A COMPARISON OF THE SOCIAL ADJUSTMENT OF STUDENTS
ENROLLED AND NOT ENROLLED IN INSTRUMENTAL MUSIC
AT CENTRAL DALLAS COMMUNITY SCHOOLS

A Field Report
Presented to
The Graduate Division
Drake University

In Partial Fulfillment
of the Requirements for the Degree
Master of Science in Education

by
Dwain Franklin Petersen

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by

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Approved by Committee:

[Signature]
Chairman

Earle J. Canfield
Dean of the Graduate Division
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CHAPTER I

INTRODUCTION

In modern education the curriculum needs all the support attainable to develop good citizens. Most educators agree that a student must understand himself, discipline himself, and adjust to his surroundings. The guidance counselor in his efforts to help students who find it difficult to adjust to their environment, is constantly seeking ways and means of making his efforts more effective.

I. THE PROBLEM

Statement of the problem. It was the principal purpose of this study to determine whether instrumental music students in the Central Dallas Community Schools, Minburn, Iowa, were measurably different from non-instrumental music students in social adjustment. A secondary purpose was to see whether any evidence could be found to support the hypothesis that instrumental music is an effective guidance technique to use in working with maladjusted students.

Importance of the study. Many deeds, both good and violent, have been attributed to social adjustment. Gilliland stated that many inferiority feelings have been cured by instrumental music and superiority feelings effectively treated by playing with, not ahead of, or behind,
a band.\textsuperscript{1} With regard to music as a tool for treatment of maladjusted he said, "Psychologically speaking, the surface has not been scratched as applied to the 'problem' child."\textsuperscript{2} In spite of the general acceptance of music in the curriculum its value is often questioned. In this investigation the experimental method was attempted to avoid the controversy\textsuperscript{3} often a resultant of the survey method.

II. REVIEW OF THE LITERATURE

Much has been written about the social advantages and character building qualities of instrumental music, but the writer will attempt to report only a characteristic apportionment of the material available.

The Social Adjustment of Instrumental Music Students. Father E. J. Flanagan, the founder of Boys Town, Nebraska, stated:

\begin{quote}
I am in full accord with educators who say that a musical education tends to develop self-confidence in students, as well as good discipline . . . Music making is one of the finest of recreational activities as well as being of great cultural value to a boy.\textsuperscript{4}
\end{quote}


\textsuperscript{2}\textit{Ibid}.


\textsuperscript{4}Mathews, \textit{op. cit.}, p. 31.
Music not only keeps students out of trouble but helps to rehabilitate men who are being punished for their antisocial behavior in prisons.

John Hendricks, director of the prison band at San Quentin, reported that:

Band rehearsals are character building, both in their discipline and in their musical influence. The man who learns to obey the conductor and his baton is not so apt to disobey the representative of the law. The man who hears the better musical result caused by his conforming to orders will not be apt to be resentful of the laws of society.¹

Music as a social asset has been recognized for many years.

Over thirty years ago Barnes wrote:

Still another important way in which music serves to build character is found in its socializing influence. Man is notoriously gregarious—that is, he is not happy unless he is in communion with others of his kind—and there is probably no other single force which serves to stimulate and improve social intercourse equally with music.²

Instrumental Music and Scholarship. The study of music has little practical use for anyone who does not plan to enter the vocation or utilize it avocationally. However, it is wise to consider music as an essential part of a liberal education. Music has a relationship to literature, history, geography, language, political science and mathematics.

¹Ibid., p. 35.

