

A STUDY OF THE NATIONAL MERIT SCHOLARSHIP PROGRAM AND
ITS OPERATION IN THE JUNCTION CITY HIGH SCHOOL FOR
THE YEARS 1961-1965

by

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INTRODUCTION

We, as a nation, face a critical shortage of educated talent. Our booming population, our huge defense requirements, and our complex technology are demanding more and better engineers, executives, scientists, and teachers. The primary way to expand the supply of these highly able people is to educate more of them at the college level. To do this we must reduce the loss of talented students between high school and college, in Junction City and around the nation.

Every year, tens of thousands of our most able high school graduates do not continue on to college. Many others lack motivation. I believe this is an economic waste in the Junction City area, and throughout the United States. The Merit Scholarship Program was created because of this waste of talent.

A question has developed as to the effectiveness of the methods used at Junction City High School in relation to identifying all individuals in the Junction City High School capable of becoming National Merit Semifinalists and of being recognized as exceptional college capable students. Administrators and counselors in the Junction City Schools see evidence of school program weakness in the limited number of semifinalists which have come out of the high school during the past five years (1961-1965).

STATEMENT OF THE PROBLEM

To increase participation of capable students in the National Merit Scholarship Program at Junction City High School.

THE PURPOSE OF THE STUDY

The purpose of this study was: (1) to identify and describe basic characteristics of National Merit Scholars in the United States; (2) to compare these characteristics with eligible participants, eligible non-participants and semifinalists at the Junction City High School; and (3) to present suggestions for obtaining more qualified participants for the program at Junction City High School.

IMPORTANCE OF THE STUDY

The effectiveness of the modern public secondary school is to an extent measured by the success of its graduates in securing scholarships and recognition in national competition. The National Merit Scholarship Program is a widely recognized competitive examination program. The limited number of semifinalists from Junction City High School in this program should justify this study. This study is made in an attempt to provide suggestions for increasing participation in the Program, and thus improve the School's scholastic image.

LIMITATIONS

Information available for study from Junction City High School records which is also found to be important from National Studies

Included: (1) intelligence quotient, (2) grade point average of "B" or better, (3) socio-economic background, (4) sex, and (5) race.

The following limitations were also accepted in terms of definitions which were generally described as acceptable minimums for two variables, grade average and intelligence quotient.

Eligible Participants at Junction City High School

Students at Junction City High School who participated in the National Merit Scholarship Program from 1961-1965, and who had either a "B" average or an intelligence quotient of 120.

Eligible Non-Participants at Junction City High School

Students at Junction City High School who did not participate in the National Merit Scholarship Program from 1961-1965, and who had either a "B" average or an intelligence quotient of 120.

Semifinalists at Junction City High School

Students at Junction City High School who reached semifinalist status between 1961-1965 as a result of the National Merit Scholarship Qualifying Test.

DEFINITIONS

Terms which are unique to this study and which need defining are here listed:

National Merit Scholarship Program

A scholarship program conducted by the National Merit Scholarship Corporation.

National Merit Scholarship Qualifying Test

This is a preliminary test given high school students, in each high school that registers for the test.

Semifinalists

These are the students scoring in the top 1 per cent in each state on the National Merit Scholarship Qualifying Test.

Finalist

A Semifinalist who meets four requirements: He must be endorsed by his school, substantiate his National Merit Scholarship Qualifying Test scores on a second test, complete a biographical Semifinalist Information Form, and provide the National Merit Scholarship Corporation with confidential family financial information.

National Merit Scholars

Finalists who are selected by the National Merit Scholarship Selection Committee.

REVIEW OF LITERATURE

History and Administration of the National Merit Scholarship Program

The methods of administering the National Merit Scholarship Program are determined by the National Merit Scholarship Corporation, an independent, nonprofit organization established in 1955.

Each fall, the high schools of the nation—public, private, and parochial—are invited to participate in the Merit Scholarship Program. Principals enter the schools by registering for the "Scholarship

Qualifying Test," the first step in the selection procedure.

This examination is administered in all participating high schools on a specified date in late October. The principal may select 5 per cent of his most able students for free testing. Others may be tested by paying a nominal fee to the testing agency. The examination is a three hour, high level college aptitude test, yielding scores highly predictive of the relative abilities of students to benefit from college training.

On the basis of their performance on the National Merit Scholarship Qualifying Test, the highest scoring students in each state are named Semifinalists.

