower-Lower
11	100	M	D	6	5	6	6	69	Lower-Lower
12	98	M	B	5	5	4	5	57	Upper-Lower
13	97	M	D	6	5	6	6	69	Lower-Lower
14	96	F	C	7	5	7	5	74	Lower-Lower
15	95	F	C	7	5	4	5	65	Upper-Lower
16	90	M	A	4	5	5	5	56	Upper-Lower
17	90	M	C	5	5	4	5	57	Upper-Lower
18	89	F	C	7	5	6	5	71	Lower-Lower
19	85	F	D	6	5	5	5	64	Upper-Lower
20	83	M	B	5	5	5	5	60	Upper-Lower
21	81	F	C	5	3	5	5	54	Upper-Lower
22	79	M	C	7	5	6	5	71	Lower-Lower
23	76	F	B	7	5	6	5	71	Lower-Lower
24	65	M	D	7	5	6	5	71	Lower-Lower
25	65	M	D	7	5	6	5	71	Lower-Lower

INTELLIGENCE SCORES, SEX, SCHOOL AND SOCIAL CHARACTERISTICS OF  
OF FIFTH GRADE PUPILS IN FOUR MISSOULA SCHOOLS

PUPIL NUMBER	INTELLIGENCE QUOTIENT	SEX	SCHOOL	OCCUPATION WEIGHT (4)	SOURCE OF INCOME WEIGHT (3)	HOUSE TYPE WEIGHT (3)	DWELLING AREA WEIGHT (2)	I.S.-C. RATING	SOCIAL CLASS
1	120	M	C	6	5	5	5	64	Upper-Lower
2	116	F	D	4	5	5	6	58	Upper-Lower
3	114	F	B	7	5	4	6	67	Lower-Lower
4	108	M	D	3	3	4	6	45	Lower-Middle
5	107	M	D	6	5	5	6	66	Upper-Lower
6	106	M	D	4	4	4	6	52	Lower-Middle
7	106	M	C	6	5	5	4	62	Upper-Lower
8	104	M	C	5	5	4	5	57	Upper-Lower
9	104	M	C	5	5	4	5	57	Upper-Lower
10	103	M	B	5	5	5	6	62	Upper-Lower
11	102	M	C	5	5	4	5	57	Upper-Lower
12	101	M	C	7	5	4	5	65	Upper-Lower
13	100	M	D	5	5	5	6	62	Upper-Lower
14	100	M	D	5	5	5	6	62	Upper-Lower
15	98	F	C	7	5	6	5	71	Lower-Lower
16	97	F	B	6	5	5	6	66	Upper-Lower
17	93	F	D	5	5	6	6	65	Upper-Lower
18	92	M	D	5	5	5	6	62	Upper-Lower
19	91	M	B	5	5	5	6	62	Upper-Lower
20	86	F	C	5	4	5	5	57	Upper-Lower
21	85	F	C	6	5	6	5	67	Lower-Lower
22	83	F	D	5	5	4	4	55	Upper-Lower
23	80	M	B	5	5	5	5	60	Upper-Lower
24	79	F	B	7	5	4	6	67	Lower-Lower
25	77	M	B	7	7	6	5	77	Lower-Lower
26	74	F	C	7	5	5	5	68	Lower-Lower
27	74	F	C	5	5	4	5	57	Upper-Lower
28	73	F	C	7	7	6	5	77	Lower-Lower