Music is helpful in the study of all the above subjects and even in excelling in them.¹ Barnes reported:

In a survey of the schools of Springfield, Missouri, namely, that school children who studied a musical instrument stood an average of three points higher in their regular school work than did students who had never studied music. It is, of course, true that other factors are involved; in some cases interest in the music keeps the child in school and carries the other subjects along by its momentum. It is probably true, also, to some extent at least, that the more brilliant students desire to know something about music and consequently are found in the instrumental classes.²

Instrumental Music, Counseling, and Guidance. Before it is possible for the writer to discuss the use of music as a guidance technique it is necessary to explore the current emphasis on the sciences and its implications for music education. Voxman, who earned his undergraduate degree in chemical engineering and his graduate degree in psychology of music, asserted:

The prospective music student is simply confronted with the choice of more advanced work in certain currently desirable areas and continuing participation in large music group activity. Frequently he is under no small pressure from counselors to make the first choice.³

Most counselors appreciate the therapeutic values of music. Music has been called the "medicine of the mind" and has had extensive

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¹Ibid., pp. 65-70.  
²Ibid., p. 70.  
use in institutions for the mentally ill. With a view toward using music as a technique of guidance, Mortensen and Schmuller also said:

Summed up for guidance, music education helps students to: (1) develop an understanding and appreciation of the different areas of music; (2) sing, play, or listen according to their individual interests and musical capabilities; (3) build up a mature understanding of the aesthetic values of music in terms of social goals.

III. LIMITATIONS

Limitations of this project include: (1) the unconscious bias of the faculty regarding the instrumental music opinionnaire, (2) the unconscious bias of the researcher in determining and utilizing the factors of age, sex, mental ability, and socio-economic status for equating the instrumental music students with non-instrumental music students, (3) the fact that instrumental music itself was a variable, (4) the less-than-perfect validity of the tests and procedures utilized, and (5) the matching pairs technique was utilized to equate the groups although it was imperfect.

The Locale of the Study. Central Dallas Community Schools are located in Minburn, Iowa; in Washington Township, five miles west

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2Ibid.
of Minburn; and, in Gardiner, Iowa, four miles north of Minburn. The high school is in Minburn and that is where the study took place, although the writer taught instrumental music throughout the district. There were 105 students enrolled in high school during this investigation. All of the students were considered rural since Minburn has a population of 350 and is the only village in the school district.

The School Program. Central Dallas Community Schools offered college preparatory, commercial (without shorthand), and vocational agriculture courses. The English classes included grammar, English literature, United States Literature, speech, and composition. French was offered for first year students in that language. Commercial subjects offered were: beginning typing, advanced typing, bookkeeping, business arithmetic during the first semester, and business law during the second semester. The mathematics classes included: general mathematics, algebra, plane geometry, advanced algebra, trigonometry during the first semester, and solid geometry during the second semester. Social studies included: world history, United States history, United States government during the first semester and economics during the second semester. The science courses offered were general science, biology, and chemistry. There were classes in beginning home economics and advanced home economics. Vocational agriculture was offered to sophomores, juniors, and seniors. There was a class in driver training
offered both semesters. These classes were taught by eleven teachers.

Co-curricular (during school day) activities included physical education, speech, vocal music and instrumental music. Extra-curricular activities included football, girls softball, boys and girls basketball, dramatics, and track.

There were six periods of sixty minutes and one period of thirty minutes scheduled each day. Students not enrolled in vocal music received a forty-five minute lunch period and vocal music students received a thirty minute lunch period. Laboratory classes met five days a week and the other classes met four times. Instrumental music classes met three times a week during the last hour of the day. Individual lessons were given during study halls to instrumental music students who desired them. Never during the entire school year was a student excused from a scheduled high school class for instrumental music.

The Music Facilities. The instrumental music department was quartered in a new, specially-designed room, adequately lighted, and possessing excellent acoustics. The students of the band had good instruments, half of which were school owned. There was an adequate number of music racks and an ample quantity of chairs. There was a sufficient music library including band music, ensemble music, and solo literature.

IV. PROCEDURE

The following techniques and procedures were used to equate the
groups, gather data, and compare and interpret the results.