The National Merit Scholarship Corporation's Annual Report for 1964, states, "Thirteen thousand Semifinalists were selected from among seven hundred thousand participants in 1963-64." In January, the Semifinalists are given the supervised Scholastic Aptitude Test of the College Entrance Examination Board. Scores on this three-hour examination further substantiate the abilities of the competitors. Each of the Finalists is considered to be fully qualified to receive a Merit Scholarship.

The final evaluations are performed by the Merit Scholar Selection Committee, a nationally-selected panel of experts in academic selection. The leadership, citizenship, grades and extra-curricular activities of each Finalist are considered as well as test scores. Special teams from company sponsors make selections as well. From all of these evaluations the final selections are made. About May first, the Merit Scholars are announced. All other Finalists

receive "Certificates of Merit." They are then identified to colleges and universities.¹

Identification of Talent

It was pointed out in the Introduction that there is a critical shortage of educated talent. One of the greatest problems then, is the careful and accurate identification of this talent. This is not easy to do.

Durr points out:

No absolute definition of "gifted" exists. Searching for a line of demarcation between the gifted and the average is like trying to establish a height that differentiates the tall from the "non-tall". If we consider that any man six feet and over is tall, will the man who is the smallest fraction of an inch under six feet be considered average? Unfortunately, the analogy with height does not provide us the complexity of the concept of giftedness. In height we know feet and inches are the standard of measurement. In determining giftedness we have not even agreed upon the measure to be used. Shall it be intelligence? Achievement? Creativity? Self-concept? Or should some combination of these and other characteristics single out the gifted student?²

There is a definite responsibility, however, to identify talent in our educational system:

Copley states:

If society is now demanding that the schools pay more attention to the ablest of its students, it is because this group, and this group alone, properly identified and trained is capable of producing intellectual leaders, and we have come to realize that without intellectual leaders democracy

¹National Merit Scholarship Corporation, Student Information Bulletin (1580 Sherman Avenue, Evanston, Illinois: Spring, 1965), p. 1.

²William K. Durr, The Gifted Student (New York: Oxford University Press, 1964), p. 14.

cannot hope to survive.³

Many more educators have called attention to the difficulty of identifying gifted students. French reports:

Lack of precision in defining giftedness is related to difficulties inherent in identifying gifted children. While it is true that considerable progress has been made in this area, and that intellectual ability can be assessed with a fair degree of adequacy, there is still much more that remains to be done. Although the wide range of intelligence, aptitude, and achievement tests that are presently available are of great value in the process of identifying bright students, they give very little information about some of the special talents or about the non-intellect factors that influence the level of functioning.⁴

Astin, in relation to identification of talent, believes the primary goal of research in this area is to develop better methods of identifying high school students who have potential for outstanding achievement in college and in their subsequent vocations. A predictive study using finalists of the National Merit Scholarship Program indicated the best type of predictor was found to be the student's high school achievements. A recurring finding in the identification area is that superior students tend to come from more favorable socio-economic backgrounds than do average students. Merit Scholars tended to achieve more frequently in both academic and creative fields, and to have more ambitious educational plans. They were also more interested in careers as college professors or scientific

³Frank O. Copley, The American High School and the Talented Student (Ann Arbor, Michigan: University of Michigan Press, 1961), p. 81.

⁴Joseph L. French, Educating the Gifted (New York: Holt, Rinehart, and Winston, Inc., 1964), p. 51.

researchers and less likely to be interested in school teaching, business, and the professions.⁵

Yet, despite their outstanding scholarship, these young men and women bear no resemblance to the conventional concept of the myopic egghead. Two-thirds of them have won awards for extracurricular activities. Here are the records of just a few that were picked at random: One Merit Scholar played football and served as sports editor of the college handbook and staff member of the student newspaper. At M.I.T. another played on both the tennis and squash teams while tying for first place academically. In his freshman year at Dartmouth, a Merit Scholar won football and track numerals, sang with the glee club, debated, was elected chairman of his dorm and secretary-treasurer of the Interdormitory council—and still managed to rank sixth in his class of 692. Similar records of rounded achievements come from every college attended by Merit Scholars.⁶

In another study of Merit Scholars, Nichols and Davis found again that high aptitude students tend to come from backgrounds of high educational and socio-economic status. There were twice as many Merit students as average students with family incomes over \$15,000, with parents' education at the college level, and with father's occupation in the professional category. There was also a larger proportion of males among the Merit students. The Merit students

⁵Alexander W. Astin, "Identification, Motivation, and Training of Talented Students," School and Society, 92:186-189, April 18, 1964.