TABLE VI  
INTELLIGENCE SCORES, SEX, SCHOOL AND SOCIAL CHARACTERISTICS  
OF SIXTH GRADE PUPILS IN FOUR MISSOULA SCHOOLS

PUPIL NUMBER	INTELLIGENCE QUOTIENT	SEX	SCHOOL	OCCUPATION WEIGHT (4)	SOURCE OF INCOME WEIGHT (3)	HOUSE TYPE WEIGHT (3)	DWELLING AREA WEIGHT (2)	I. S. C. RATING	SOCIAL CLASS
1	129	M	C	7	5	6	5	71	Lower-Lower
2	116	M	C	4	5	6	5	59	Upper-Lower
3	112	M	D	2	3	4	5	39	Lower-Middle
4	108	M	C	7	5	4	5	65	Upper-Lower
5	107	M	D	4	5	4	5	53	Lower-Middle
6	106	F	C	7	5	7	5	74	Lower-Lower
7	105	M	C	5	5	5	6	62	Upper-Lower
8	104	M	C	5	5	6	5	63	Upper-Lower
9	104	M	B	4	5	4	5	53	Lower-Middle
10	98	M	C	2	4	5	5	45	Lower-Middle
11	98	F	B	1	4	5	5	41	Lower-Middle
12	96	M	A	4	4	3	3	43	Lower-Middle
13	96	F	B	5	5	6	6	65	Upper-Lower
14	95	M	B	7	5	5	5	68	Lower-Lower
15	95	M	B	5	5	4	5	57	Upper-Lower
16	95	F	B	6	5	4	5	61	Upper-Lower
17	91	M	B	5	5	6	6	65	Upper-Lower
18	88	F	B	5	5	5	6	62	Upper-Lower
19	85	M	C	5	5	6	5	63	Upper-Lower
20	85	M	C	6	5	5	5	64	Upper-Lower
21	82	F	C	7	5	7	6	76	Lower-Lower
22	82	M	B	6	5	4	5	61	Upper-Lower
23	73	M	C	7	5	6	5	71	Lower-Lower
24	71	M	C	6	5	7	5	70	Lower-Lower
25	68	M	C	6	5	5	5	64	Upper-Lower

TABLE VII

INTELLIGENCE SCORES, SEX, SCHOOL AND SOCIAL CHARACTERISTICS  
OF SEVENTH GRADE PUPILS IN FOUR MISSOULA SCHOOLS

PUPIL NUMBER	INTELLIGENCE QUOTIENT	SEX	SCHOOL	OCCUPATION WEIGHT (4)	SOURCE OF INCOME WEIGHT (3)	HOUSE TYPE WEIGHT (3)	DWELLING AREA WEIGHT (2)	I. S. C. RATING	SOCIAL CLASS
1	107	M	B	5	5	4	5	57	Upper-Lower
2	107	M	B	5	4	5	5	57	Upper-Lower
3	107	M	B	5	5	4	5	57	Upper-Lower
4	106	M	B	5	5	5	5	60	Upper-Lower
5	106	M	D	4	5	4	6	55	Upper-Lower
6	103	F	B	4	5	3	6	52	Lower-Middle
7	103	M	B	4	4	4	5	50	Lower-Middle
8	102	F	C	7	5	6	5	71	Lower-Lower
9	99	F	B	4	5	4	5	53	Lower-Middle
10	99	F	D	7	5	6	6	73	Lower-Lower
11	99	F	B	5	5	5	5	60	Upper-Lower
12	95	F	C	7	5	7	5	74	Lower-Lower
13	95	M	C	5	5	6	5	63	Upper-Lower
14	95	M	C	6	5	7	5	70	Lower-Lower
15	95	M	D	5	5	4	5	57	Upper-Lower
16	95	M	C	7	5	7	6	76	Lower-Lower
17	94	M	D	7	7	5	6	76	Lower-Lower
18	91	M	B	5	5	5	5	60	Upper-Lower
19	90	M	C	5	5	6	5	63	Upper-Lower
20	83	M	D	4	5	6	4	57	Upper-Lower
21	78	M	B	3	3	6	5	49	Lower-Middle
22	78	F	A	2	3	4	1	31	Upper-Middle
23	76	F	B	7	5	6	5	71	Lower-Lower
24	75	F	B	6	5	4	5	61	Upper-Lower
25	71	F	B	4	4	4	5	50	Lower-Middle
26	73	F	D	6	5	5	6	66	Upper-Lower
27	63	M	B	5	5	5	5	60	Upper-Lower