**Equating the Groups.** The thirty-nine instrumental music students were equated with thirty-nine students selected from the remaining student body on the following criteria: age, sex, mental ability determined by the California Test of Mental Maturity, and socio-economic background determined by the Sims Socio-economic Score Card.

Age and sex were, understandably, no problem in equating the groups using the matching pairs technique. Since it was not possible to match intelligence quotients and socio-economic perfectly, an average of these criteria was computed.

As shown in Table I, the average intelligence quotients of the instrumental and non-instrumental music groups were 111.9 and 111.7, respectively. The greatest difference was ten points in the case of one pair. Seven pairs matched perfectly; eight pairs differed by one point; five by two points; one by five points; four by six points; and one by seven points.

The Sims Socio-Economic Score Card, which was administered to the entire student body of 105 students in December, 1960, produced a rating between one and ten. Never in the equating process was it necessary to equate a pair more than two ratings apart on this scale. Table I shows that there were three pairs two ratings apart, eleven pairs one rating apart and twenty-five pairs that matched perfectly in
TABLE I

EQUATION OF INSTRUMENTAL MUSIC STUDENTS WITH NON-INSTRUMENTAL MUSIC STUDENTS AT CENTRAL DALLAS COMMUNITY SCHOOLS, MINBURN, IOWA, 1960-1961

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AVERAGE 111.9 7.1 111.7 6.9
socio-economic status. The average ratings were 7.1 for instrumental music participants and 6.9 for the non-participants.

**Sociometry.** A sociometric schedule was given to the entire student body of 105 students in December, 1960. The students were asked to: "Write the name of your best friend in this high school." A sociogram was constructed with the results in the following manner: a student chosen four or more times was considered a star and plotted in the innermost circle, those chosen three times, twice, and once were plotted outward from the center, with the isolates placed outside the concentric circles.

The sociogram was designed to distinguish among boys, girls, instrumental music students, and non-instrumental music students. It depicts the social relationships that existed between individuals in the entire high school at Christmas time, 1960.

**Youth Inventory Comparison.** The SRA Youth Inventory was given to the two equated groups in May of 1961. This instrument is a check list of 298 questions to identify the problems young people say worry them most.\(^1\) It is divided into eight major areas, discussed in Chapter II.

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The norms are based on the stratified sample of 2500 cases that were used in making the comprehensive analysis for the various subgroups.\(^1\) The norms were for rural boys and girls for the ninth through the twelfth grades. The subjects of this study matched those norms.

**Opinionnaire.** An opinionnaire was constructed encompassing all phases of the problem.\(^2\) On the opinionnaire, statements one and three were stated in positive form: (1) Instrumental music participation has a good effect on the social adjustment of students in Central Dallas Community Schools, and (3) Instrumental music students rank higher in scholarship than non-instrumental music students. Statements two and four were stated in negative form: (2) Instrumental music does not help the curriculum develop well adjusted citizens, and (4) Instrumental music does not provide the counselor with an effective “tool” to use in working with maladjusted students. The number of favorable and unfavorable statements were then equal as required for the Lickert Method of Summated Ratings, which assigns a value of five, four, three, two, and one for the responses: agree, tend to agree, cannot say, tend to disagree, and disagree, respectively. If the opinion is stated in negative form this scale is reversed symmetrically, one, two, three, four, and

\(^1\)Ibid., p. 19.  \(^2\)Appendix A.
five for the responses: agree, tend to agree, cannot say, tend to disagree and disagree, respectively.¹

This opinionnaire was validated by administering it to the faculty of the Plainview Public Schools, Plainview, Nebraska. This was done by the Plainview High School Principal in April, 1961. The opinionnaire was then administered to the faculty of Central Dallas Community High School in May, 1961.

The opinionnaire was given to eleven teachers and administrators in both instances, so the most favorable response for each item was five; therefore, fifty-five (11 x 5 = 55) was the most enthusiastic response for each individual opinion. Similarly thirty-three would be a neutral opinion and eleven would indicate the most unfavorable attitude for each opinion.