⁶Albert Q. Maisel, "175,000,000 Winners," National Parent-Teacher, 53:6, June, 1959.

were almost exclusively white. Six per cent of the representative sample of college seniors studied were from the non-white races. Merit students came more frequently from Jewish backgrounds and less frequently from Catholic backgrounds than the average college student. There was also the tendency of the Merit Scholars to be the older children in the family and to have fewer siblings. Merit Scholars received various academic honors with greater frequency than the average student. Sixty-two per cent of the Merit students planned some kind of graduate study immediately following graduation from college as compared to 32 per cent of the average group. The Merit student showed considerably more preference than the average student for scientific and artistic occupations. They reported themselves to be less religious, more interested in careers as scientists, writers, and philosophers.⁷

From Senior Scholastic:

The records and plans of the graduate Merit Scholars testify to the quality of the winners. Two-thirds won academic honors—such as election to Phi Beta Kappa or Sigma Xi. One in five held major positions of leadership in student government, publications, athletics, and the like. Three-fourths planned at graduation to continue their studies either in this country or abroad. Nearly 80% of this group reported they would receive financial aid (fellowships, assistantships, and the like) to continue their studies.⁸

Another study was made in Michigan concerning Merit Scholars.

⁷Robert C. Nichols and James A. Davis, "Characteristics of Students of High Academic Aptitude," Personnel and Guidance Journal, 43:794-800, April, 1964.

⁸Merit Scholars "Cream" of the Senior Class "Crop," Senior Scholastic, 82:21, April, 1963.

Procedure followed was: Each Michigan high school that had one or more National Merit Scholarship Semifinalists in the years 1959-60 and/or 1960-61 was contacted. The schools were asked to provide for each of their semifinalists, an intelligence quotient (or percentile rank) from the intelligence or scholastic aptitude test given closest, but prior, to administration of the National Merit Scholastic Qualifying Test. The names of the schools and the semifinalists were available in publications of the National Merit Scholarship Corporation. Roster sheets were prepared which included students' names, so that the only task of the school administrator or counselor was to fill in the requested information: (1) intelligence quotient or percentile, (2) name of test, (3) form of test, and (4) year given.

There were 242 high schools in Michigan which had 892 National Merit Scholarship semifinalists in the two year period. The first request resulted in replies from 209 schools (86.4 per cent). Two more appeals resulted in 99 per cent plus, participation.

Conclusions from the Michigan Study were as follows:

1. The average ability level of Michigan National Merit semifinalists was an intelligence quotient of 130 or a percentile rank of 98-99 or an "A" rating on the Detroit Intelligence Test.
2. Ten per cent of Michigan National Merit semifinalists had ability test scores at or below intelligence quotients of 119, percentile ranks of 89 or Detroit Intelligence Test rating of "B".
3. Almost all Michigan National Merit semifinalists had ability

test scores at or above intelligence quotients of 120, percentile ranks of 90 or Detroit Intelligence Test ratings of "A"; or would be rated in the top 10 per cent if ability were judged by their principal or counselor.⁹

Another review was made of National Merit Scholars in relation to socio-economic background, and to occupations of fathers. Bond stated that:

Thus, an American child, whose father is a librarian, has 1,120 times the chance to win a National Merit Scholarship as a child whose parent is a laborer. The odds against a child, whose father is in one of the farming occupations, to win a National Merit Scholarship in competition with a child of one of the professional occupations is 30-1. While 168,000 physicians produced 26 scholars, 972,300 carpenters produced seven, 516,360 machinists produced three, 289,140 plumbers produced two, and 1,376,910 truckers produced three.

Some will argue, of course, that the spread of "aptitude" represented by these distributions is a fairly accurate index to the distribution of "native intelligence" in occupational classes. The author prefers a contrary explanation.

The National Merit Scholarships were awarded—as, indeed, they had to be awarded—on the basis of competitive tests (after state quotas had been established). These aptitude tests accurately measure the degree of facility in the manipulation of verbal and mathematical symbols by the student. Children in whose homes such symbols are now a part of the occupational stock-in-trade of parents (homes where such facility probably has characterized family operations for several generations) almost invariably will surpass children—testwise—from homes not so privileged.¹⁰

The review of literature has shown that National Merit students

⁹Frank B. Womer, "National Merit Scholarship Qualifying Test: A Michigan Study," Personnel and Guidance Journal, 41:218, November, 1962.