TABLE VIII

INTELLIGENCE SCORES, SEX, SCHOOL AND SOCIAL CHARACTERISTICS  
OF EIGHTH GRADE PUPILS IN FOUR MISSOULA SCHOOLS

PUPIL NUMBER	INTELLIGENCE QUOTIENT	SEX	SCHOOL	OCCUPATION WEIGHT (4)	SOURCE % INCOME WEIGHT (3)	HOUSE TYPE WEIGHT (3)	DWELLING AREA WEIGHT (2)	I.S.C. RATING	SOCIAL CLASS
1	108	M	C	7	5	6	5	71	Lower-Lower
2	107	F	B	5	5	5	5	60	Upper-Lower
3	107	M	D	5	5	4	4	55	Upper-Lower
4	105	M	D	4	5	4	4	51	Lower-Middle
5	105	F	B	4	5	5	5	56	Upper-Lower
6	99	M	A	4	4	4	5	50	Lower-Middle
7	99	M	D	4	4	4	5	50	Lower-Middle
8	98	M	C	4	5	5	5	56	Upper-Lower
9	98	M	D	6	5	4	5	61	Upper-Lower
10	95	M	B	4	4	4	6	52	Lower-Middle
11	93	F	C	6	5	6	5	67	Lower-Middle
12	93	F	D	6	5	5	5	64	Upper-Lower
13	93	M	B	6	5	5	5	64	Upper-Lower
14	92	F	A	4	4	4	5	50	Lower-Middle
15	92	F	D	6	5	5	5	64	Upper-Lower
16	88	M	D	7	5	6	6	73	Lower-Lower
17	87	M	D	5	5	5	6	62	Upper-Lower
18	85	F	C	7	5	6	6	73	Lower-Lower
19	83	M	C	5	5	6	5	63	Upper-Lower
20	82	M	D	7	5	5	6	70	Lower-Lower
21	76	F	B	7	5	4	5	65	Upper-Lower
22	70	M	C	7	5	6	5	71	Lower-Lower
23	70	F	D	4	4	5	6	55	Upper-Lower
24	58	M	D	6	5	5	6	66	Upper-Lower

TABLE IX  
 DISTRIBUTION OF FAILURES BY GRADES AND INTELLIGENCE QUOTIENTS  
 IN FOUR MISSOULA SCHOOLS

Intelligence Quotient	School A		School B		School C		School D		Totals
	<u>3-4-5</u> Grades	<u>6-7-8</u> Grades	<u>3-4-5</u> Grades	<u>6-7-8</u> Grades	<u>3-4-5</u> Grades	<u>6-7-8</u> Grades	<u>3-4-5</u> Grades	<u>6-7-8</u> Grades	
120-129			2		2	1	1		6
110-119			4		1	1	5	1	12
100-109	2		9	9	6	6	10	4	46
90-99	1	3	6	11	4	8	6	7	46
80-89			4	2	4	5	3	4	22
70-79		1	3	5	4	3	1	2	19
60-69				1		1	2		4
50-59								1	1
<b>Totals</b>	<b>3</b>	<b>4</b>	<b>28</b>	<b>28</b>	<b>21</b>	<b>25</b>	<b>28</b>	<b>19</b>	<b>156</b>

TABLE X  
 SCATTER DIAGRAM  
 SOCIAL CLASSES AND INTELLIGENCE QUOTIENTS  
 LOWER GRADES

	120-129		110-119		100-109		90-99		80-89		70-79		60-69		50-59		Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F			
Upper																	
Upper Middle																	
Lower Middle	1		2	1	5		1										10
Upper Lower	2	2	1	4	16	2	7	5	4	4		1					48
Lower Lower			1	1	3	1	2	2		3	2	5	2				22
Total	3	2	4	6	24	3	10	7	4	7	2	6	2				80

TABLE XI  
SCATTER DIAGRAM  
SOCIAL CLASSES AND INTELLIGENCE QUOTIENTS  
UPPER GRADES

	120-129		110-119		100-109		90-99		80-89		70-79		60-69		50-59		Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F			
Upper																	
Upper Middle											1						1
Lower Middle			1		4	1	6	2			1	1					16
Upper Lower			1		9	2	9	5	6	1	4	2		1			40
Lower Lower	1				1	2	4	3	2	2	3	1					19
Total	1		2		14	5	19	10	8	3	4	7	2		1		76