Four opinions were expressed, hence 220 (4 x 55 = 220) was the most favorable attitude of the entire group toward instrumental music as far as this problem is concerned. Similarly 132 would be a neutral opinion and forty-four would indicate the most unfavorable attitude.

**Academic Achievement.** A comparison was made between the grades achieved in required academic courses by students enrolled in instrumental music and those not enrolled in this activity. The two groups had been equated as outlined on page 9, so that the only difference

¹Best, op. cit., p. 157.
in the courses for the two groups was instrumental music. The required curriculum included four years of English, two years of mathematics, two years of science, and three years of social studies. Only mathematics was not usable in comparing the groups because some students took general mathematics instead of algebra and algebra rather than geometry to fulfill this requirement. A comparison of the achievement of the instrumental music students and the non-instrumental music students was made in May, 1961.
CHAPTER II

PRESENTATION OF THE FINDINGS

The Sociogram. A chart of the social relationships that existed among students at Central Dallas Community Schools in December, 1960, is presented in Figure 1. This sociogram, which shows best friend choices, also distinguishes between boys and girls, and between instrumental and non-instrumental music students.

There were thirty-nine instrumental music students and sixty-six non-instrumental music students involved in this part of the study. One instrumental music student was chosen by eight persons to be his best friend. Five instrumental and four non-instrumental music students were chosen three times. Nine non-instrumental and four instrumental music students were chosen twice each. Thirteen band members and thirty-one non-band members were selected by one other person as their best friend. There were sixteen isolates among the instrumental music students and twenty-two in the rest of the student body. There were four mutual choices between band members, eight mutual choices between non-band members, and ten mutual choices between instrumental music students and non-instrumental music students. The thirty-nine band members were chosen forty-four times and the sixty-six other students were selected sixty-one times as each of the 105 students were asked to name their best friend.
A SOCIОGRAM SHOWING BEST FRIEND CHOICES AMONG STUDENTS
IN DECEMBER, 1960, AT CENTRAL DALLAS COMMUNITY
SCHOOLS, MINBURN, IOWA

Single Choice ——— Mutual Choice

Boy Instrumental Music Student
Girl Instrumental Music Student
Boy Non-Instrumental Music Student
Girl Non-Instrumental Music Student
I. YOUTH INVENTORY COMPARISON

The results of the administration of the SRA Youth Inventory are shown in Table II. A comparison of the percentiles aggregated by the equated groups of instrumental music students and non-instrumental music groups demonstrated that instrumental music students had fewer problems in each area.

My School. "This area focuses attention on the things that may keep the student from getting what he wants out of school."¹ The instrumental music students of Central Dallas Community Schools ranked at the fifty-fifth percentile and the non-instrumental music group at the 67.5 percentile. This indicates instrumental music students felt they were getting more of what they wanted out of school than the other group.

Looking Ahead. "This area is concerned chiefly with the problems of choosing a career, going to college, and finding a job."² As shown in Table II, in this area the non-instrumental music students attained a percentile rank of 72.4; the instrumental students 51.4, a difference of 21 percentile points. This indicates that the non-instrumental music group had more problems in this area than those studying instrumental music.

¹Remmers, op. cit., p. 2. ²Ibid., p. 3.
TABLE II

A COMPARISON OF THE PERCENTILES AGGREGATED BY EQUATED GROUPS OF INSTRUMENTAL MUSIC STUDENTS AND NON-INSTRUMENTAL MUSIC STUDENTS ON THE SRA YOUTH INVENTORY AT CENTRAL DALLAS COMMUNITY SCHOOLS, MINBURN, IOWA