¹⁰Horace Mann Bond, "The Productivity of National Merit Scholars by Occupational Class," School and Society, 85:268, September 28, 1957.

have the following characteristics:

1. Merit students had higher academic achievement records than average students.
2. Merit students came from higher socio-economic backgrounds, as parents were in the executive or professional income group.
3. Merit students were interested in academic and creative fields.
4. Merit scholars had more ambitious educational plans, as many planned immediate graduate study following college graduation.
5. Merit students were the older children in their families and had fewer siblings.
6. Merit students came more frequently from Jewish backgrounds and less frequently from Catholic backgrounds.
7. Merit students were almost exclusively white.
8. There was a larger proportion of males among Merit students.
9. Almost all Merit students had an Intelligence quotient of at least 120.

METHOD AND PROCEDURE

A review of the Permanent Record File at Junction City High School was made to determine which characteristics, listed in the literature, were available for comparison. Those found to be available were: (1) intelligence quotient, (2) grade point average,

(3) socio-economic background, (4) sex, and (5) race.

Data were collected from the Personnel Record File at Junction City High School on each characteristic listed. These facts were organized into frequency distributions and presented in tables for comparison with Merit students. The resulting tables show the number and per cent of students at Junction City High School classified in relation to the basic characteristics described.

Information which came from the comparisons was used as a basis for developing suggestions for obtaining more qualified participants in the National Merit Scholarship Program at Junction City High School.

THE STUDY

The National Merit Program is offered in Junction City High School, and the students are informed by a release to the press and a bulletin, which gives the time and place the National Merit Scholarship Qualifying Test will be administered. It states that all Juniors, interested in Merit Scholarships to be awarded the next year, should take the test. Students with "B" averages are urged to participate. The type of examination and the areas covered are explained. Explanation is also given about the amounts of the minimum and maximum awards available and the relation of awards to financial need. Students are urged to register in the counselor's office before the test date. This announcement is also publicized on the school's bulletin board. An attempt is made to notify all interested and eligible students.

Identification of All Students with Intelligence Quotients of 120 or

"B" Averages at Junction City High School during the Five Year Period (1961-1965)

It is suspected that a number of students who are not qualified academically, take the test without much success, whereas, others who should take the test do not. An attempt was made to identify students with an intelligence quotient of 120, or a "B" average to determine how many should have taken the test, but did not, over the five year period (1961-1965).

Table I, on page 15, was constructed to show more clearly the number of Junction City High School eligible participants and their average intelligence quotients and grades. There were thirty eligible participants in 1961, and they had average intelligence quotients of 124 and grade point averages of 3.4.

Comparisons of intelligence quotients and grade point averages were made for the remaining years of the five year period. There were 145 eligible participants between 1961-1965 who had an intelligence quotient average of 124 and a grade point average of 3.3.

A similar comparison of eligible non-participants at Junction City High School between 1961-1965 is shown in Table II, page 16. In 1961, sixteen additional students were eligible to take the qualifying test. These students had an intelligence quotient average of 122 and a grade point average of 3.0. Comparison of the remainder of the five year period indicated similar intelligence quotient and grade point average for eligible non-participants.

The last comparison presented, indicated a total of 104 eligible non-participants who had an intelligence quotient average of 122 and a

TABLE I
 INTELLIGENCE QUOTIENTS AND GRADE POINT
 AVERAGES OF ELIGIBLE PARTICIPANTS
 AT JUNCTION CITY HIGH SCHOOL
 (1961-1965)

Eligible Participants			
Date	Number	Average Intelligence Quotient	Grade Point Average
1961	30	124	3.4
1962	32	123	3.2
1963	26	126	3.6
1964	21	121	3.4
1965	36	125	3.1
Five Year Average			
1961-1965	145	124	3.3

TABLE II
 INTELLIGENCE QUOTIENTS AND GRADE POINT AVERAGES OF ELIGIBLE
 NON-PARTICIPANTS AT JUNCTION CITY HIGH SCHOOL
 (1961-1965)

Eligible Non-Participants			
Date	Number	Average Intelligence Quotient	Grade Point Average
1961	16	122	3.0
1962	9	120	3.4
1963	11	125	3.0
1964	32	126	3.1
1965	36	122	3.2
Five Year Average			
1961-1965	104	122	3.2

grade point average of 3.2.