<table>
<thead>
<tr>
<th>AREA</th>
<th>INSTRUMENTAL MUSIC STUDENTS' PERCENTILE RANK</th>
<th>NON-INSTRUMENTAL MUSIC STUDENTS' PERCENTILE RANK</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>MY SCHOOL</td>
<td>55.0</td>
<td>12.5</td>
<td>67.5</td>
</tr>
<tr>
<td>LOOKING AHEAD</td>
<td>51.4</td>
<td>21.0</td>
<td>72.4</td>
</tr>
<tr>
<td>ABOUT MYSELF</td>
<td>55.5</td>
<td>14.6</td>
<td>70.1</td>
</tr>
<tr>
<td>GETTING ALONG WITH OTHERS</td>
<td>45.9</td>
<td>16.1</td>
<td>62.0</td>
</tr>
<tr>
<td>MY HOME AND FAMILY</td>
<td>51.4</td>
<td>14.5</td>
<td>65.9</td>
</tr>
<tr>
<td>BOY MEETS GIRL</td>
<td>40.3</td>
<td>16.3</td>
<td>56.6</td>
</tr>
<tr>
<td>HEALTH</td>
<td>48.6</td>
<td>14.0</td>
<td>62.6</td>
</tr>
<tr>
<td>THINGS IN GENERAL</td>
<td>51.3</td>
<td>22.9</td>
<td>74.2</td>
</tr>
<tr>
<td>BASIC DIFFICULTY SCORE</td>
<td>54.7</td>
<td>16.0</td>
<td>70.7</td>
</tr>
</tbody>
</table>

Note: Zero percentile indicates no problems, fiftieth percentile, the national average.
About Myself. "This group of statements focuses attention on
the individual and his personal adjustment." The percentile rank for
this area was 55.5 for the instrumental music students and 70.1 for the
other group. Once more this shows that instrumental music students had
fewer problems than those not studying instrumental music.

Getting Along With Others. Closely related to personal adjust-
ment is the social adjustment of young people. This complex of
questions suggests strongly the desirability of introducing units in
the school curriculum to teach these skills as well as of providing
numerous extracurricular activities where young people can obtain
training in these skills.

The instrumental music students of Central Dallas High School
ranked at the 45.9 percentile, whereas the non-instrumental music stu-
dents were at the 62.0 percentile. The instrumental students, according
to this measurement, ranked four percentile points higher than the
median across the United States. The non-instrumental music students
were twelve percentile points below the national median of fifty in social
adjustment.

My Home and Family. The results in this area show instrumental
music students, with a percentile rank of 51.4, got along with their par-
ents, brothers and sisters better than the other group, with a 65.9 percen-
tile rank.

1Ibid., p. 4. 2Ibid.
"Students checking questions in this area seem to lack confidence in their home environment, an attitude which mental hygienists say is not conducive to healthy emotional development."  

Boy Meets Girl. How to get dates, how to act on dates, standards of right and wrong, the need for sex information, and things to consider in courtship, love and marriage are among the topics included in this area.  

In this area instrumental music students attained the lowest percentile rank, 40.3, attained in any area covered by the Youth Inventory. Likewise, non-instrumental music students also attained their lowest percentile rank, 56.6. The difference in ranks, however, was the third largest of the eight areas compared in Table II.  

Health. Problems of physical well-being checked in this area show a concern with physical appearance, health habits, general state of health, or some physical disability that is worrying the student.  

Instrumental music students ranked at the 48.6 percentile and non-instrumental music participants at the 62.6 percentile level.  

Things in General. "World affairs, religion and social ethics are the major problems which arise in this section."  

---  

1Ibid., p. 5.  
2Ibid.  
3Ibid., p. 6.  
4Ibid.
The percentile rank of 74.2 indicates the highest incidence of problems for the non-instrumental music student in any area covered by the Youth Inventory. As shown in Table II, page 17, the percentile of 51.3 for the instrumental music students produced the largest variance, 22.9, of the entire check list.

**Basic Difficulty Score.** This score is derived from problems checked over the entire check list which is still experimental and intended for use as a rough screening device.  