Data in Tables I and II showed that the Junction City High School eligible participants and non-participants were comparable in terms of intelligence quotients and grade point averages for the years 1961-1965.

Table III, on page 19, illustrated a summary comparison of eligible participants and non-participants at Junction City High School.

There was a total of 988 students in the junior classes over the five year period. Two hundred one students participated, 145 or 72 per cent had "B" averages or intelligence quotients of 120. Fifty-six or 28 per cent did not have "B" averages or intelligence quotients of 120.

The last line of Table III was especially significant, because it indicated the per cent of eligible non-participants. Thirty-four per cent in 1961, 22 per cent in 1962, and 30 per cent in 1963, were eligible in terms of intelligence quotients and grade point averages, but did not participate. It was noted that for the years 1964 and 1965, the enrollment at Junction City High School had increased and the per cent of eligible non-participants increased to 60 per cent in 1964, and 50 per cent in 1965. This showed a further loss of talent for the years 1964 and 1965. The proportion of eligible non-participants, for the five year period, was 41 per cent of the total eligible group.

The success of the National Scholarship Program at Junction City High School is expected to improve with increased participation of qualified students. The data reviewed showed the necessity of encouraging eligible students to participate. Capable students would be more likely to succeed in the National competition.

Comparison of Socio-Economic Backgrounds of Eligible Participants and Eligible Non-Participants at Junction City High School during the Five Year Period (1961-1965)

Socio-economic backgrounds were compared because much of the literature reviewed suggested this as a factor in the success of students in the National Merit Program. Astin said, "The Scholars when compared with the other students came from higher socio-economic backgrounds."¹¹

According to Nichols and Davis, the Merit students came from backgrounds of higher socio-economic status. The socio-economic differences were quite marked with approximately twice as many Merit students as average students coming from families with incomes over \$15,000, and from families in which the fathers' occupation is in the professional category.¹²

The eligible participants and eligible non-participants were compared in relation to socio-economic backgrounds. Comparison was made by categorizing students in relation to their parents' occupations. This information was obtained from the permanent record file at Junction City High School.

Comparisons of socio-economic backgrounds of eligible participants and non-participants were shown in Table IV, page 22, and Table V, page 23.

¹¹Astin, loc. cit.

¹²Nichols and Davis, op. cit., p. 795.

TABLE III
 INTELLIGENCE QUOTIENTS AND GRADE POINT
 AVERAGES OF ELIGIBLE PARTICIPANTS
 AND NON-PARTICIPANTS AT
 JUNCTION CITY HIGH SCHOOL
 (1961-1965)

Years	1961	1962	1963	1964	1965	Totals
Class Total	181	165	171	204	277	988
Participants in National Merit Program	40	51	39	27	44	201
"B" or 120 I.Q.	30 or 75%	32 or 63%	26 or 61%	21 or 78%	36 or 82%	145 or 72%
Less "B" or 120 I.Q.	10	19	13	6	8	56 or 28%
Non-Participants "B" or 120 I.Q.	16	9	11	32	36	104
Eligible Partici- pants "B" or 120 I.Q.	46	41	37	53	72	249
Per cent Eligible Non- Participants	34%	22%	30%	60%	50%	41%

These comparisons indicated the number of eligible participants and non-participants at Junction City High School and parents' incomes from 1961 to 1965.

Students were classified in income groups which ranged from a minimum of \$5,000 to a maximum of \$11,000.

The comparison indicated a relatively constant proportion of eligible participants in each income group each year.

The proportion of eligible non-participants in the upper income group decreased, the proportion in the middle income group increased, and the proportion in the lower income group decreased over the five year period.

The summary of the comparisons of the total number of eligible participants indicated 14 per cent in the upper income group, 48 per cent in the middle income group, and 38 per cent in the lower income group.

Thirteen per cent of the eligible non-participants were found to be in the upper income group, 54 per cent in the middle income group, and 33 per cent in the lower income group.

This summary showed that eligible participants and non-participants were similar in relation to socio-economic background. Each category had almost equal numbers of participants and non-participants.

Comparison indicated socio-economic background not to be important as a single factor in the selection of participants for National Merit Scholarship competition at Junction City High School.

Comparison of Sex of Eligible Participants and Eligible Non-Participants at the Junction City High School during the Five Year Period (1961-1965)

A comparison was made in relation to the number of male and female eligible participants and non-participants.