The non-instrumental music students placed at the 70.7 percentile and instrumental music students at the 54.7 percentile showing, experimentally, that sixteen more non-instrumental students out of a hundred, have more basic difficulties than do instrumental music students.

II. OPINIONNAIRE

**Opinions of the Faculty.** The results of the validation with the faculty of Plainview High School at Plainview, Nebraska, were very similar to the results obtained by its administration to the faculty of Central Dallas Community High School, Minburn, Iowa. Opinions were offered on the opinionnaire in both favorable and unfavorable statements. By reversing the scale symmetrically for the unfavorable statements it was pos-

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1Ibid., p. 14.
sible to arrive at a summated rating of favorable opinions regarding instrumental music. The total scale value of the teachers of Central Dallas Community Schools was one-hundred-seventy-three. The total scale value of the same number of teachers at Plainview High School, the writer's alma mater, was one-hundred-sixty-five. Two-hundred-twenty is the most favorable attitude and one-hundred-thirty-two is a neutral opinion for this opinionnaire according to the Lickert System of Summated Ratings discussed on page 11. This opinionnaire may be seen in Appendix A.

Social Adjustment. "Instrumental music participation has a good effect on the social adjustment of students at Central Dallas Community Schools," was almost a unanimous opinion with only one teacher having no feeling either way. The Lickert rating of fifty of a possible fifty-five is shown in Table III.

Citizenship. "Instrumental music helps the curriculum develop well adjusted citizens," was written in negative form on the opinionnaire to comply with the form for the Lickert method. Converting this opinion to the positive form, ten of the teachers agreed with the statement, but half of them had reservations. One teacher, with reservations, felt instrumental music did not help the curriculum develop well adjusted citizens. The summated rating for this statement is forty-seven out of a possible fifty-five.
TABLE III

LICKERT SUMMATED RATINGS OF INSTRUMENTAL MUSIC
OPINIONNAIRE GIVEN TO TEACHERS OF CENTRAL
DALLAS COMMUNITY SCHOOLS, MINBURN, IOWA

<table>
<thead>
<tr>
<th>FAVORABLE STATEMENTS SCALE VALUE</th>
<th>UNFAVORABLE STATEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree (A) 5</td>
<td>Disagree (E)</td>
</tr>
<tr>
<td>Tend to Agree (B) 4</td>
<td>Tend to Disagree (D)</td>
</tr>
<tr>
<td>Cannot Say (C) 3</td>
<td>Cannot Say (C)</td>
</tr>
<tr>
<td>Tend to Disagree (D) 2</td>
<td>Tend to Agree (B)</td>
</tr>
<tr>
<td>Disagree (E) 1</td>
<td>Agree (A)</td>
</tr>
</tbody>
</table>

Eleven teachers times the most favorable response (11x5=55)
Eleven teachers times the neutral response (11x3=33)

<table>
<thead>
<tr>
<th>OPINIONNAIRE STATEMENTS</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>L</th>
<th>R</th>
<th>I</th>
<th>C</th>
<th>T</th>
<th>K</th>
<th>I</th>
<th>N</th>
<th>E</th>
<th>R</th>
<th>G</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Instrumental music participation has a good effect on the social adjustment of students in Central Dallas Community Schools.</td>
<td>7</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>50</td>
<td>FAVORABLE</td>
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<tr>
<td>2. Instrumental music does not help the curriculum develop well adjusted citizens.</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>5</td>
<td>47</td>
<td>UNFAVORABLE</td>
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<tr>
<td>3. Instrumental music students rank higher in scholarship than non-instrumental music students.</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>37</td>
<td>FAVORABLE</td>
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<tr>
<td>4. Instrumental music does not provide the counselor with an effective “tool” to use in working with maladjusted students.</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>39</td>
<td>UNFAVORABLE</td>
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<tr>
<td>Most favorable response for each statement times number of statements (55x4=220)</td>
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<td>173</td>
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<tr>
<td>Neutral response for each statement times number of statements (33x4=132)</td>
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</table>
Scholarship. “Instrumental music students rank higher in scholarship than non-instrumental music students,” had the most diverse distribution of any opinion studied. Seven teachers agreed, but only two of these without reservations. Three disagreed and two of these three disagreed without reservations. This question had the lowest score, thirty-seven, on the Lickert Scale of Summated Ratings as shown in Table III.