Nichols and Davis related a larger proportion of males among the Merit students which could not be accounted for on the basis of more boys than girls taking the National Merit Test. It has been a consistent observation in the Merit Scholarship competition that a larger proportion of boys who took the test obtained the high scores necessary for consideration for scholarships. It is not known whether this is due to a mean sex difference on the selection test or to greater variance among the males.¹⁴

Table VI, page 25, and Table VII, page 26, compared male and female eligible participants and non-participants. The number of eligible male and female participants changed from year to year. There were more eligible male participants in 1961 and 1964, but more eligible female participants in 1962 and 1963. In 1965 there was an equal number of male and female eligible participants. There were seventy eligible male participants and seventy-five eligible female participants for the five year period.

Data presented in Table VII, page 26, showed more female than male eligible non-participants for the five year period. There were

¹⁴ibid.

TABLE IV
 NUMBER AND PER CENT OF ELIGIBLE PARTICIPANTS
 IN SELECTED INCOME GROUPS AT JUNCTION
 CITY HIGH SCHOOL
 (1961-1965)

Income Groups compared				
A-\$9,000-\$11,000				
B- 7,000- 9,000				
C- 5,000- 7,000				
Eligible Participants				
Date	Number	A	B	C
1961	30	4 or 13%	15 or 50%	11 or 37%
1962	32	3 or 9%	16 or 50%	13 or 41%
1963	26	6 or 23%	12 or 46%	8 or 31%
1964	21	4 or 18%	10 or 49%	7 or 33%
1965	36	4 or 11%	18 or 50%	14 or 39%
Total	145	21 or 14%	71 or 48%	53 or 36%

TABLE V
 NUMBER AND PER CENT OF ELIGIBLE NON-PARTICIPANTS
 IN SELECTED INCOME GROUPS AT JUNCTION CITY
 HIGH SCHOOL (1961-1965)

Income Groups compared				
A-\$9,000-\$11,000				
B- 7,000- 9,000				
C- 5,000- 7,000				
Date	Number	Eligible Non-Participants		
		A	B	C
1961	16	2 or 12½%	5 or 31½%	9 or 56%
1962	9	2 or 23%	3 or 33%	4 or 44%
1963	11	2 or 19%	6 or 55%	3 or 26%
1964	32	5 or 16%	17 or 53%	10 or 31%
1965	36	3 or 8%	25 or 70%	8 or 22%
Total	104	14 or 13%	56 or 54%	34 or 33%

forty-one eligible male non-participants and sixty-three eligible female non-participants from 1961-1965.

The similarity in the proportion of eligible boy and girl participants and non-participants indicated sex not to be important as a single factor in selection of participants for the National Merit Scholarship competition at Junction City High School.

Comparison of Race of Eligible Participants and Eligible Non-Participants at Junction City High School during the Five Year Period (1961-1965)

The characteristics which were reviewed indicated few non-white National Merit Scholars. Nichols and Davis reported Merit students were almost exclusively white, while 6 per cent of the representative sample of college seniors were of non-white races. It might be expected that the underrepresentation of non-white races among high aptitude students would tend to disappear when socio-economic status was controlled. However, since there were practically no non-whites among the Merit students to start with, the proportion of non-whites in the Matched Merit group could not increase.¹⁵

Data, which was presented on Table VIII, page 28, identified the race of eligible participants at Junction City High School. All eligible participants were white for the years 1961 through 1963. Ninety-five per cent were white in 1964, and 97 per cent were white in 1965. There were 143 (99 per cent) white and 2 (1 per cent) non-

¹⁵ibid.

TABLE VI
 MALE AND FEMALE ELIGIBLE PARTICIPANTS
 AT JUNCTION CITY HIGH SCHOOL
 (1961-1965)

Eligible Participants			
Date	Number	Male	Female
1961	30	16 or 53%	14 or 47%
1962	32	12 or 37%	20 or 63%
1963	26	11 or 42%	15 or 58%
1964	21	13 or 62%	8 or 38%
1965	36	18 or 50%	18 or 50%
Total	145	70 or 48%	75 or 52%

TABLE VII
 MALE AND FEMALE ELIGIBLE NON-PARTICIPANTS
 AT JUNCTION CITY HIGH SCHOOL
 (1961-1965)

Eligible Non-Participants			
Date	Number	Male	Female
1961	16	6 or 38%	10 or 62%
1962	9	2 or 22%	7 or 78%
1963	11	5 or 46%	6 or 54%
1964	32	13 or 41%	19 or 59%
1965	36	15 or 41%	21 or 59%
Total	104	41 or 40%	63 or 60%

white eligible participants from 1961-1965.

The race of eligible non-participants was identified and presented on Table IX, page 29. All eligible non-participants were white for the years 1961-1963, and 97 per cent were white in 1964 and 1965. There were 102 (99 per cent) white and 2 (1 per cent) non-white eligible non-participants from 1961 to 1965.

This comparison has shown a similarity in the proportion of white and non-white eligible participants and non-participants at Junction City High School from 1961-1965.

Race was not found to be important as a single factor in the selection of participants for the National Merit Scholarship Program at Junction City High School.

Comparison of Intelligence Quotients, Grade Point Averages, Economic Backgrounds, Sex and Race of Semifinalists, Eligible Participants and Eligible Non-Participants at Junction City High School (1961-1965)

A comparison of eligible participants, eligible non-participants, and semifinalists was made and presented in Table X, page 31. There were 9 semifinalists, with an intelligence quotient average of 127 and a grade point average of 3.6. There were 145 eligible participants with an intelligence quotient average of 124 and a grade point average of 3.3. There were 104 eligible non-participants with an intelligence quotient average of 122 and a grade point average of 3.3.

This comparison indicated grade point averages of semifinalists were .3 higher than eligible participants and .4 higher than eligible non-participants. The intelligence quotient average of semifinalists

TABLE VIII
 WHITE AND NON-WHITE ELIGIBLE PARTICIPANTS
 AT JUNCTION CITY HIGH SCHOOL
 (1961-1965)

Date	Number	Eligible Participants	
		White	Non-White
1961	30	30 or 100%	0 or 0%
1962	32	32 or 100%	0 or 0%
1963	26	26 or 100%	0 or 0%
1964	21	20 or 95%	1 or 5%
1965	36	35 or 97%	1 or 3%
Total	145	143 or 98%	2 or 1%

TABLE IX
 WHITE AND NON-WHITE ELIGIBLE NON-PARTICIPANTS
 AT JUNCTION CITY HIGH SCHOOL
 (1961-1965)

Eligible Non-Participants			
Date	Number	White	Non-White
1961	16	16 or 100%	0 or 0%
1962	9	9 or 100%	0 or 0%
1963	11	11 or 100%	0 or 0%
1964	32	31 or 97%	1 or 3%
1965	36	35 or 97%	1 or 3%
Total	104	102 or 99%	2 or 1%

was 3 points higher than eligible participants and 5 points higher than eligible non-participants.

Further comparison showed 67 per cent of the semifinalists, 14 per cent of the eligible participants, and 13 per cent of the eligible non-participants came from families with higher incomes. The larger per cent of semifinalists in the upper income group is noted.

Eighty-nine per cent of the semifinalists, 48 per cent of the eligible participants, and 40 per cent of the eligible non-participants were male. Therefore, the comparison has shown more male semifinalists, but more female eligible participants and non-participants. National Merit Scholars were predominantly male.

The last comparison presented in Table X indicated all semifinalists and 99 per cent of the eligible participants and non-participants were white. National Merit Scholars were almost all white.

SUMMARY

This study has compared Junction City High School participants, non-participants, and semifinalists in relation to the National Merit Scholarship Program. The review of literature identified basic characteristics of National Merit Scholars for comparison.

Characteristics available for comparison at Junction City High School were: (1) intelligence quotients, (2) grade point averages, (3) socio-economic backgrounds, (4) sex, and (5) race.

The major points of similarity which were found to exist between Junction City High School eligible participants, non-participants, semifinalists, and National Merit Scholars were:

TABLE X
 CHARACTERISTICS OF SEMIFINALISTS, ELIGIBLE PARTICIPANTS
 AND ELIGIBLE NON-PARTICIPANTS AT JUNCTION CITY
 HIGH SCHOOL (1961-1965)

	Number	Semi- finalists	Number	Eligible Partici- pants	Number	Eligible Non- Participants
	9		145		104	
Median I.Q.		127		124		122
Grade Point Average		3.6		3.5		3.2
<u>Socio-Ec.</u>	9	%	145	%	104	%
Upper Bracket	6	67	21	14	14	13
Lower Brackets	3	33	124	86	90	87
<u>Sex</u>	9	%	145	%	104	%
Male	8	89	70	48	41	40
Female	1	11	75	52	63	60
<u>Race</u>	9	%	145	%	104	%
White	9	100	143	99	102	99
Non-White	0	0	2	1	2	1