“Tool” for Counselors. “Instrumental music provides the counselor with an effective ‘tool’ to use in working with maladjusted students,” in the opinionnaire was stated in negative form. This device, aside from the requirement for the Lickert Method, caused careful consideration of each individual opinion as evidenced by the amount of time spent scoring the opinionnaire. Three teachers disagreed with reservations; six agreed with the statement, three with reservations. Two of the faculty had no feeling one way or the other. As shown in Table III, this opinion received thirty-nine, the second lowest summated rating on the Opinionnaire.

III. ACADEMIC ACHIEVEMENT

The opinion that instrumental music students rank higher in scholarship than non-instrumental music students had the most diverse rating among the teachers of Central Dallas Community Schools of any
statement presented in Table III. The summated opinion of the teachers was between tend to agree and cannot say. Reference to Figure 2 shows that instrumental music students achieved higher grades in all comparable courses of the required curriculum than the equated group of non-instrumental music students.

The senior class members in instrumental music achieved a 2.5 or B- average and non-instrumental music students received a 2.25 or C+ average in required courses of English literature, government and economics. These averages, as well as the ones that follow, are presented in Figure 2.

The equated groups of the junior class were nearly the same scholastically in required courses. Instrumental music students averaged 2.67 while non-instrumental music students were averaging 2.57. Both of these averages, which are in the B- area, are for United States history, speech and composition.

Reference to Figure 2 shows that the equated groups in the sophomore class had the greatest difference in averages. For English, biology and world history the instrumental music students attained an average grade of 2.92 or B and the non-instrumental music students 2.07 or C, which is a full letter grade difference.

In academic achievement the freshman equated groups were very close, with only .07 of a point separating them. The instrumental music
A COMPARISON OF THE GRADES ACHIEVED IN REQUIRED COURSES BY EQUATED GROUPS OF INSTRUMENTAL MUSIC STUDENTS AND NON-INSTRUMENTAL MUSIC STUDENTS OF CENTRAL DALLAS COMMUNITY SCHOOLS, MINBURN, IOWA DURING THE SCHOOL YEAR OF 1960-1961

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<td>Grades</td>
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<tr>
<td></td>
<td>3.83</td>
<td>3.49</td>
<td>3.16</td>
<td>2.83</td>
<td>3.49</td>
<td>3.16</td>
<td>2.83</td>
<td>3.49</td>
<td>3.16</td>
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<tr>
<td></td>
<td>A</td>
<td>B†</td>
<td>B</td>
<td>B†</td>
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<td>B†</td>
<td>B†</td>
<td>B†</td>
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<tr>
<td></td>
<td>4.0</td>
<td>3.67</td>
<td>3.33</td>
<td>3.0</td>
<td>2.67</td>
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<td>2.0</td>
<td>1.67</td>
<td>1.33</td>
<td>1.0</td>
</tr>
</tbody>
</table>
students averaged 2.52, or B-, whereas the non-instrumental music students averaged 2.45, or C+, in English and general science. Figure 2 shows these averages.
CHAPTER III

SUMMARY AND CONCLUSIONS

It was the principal purpose of this study to determine whether instrumental music students in the Central Dallas Community Schools, Minburn, Iowa, were measurably different from non-instrumental music students in social adjustment. A secondary purpose was to see whether any evidence could be found to support the hypothesis that instrumental music is an effective guidance technique to use in working with maladjusted students. This was accomplished by: (1) equating, by the matching pairs technique, the thirty-nine instrumental music students with thirty-nine students from the student body on the following criteria: age, sex, mental ability determined by the California Test of Mental Maturity, and socio-economic background determined by the Sims Socio-Economic Score Card; (2) administering a sociometric schedule to the student body (105 students) to determine the best friend of each student for a sociogram; (3) employing the SRA Youth Inventory to determine the social adjustment of the equated groups; (4) using an opinionnaire with the faculty to get opinions from them on all aspects of the problem; and (5) determining the academic achievement of the two groups in required academic subjects by making a study of the school records.