1. The three groups compared were similar in regard to intelligence, academic achievement and all compared favorably with National Merit Scholars.
2. The eligible participants and non-participants compared favorably in relation to socio-economic background. The review showed 14 per cent of eligible participants, and 13 per cent of eligible non-participants came from families of high income. Sixty-seven per cent of the semifinalists at Junction City High School came from high income families. Merit Scholars were found to come more often from high income families.
3. In Junction City 48 per cent of the eligible participants were male, and 52 per cent female. The eligible non-participants included 40 per cent male and 60 per cent female. The semifinalists were 89 per cent male and 11 per cent female. National Merit Scholars were predominantly male.
4. In regard to race it was found that National Merit winners were almost exclusively white. Comparison with Junction City students indicated 99 per cent of the eligible participants and non-participants were white, and 100 per cent of the semifinalists were of the white race.

Analysis of data available relative to Junction City High School semifinalists, eligible participants and eligible non-participants in the National Merit Scholarship Program and comparison of these data with National Merit Scholars showed no single factor or

pattern of factors which could account for the problem of limited success at Junction City High School.

The group identified as eligible non-participants did emerge as a probable resource for increased successful participation. A program of action designed to move more of this group to participation would seem to be justified.

The administration and faculty should develop a program aimed at increasing the participation and effectiveness of Junction City High School in the National Merit Scholarship competition. The program should recognize:

1. All students who are interested in taking the National Merit Scholarship Qualifying Test should be permitted to do so.
2. All students with "B" averages or intelligence quotients of 120 should be contacted by the guidance counselor and instructed about the National Merit Scholarship Program to encourage their participation.
3. All students at Junction City High School should be given information about the National Merit Scholarship Program and the values of higher education.
4. Eligible boys at Junction City High School should be encouraged to participate in the National Merit Scholarship Program.
5. The community of Junction City should be informed of the National Merit Scholarship Program and of the characteristics and intellectual interests of students who succeed in the program.

6. A general briefing session for students and parents to explain the purpose of scholarships, how to prepare for them effectively, how to react to them, and how to interpret the results.
7. Sessions should be held as a regular part of the educational program, to stress improved methods of student study, improved reading, extra work in mathematics and science.
8. The school should start developing a realistic approach to the scholarship improvement for its students.

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A STUDY OF THE NATIONAL MERIT SCHOLARSHIP PROGRAM AND
ITS OPERATION IN THE JUNCTION CITY HIGH SCHOOL FOR
THE YEARS 1961-1965

by

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AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

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KANSAS STATE UNIVERSITY
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The purpose of the study was:

1. To identify and describe basic characteristics of National Merit Scholars in the United States.
2. To compare these characteristics with eligible participants, eligible non-participants and semifinalists at the Junction City High School.
3. To present recommendations for obtaining more qualified participants for the program at Junction City High School.

The study was important because the effectiveness of the modern public secondary school is to an extent measured by the success of its graduates in securing scholarships and recognition in national competition. The National Merit Scholarship Program is a widely recognized competitive examination program. The limited number of semifinalists from Junction City High School should justify this study.

The material in the review of literature was used as a basis for comparing Junction City High School students, participants, non-participants, and semifinalists, in the National Merit Program with successful National Merit Scholars throughout the United States.

Comparison of characteristics of Junction City High School students were limited to the following: (1) intelligence quotient, (2) grade point averages of "B", (3) socio-economic background, (4) sex, and (5) race.

The following limitations were also accepted in terms of definitions which were generally described as acceptable minimums for two variables, grade average and intelligence quotient.

Eligible Participants at Junction City High School

Students at Junction City High School who participated in the National Merit Scholarship Program from 1961-1965, and who had either a "B" average or an intelligence quotient of 120.

Eligible Non-Participants at Junction City High School

Students at Junction City High School who did not participate in the National Merit Scholarship Program from 1961-1965, and who had either a "B" average or an intelligence quotient of 120.

Analysis of data available relative to Junction City High School semifinalists, eligible participants and eligible non-participants in the National Merit Scholarship Program and comparison of these data with National Merit Scholars showed no single factor or pattern of factors which could account for the problem of limited success at Junction City High School.

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8. The school should start developing a realistic approach to the scholarship improvement for its students.