"Instrumental music participation has a good effect on the social adjustment of students in Central Dallas Community Schools." This
The conclusion was substantiated by teacher opinion, sociometry, and two Youth Inventory areas. The opinionnaire results, interpreted by the Lickert Method of Summated Ratings, scored this statement at fifty of a possible fifty-five. The SRA Youth Inventory showed that instrumental music students had fewer problems than the non-instrumental music students in every area. This variance was nearly fifteen percentile points for the "About Myself" area and over sixteen points in the "Getting Along With Others" part of the check list.

"Instrumental music helps the curriculum develop well adjusted citizens." The teachers, on the opinionnaire, gave this statement forty-seven points of a possible fifty-five on the Lickert Scale of Summated Ratings. Incidentally, an instrumental music student whose extracurricular activities included only music and dramatics was chosen by the teachers of this school to receive the citizenship award during the 1959-1960 school year. This award was discontinued during the 1960-1961 school year, the year of this investigation.

"Instrumental music students rank higher in scholarship than non-instrumental music students." Using a four point grading system, instrumental music students averaged .31 of a point higher than non-instrumental music students in the required courses at Central Dallas Community Schools. This hypothesis had the least agreement among the teachers as scored on the opinionnaire. The Lickert Rating was thirty-
seven, compared to fifty-five, total agreement, and thirty-three, a neutral attitude.

"Instrumental music provides the counselor with an effective guidance technique to use in working with maladjusted students." The opinion of the teachers on this hypothesis fell between "tend to agree" and "cannot say." The basic difficulty score of the SRA Youth Inventory, which is a rough screening device of an experimental nature, showed that instrumental music students had fewer basic difficulties than non-instrumental music students. Since instrumental music students appeared to be somewhat better adjusted than the non-instrumental students, instrumental music may be a positive factor in adjustment. However, whether the better adjusted students elect instrumental music or whether students become better adjusted as a result of participation in instrumental music was not determined by this study. However, there was a measurable difference in favor of the instrumental music students in all factors investigated.
BIBLIOGRAPHY


A. BOOKS


B. PERIODICALS


APPENDIX

1. Instructions to participants in psychometric testing.

2. Instruments for starting with students working in a group.

3. Instruments for evaluating student

4. Instruments to get to know the students better.
INSTRUMENTAL MUSIC OPINIONNAIRE

The following statements are presented as generalizations and represent opinions rather than facts. As opinions, they are neither right nor wrong, and your agreement or disagreement will be determined largely in terms of your particular experiences. Kindly check your position on the statement as it first impresses you. Indicate what you believe, rather than what you think you should believe.

a. I agree with the statement.

b. I am inclined to agree (with reservations).

c. I cannot say (have no feeling one way or another).

d. I am inclined to disagree (with reservations).

e. I disagree.

<table>
<thead>
<tr>
<th></th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>d</th>
<th>e</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Instrumental music participation has a good effect on the social adjustment of students in Central Dallas Community Schools.</td>
<td></td>
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</tr>
<tr>
<td>2. Instrumental music does not help the curriculum develop well adjusted citizens.</td>
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<tr>
<td>3. Instrumental music students rank higher in scholarship than non-instrumental music students.</td>
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</tr>
<tr>
<td>4. Instrumental music does not provide the counselor with an effective &quot;tool&quot; to use in working with maladjusted students.</td>
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